

**CONSULTANT SERVICES FEE PROPOSAL
RESILIENCY PLANNING PROJECTS - NJDEP**

**THIS FEE PROPOSAL TO BE SENT ELECTRONICALLY TO: CARMEN.VALENTIN@DEP.NJ.GOV
DUE DATE NO LATER THAN: 12:00 NOON, EST, FEBRUARY 18, 2020**

**THREE (3) HARD COPIES OF THIS FEE PROPOSAL WITH ONE (1) HARD COPY OF
ORIGINAL BID PROPOSAL FOR BID SOLICITATION 19DPP00368, SENT TO:**

NJ DEPT. OF ENVIRONMENTAL PROTECTION
BUREAU OF CLIMATE RESILIENCE PLANNING
401 E. State Street, 7th Floor West
P.O. Box 402
Trenton, NJ 08625-0402
Attention: Carmen Valentin

DUE DATE: NO LATER THAN 5:00 PM EST, FEBRUARY 18, 2020.

FIRM NAME: _____

THE UNDERSIGNED PROPOSES TO PROVIDE ALL PROFESSIONAL SERVICES REQUIRED IN THE SCOPE OF WORK
AND THE REQUIREMENTS SET FORTH IN BID SOLICITATION 19DPP00368.

SUB-TOTAL CONSULTANT TASK/LABOR/FEE SHEET - Tasks 1 -6	\$	_____
SUB-TOTAL CONSULTANT TASK/LABOR/FEE SHEET - Tasks 7 - 8	\$	_____
TOTAL NOT TO EXCEED (NTE) FEE FOR CONSULTANT SERVICES	\$	_____
REPRODUCTION ALLOWANCE	\$	_____
ALLOWANCES PROPOSED BY CONSULTANT (INCLUDE DESCRIPTION)	\$	_____
	\$	_____
	\$	_____
TOTAL WORK ORDER NTE AMOUNT	\$	_____

THE LEVELS AND CORRESPONDING HOURLY RATES INCLUDED IN THIS
PROPOSAL WILL BE FOR THE BASE PERIOD OF TWO (2) YEARS WITH
THE OPTION TO EXTEND FOR UP TO AN ADDITIONAL ONE (1) YEAR
PERIOD.

SIGNATURE

TITLE

PRINT

TASK/LABOR/FEE SHEET

FIRM: _____

MINI-BID REQUEST FOR QUOTE

REFERENCE: Bid Solicitation 19DPP0368

T3103 Program Administrator - Resiliency Planning Projects - NJDEP

PROJECT PHASE OR TASK	CONSULTANT'S LEVEL OF EFFORT IN HOURS/FEE								TOTALS
	LEVEL	7	6	5	4	3	2	1	PER TASK
	*HOURLY RATE	\$	\$	\$	\$	\$	\$	\$	HOURS \$ AMOUNT
Task 1 Planning Context	HOURS AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
Task 2 Community and Stakeholder Engagement	HOURS AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
Task 3 Asset Collection and Risk Assessment	HOURS AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
Task 4 Resilience and Adaptation Scenario Development	HOURS AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
Task 5 Regional Resilience and Adaptation Action Plan	HOURS AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
Task 6 Phase II: Implementation	HOURS AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
NOT TO EXCEED TOTALS	HOURS AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
Consultant Services								HOURS	
SUB-TOTAL CONSULTANT SERVICES - Tasks 1 - 6								AMOUNT	\$

TASK/LABOR/FEE SHEET

FIRM: _____

MINI-BID REQUEST FOR QUOTE

REFERENCE: Bid Solicitation 19DPP0368

T3103 Program Administrator - Resiliency Planning Projects - NJDEP

PROJECT PHASE OR TASK	CONSULTANT'S LEVEL OF EFFORT IN HOURS/FEE								TOTALS
	LEVEL	7	6	5	4	3	2	1	PER TASK
	*HOURLY RATE	\$	\$	\$	\$	\$	\$	\$	HOURS \$ AMOUNT
Task 7 Project Website	HOURS								
	AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
Task 8 Meetings, Conference Calls and General Project Team Coordination	HOURS								
	AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
	HOURS								
	AMOUNT								
	HOURS								
	AMOUNT								
	HOURS								
	AMOUNT								
NOT TO EXCEED TOTALS	HOURS								
	AMOUNT	\$	\$	\$	\$	\$	\$	\$	\$
Consultant Services								HOURS	
SUB-TOTAL CONSULTANT SERVICES - Tasks 7 - 8								AMOUNT	\$

**ATTACHMENT C
INVOICE SUMMARY TABLE**

Resilient NJ Grant Program					
T3103 Program Administrator-Resilience Planning Projects-NJDEP					
BID SOLICITATION # 19DPP-00368					
Consultant Firm			Blanket P.O. #		
Project Name			Invoice #		
Task	Line Item Amount	Previously Paid	This Invoice	Contract Balance	%Complete
Task 1					
Task 2					
Task 3					
Task 4					
Task 5					
Task 6					
Task 7					
Task 8					
Task 9					
Task 10					
TASK TOTAL					
List expenses - examples below.					
Reproduction					
Mileage					
SubTotal					
TOTALS					

CONSULTANT CERTIFICATION:

As an authorized representative of the Consultant Firm, I certify this Estimate to be correct and just and that payment therefore has not been received. I further certify that the Consultant and its project sub-consultants have complied with Labor Standards and that all previous payments made under this contract have been applied by the Consultant to discharge in full all obligations in connection with work covered by all prior payment estimates as required by NJSA 2A: 44-148.

SIGN: _____ **DATE:** _____

PRINT NAME: _____

TITLE: _____

ATTACHMENT D

**EVALUATION CRITERIA
Consultant Team Request for Quotes**

Consultant Team Name _____

CRITERIA	MAXIMUM POINTS	SCORE
Scope of Work	25	
<ul style="list-style-type: none"> • <i>Scope of Work meets the overall objectives of the Resilient NJ program;</i> • <i>Consultant Team demonstrates a clear understanding of individual tasks;</i> • <i>Steps and level of effort provided for each task is appropriate and sufficient.</i> 		
Comments:		
Regional Specificity	25	
<ul style="list-style-type: none"> • <i>Identification of regional attributes that will need to be accounted for in the planning process;</i> • <i>Scope of work and level of effort is tailored to meet the needs of the region.</i> 		
Comments:		
Demonstration of capacity	25	
<ul style="list-style-type: none"> • <i>Demonstration of organizational ability to complete individual tasks;</i> • <i>Demonstration of ability of identified team members to complete their specific tasks;</i> • <i>Examples of work provided illustrate the ability to complete tasks;</i> • <i>Demonstration of capacity for innovation in planning.</i> 		
Comments:		
Cost	25	
<ul style="list-style-type: none"> • <i>Overall cost of the proposal;</i> • <i>Value for money – cost compared to the work being provided.</i> 		
Comments:		
TOTAL	100	

EVALUATOR # _____ DATE: _____

ATTACHMENT B

PROGRESS REPORT

Consultant Team: _____

Project Name: _____

For the month/year: _____

Date Submitted: _____

Summary of Activity for the Current Reporting Period

Task	Activities/Meetings/Comments	Percent Complete to Date
Task 1:		
Task 2:		
Task 3:		
Task 4:		
Task 5:		
Task 6:		
Task 7:		
Task 8:		
Task 9:		
Task 10:		

**NJ DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLIMATE RESILIENCE PLANNING
RESILIENT NJ PROGRAM**

**Request for Quotes for Jersey City Regional Team Project
Scope of Services**

NOTE: All requirements and provisions of Bid Solicitation 19DPP00368 are in effect for this scope of services and request for quotes including the “Statement of Assurances for Contractor/Consultant – Additional Federally Funded Agreement Provisions Applicable to Community Development Block-Grant-Disaster Recovery Funded Projects” and the assessment of liquidated damages, as applicable, in Section 5.14.

OVERVIEW

The New Jersey Department of Environmental Protection (DEP) is soliciting quotes under Bid Solicitation 19DPP00368 to work with the Jersey City Regional Team on execution of a Resilient NJ planning project. This includes development of a Regional Resilience and Adaptation Action Plan (Action Plan), as well as implementation of planning actions that are identified through development of the Action Plan. This request is one of four released at this time. The total funding available for these task orders is \$5,675,000. It is expected that the fee proposals will consider the unique circumstances of each project area that may affect level of effort to complete the scope of work. All work must be completed and deliverables submitted by May 31, 2022.

To support this program, DEP has engaged a Construction Management Firm (CMF). The CMF may provide services or materials on behalf of DEP to aid in the execution of this scope of work, as indicated below.

PROJECT AREA

The Jersey City Regional Team (Regional Team or Region) is composed of the municipalities of Jersey City, Newark, Hoboken, and Bayonne, as well as the HOPES Community Action Partnership and Ironbound Community Corporation community-based organizations (CBO). Jersey City is the Prime, or lead grant recipient, and is responsible for coordinating regional team members, ensuring participation at meetings and events, and managing administrative tasks for the Regional Team. The CBOs are included in the region to assist with community engagement and ensure that socially vulnerable populations are represented in the planning process.

SCOPE OF WORK

The Consultant Team will execute this scope of work as described herein for the Jersey City Region through two phases. Activities leading up to the development of the Action Plan comprise the plan development phase. The second phase – implementation - includes advancement of actions identified and selected through the plan development phase. Given the timeframe of the overall project, the implementation phase may be initiated

before the Action Plan is finalized. However, funding shall only be used to advance actions identified in the Action Plan.

Consultant Teams shall use the unique methods created for Resilient NJ to assess risk/vulnerability within the project areas (Attachment A), and to create and consider resilience scenarios (methodology to be provided after consultant selection). Small modifications to the methodologies will be considered and discussed during the course of the work, as appropriate, to ensure project success in each region, but for the purpose of this request for quotes these methodologies will be used in Tasks 3 and 4.

All project deliverables shall be submitted to DEP for review in a timely manner. Consultant Teams shall be responsible for posting all deliverables on the project website described below unless indicated otherwise by DEP. Each of the deliverables detailed below should be formatted as appropriate for inclusion in the final action plan.

The Consultant Team will be responsible for completing the following tasks:

TASK 1 - PLANNING CONTEXT

The Consultant Team will review existing relevant municipal, county, regional and state planning documents to gain an understanding of the Jersey City Region and surrounding area as applicable, including but not limited to its demographics, land use, topography, hazard exposure, social and cultural assets, local economic drivers, property tax, transportation and other critical infrastructure. In addition, the Consultant Team is expected to review and understand all resilience work that has been done to date or is in planning stages, as well as existing identified vulnerabilities and recommended actions.

DEP may provide some of this information in advance of project kick-off, however the Consultant Team will be responsible for identifying gaps in the documents and/or data and work directly with the Regional Teams to obtain the necessary information.

The Consultant Team shall develop a Planning Context Report that includes:

- 1) Index of documents and data reviewed
- 2) Memo on current planning status of the region, including, but not limited to:
 - a. Baseline community and regional information;
 - b. Identification of significant assets within the region based on initial document review;
 - c. Identification of socially vulnerable populations;
 - d. Major projects being planned or undertaken (not limited to resilience, including infrastructure, housing/development, transportation, or restoration);
 - e. Other resilience activities being planned or recently implemented;
 - f. Existing local and/or regional visions;
 - g. Initial list of gaps in plans, ordinances, or data related to resilience.
- 3) Maps depicting unique or relevant indicators/data related to long-term risk or resilience, as appropriate based on initial consultation with DEP.

The Planning Context Report will ultimately be a chapter of the Action Plan for the Jersey City Regional Team.

Deliverable(s)

- 1) Planning Context Report

TASK 2 – COMMUNITY AND STAKEHOLDER ENGAGEMENT

It is expected that the planning process will include a robust and multi-faceted community and stakeholder engagement effort. This effort is expected to be a community-driven regional planning process that envisions how the region can collectively address current and future flood concerns. The Consultant Team will lead a thorough and effective community outreach effort to ensure community awareness and gather community input and support during both phases of the project with input from DEP, the Regional Team, other stakeholders, and the public. A variety of innovative engagement methods will be utilized to meaningfully engage a broad cross-section of community members. This is expected to be a substantial effort taking up a significant portion of the budget for Phase I – Plan Development. It is expected that all the results of the following subtasks will inform future tasks in development and implementation of the Action Plan.

Additionally, it is expected that the community outreach will be designed to have an equitable and inclusive community engagement approach to promote a fair process of engagement. It is a core objective of the Resilient NJ program to engage and address the needs of socially vulnerable and under-represented populations throughout both the Plan Development and Implementation phases. To assist with this effort, the Jersey City Regional Team includes two community-based organizations with experience working with socially vulnerable populations in the region.

The Consultant Team shall develop a Community and Stakeholder Engagement report, including an Engagement Plan, that details the process and outcomes of the engagement efforts. All deliverables identified in Task 2.1 – 2.4 shall be included in the report.

Deliverable(s)

- 1) Community and Stakeholder Engagement Report

Task 2.1 Engagement Plan

The Consultant Team shall draft a Stakeholder and Community Engagement Plan (Engagement Plan) in consultation with members of the Jersey City Regional Team and with oversight by DEP. This plan shall detail the methods and timing of all outreach efforts for both phases of the Resilient NJ program. The Engagement Plan will be updated periodically to track the stakeholder engagement process and modify approaches as necessary. The Consultant Team shall utilize a wide range of approaches in conducting public engagement. Engagement methods shall be chosen to advance programmatic objectives while responding to the unique characteristics of the region. Engagement should not be limited to any single outreach or engagement strategy.

In addition to the public engagement strategies, the Engagement Plan shall detail any planning/steering committees or advisory group(s), how they will be engaged in the process, and metrics for tracking the effectiveness of the Engagement Plan. The Engagement Plan will identify neighborhood-level engagement strategies and opportunities. Consultants must demonstrate how engagement will be maintained throughout the process to maintain interest and participation from stakeholders.

In order to ensure the development of a strong engagement plan for the region, DEP has awarded a grant to Enterprise Community Partners, Inc. (Enterprise) to assist with the development and enhancement of the engagement plan. Enterprise will provide consulting, support, and resources for the Regional and Consultant Teams as they develop the Plan. This support will include providing guidance on best practices for engaging socially vulnerable populations. The Consultant Team will be expected to participate in up to 3 in-person meetings and 2-4 remote meetings to coordinate with Enterprise. Enterprise will serve entirely in a supportive role for the Resilient NJ program; the Consultant Team will have final responsibility for the development and execution of the Engagement Plan.

Deliverable(s)

- 1) Draft Engagement Plan for review by DEP and Jersey City Regional Team
- 2) Final Engagement Plan, revised based on comments from DEP and Jersey City Regional Team

Task 2.2 Engagement/Outreach

This task shall address public engagement throughout both phases of the Resilient NJ program. It is expected there will be appropriate public outreach and engagement in Phase II for each/all actions that are selected.

Engagement and outreach efforts may be executed using various platforms, media, or other techniques identified by the Consultant Team. Outreach efforts should be innovative with an overall goal of regional saturation. Attention shall be paid to the diversity of neighborhoods in the region with distinct cultural identities, socioeconomic characteristics, and architectural and urban forms. Special attention shall be given to socially vulnerable populations (see Task 2.3). The Consultant Team is expected to identify and execute engagement methods that will be successful in meaningfully engaging socially vulnerable populations.

It is expected that outreach will include, but is not limited to:

- a minimum of two meetings for planning/steering committees;
- a minimum of one public meeting, for each of the Tasks 2-6; and,
- utilization of additional engagement methods beyond public meetings to engage populations.

The Consultant Team should indicate the anticipated number of meetings and other engagement activities in its fee proposal accounting for the size and diversity of the region.

The Consultant Team shall be responsible for developing outreach and communication materials for the project. To ensure effective communication within the region, all written materials requesting input and participation from the public for any CDBG-DR related activity will be translated into Spanish. These documents will also be made available upon request in any of the other 10 languages required by the New Jersey Department of Community Affairs' Language Access Plan (LAP) found at www.renewjerseystronger.org – Plans & Reports. A list of the languages available for translation shall be included at the bottom of all printed materials intended for public outreach.

DEP, through the CMF, will provide translation services for written materials as well as on-call translation services at public meetings, if needed. The Consultant Team shall provide the CMF with the appropriate materials with enough time to allow for translation. The Engagement Plan shall identify the appropriate languages for translation for the Jersey City Region.

Deliverable(s)

- 1) Meeting materials, as appropriate
- 2) Meeting notes, as appropriate
- 3) Results from innovative engagement methods, as appropriate
- 4) Tracking of outreach/engagement metrics throughout process

Task 2.3 – Socially Vulnerable Populations

Socially vulnerable populations have been traditionally underrepresented in resilience planning efforts and the Resilient NJ program seeks to remedy this within the project areas. The work proposed for this task should be scoped to meet the overall Resilient NJ program objectives of a community-driven planning process that incorporates socially vulnerable and underrepresented populations. Socially vulnerable populations are defined by Sapam Singh, et al. (2014) as individuals and groups of people who are challenged in their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard based on physical or socioeconomic factors (Singh, 2014). Key characteristics can include but are not limited to: age (elderly and very young); low income; language other than English spoken at home; limited access to transportation; inadequate housing/shelter; low educational attainment; ethnic minorities; physically and mentally challenged; and special medical needs. It is expected that the Consultant Team will modify its approaches as needed to ensure all socially vulnerable populations within the region are appropriately engaged throughout the entire project.

The Jersey City Regional Team includes the Ironbound Community Corporation and HOPES CAP, Inc. These organizations will provide support to the Consultant Team for the identification and engagement of socially vulnerable populations.

As part of the grant, the Jersey City Regional Team will convene and lead a Citizen Advisory Council (CAC) that will meet quarterly throughout the project. It is expected that the Consultant Team will work closely with the Jersey City Regional Team and support their efforts through preparation of relevant materials for CAC meetings in a timely manner,

attendance at meetings as appropriate, and in other activities to ensure the effectiveness of engagement for socially vulnerable populations.

It is expected the Consultant Team will integrate outcomes of these meetings and all engagement throughout the other tasks of the project including Visioning (2.5), Asset Collection (3.1), Baseline Risk Assessment (3.2), Resilience and Adaptation Scenario Development (4.1), Scenario Evaluation and Selection (4.2), Regional Resilience and Adaptation Action Plan (5), and Phase II: Implementation (6).

Task 2.4 – Visioning

As part of the execution of the Engagement Plan, the Consultant Team shall be expected to lead the public within the region through a long-term (through 2070) community visioning process that provides community members an opportunity to identify their goals, objectives, and values. This vision will inform the Resilience and Adaptation Scenarios (Task 4) and the basis of the actions. The visioning process should not be limited to the community's response to flooding hazards but should be designed to consider all aspects of the community's character and identity through a resilience lens. Visioning should, at a minimum, occur before the detailed risk assessment.

The Consultant Team shall prepare a Visioning Report with a vision statement, goals and objectives, and concept graphics, as appropriate, demonstrating to DEP and the Jersey City Regional Team that it understands what is considered important in the region and how the region wants to look and feel in the future. The vision will be used to evaluate the success of the selected Resilience and Adaptation Scenarios. The Visioning Report will ultimately be a chapter of the Action Plan for the Jersey City Regional Team.

Deliverable(s)

- 1) Visioning Report including a final vision statement and supporting documentation

TASK 3 – ASSET COLLECTION AND RISK ASSESSMENT

The Consultant Team will be expected to perform asset collection and a risk assessment for the Jersey City Region using the Risk Assessment Methodology outlined in Attachment A.

Task 3.1 – Asset Collection

For the purposes of the Resilient NJ program, assets are considered places, things, processes or services.

Places may include: special neighborhoods, areas, or facilities where economic, environmental, and/or social functions of the community occur.

Things may include: features that the community values or critical or other infrastructure that supports places, processes or services.

Processes or Services may include: social, cultural, economic, government, or professional networks and services that are essential to day-to-day life and livability and/or support operations during and after a disaster.

Assets can also exist on a spectrum of having beneficial or negative qualities. Liabilities such as superfund sites, criminal hot spots, or traffic hazards may be considered an asset for the purposes of evaluation.

The Consultant Team shall work with the Jersey City Regional Team to identify important community assets in the region. It is expected this task will involve significant public input. The Consultant Team shall determine the best methods to collect and store the necessary data. The Consultant Team shall include the information in a geodatabase and provide it to DEP upon completion of the task. It is anticipated that this process may result in more assets than can be utilized for the risk assessment, and scenario development. The Consultant Team shall work with the Jersey City Regional Team to prioritize assets using a methodology appropriate for the Project.

Deliverable(s)

- 1) Tabular and geodatabase of asset information, including prioritization if appropriate
- 2) Individual asset profile tables; see Attachment A.

Task 3.2 – Baseline Risk Assessment

The Consultant Team will perform a baseline risk assessment for four (4) potential flood conditions (to be provided by DEP) to understand how the existing landscape, and identified assets, may be vulnerable to flood events now and in the future. The risk assessment shall consider flooding from precipitation, coastal storms, and chronic tidal flooding. These baseline risk assessments will inform the development and assessment of the Resilience and Adaptation Scenarios.

The risk assessment will generally use data, models, and methods provided by DEP, as detailed in Attachment A. The Consultant Team will work with DEP and the CMF to determine if any modifications to these methods and models are necessary and/or feasible within the final scope and budget.

Some communities will likely have undergone partial risk assessments as part of previous planning initiatives that monetize or qualitatively assess exposure to these hazards. It is expected that these risk assessments will be insufficient and/or outdated for the purposes of the Resilient NJ program. However, if the Consultant Team believes the data to be sufficient and meeting the expected outcomes of the Risk Assessment methodology, a memo documenting the assertion can be drafted and submitted for review by DEP and the CMF.

The Consultant Team shall develop an Asset Collection and Risk Assessment Report detailing the process, assumptions, information, summaries, and conclusions of the risk assessments.

All deliverables identified above shall be included in the report. This Report will ultimately be a chapter of the Action Plan for the Jersey City Regional Team.

Deliverable(s)

- 1) Asset Collection and Risk Assessment Report

TASK 4 – RESILIENCE AND ADAPTATION SCENARIOS

Task 4.1 – Resilience and Adaptation Scenario Development

With an understanding of existing and anticipated risk to the region, the Consultant Team will propose a minimum of three (3) resilience and adaptation scenarios and a “No Action” Scenario for consideration by the Jersey City Regional Team, project stakeholders, and the public. The scenarios are an opportunity to demonstrate to the Regional Team that there are multiple options to advance resilience within the region while meeting the community’s vision. Each scenario shall include:

- a suite of planning actions, policies, and projects to address the identified risks and build resilience in the region in a manner that meets the regional vision;
- a linked set of strategies and actions, or pathways to resilience and adaptation;
- a timeline showing how the risk(s) identified through the planning process over time will be addressed
- renderings/conceptual drawings or other visualization products to present the scenarios to DEP, stakeholders, and the public.

Scenarios shall be developed to provide communities with real choices about how they may plan for their future. It is expected that the scenarios will respond to the vision developed by the community, although it may sometimes be necessary to provide alternatives if achieving elements of the vision are not possible. If this is the case, this shall be communicated to the Regional Team in a timely fashion. Planning, policy actions, and projects within each scenario should be linked together and build upon each other to provide co-benefits. Consultant Team will be expected to identify innovative approaches to solving resilience challenges as part of their scenarios.

Products to present the scenarios must be designed to ensure the regional teams, stakeholders, and the broader public understand and are able to make informed decisions about their preferences. The development of both the scenarios and the associated visualization products are expected to be major undertakings requiring significant resources within the overall framework of the Resilient NJ program. Choices about how scenarios will be differentiated from each other will be made in collaboration with DEP. DEP will have final approval over the choices that are made.

The scenarios will be developed using the Scenario Development and Evaluation Methodology to be provided by DEP after Consultant selection. Variations to this approach must be approved in writing by DEP. The methodology includes multiple questionnaires to help brainstorm and evaluate the scenario as it’s being developed to ensure the strategies respond to the region’s vision, reduce future risk to identified assets, and enhance the

overall resilience of the region, including its socially vulnerable populations. Consultant Teams will have an opportunity to provide feedback on the methodology prior to its execution.

The Consultant Team shall produce a Scenario Development Memo detailing each scenario, all of the actions that are included, why it was developed as such, how it will address the vision of Regional Team, the goals and objectives of the scenario, and the Resilient NJ program identified in the bid solicitation document. Materials developed under this scenario will be used in the evaluation of the Innovation Award as described under **Innovation Award** below.

Deliverable(s)

- 1) Scenario Development Memo for each scenario
- 2) Visualization products to present the scenarios to DEP, stakeholders, and the public

Task 4.2 – Scenario Evaluation and Selection

Each resilience and adaptation scenario will be evaluated using the Scenario Development and Evaluation methodology developed specifically for the Resilient NJ program. The Scenario Development and Evaluation methodology uses qualitative and quantitative analyses to provide a comprehensive understanding of how each scenario would affect the region if it were to be fully realized and how it will perform under various flood conditions.

The evaluation and its outcomes will be used in conjunction with the visualization products produced in Task 4.1 to inform selection of the preferred resilience and adaptation scenario by the Regional Team. To inform the decision, the Consultant Team will gather input from the Regional Team, stakeholders, and the public, modify the scenario as appropriate, and finalize the suite of actions that will be included in Task 5.

The Consultant Team shall develop a Resilience and Adaptation Scenario Report detailing the development, evaluation, and selection of the Preferred Scenario. All deliverables identified above shall be included in the report. This Report will ultimately be a chapter of the Action Plan for the Jersey City Regional Team.

Deliverable(s)

- 1) Completed evaluation for each scenario
- 2) Resilience and Adaptation Scenario Report

Innovation Award

The Resilient NJ program seeks innovation in the field of resilience planning. After development of the scenarios, the Consultant Team, in conjunction with the Jersey City Regional Team, if desired, will present the final scenarios to all Regional and Consultant Teams from the four Resilient NJ Program regions at an event organized by the CMF and DEP, which is noted under Task 8. This event is to showcase how the scenarios creatively address the vulnerabilities while meeting the vision of the Jersey City Region. Consultant

Teams may use any materials created under the previous tasks to support their presentation for consideration of the award.

The Consultant Team who wins this competition, based on the criteria below, may be eligible for additional funding, up to \$250,000, for Phase II. This is in addition to and separate from the work budgeted under this request for quotes. **The innovation award or the subsequent work effort should not be included in the quotation submitted in response to this request.**

The decision to offer an innovation award will be made by a panel of experts at DEP based on the group of scenarios that are submitted to DEP as part of Task 4.1 – Resilience and Adaptation Scenario Development. The Panel will evaluate the scenarios and the presentation of the scenarios using the criteria below:

- 1) The scenarios reduce risk to flood hazards. This includes, but is not limited to, direct risk reduction, and may include both physical and non-physical actions (15 points);
- 2) The scenarios are specifically adapted to the unique characteristics of the communities and ecology of the region and respond to the vision articulated by the Regional Teams (15 points);
- 3) The scenarios utilize actions that are designed to create social, cultural, economic, ecological, and environmental co-benefits (20 points);
- 4) The scenarios tie actions together to create greater benefits than each action would create on its own (20 points);
- 5) The scenarios present the region with multiple approaches to building resilience and addressing potential flooding hazards to allow for community discussion and decision-making (15 points); and
- 6) The scenarios are determined to be equitable in the distributions of costs, benefits, and risk across populations subgroup. This will be evaluated based on a method developed by DEP using the following measurements (15 points):
 - a. “Fair Process:” Measuring equity and inclusion based on the fairness of the process for representation of SVPs; or
 - b. “Equal Outcomes:” Measuring based on equal outcomes- distribution of a policy’s costs, benefits, and risk across population subgroups.

DEP reserves the right to not distribute an innovation award if it determines that none of the scenarios developed by the Consultant Team are significantly innovative. Only submissions that meet project deadlines will be eligible for consideration.

TASK 5 – REGIONAL RESILIENCE AND ADAPTATION ACTION PLAN

Once the preferred scenario has been selected and prioritized, the Consultant Team shall draft a Regional Resilience and Adaptation Action Plan around that preferred scenario for the region. The Action Plan will identify responsible parties, cost of implementation, potential funding sources, and implementation timelines for each action. The Consultant Team will work with the Regional Team to prioritize the actions and identify which actions

are most appropriate and advantageous to pursue in Phase II. Actions should be selected in accordance with HUD requirements and in consultation with DEP.

The Consultant Team will gather input from the Regional Team, stakeholders, and the public on the draft Regional Resilience and Adaptation Action Plan and modify it as appropriate, producing a final Regional Resilience and Adaptation Action Plan.

Deliverable(s)

- 1) Draft Action Plan
- 2) Final Action Plan including consideration of comments received

TASK 6 –PHASE II: IMPLEMENTATION

The Consultant Team, in consultation with the Regional Team shall, with DEP approval, select actions from the Action Plan to advance as part of Phase II - Implementation. However, with prior approval from DEP, actions may be identified and initiated prior to the finalization of the Action Plan.

It is expected that:

- a minimum of approximately one-third of the overall budget submitted for this Request for Quotes shall be allocated for this task;
- the actions selected will be completed prior to May 31, 2022 and within budget;
- the outcomes can be realized in either the short-or long-term;
- the outcomes will have regional or local impact; and
- meet the eligibility requirements determined by HUD (24CFR570.205).

As directed by HUD (24CFR570.205) eligible implementation actions must be considered “planning-only” activities, which include data gathering, studies, analysis, preparation of plans, and the development of ordinances. These funds can be used to advance analysis for long-range planning and solutions. Conceptual design work, feasibility analyses, and cost-benefit analyses for specific projects are also permissible. Given the restrictions from HUD, the funds **cannot** be used for creating engineering or architectural drawings in support of construction. At no point will construction occur as part of the Resilient NJ program, nor shall architectural or engineering plans be developed. It is permitted and encouraged to identify these types of projects in scenarios and in the Action Plan; however, they may not be chosen as implementation activities.

The Consultant Team shall develop an Implementation Memo detailing the actions selected for implementation and a proposed work plan.

The Consultant Team shall be responsible for the delivery of all draft and final products associated with the selected action(s).

It is expected that appropriate community engagement will continue through this task. Community engagement for this task should be included in the budget for Task 2.2 above.

Deliverable(s)

- 1) Implementation Memo, including Workplan outlining timelines and deliverables anticipated under this task, including how stakeholders and the public may be engaged during this Phase
- 2) All draft deliverables for comment
- 3) All final deliverables in print and/or electronic format, as appropriate

TASK 7 - PROJECT WEBSITE

The Consultant Team shall develop, host, maintain, and regularly update a public facing website for the project. The project website shall be updated throughout the process to continue to provide information about the status of the project and how to get involved, at a minimum. All project deliverables shall be posted on the project website unless indicated otherwise by DEP. The Consultant Team shall assist DEP in ensuring the public facing website shall remain available after completion of the project.

Deliverable

- 1) Project website

TASK 8 – MEETINGS, CONFERENCE CALLS AND GENERAL PROJECT TEAM COORDINATION

The Consultant Team shall schedule regular meetings with the Regional Team and DEP to monitor progress for the duration of the Resilient NJ program. These meetings may take place within the Jersey City Region, Trenton, NJ or other locations as appropriate. The Consultant Team shall prepare the agenda, facilitate meetings, prepare meeting summaries, and distribute copies to the attendees.

The Consultant Team will also meet with DEP throughout the length of the project. These meetings will include, but are not limited to:

- SIROMS Training – Two staff from the Consultant Team shall attend training on SIROMS in Trenton, New Jersey. The training will help the users understand the functionality of the system and how to successfully upload the required documents. This is a one-time training and will take approximately two hours.
- Project Kick Off Meeting(s) – Within 30 business days of receiving the notice to proceed on execution of this scope of work, the Consultant Team’s PM and other key personnel shall participate in a project kick off meeting, which will take place at DEP offices in Trenton, New Jersey. At this meeting, contract requirements, timelines, and team member roles and responsibilities will be clarified. Within 45 business days of this notice, the Consultant Team will hold a kick-off meeting with the Jersey City Regional Team.
- Status/Progress meetings – The Consultant Team’s Project Manager and relevant staff shall meet with DEP at least every three (3) weeks to report on the progress of all tasks for the duration of the project. These meetings may be conducted in person or by conference call but will be in-person at least quarterly. The

Consultant Team shall:

1. Schedule all meetings;
 2. Prepare meeting agenda; and
 3. Distribute a copy of the agenda to the meeting participants no later than two (2) business days prior to all meetings or conference calls;
 4. Prepare meeting summaries and transmit to DEP no later than two (2) business days after the meeting.
- Up to 25 additional meetings or conference calls may be scheduled to resolve issues as they arise, for the duration of the project.
 - Scenario Presentation – Consultant Team are expected to present their final scenarios pursuant to Task 4.2 – Innovation Award.
 - Workshops and trainings – As part of the Resilient NJ program, the Consultant Team may be expected to send a minimum of one staff member to attend identified workshops or trainings on relevant issues related to community resilience in the region. The trainings or workshops may be designed as professional development for the Consultant Team or as an opportunity to solicit feedback from the Consultant Team to inform state policy, programs, or priorities. These workshops may include topics such as engaging underrepresented populations, identifying community resilience metrics, resilience project funding and financing, risk communication techniques, etc. A maximum of ten (10) full-day workshops will be identified under this task.

Deliverable(s)

- 1) Meeting summaries for Progress/Status meetings only

ADMINISTRATIVE REQUIREMENTS

In addition to the tasks identified above, the Consultant Team will comply with administrative requirements listed below in accordance with HUD and DEP requirements.

Progress Reporting

The Consultant Team shall be responsible for reporting all project progress. This requires:

1. Uploading all project progress reports to SIROMS on a monthly basis; and
2. Ensuring that all progress reports are submitted in a mutually agreed upon format and include the following:
 - a. Task Name or description per the Scope of Work;
 - b. Task Status;
 - c. Activities completed and anticipated for the next month; and
 - d. Percent completed. Refer to **Attachment B** for a sample progress report.

Invoicing

All requests for payment shall be uploaded to SIROMS by the Project Team at least quarterly and no more than monthly. The Consultant Team's Project Manager shall ensure that all requests for payment:

1. Include employee timesheets;
2. Are signed by the employee's supervisor;
3. Are supported by completed activities/tasks described in the monthly progress reports; and
4. Include the **Invoice Summary Table – Attachment C**.

All activity to be reimbursed by the Resilient NJ program and all deliverables must be submitted in SIROMS, reviewed, and approved by both the CMF and DEP, by May 31, 2022. Final invoicing and progress report must be submitted in SIROMS by June 30, 2022.

Uploading documents to the Resilient NJ SharePoint site

The CMF will provide a SharePoint site for Regional and Consultant teams to collaborate on projects and serve as a repository for work products. The Consultant Team's Project Manager shall ensure that all draft and final work products developed by the Consultant Team are uploaded to the site regularly, but at least monthly.

SUBMISSION OF QUOTE PROPOSALS

If a prequalified vendor is not able to respond to this Request for Quotes for Jersey City Regional Team Project Scope of Services due to a conflict of interest or scheduling issue, it shall decline the request for competitive pricing in writing to DEP within three (3) business days of receipt of the request. Scheduling issues may include if the Consultant Team would not have capacity to execute this scope of work within the timeline required, due to capacity constraints resulting from ongoing or anticipated projects.

Prequalified vendors may submit questions no later than 12:00 noon, February 3, 2020. Please submit questions to Carmen.Valentin@dep.nj.gov. Responses to questions will be emailed to all prequalified vendors.

Both electronic and hard copies of the quote proposal are required. Quotes will be reviewed and scored according to the criteria in **Attachment D - Evaluation Criteria**.

One electronic copy of the quote proposal must be submitted to Carmen.Valentin@dep.nj.gov by 12:00 Noon, EST on February 18, 2020, and in accordance with the hourly rates awarded, as a result of Bid Solicitation 19DPP00368. Problems with electronic submission of the application should be directed to Carmen Valentin at (609) 984-0058 from Monday through Friday, 9:00 am to 4:00 pm.

Additionally, three hard copies of the quote proposal and one hard copy of the bid proposal previously submitted as part of Bid Solicitation 19DPP00368 must accompany the quote proposal, postmarked no later than 5:00 P.M. EST on February 18, 2020, and mailed to:

Attn: Carmen Valentin
NJ Department of Environmental Protection
Office of Climate Resilience
Bureau of Climate Resilience Planning
401 E. State St., 7th floor wing
P.O. Box 402
Trenton, NJ 08625-0402

The quote proposal must include the following:

- a. A statement demonstrating why the Consultant Team is uniquely qualified to work on the Jersey City Regional Team's regional project;
- b. A detailed description of how the Consultant Team will complete each identified task in the Scope of Work. Steps and level of effort should be tailored to the region;
- c. Name, title, and qualifications of personnel that will be assigned to each task and their experience to complete it successfully;
- d. A Work Schedule identifying the associated deliverable items to be submitted as evidence of completion of each task and/or sub-task; and

- e. A comprehensive budget showing the person-hours proposed to meet the requirements of the request for competitive quotes. The budget shall be designed to reflect the tasks, sub-tasks, or other work elements required by this request for quotes. The budget shall set forth, for each task, sub-task or other work element, the total number of person-hours, by labor category, proposed to complete the assignment. The hourly rates used for each labor category shall be the all-inclusive hourly rates specified in the Contract.

**NJ DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLIMATE RESILIENCE PLANNING
RESILIENT NJ PROGRAM**

**Request for Quotes for Long Beach Island Regional Team Project
Scope of Services**

NOTE: All requirements and provisions of Bid Solicitation 19DPP00368 are in effect for this scope of services and request for quotes including the “Statement of Assurances for Contractor/Consultant – Additional Federally Funded Agreement Provisions Applicable to Community Development Block-Grant-Disaster Recovery Funded Projects” and the assessment of liquidated damages, as applicable, in Section 5.14.

OVERVIEW

The New Jersey Department of Environmental Protection (DEP) is soliciting quotes under Bid Solicitation 19DPP00368 to work with the Long Beach Island Regional Team on execution of a Resilient NJ planning project. This includes development of a Regional Resilience and Adaptation Action Plan (Action Plan), as well as implementation of planning actions that are identified through development of the Action Plan. This request is one of four released at this time. The total funding available for these task orders is \$5,675,000. It is expected that the fee proposals will consider the unique circumstances of each project area that may affect level of effort to complete the scope of work. All work must be completed and deliverables submitted by May 31, 2022.

To support this program, DEP has engaged a Construction Management Firm (CMF). The CMF may provide services or materials on behalf of DEP to aid in the execution of this scope of work, as indicated below.

PROJECT AREA

The Long Beach Island Regional Team (Regional Team or Region) is composed of the municipalities of Long Beach Township, Barnegat Light, Beach Haven, Harvey Cedars, Ship Bottom, Surf City, as well as the Long Beach Island Community Center community-based organization (CBO). Long Beach Island is the Prime, or lead grant recipient, and is responsible for coordinating regional team members, ensuring participation at meetings and events, and managing administrative tasks for the Regional Team. The CBOs are included in the region to assist with community engagement and ensure that socially vulnerable populations are represented in the planning process.

SCOPE OF WORK

The Consultant Team will execute this scope of work as described herein for the Long Beach Island Region through two phases. Activities leading up to the development of the Action Plan comprise the plan development phase. The second phase – implementation - includes advancement of actions identified and selected through the plan development phase. Given the timeframe of the overall project, the implementation phase may be

initiated before the Action Plan is finalized. However, funding shall only be used to advance actions identified in the Action Plan.

Consultant Teams shall use the unique methods created for Resilient NJ to assess risk/vulnerability within the project areas (Attachment A), and to create and consider resilience scenarios (methodology to be provided after consultant selection). Small modifications to the methodologies will be considered and discussed during the course of the work, as appropriate, to ensure project success in each region, but for the purpose of this request for quotes these methodologies will be used in Tasks 3 and 4.

All project deliverables shall be submitted to DEP for review in a timely manner. Consultant Teams shall be responsible for posting all deliverables on the project website described below unless indicated otherwise by DEP. Each of the deliverables detailed below should be formatted as appropriate for inclusion in the final action plan.

The Consultant Team will be responsible for completing the following tasks:

TASK 1 - PLANNING CONTEXT

The Consultant Team will review existing relevant municipal, county, regional and state planning documents to gain an understanding of the Long Beach Island Region and surrounding area as applicable, including but not limited to its demographics, land use, topography, hazard exposure, social and cultural assets, local economic drivers, property tax, transportation and other critical infrastructure. In addition, the Consultant Team is expected to review and understand all resilience work that has been done to date or is in planning stages, as well as existing identified vulnerabilities and recommended actions.

DEP may provide some of this information in advance of project kick-off, however the Consultant Team will be responsible for identifying gaps in the documents and/or data and work directly with the Regional Teams to obtain the necessary information.

The Consultant Team shall develop a Planning Context Report that includes:

- 1) Index of documents and data reviewed
- 2) Memo on current planning status of the region, including, but not limited to:
 - a. Baseline community and regional information;
 - b. Identification of significant assets within the region based on initial document review;
 - c. Identification of socially vulnerable populations;
 - d. Major projects being planned or undertaken (not limited to resilience, including infrastructure, housing/development, transportation, or restoration);
 - e. Other resilience activities being planned or recently implemented;
 - f. Existing local and/or regional visions;
 - g. Initial list of gaps in plans, ordinances, or data related to resilience.
- 3) Maps depicting unique or relevant indicators/data related to long-term risk or resilience, as appropriate based on initial consultation with DEP.

The Planning Context Report will ultimately be a chapter of the Action Plan for the Long Beach Island Regional Team.

Deliverable(s)

- 1) Planning Context Report

TASK 2 – COMMUNITY AND STAKEHOLDER ENGAGEMENT

It is expected that the planning process will include a robust and multi-faceted community and stakeholder engagement effort. This effort is expected to be a community-driven regional planning process that envisions how the region can collectively address current and future flood concerns. The Consultant Team will lead a thorough and effective community outreach effort to ensure community awareness and gather community input and support during both phases of the project with input from DEP, the Regional Team, other stakeholders, and the public. A variety of innovative engagement methods will be utilized to meaningfully engage a broad cross-section of community members. This is expected to be a substantial effort taking up a significant portion of the budget for Phase I – Plan Development. It is expected that all the results of the following subtasks will inform future tasks in development and implementation of the Action Plan.

Additionally, it is expected that the community outreach will be designed to have an equitable and inclusive community engagement approach to promote a fair process of engagement. It is a core objective of the Resilient NJ program to engage and address the needs of socially vulnerable and under-represented populations throughout both the Plan Development and Implementation phases. To assist with this effort, the Long Beach Island Regional Team includes a community-based organization with experience working with socially vulnerable populations in the region.

The Consultant Team shall develop a Community and Stakeholder Engagement report, including an Engagement Plan, that details the process and outcomes of the engagement efforts. All deliverables identified in Task 2.1 – 2.4 shall be included in the report.

Deliverable(s)

- 1) Community and Stakeholder Engagement Report

Task 2.1 Engagement Plan

The Consultant Team shall draft a Stakeholder and Community Engagement Plan (Engagement Plan) in consultation with members of the Long Beach Island Regional Team and with oversight by DEP. This plan shall detail the methods and timing of all outreach efforts for both phases of the Resilient NJ program. The Engagement Plan will be updated periodically to track the stakeholder engagement process and modify approaches as necessary. The Consultant Team shall utilize a wide range of approaches in conducting public engagement. Engagement methods shall be chosen to advance programmatic objectives while responding to the unique characteristics of the region. Engagement should not be limited to any single outreach or engagement strategy.

In addition to the public engagement strategies, the Engagement Plan shall detail any planning/steering committees or advisory group(s), how they will be engaged in the process, and metrics for tracking the effectiveness of the Engagement Plan. The Engagement Plan will identify neighborhood-level engagement strategies and opportunities. Consultants must demonstrate how engagement will be maintained throughout the process to maintain interest and participation from stakeholders.

In order to ensure the development of a strong engagement plan for the region, DEP has awarded a grant to Enterprise Community Partners, Inc. (Enterprise) to assist with the development and enhancement of the engagement plan. Enterprise will provide consulting, support, and resources for the Regional and Consultant Teams as they develop the Plan. This support will include providing guidance on best practices for engaging socially vulnerable populations. The Consultant Team will be expected to participate in up to 3 in-person meetings and 2-4 remote meetings to coordinate with Enterprise. Enterprise will serve entirely in a supportive role for the Resilient NJ program; the Consultant Team will have final responsibility for the development and execution of the Engagement Plan.

Deliverable(s)

- 1) Draft Engagement Plan for review by DEP and Long Beach Island Regional Team
- 2) Final Engagement Plan, revised based on comments from DEP and Long Beach Island Regional Team

Task 2.2 Engagement/Outreach

This task shall address public engagement throughout both phases of the Resilient NJ program. It is expected there will be appropriate public outreach and engagement in Phase II for each/all actions that are selected.

Engagement and outreach efforts may be executed using various platforms, media, or other techniques identified by the Consultant Team. Outreach efforts should be innovative with an overall goal of regional saturation. Attention shall be paid to the diversity of neighborhoods in the region with distinct cultural identities, socioeconomic characteristics, and architectural and urban forms. Special attention shall be given to socially vulnerable populations (see Task 2.3). The Consultant Team is expected to identify and execute engagement methods that will be successful in meaningfully engaging socially vulnerable populations.

It is expected that outreach will include, but is not limited to:

- a minimum of two meetings for planning/steering committees;
- a minimum of one public meeting, for each of the Tasks 2-6; and,
- utilization of additional engagement methods beyond public meetings to engage populations.

The Consultant Team should indicate the anticipated number of meetings and other engagement activities in its fee proposal accounting for the size and diversity of the region. The Consultant Team shall be responsible for developing outreach and communication

materials for the project. To ensure effective communication within the region, all written materials requesting input and participation from the public for any CDBG-DR related activity will be translated into Spanish. These documents will also be made available upon request in any of the other 10 languages required by the New Jersey Department of Community Affairs' Language Access Plan (LAP) found at www.renewjerseystronger.org – Plans & Reports. A list of the languages available for translation shall be included at the bottom of all printed materials intended for public outreach.

DEP, through the CMF, will provide translation services for written materials as well as on-call translation services at public meetings, if needed. The Consultant Team shall provide the CMF with the appropriate materials with enough time to allow for translation. The Engagement Plan shall identify the appropriate languages for translation for the Long Beach Island Region.

Deliverable(s)

- 1) Meeting materials, as appropriate
- 2) Meeting notes, as appropriate
- 3) Results from innovative engagement methods, as appropriate
- 4) Tracking of outreach/engagement metrics throughout process

Task 2.3 – Socially Vulnerable Populations

Socially vulnerable populations have been traditionally underrepresented in resilience planning efforts and the Resilient NJ program seeks to remedy this within the project areas. The work proposed for this task should be scoped to meet the overall Resilient NJ program objectives of a community-driven planning process that incorporates socially vulnerable and underrepresented populations. Socially vulnerable populations are defined by Sapam Singh, et al. (2014) as individuals and groups of people who are challenged in their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard based on physical or socioeconomic factors (Singh, 2014). Key characteristics can include but are not limited to: age (elderly and very young); low income; language other than English spoken at home; limited access to transportation; inadequate housing/shelter; low educational attainment; ethnic minorities; physically and mentally challenged; and special medical needs. It is expected that the Consultant Team will modify its approaches as needed to ensure all socially vulnerable populations within the region are appropriately engaged throughout the entire project.

The Long Beach Island Regional Team includes the Long Beach Island Community Center. This organization will provide support to the Consultant Team for the identification and engagement of socially vulnerable populations.

Task 2.4 – Visioning

As part of the execution of the Engagement Plan, the Consultant Team shall be expected to lead the public within the region through a long-term (through 2070) community visioning process that provides community members an opportunity to identify their goals, objectives, and values. This vision will inform the Resilience and Adaptation Scenarios (Task

4) and the basis of the actions. The visioning process should not be limited to the community's response to flooding hazards but should be designed to consider all aspects of the community's character and identity through a resilience lens. Visioning should, at a minimum, occur before the detailed risk assessment.

The Consultant Team shall prepare a Visioning Report with a vision statement, goals and objectives, and concept graphics, as appropriate, demonstrating to DEP and the Long Beach Island Regional Team that it understands what is considered important in the region and how the region wants to look and feel in the future. The vision will be used to evaluate the success of the selected Resilience and Adaptation Scenarios. The Visioning Report will ultimately be a chapter of the Action Plan for the Long Beach Island Regional Team.

Deliverable(s)

- 1) Visioning Report including a final vision statement and supporting documentation

TASK 3 – ASSET COLLECTION AND RISK ASSESSMENT

The Consultant Team will be expected to perform asset collection and a risk assessment for the Long Beach Island Region using the Risk Assessment Methodology outlined in Attachment A.

Task 3.1 – Asset Collection

For the purposes of the Resilient NJ program, assets are considered places, things, processes or services.

Places may include: special neighborhoods, areas, or facilities where economic, environmental, and/or social functions of the community occur.

Things may include: features that the community values or critical or other infrastructure that supports places, processes or services.

Processes or Services may include: social, cultural, economic, government, or professional networks and services that are essential to day-to-day life and livability and/or support operations during and after a disaster.

Assets can also exist on a spectrum of having beneficial or negative qualities. Liabilities such as superfund sites, criminal hot spots, or traffic hazards may be considered an asset for the purposes of evaluation.

The Consultant Team shall work with the Long Beach Island Regional Team to identify important community assets in the region. It is expected this task will involve significant public input. The Consultant Team shall determine the best methods to collect and store the necessary data. The Consultant Team shall include the information in a geodatabase and provide it to DEP upon completion of the task. It is anticipated that this process may result in more assets than can be utilized for the risk assessment, and scenario

development. The Consultant Team shall work with the Long Beach Island Regional Team to prioritize assets using a methodology appropriate for the Project.

Deliverable(s)

- 1) Tabular and geodatabase of asset information, including prioritization if appropriate
- 2) Individual asset profile tables; see Attachment A.

Task 3.2 – Baseline Risk Assessment

The Consultant Team will perform a baseline risk assessment for four (4) potential flood conditions (to be provided by DEP) to understand how the existing landscape, and identified assets, may be vulnerable to flood events now and in the future. The risk assessment shall consider flooding from precipitation, coastal storms, and chronic tidal flooding. These baseline risk assessments will inform the development and assessment of the Resilience and Adaptation Scenarios.

The risk assessment will generally use data, models, and methods provided by DEP, as detailed in Attachment A. The Consultant Team will work with DEP and the CMF to determine if any modifications to these methods and models are necessary and/or feasible within the final scope and budget.

Some communities will likely have undergone partial risk assessments as part of previous planning initiatives that monetize or qualitatively assess exposure to these hazards. It is expected that these risk assessments will be insufficient and/or outdated for the purposes of the Resilient NJ program. However, if the Consultant Team believes the data to be sufficient and meeting the expected outcomes of the Risk Assessment methodology, a memo documenting the assertion can be drafted and submitted for review by DEP and the CMF.

The Consultant Team shall develop an Asset Collection and Risk Assessment Report detailing the process, assumptions, information, summaries, and conclusions of the risk assessments. All deliverables identified above shall be included in the report. This Report will ultimately be a chapter of the Action Plan for the Long Beach Island Regional Team.

Deliverable(s)

- 1) Asset Collection and Risk Assessment Report

TASK 4 – RESILIENCE AND ADAPTATION SCENARIOS

Task 4.1 – Resilience and Adaptation Scenario Development

With an understanding of existing and anticipated risk to the region, the Consultant Team will propose a minimum of three (3) resilience and adaptation scenarios and a “No Action” Scenario for consideration by the Long Beach Island Regional Team, project stakeholders, and the public. The scenarios are an opportunity to demonstrate to the Regional Team that there are multiple options to advance resilience within the region while meeting the community’s vision. Each scenario shall include:

- a suite of planning actions, policies, and projects to address the identified risks and build resilience in the region in a manner that meets the regional vision;
- a linked set of strategies and actions, or pathways to resilience and adaptation;
- a timeline showing how the risk(s) identified through the planning process over time will be addressed
- renderings/conceptual drawings or other visualization products to present the scenarios to DEP, stakeholders, and the public.

Scenarios shall be developed to provide communities with real choices about how they may plan for their future. It is expected that the scenarios will respond to the vision developed by the community, although it may sometimes be necessary to provide alternatives if achieving elements of the vision are not possible. If this is the case, this shall be communicated to the Regional Team in a timely fashion. Planning, policy actions, and projects within each scenario should be linked together and build upon each other to provide co-benefits. Consultant Team will be expected to identify innovative approaches to solving resilience challenges as part of their scenarios.

Products to present the scenarios must be designed to ensure the regional teams, stakeholders, and the broader public understand and are able to make informed decisions about their preferences. The development of both the scenarios and the associated visualization products are expected to be major undertakings requiring significant resources within the overall framework of the Resilient NJ program. Choices about how scenarios will be differentiated from each other will be made in collaboration with DEP. DEP will have final approval over the choices that are made.

The scenarios will be developed using the Scenario Development and Evaluation Methodology to be provided by DEP after Consultant selection. Variations to this approach must be approved in writing by DEP. The methodology includes multiple questionnaires to help brainstorm and evaluate the scenario as it's being developed to ensure the strategies respond to the region's vision, reduce future risk to identified assets, and enhance the overall resilience of the region, including its socially vulnerable populations. Consultant Teams will have an opportunity to provide feedback on the methodology prior to its execution.

The Consultant Team shall produce a Scenario Development Memo detailing each scenario, all of the actions that are included, why it was developed as such, how it will address the vision of Regional Team, the goals and objectives of the scenario, and the Resilient NJ program identified in the bid solicitation document. Materials developed under this scenario will be used in the evaluation of the Innovation Award as described under **Innovation Award** below.

Deliverable(s)

- 1) Scenario Development Memo for each scenario
- 2) Visualization products to present the scenarios to DEP, stakeholders, and the public

Task 4.2 – Scenario Evaluation and Selection

Each resilience and adaptation scenario will be evaluated using the Scenario Development and Evaluation methodology developed specifically for the Resilient NJ program. The Scenario Development and Evaluation methodology uses qualitative and quantitative analyses to provide a comprehensive understanding of how each scenario would affect the region if it were to be fully realized and how it will perform under various flood conditions.

The evaluation and its outcomes will be used in conjunction with the visualization products produced in Task 4.1 to inform selection of the preferred resilience and adaptation scenario by the Regional Team. To inform the decision, the Consultant Team will gather input from the Regional Team, stakeholders, and the public, modify the scenario as appropriate, and finalize the suite of actions that will be included in Task 5.

The Consultant Team shall develop a Resilience and Adaptation Scenario Report detailing the development, evaluation, and selection of the Preferred Scenario. All deliverables identified above shall be included in the report. This Report will ultimately be a chapter of the Action Plan for the Long Beach Island Regional Team.

Deliverable(s)

- 1) Completed evaluation for each scenario
- 2) Resilience and Adaptation Scenario Report

Innovation Award

The Resilient NJ program seeks innovation in the field of resilience planning. After development of the scenarios, the Consultant Team, in conjunction with the Long Beach Island Regional Team, if desired, will present the final scenarios to all Regional and Consultant Teams from the four Resilient NJ Program regions at an event organized by the CMF and DEP, which is noted under Task 8. This event is to showcase how the scenarios creatively address the vulnerabilities while meeting the vision of the Long Beach Island Region. Consultant Teams may use any materials created under the previous tasks to support their presentation for consideration of the award.

The Consultant Team who wins this competition, based on the criteria below, may be eligible for additional funding, up to \$250,000, for Phase II. This is in addition to and separate from the work budgeted under this request for quotes. **The innovation award or the subsequent work effort should not be included in the quotation submitted in response to this request.**

The decision to offer an innovation award will be made by a panel of experts at DEP based on the group of scenarios that are submitted to DEP as part of Task 4.1 – Resilience and Adaptation Scenario Development. The Panel will evaluate the scenarios and the presentation of the scenarios using the criteria below:

- 1) The scenarios reduce risk to flood hazards. This includes, but is not limited to, direct risk reduction, and may include both physical and non-physical actions (15 points);

- 2) The scenarios are specifically adapted to the unique characteristics of the communities and ecology of the region and respond to the vision articulated by the Regional Teams (15 points);
- 3) The scenarios utilize actions that are designed to create social, cultural, economic, ecological, and environmental co-benefits (20 points);
- 4) The scenarios tie actions together to create greater benefits than each action would create on its own (20 points);
- 5) The scenarios present the region with multiple approaches to building resilience and addressing potential flooding hazards to allow for community discussion and decision-making (15 points); and
- 6) The scenarios are determined to be equitable in the distributions of costs, benefits, and risk across populations subgroup. This will be evaluated based on a method developed by DEP using the following measurements (15 points):
 - a. "Fair Process:" Measuring equity and inclusion based on the fairness of the process for representation of SVPs; or
 - b. "Equal Outcomes:" Measuring based on equal outcomes- distribution of a policy's costs, benefits, and risk across population subgroups.

DEP reserves the right to not distribute an innovation award if it determines that none of the scenarios developed by the Consultant Team are significantly innovative. Only submissions that meet project deadlines will be eligible for consideration.

TASK 5 – REGIONAL RESILIENCE AND ADAPTATION ACTION PLAN

Once the preferred scenario has been selected and prioritized, the Consultant Team shall draft a Regional Resilience and Adaptation Action Plan around that preferred scenario for the region. The Action Plan will identify responsible parties, cost of implementation, potential funding sources, and implementation timelines for each action. The Consultant Team will work with the Regional Team to prioritize the actions and identify which actions are most appropriate and advantageous to pursue in Phase II. Actions should be selected in accordance with HUD requirements and in consultation with DEP.

The Consultant Team will gather input from the Regional Team, stakeholders, and the public on the draft Regional Resilience and Adaptation Action Plan and modify it as appropriate, producing a final Regional Resilience and Adaptation Action Plan.

Deliverable(s)

- 1) Draft Action Plan
- 2) Final Action Plan including consideration of comments received

TASK 6 –PHASE II: IMPLEMENTATION

The Consultant Team, in consultation with the Regional Team shall, with DEP approval, select actions from the Action Plan to advance as part of Phase II - Implementation. However, with prior approval from DEP, actions may be identified and initiated prior to the finalization of the Action Plan.

It is expected that:

- a minimum of approximately one-third of the overall budget submitted for this Request for Quotes shall be allocated for this task;
- the actions selected will be completed prior to May 31, 2022 and within budget;
- the outcomes can be realized in either the short-or long-term;
- the outcomes will have regional or local impact; and
- meet the eligibility requirements determined by HUD (24CFR570.205).

As directed by HUD (24CFR570.205) eligible implementation actions must be considered “planning-only” activities, which include data gathering, studies, analysis, preparation of plans, and the development of ordinances. These funds can be used to advance analysis for long-range planning and solutions. Conceptual design work, feasibility analyses, and cost-benefit analyses for specific projects are also permissible. Given the restrictions from HUD, the funds **cannot** be used for creating engineering or architectural drawings in support of construction. At no point will construction occur as part of the Resilient NJ program, nor shall architectural or engineering plans be developed. It is permitted and encouraged to identify these types of projects in scenarios and in the Action Plan; however, they may not be chosen as implementation activities.

The Consultant Team shall develop an Implementation Memo detailing the actions selected for implementation and a proposed work plan.

The Consultant Team shall be responsible for the delivery of all draft and final products associated with the selected action(s).

It is expected that appropriate community engagement will continue through this task. Community engagement for this task should be included in the budget for Task 2.2 above.

Deliverable(s)

- 1) Implementation Memo, including Workplan outlining timelines and deliverables anticipated under this task, including how stakeholders and the public may be engaged during this Phase
- 2) All draft deliverables for comment
- 3) All final deliverables in print and/or electronic format, as appropriate

TASK 7 - PROJECT WEBSITE

The Consultant Team shall develop, host, maintain, and regularly update a public facing website for the project. The project website shall be updated throughout the process to continue to provide information about the status of the project and how to get involved, at a minimum. All project deliverables shall be posted on the project website unless indicated otherwise by DEP. The Consultant Team shall assist DEP in ensuring the public facing website shall remain available after completion of the project.

Deliverable

- 1) Project website

TASK 8 – MEETINGS, CONFERENCE CALLS AND GENERAL PROJECT TEAM COORDINATION

The Consultant Team shall schedule regular meetings with the Regional Team and DEP to monitor progress for the duration of the Resilient NJ program. These meetings may take place within the Long Beach Island Region, Trenton, NJ or other locations as appropriate. The Consultant Team shall prepare the agenda, facilitate meetings, prepare meeting summaries, and distribute copies to the attendees.

The Consultant Team will also meet with DEP throughout the length of the project. These meetings will include, but are not limited to:

- SIROMS Training – Two staff from the Consultant Team shall attend training on SIROMS in Trenton, New Jersey. The training will help the users understand the functionality of the system and how to successfully upload the required documents. This is a one-time training and will take approximately two hours.
- Project Kick Off Meeting(s) – Within 30 business days of receiving the notice to proceed on execution of this scope of work, the Consultant Team’s PM and other key personnel shall participate in a project kick off meeting, which will take place at DEP offices in Trenton, New Jersey. At this meeting, contract requirements, timelines, and team member roles and responsibilities will be clarified. Within 45 business days of this notice, the Consultant Team will hold a kick-off meeting with the Long Beach Island Regional Team.
- Status/Progress meetings – The Consultant Team’s Project Manager and relevant staff shall meet with DEP at least every three (3) weeks to report on the progress of all tasks for the duration of the project. These meetings may be conducted in person or by conference call but will be in-person at least quarterly. The Consultant Team shall:
 1. Schedule all meetings;
 2. Prepare meeting agenda; and
 3. Distribute a copy of the agenda to the meeting participants no later than two (2) business days prior to all meetings or conference calls;
 4. Prepare meeting summaries and transmit to DEP no later than two (2) business days after the meeting.
- Up to 25 additional meetings or conference calls may be scheduled to resolve issues as they arise, for the duration of the project.
- Scenario Presentation – Consultant Team are expected to present their final scenarios pursuant to Task 4.2 – Innovation Award.
- Workshops and trainings – As part of the Resilient NJ program, the Consultant Team may be expected to send a minimum of one staff member to attend identified workshops or trainings on relevant issues related to community resilience in the region. The trainings or workshops may be designed as professional development

for the Consultant Team or as an opportunity to solicit feedback from the Consultant Team to inform state policy, programs, or priorities. These workshops may include topics such as engaging underrepresented populations, identifying community resilience metrics, resilience project funding and financing, risk communication techniques, etc. A maximum of ten (10) full-day workshops will be identified under this task.

Deliverable(s)

- 1) Meeting summaries for Progress/Status meetings only

ADMINISTRATIVE REQUIREMENTS

In addition to the tasks identified above, the Consultant Team will comply with administrative requirements listed below in accordance with HUD and DEP requirements.

Progress Reporting

The Consultant Team shall be responsible for reporting all project progress. This requires:

1. Uploading all project progress reports to SIROMS on a monthly basis; and
2. Ensuring that all progress reports are submitted in a mutually agreed upon format and include the following:
 - a. Task Name or description per the Scope of Work;
 - b. Task Status;
 - c. Activities completed and anticipated for the next month; and
 - d. Percent completed. Refer to **Attachment B** for a sample progress report.

Invoicing

All requests for payment shall be uploaded to SIROMS by the Project Team at least quarterly and no more than monthly. The Consultant Team's Project Manager shall ensure that all requests for payment:

1. Include employee timesheets;
2. Are signed by the employee's supervisor;
3. Are supported by completed activities/tasks described in the monthly progress reports; and
4. Include the **Invoice Summary Table – Attachment C**.

All activity to be reimbursed by the Resilient NJ program and all deliverables must be submitted in SIROMS, reviewed, and approved by both the CMF and DEP, by May 31, 2022. Final invoicing and progress report must be submitted in SIROMS by June 30, 2022.

Uploading documents to the Resilient NJ SharePoint site

The CMF will provide a SharePoint site for Regional and Consultant teams to collaborate on projects and serve as a repository for work products. The Consultant Team's Project Manager shall ensure that all draft and final work products developed by the Consultant Team are uploaded to the site regularly, but at least monthly.

SUBMISSION OF QUOTE PROPOSALS

If a prequalified vendor is not able to respond to this Request for Quotes for the Long Beach Island Regional Team Project Scope of Services due to a conflict of interest or scheduling issue, it shall decline the request for competitive pricing in writing to DEP within three (3) business days of receipt of the request. Scheduling issues may include if the Consultant Team would not have capacity to execute this scope of work on the timeline required, due to capacity constraints resulting from ongoing or anticipated projects.

Prequalified vendors may submit questions no later than 12:00 noon, February 3, 2020. Please submit questions to Carmen.Valentin@dep.nj.gov. Responses to questions will be emailed to all prequalified vendors.

Both electronic and hard copies of the quote proposal are required. Quotes will be reviewed and scored according to the criteria in **Attachment D - Evaluation Criteria**.

One electronic copy of the quote proposal must be submitted to Carmen.Valentin@dep.nj.gov by 12:00 Noon, EST on February 18, 2020, and in accordance with the hourly rates awarded, as a result of Bid Solicitation 19DPP00368. Problems with electronic submission of the application should be directed to Carmen Valentin at (609) 984-0058 from Monday through Friday, 9:00 am to 4:00 pm.

Additionally, three hard copies of the quote proposal and one hard copy of the bid proposal previously submitted as part of Bid Solicitation 19DPP00368 must accompany the quote proposal, postmarked no later than 5:00 P.M. EST on February 18, 2020, and mailed to:

Attn: Carmen Valentin
NJ Department of Environmental Protection
Office of Climate Resilience
Bureau of Climate Resilience Planning
401 E. State St., 7th floor wing
P.O. Box 402
Trenton, NJ 08625-0402

The quote proposal must include the following:

- a. A statement demonstrating why the Consultant Team is uniquely qualified to work on the Long Beach Island Regional Team's regional project;
- b. A detailed description of how the Consultant Team will complete each identified task in the Scope of Work. Steps and level of effort should be tailored to the region;
- c. Name, title, and qualifications of personnel that will be assigned to each task and their experience to complete it successfully;
- d. A Work Schedule identifying the associated deliverable items to be submitted as evidence of completion of each task and/or sub-task; and

- e. A comprehensive budget showing the person-hours proposed to meet the requirements of the request for competitive quotes. The budget shall be designed to reflect the tasks, sub-tasks, or other work elements required by this request for quotes. The budget shall set forth, for each task, sub-task or other work element, the total number of person-hours, by labor category, proposed to complete the assignment. The hourly rates used for each labor category shall be the all-inclusive hourly rates specified in the Contract.

**NJ DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLIMATE RESILIENCE PLANNING
RESILIENT NJ PROGRAM**

**Request for Quotes for Middlesex County Regional Team Project
Scope of Services**

NOTE: All requirements and provisions of Bid Solicitation 19DPP00368 are in effect for this scope of services and request for quotes including the “Statement of Assurances for Contractor/Consultant – Additional Federally Funded Agreement Provisions Applicable to Community Development Block-Grant-Disaster Recovery Funded Projects” and the assessment of liquidated damages, as applicable, in Section 5.14.

OVERVIEW

The New Jersey Department of Environmental Protection (DEP) is soliciting quotes under Bid Solicitation 19DPP00368 to work with the Middlesex County Regional Team on execution of a Resilient NJ planning project. This includes development of a Regional Resilience and Adaptation Action Plan (Action Plan), as well as implementation of planning actions that are identified through development of the Action Plan. This request is one of four released at this time. The total funding available for these task orders is \$5,675,000. It is expected that the fee proposals will consider the unique circumstances of each project area that may affect level of effort to complete the scope of work. All work must be completed and deliverables submitted by May 31, 2022.

To support this program, DEP has engaged a Construction Management Firm (CMF). The CMF may provide services or materials on behalf of DEP to aid in the execution of this scope of work, as indicated below.

PROJECT AREA

The Middlesex County Regional Team (Regional Team or Region) is composed of the municipalities of Middlesex County, Perth Amboy, Woodbridge, Sayreville, South River, Old Bridge, as well as the Lower-Raritan Water Partnership community-based organization (CBO). Middlesex County is the Prime, or lead grant recipient, and is responsible for coordinating regional team members, ensuring participation at meetings and events, and managing administrative tasks for the Regional Team. The CBOs are included in the region to assist with community engagement and ensure that socially vulnerable populations are represented in the planning process.

SCOPE OF WORK

The Consultant Team will execute this scope of work as described herein for the Middlesex County Region through two phases. Activities leading up to the development of the Action Plan comprise the plan development phase. The second phase – implementation - includes advancement of actions identified and selected through the plan development phase. Given the timeframe of the overall project, the implementation phase may be initiated

before the Action Plan is finalized. However, funding shall only be used to advance actions identified in the Action Plan.

Consultant Teams shall use the unique methods created for Resilient NJ to assess risk/vulnerability within the project areas (Attachment A), and to create and consider resilience scenarios (methodology to be provided after consultant selection). Small modifications to the methodologies will be considered and discussed during the course of the work, as appropriate, to ensure project success in each region, but for the purpose of this request for quotes these methodologies will be used in Tasks 3 and 4.

All project deliverables shall be submitted to DEP for review in a timely manner. Consultant Teams shall be responsible for posting all deliverables on the project website described below unless indicated otherwise by DEP. Each of the deliverables detailed below should be formatted as appropriate for inclusion in the final action plan.

The Consultant Team will be responsible for completing the following tasks:

TASK 1 - PLANNING CONTEXT

The Consultant Team will review existing relevant municipal, county, regional and state planning documents to gain an understanding of the Middlesex County Region and surrounding area as applicable, including but not limited to its demographics, land use, topography, hazard exposure, social and cultural assets, local economic drivers, property tax, transportation and other critical infrastructure. In addition, the Consultant Team is expected to review and understand all resilience work that has been done to date or is in planning stages, as well as existing identified vulnerabilities and recommended actions.

DEP may provide some of this information in advance of project kick-off, however the Consultant Team will be responsible for identifying gaps in the documents and/or data and work directly with the Regional Teams to obtain the necessary information.

The Consultant Team shall develop a Planning Context Report that includes:

- 1) Index of documents and data reviewed
- 2) Memo on current planning status of the region, including, but not limited to:
 - a. Baseline community and regional information;
 - b. Identification of significant assets within the region based on initial document review;
 - c. Identification of socially vulnerable populations;
 - d. Major projects being planned or undertaken (not limited to resilience, including infrastructure, housing/development, transportation, or restoration);
 - e. Other resilience activities being planned or recently implemented;
 - f. Existing local and/or regional visions;
 - g. Initial list of gaps in plans, ordinances, or data related to resilience.
- 3) Maps depicting unique or relevant indicators/data related to long-term risk or resilience, as appropriate based on initial consultation with DEP.

The Planning Context Report will ultimately be a chapter of the Action Plan for the Middlesex County Regional Team.

Deliverable(s)

- 1) Planning Context Report

TASK 2 – COMMUNITY AND STAKEHOLDER ENGAGEMENT

It is expected that the planning process will include a robust and multi-faceted community and stakeholder engagement effort. This effort is expected to be a community-driven regional planning process that envisions how the region can collectively address current and future flood concerns. The Consultant Team will lead a thorough and effective community outreach effort to ensure community awareness and gather community input and support during both phases of the project with input from DEP, the Regional Team, other stakeholders, and the public. A variety of innovative engagement methods will be utilized to meaningfully engage a broad cross-section of community members. This is expected to be a substantial effort taking up a significant portion of the budget for Phase I – Plan Development. It is expected that all the results of the following subtasks will inform future tasks in development and implementation of the Action Plan.

Additionally, it is expected that the community outreach will be designed to have an equitable and inclusive community engagement approach to promote a fair process of engagement. It is a core objective of the Resilient NJ program to engage and address the needs of socially vulnerable and under-represented populations throughout both the Plan Development and Implementation phases. To assist with this effort, the Middlesex County Regional Team includes a community-based organization with experience working with socially vulnerable populations in the region.

The Consultant Team shall develop a Community and Stakeholder Engagement report, including an Engagement Plan, that details the process and outcomes of the engagement efforts. All deliverables identified in Task 2.1 – 2.4 shall be included in the report.

Deliverable(s)

- 1) Community and Stakeholder Engagement Report

Task 2.1 Engagement Plan

The Consultant Team shall draft a Stakeholder and Community Engagement Plan (Engagement Plan) in consultation with members of the Middlesex County Regional Team and with oversight by DEP. This plan shall detail the methods and timing of all outreach efforts for both phases of the Resilient NJ program. The Engagement Plan will be updated periodically to track the stakeholder engagement process and modify approaches as necessary. The Consultant Team shall utilize a wide range of approaches in conducting public engagement. Engagement methods shall be chosen to advance programmatic objectives while responding to the unique characteristics of the region. Engagement should not be limited to any single outreach or engagement strategy.

In addition to the public engagement strategies, the Engagement Plan shall detail any planning/steering committees or advisory group(s), how they will be engaged in the process, and metrics for tracking the effectiveness of the Engagement Plan. The Engagement Plan will identify neighborhood-level engagement strategies and opportunities. Consultants must demonstrate how engagement will be maintained throughout the process to maintain interest and participation from stakeholders.

In order to ensure the development of a strong engagement plan for the region, DEP has awarded a grant to Enterprise Community Partners, Inc. (Enterprise) to assist with the development and enhancement of the engagement plan. Enterprise will provide consulting, support, and resources for the Regional and Consultant Teams as they develop the Plan. This support will include providing guidance on best practices for engaging socially vulnerable populations. The Consultant Team will be expected to participate in up to 3 in-person meetings and 2-4 remote meetings to coordinate with Enterprise. Enterprise will serve entirely in a supportive role for the Resilient NJ program; the Consultant Team will have final responsibility for the development and execution of the Engagement Plan.

Deliverable(s)

- 1) Draft Engagement Plan for review by DEP and Middlesex County Regional Team
- 2) Final Engagement Plan, revised based on comments from DEP and Middlesex County Regional Team

Task 2.2 Engagement/Outreach

This task shall address public engagement throughout both phases of the Resilient NJ program. It is expected there will be appropriate public outreach and engagement in Phase II for each/all actions that are selected.

Engagement and outreach efforts may be executed using various platforms, media, or other techniques identified by the Consultant Team. Outreach efforts should be innovative with an overall goal of regional saturation. Attention shall be paid to the diversity of neighborhoods in the region with distinct cultural identities, socioeconomic characteristics, and architectural and urban forms. Special attention shall be given to socially vulnerable populations (see Task 2.3). The Consultant Team is expected to identify and execute engagement methods that will be successful in meaningfully engaging socially vulnerable populations.

It is expected that outreach will include, but is not limited to:

- a minimum of two meetings for planning/steering committees;
- a minimum of one public meeting, for each of the Tasks 2-6; and,
- utilization of additional engagement methods beyond public meetings to engage populations.

The Consultant Team should indicate the anticipated number of meetings and other engagement activities in its fee proposal accounting for the size and diversity of the region.

The Consultant Team shall be responsible for developing outreach and communication materials for the project. To ensure effective communication within the region, all written materials requesting input and participation from the public for any CDBG-DR related activity will be translated into Spanish. These documents will also be made available upon request in any of the other 10 languages required by the New Jersey Department of Community Affairs' Language Access Plan (LAP) found at www.renewjerseystronger.org – Plans & Reports. A list of the languages available for translation shall be included at the bottom of all printed materials intended for public outreach.

DEP, through the CMF, will provide translation services for written materials as well as on-call translation services at public meetings, if needed. The Consultant Team shall provide the CMF with the appropriate materials with enough time to allow for translation. The Engagement Plan shall identify the appropriate languages for translation for the Middlesex County Region.

Deliverable(s)

- 1) Meeting materials, as appropriate
- 2) Meeting notes, as appropriate
- 3) Results from innovative engagement methods, as appropriate
- 4) Tracking of outreach/engagement metrics throughout process

Task 2.3 – Socially Vulnerable Populations

Socially vulnerable populations have been traditionally underrepresented in resilience planning efforts and the Resilient NJ program seeks to remedy this within the project areas. The work proposed for this task should be scoped to meet the overall Resilient NJ program objectives of a community-driven planning process that incorporates socially vulnerable and underrepresented populations. Socially vulnerable populations are defined by Sapam Singh, et al. (2014) as individuals and groups of people who are challenged in their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard based on physical or socioeconomic factors (Singh, 2014). Key characteristics can include but are not limited to: age (elderly and very young); low income; language other than English spoken at home; limited access to transportation; inadequate housing/shelter; low educational attainment; ethnic minorities; physically and mentally challenged; and special medical needs. It is expected that the Consultant Team will modify its approaches as needed to ensure all socially vulnerable populations within the region are appropriately engaged throughout the entire project.

The Middlesex County Regional Team includes the Lower-Raritan Water Partnership. This organization will provide support to the Consultant Team for the identification and engagement of socially vulnerable populations.

Task 2.4 – Visioning

As part of the execution of the Engagement Plan, the Consultant Team shall be expected to lead the public within the region through a long-term (through 2070) community visioning

process that provides community members an opportunity to identify their goals, objectives, and values. This vision will inform the Resilience and Adaptation Scenarios (Task 4) and the basis of the actions. The visioning process should not be limited to the community's response to flooding hazards but should be designed to consider all aspects of the community's character and identity through a resilience lens. Visioning should, at a minimum, occur before the detailed risk assessment.

The Consultant Team shall prepare a Visioning Report with a vision statement, goals and objectives, and concept graphics, as appropriate, demonstrating to DEP and the Middlesex County Regional Team that it understands what is considered important in the region and how the region wants to look and feel in the future. The vision will be used to evaluate the success of the selected Resilience and Adaptation Scenarios. The Visioning Report will ultimately be a chapter of the Action Plan for the Middlesex County Regional Team.

Deliverable(s)

- 1) Visioning Report including a final vision statement and supporting documentation

TASK 3 – ASSET COLLECTION AND RISK ASSESSMENT

The Consultant Team will be expected to perform asset collection and a risk assessment for the Middlesex County Region using the Risk Assessment Methodology outlined in Attachment A.

Task 3.1 – Asset Collection

For the purposes of the Resilient NJ program, assets are considered places, things, processes or services.

Places may include: special neighborhoods, areas, or facilities where economic, environmental, and/or social functions of the community occur.

Things may include: features that the community values or critical or other infrastructure that supports places, processes or services.

Processes or Services may include: social, cultural, economic, government, or professional networks and services that are essential to day-to-day life and livability and/or support operations during and after a disaster.

Assets can also exist on a spectrum of having beneficial or negative qualities. Liabilities such as superfund sites, criminal hot spots, or traffic hazards may be considered an asset for the purposes of evaluation.

The Consultant Team shall work with the Middlesex County Regional Team to identify important community assets in the region. It is expected this task will involve significant public input. The Consultant Team shall determine the best methods to collect and store the necessary data. The Consultant Team shall include the information in a geodatabase and provide it to DEP upon completion of the task. It is anticipated that this process may

result in more assets than can be utilized for the risk assessment, and scenario development. The Consultant Team shall work with the Middlesex County Regional Team to prioritize assets using a methodology appropriate for the Project.

Deliverable(s)

- 1) Tabular and geodatabase of asset information, including prioritization if appropriate
- 2) Individual asset profile tables; see Attachment A.

Task 3.2 – Baseline Risk Assessment

The Consultant Team will perform a baseline risk assessment for four (4) potential flood conditions (to be provided by DEP) to understand how the existing landscape, and identified assets, may be vulnerable to flood events now and in the future. The risk assessment shall consider flooding from precipitation, coastal storms, and chronic tidal flooding. These baseline risk assessments will inform the development and assessment of the Resilience and Adaptation Scenarios.

The risk assessment will generally use data, models, and methods provided by DEP, as detailed in Attachment A. The Consultant Team will work with DEP and the CMF to determine if any modifications to these methods and models are necessary and/or feasible within the final scope and budget.

Some communities will likely have undergone partial risk assessments as part of previous planning initiatives that monetize or qualitatively assess exposure to these hazards. It is expected that these risk assessments will be insufficient and/or outdated for the purposes of the Resilient NJ program. However, if the Consultant Team believes the data to be sufficient and meeting the expected outcomes of the Risk Assessment methodology, a memo documenting the assertion can be drafted and submitted for review by DEP and the CMF.

The Consultant Team shall develop an Asset Collection and Risk Assessment Report detailing the process, assumptions, information, summaries, and conclusions of the risk assessments. All deliverables identified above shall be included in the report. This Report will ultimately be a chapter of the Action Plan for the Middlesex County Regional Team.

Deliverable(s)

- 1) Asset Collection and Risk Assessment Report

TASK 4 – RESILIENCE AND ADAPTATION SCENARIOS

Task 4.1 – Resilience and Adaptation Scenario Development

With an understanding of existing and anticipated risk to the region, the Consultant Team will propose a minimum of three (3) resilience and adaptation scenarios and a “No Action” Scenario for consideration by the Middlesex County Regional Team, project stakeholders, and the public. The scenarios are an opportunity to demonstrate to the Regional Team that

there are multiple options to advance resilience within the region while meeting the community's vision. Each scenario shall include:

- a suite of planning actions, policies, and projects to address the identified risks and build resilience in the region in a manner that meets the regional vision;
- a linked set of strategies and actions, or pathways to resilience and adaptation;
- a timeline showing how the risk(s) identified through the planning process over time will be addressed
- renderings/conceptual drawings or other visualization products to present the scenarios to DEP, stakeholders, and the public.

Scenarios shall be developed to provide communities with real choices about how they may plan for their future. It is expected that the scenarios will respond to the vision developed by the community, although it may sometimes be necessary to provide alternatives if achieving elements of the vision are not possible. If this is the case, this shall be communicated to the Regional Team in a timely fashion. Planning, policy actions, and projects within each scenario should be linked together and build upon each other to provide co-benefits. Consultant Team will be expected to identify innovative approaches to solving resilience challenges as part of their scenarios.

Products to present the scenarios must be designed to ensure the regional teams, stakeholders, and the broader public understand and are able to make informed decisions about their preferences. The development of both the scenarios and the associated visualization products are expected to be major undertakings requiring significant resources within the overall framework of the Resilient NJ program. Choices about how scenarios will be differentiated from each other will be made in collaboration with DEP. DEP will have final approval over the choices that are made.

The scenarios will be developed using the Scenario Development and Evaluation Methodology to be provided by DEP after Consultant selection. Variations to this approach must be approved in writing by DEP. The methodology includes multiple questionnaires to help brainstorm and evaluate the scenario as it's being developed to ensure the strategies respond to the region's vision, reduce future risk to identified assets, and enhance the overall resilience of the region, including its socially vulnerable populations. Consultant Teams will have an opportunity to provide feedback on the methodology prior to its execution.

The Consultant Team shall produce a Scenario Development Memo detailing each scenario, all of the actions that are included, why it was developed as such, how it will address the vision of Regional Team, the goals and objectives of the scenario, and the Resilient NJ program identified in the bid solicitation document. Materials developed under this scenario will be used in the evaluation of the Innovation Award as described under **Innovation Award** below.

Deliverable(s)

- 1) Scenario Development Memo for each scenario

- 2) Visualization products to present the scenarios to DEP, stakeholders, and the public

Task 4.2 – Scenario Evaluation and Selection

Each resilience and adaptation scenario will be evaluated using the Scenario Development and Evaluation methodology developed specifically for the Resilient NJ program. The Scenario Development and Evaluation methodology uses qualitative and quantitative analyses to provide a comprehensive understanding of how each scenario would affect the region if it were to be fully realized and how it will perform under various flood conditions.

The evaluation and its outcomes will be used in conjunction with the visualization products produced in Task 4.1 to inform selection of the preferred resilience and adaptation scenario by the Regional Team. To inform the decision, the Consultant Team will gather input from the Regional Team, stakeholders, and the public, modify the scenario as appropriate, and finalize the suite of actions that will be included in Task 5.

The Consultant Team shall develop a Resilience and Adaptation Scenario Report detailing the development, evaluation, and selection of the Preferred Scenario. All deliverables identified above shall be included in the report. This Report will ultimately be a chapter of the Action Plan for the Middlesex County Regional Team.

Deliverable(s)

- 1) Completed evaluation for each scenario
- 2) Resilience and Adaptation Scenario Report

Innovation Award

The Resilient NJ program seeks innovation in the field of resilience planning. After development of the scenarios, the Consultant Team, in conjunction with the Middlesex County Regional Team, if desired, will present the final scenarios to all Regional and Consultant Teams from the four Resilient NJ Program regions at an event organized by the CMF and DEP, which is noted under Task 8. This event is to showcase how the scenarios creatively address the vulnerabilities while meeting the vision of the Middlesex County Region. Consultant Teams may use any materials created under the previous tasks to support their presentation for consideration of the award.

The Consultant Team who wins this competition, based on the criteria below, may be eligible for additional funding, up to \$250,000, for Phase II. This is in addition to and separate from the work budgeted under this request for quotes. **The innovation award or the subsequent work effort should not be included in the quotation submitted in response to this request.**

The decision to offer an innovation award will be made by a panel of experts at DEP based on the group of scenarios that are submitted to DEP as part of Task 4.1 – Resilience and Adaptation Scenario Development. The Panel will evaluate the scenarios and the presentation of the scenarios using the criteria below:

- 1) The scenarios reduce risk to flood hazards. This includes, but is not limited to, direct risk reduction, and may include both physical and non-physical actions (15 points);
- 2) The scenarios are specifically adapted to the unique characteristics of the communities and ecology of the region and respond to the vision articulated by the Regional Teams (15 points);
- 3) The scenarios utilize actions that are designed to create social, cultural, economic, ecological, and environmental co-benefits (20 points);
- 4) The scenarios tie actions together to create greater benefits than each action would create on its own (20 points);
- 5) The scenarios present the region with multiple approaches to building resilience and addressing potential flooding hazards to allow for community discussion and decision-making (15 points); and
- 6) The scenarios are determined to be equitable in the distributions of costs, benefits, and risk across populations subgroup. This will be evaluated based on a method developed by DEP using the following measurements (15 points):
 - a. "Fair Process:" Measuring equity and inclusion based on the fairness of the process for representation of SVPs; or
 - b. "Equal Outcomes:" Measuring based on equal outcomes- distribution of a policy's costs, benefits, and risk across population subgroups.

DEP reserves the right to not distribute an innovation award if it determines that none of the scenarios developed by the Consultant Team are significantly innovative. Only submissions that meet project deadlines will be eligible for consideration.

TASK 5 – REGIONAL RESILIENCE AND ADAPTATION ACTION PLAN

Once the preferred scenario has been selected and prioritized, the Consultant Team shall draft a Regional Resilience and Adaptation Action Plan around that preferred scenario for the region. The Action Plan will identify responsible parties, cost of implementation, potential funding sources, and implementation timelines for each action. The Consultant Team will work with the Regional Team to prioritize the actions and identify which actions are most appropriate and advantageous to pursue in Phase II. Actions should be selected in accordance with HUD requirements and in consultation with DEP.

The Consultant Team will gather input from the Regional Team, stakeholders, and the public on the draft Regional Resilience and Adaptation Action Plan and modify it as appropriate, producing a final Regional Resilience and Adaptation Action Plan.

Deliverable(s)

- 1) Draft Action Plan
- 2) Final Action Plan including consideration of comments received

TASK 6 –PHASE II: IMPLEMENTATION

The Consultant Team, in consultation with the Regional Team shall, with DEP approval, select actions from the Action Plan to advance as part of Phase II - Implementation.

However, with prior approval from DEP, actions may be identified and initiated prior to the finalization of the Action Plan.

It is expected that:

- a minimum of approximately one-third of the overall budget submitted for this Request for Quotes shall be allocated for this task;
- the actions selected will be completed prior to May 31, 2022 and within budget;
- the outcomes can be realized in either the short-or long-term;
- the outcomes will have regional or local impact; and
- meet the eligibility requirements determined by HUD (24CFR570.205).

As directed by HUD (24CFR570.205) eligible implementation actions must be considered “planning-only” activities, which include data gathering, studies, analysis, preparation of plans, and the development of ordinances. These funds can be used to advance analysis for long-range planning and solutions. Conceptual design work, feasibility analyses, and cost-benefit analyses for specific projects are also permissible. Given the restrictions from HUD, the funds **cannot** be used for creating engineering or architectural drawings in support of construction. At no point will construction occur as part of the Resilient NJ program, nor shall architectural or engineering plans be developed. It is permitted and encouraged to identify these types of projects in scenarios and in the Action Plan; however, they may not be chosen as implementation activities.

The Consultant Team shall develop an Implementation Memo detailing the actions selected for implementation and a proposed work plan.

The Consultant Team shall be responsible for the delivery of all draft and final products associated with the selected action(s).

It is expected that appropriate community engagement will continue through this task. Community engagement for this task should be included in the budget for Task 2.2 above.

Deliverable(s)

- 1) Implementation Memo, including Workplan outlining timelines and deliverables anticipated under this task, including how stakeholders and the public may be engaged during this Phase
- 2) All draft deliverables for comment
- 3) All final deliverables in print and/or electronic format, as appropriate

TASK 7 - PROJECT WEBSITE

The Consultant Team shall develop, host, maintain, and regularly update a public facing website for the project. The project website shall be updated throughout the process to continue to provide information about the status of the project and how to get involved, at a minimum. All project deliverables shall be posted on the project website unless indicated otherwise by DEP. The Consultant Team shall assist DEP in ensuring the public facing website shall remain available after completion of the project.

Deliverable

- 1) Project website

TASK 8 – MEETINGS, CONFERENCE CALLS AND GENERAL PROJECT TEAM COORDINATION

The Consultant Team shall schedule regular meetings with the Regional Team and DEP to monitor progress for the duration of the Resilient NJ program. These meetings may take place within the Middlesex County Region, Trenton, NJ or other locations as appropriate. The Consultant Team shall prepare the agenda, facilitate meetings, prepare meeting summaries, and distribute copies to the attendees.

The Consultant Team will also meet with DEP throughout the length of the project. These meetings will include, but are not limited to:

- SIROMS Training – Two staff from the Consultant Team shall attend training on SIROMS in Trenton, New Jersey. The training will help the users understand the functionality of the system and how to successfully upload the required documents. This is a one-time training and will take approximately two hours.
- Project Kick Off Meeting(s) – Within 30 business days of receiving the notice to proceed on execution of this scope of work, the Consultant Team’s PM and other key personnel shall participate in a project kick off meeting, which will take place at DEP offices in Trenton, New Jersey. At this meeting, contract requirements, timelines, and team member roles and responsibilities will be clarified. Within 45 business days of this notice, the Consultant Team will hold a kick-off meeting with the Middlesex County Regional Team.
- Status/Progress meetings – The Consultant Team’s Project Manager and relevant staff shall meet with DEP at least every three (3) weeks to report on the progress of all tasks for the duration of the project. These meetings may be conducted in person or by conference call but will be in-person at least quarterly. The Consultant Team shall:
 1. Schedule all meetings;
 2. Prepare meeting agenda; and
 3. Distribute a copy of the agenda to the meeting participants no later than two (2) business days prior to all meetings or conference calls;
 4. Prepare meeting summaries and transmit to DEP no later than two (2) business days after the meeting.
- Up to 25 additional meetings or conference calls may be scheduled to resolve issues as they arise, for the duration of the project.
- Scenario Presentation – Consultant Team are expected to present their final scenarios pursuant to Task 4.2 – Innovation Award.

- Workshops and trainings – As part of the Resilient NJ program, the Consultant Team may be expected to send a minimum of one staff member to attend identified workshops or trainings on relevant issues related to community resilience in the region. The trainings or workshops may be designed as professional development for the Consultant Team or as an opportunity to solicit feedback from the Consultant Team to inform state policy, programs, or priorities. These workshops may include topics such as engaging underrepresented populations, identifying community resilience metrics, resilience project funding and financing, risk communication techniques, etc. A maximum of ten (10) full-day workshops will be identified under this task.

Deliverable(s)

- 1) Meeting summaries for Progress/Status meetings only

ADMINISTRATIVE REQUIREMENTS

In addition to the tasks identified above, the Consultant Team will comply with administrative requirements listed below in accordance with HUD and DEP requirements.

Progress Reporting

The Consultant Team shall be responsible for reporting all project progress. This requires:

1. Uploading all project progress reports to SIROMS on a monthly basis; and
2. Ensuring that all progress reports are submitted in a mutually agreed upon format and include the following:
 - a. Task Name or description per the Scope of Work;
 - b. Task Status;
 - c. Activities completed and anticipated for the next month; and
 - d. Percent completed. Refer to **Attachment B** for a sample progress report.

Invoicing

All requests for payment shall be uploaded to SIROMS by the Project Team at least quarterly and no more than monthly. The Consultant Team's Project Manager shall ensure that all requests for payment:

1. Include employee timesheets;
2. Are signed by the employee's supervisor;
3. Are supported by completed activities/tasks described in the monthly progress reports; and
4. Include the **Invoice Summary Table – Attachment C**.

All activity to be reimbursed by the Resilient NJ program and all deliverables must be submitted in SIROMS, reviewed, and approved by both the CMF and DEP, by May 31, 2022. Final invoicing and progress report must be submitted in SIROMS by June 30, 2022.

Uploading documents to the Resilient NJ SharePoint site

The CMF will provide a SharePoint site for Regional and Consultant teams to collaborate on projects and serve as a repository for work products. The Consultant Team's Project Manager shall ensure that all draft and final work products developed by the Consultant Team are uploaded to the site regularly, but at least monthly.

SUBMISSION OF QUOTE PROPOSALS

If a prequalified vendor is not able to respond to this Request for Quotes for the Middlesex County Regional Team Project Scope of Services due to a conflict of interest or scheduling issue, it shall decline the request for competitive pricing in writing to DEP within three (3) business days of receipt of the request. Scheduling issues may include if the Consultant Team would not have capacity to execute this scope of work on the timeline required, due to capacity constraints resulting from ongoing or anticipated projects.

Prequalified vendors may submit questions no later than 12:00 noon, February 3, 2020. Please submit questions to Carmen.Valentin@dep.nj.gov. Responses to questions will be emailed to all prequalified vendors.

Both electronic and hard copies of the quote proposal are required. Quotes will be reviewed and scored according to the criteria in **Attachment D - Evaluation Criteria**.

One electronic copy of the quote proposal must be submitted to Carmen.Valentin@dep.nj.gov by 12:00 Noon, EST on February 18, 2020, and in accordance with the hourly rates awarded, as a result of Bid Solicitation 19DPP00368. Problems with electronic submission of the application should be directed to Carmen Valentin at (609) 984-0058 from Monday through Friday, 9:00 am to 4:00 pm.

Additionally, three hard copies of the quote proposal and one hard copy of the bid proposal previously submitted as part of Bid Solicitation 19DPP00368 must accompany the quote proposal, postmarked no later than 5:00 P.M. EST on February 18, 2020, and mailed to:

Attn: Carmen Valentin
NJ Department of Environmental Protection
Office of Climate Resilience
Bureau of Climate Resilience Planning
401 E. State St., 7th floor wing
P.O. Box 402
Trenton, NJ 08625-0402

The quote proposal must include the following:

- a. A statement demonstrating why the Consultant Team is uniquely qualified to work on the Middlesex County Regional Team's regional project;
- b. A detailed description of how the Consultant Team will complete each identified task in the Scope of Work. Steps and level of effort should be tailored to the region;
- c. Name, title, and qualifications of personnel that will be assigned to each task and their experience to complete it successfully;
- d. A Work Schedule identifying the associated deliverable items to be submitted as evidence of completion of each task and/or sub-task; and

- e. A comprehensive budget showing the person-hours proposed to meet the requirements of the request for competitive quotes. The budget shall be designed to reflect the tasks, sub-tasks, or other work elements required by this request for quotes. The budget shall set forth, for each task, sub-task or other work element, the total number of person-hours, by labor category, proposed to complete the assignment. The hourly rates used for each labor category shall be the all-inclusive hourly rates specified in the Contract.

**NJ DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLIMATE RESILIENCE PLANNING
RESILIENT NJ PROGRAM**

**Request for Quotes for Ventnor Regional Team Project
Scope of Services**

NOTE: All requirements and provisions of Bid Solicitation 19DPP00368 are in effect for this scope of services and request for quotes including the “Statement of Assurances for Contractor/Consultant – Additional Federally Funded Agreement Provisions Applicable to Community Development Block-Grant-Disaster Recovery Funded Projects” and the assessment of liquidated damages, as applicable, in Section 5.14.

OVERVIEW

The New Jersey Department of Environmental Protection (DEP) is soliciting quotes under Bid Solicitation 19DPP00368 to work with the Ventnor Regional Team on execution of a Resilient NJ planning project. This includes development of a Regional Resilience and Adaptation Action Plan (Action Plan), as well as implementation of planning actions that are identified through development of the Action Plan. This request is one of four released at this time. The total funding available for these task orders is \$5,675,000. It is expected that the fee proposals will consider the unique circumstances of each project area that may affect level of effort to complete the scope of work. All work must be completed and deliverables submitted by May 31, 2022.

To support this program, DEP has engaged a Construction Management Firm (CMF). The CMF may provide services or materials on behalf of DEP to aid in the execution of this scope of work, as indicated below.

PROJECT AREA

The Ventnor Regional Team (Regional Team or Region) is composed of the municipalities of Ventnor City, Brigantine, Atlantic City, Margate, Longport, Northfield, Pleasantville, Atlantic County, as well as the American Red Cross as the community-based organization (CBO). Ventnor is the Prime, or lead grant recipient, and is responsible for coordinating regional team members, ensuring participation at meetings and events, and managing administrative tasks for the Regional Team. The CBOs are included in the region to assist with community engagement and ensure that socially vulnerable populations are represented in the planning process.

SCOPE OF WORK

The Consultant Team will execute this scope of work as described herein for the Ventnor Region through two phases. Activities leading up to the development of the Action Plan comprise the plan development phase. The second phase – implementation - includes advancement of actions identified and selected through the plan development phase. Given the timeframe of the overall project, the implementation phase may be initiated

before the Action Plan is finalized. However, funding shall only be used to advance actions identified in the Action Plan.

Consultant Teams shall use the unique methods created for Resilient NJ to assess risk/vulnerability within the project areas (Attachment A), and to create and consider resilience scenarios (methodology to be provided after consultant selection). Small modifications to the methodologies will be considered and discussed during the course of the work, as appropriate, to ensure project success in each region, but for the purpose of this request for quotes these methodologies will be used in Tasks 3 and 4.

All project deliverables shall be submitted to DEP for review in a timely manner. Consultant Teams shall be responsible for posting all deliverables on the project website described below unless indicated otherwise by DEP. Each of the deliverables detailed below should be formatted as appropriate for inclusion in the final action plan.

The Consultant Team will be responsible for completing the following tasks:

TASK 1 - PLANNING CONTEXT

The Consultant Team will review existing relevant municipal, county, regional and state planning documents to gain an understanding of the Ventnor Region and surrounding area as applicable, including but not limited to its demographics, land use, topography, hazard exposure, social and cultural assets, local economic drivers, property tax, transportation and other critical infrastructure. In addition, the Consultant Team is expected to review and understand all resilience work that has been done to date or is in planning stages, as well as existing identified vulnerabilities and recommended actions.

DEP may provide some of this information in advance of project kick-off, however the Consultant Team will be responsible for identifying gaps in the documents and/or data and work directly with the Regional Teams to obtain the necessary information.

The Consultant Team shall develop a Planning Context Report that includes:

- 1) Index of documents and data reviewed
- 2) Memo on current planning status of the region, including, but not limited to:
 - a. Baseline community and regional information;
 - b. Identification of significant assets within the region based on initial document review;
 - c. Identification of socially vulnerable populations;
 - d. Major projects being planned or undertaken (not limited to resilience, including infrastructure, housing/development, transportation, or restoration);
 - e. Other resilience activities being planned or recently implemented;
 - f. Existing local and/or regional visions;
 - g. Initial list of gaps in plans, ordinances, or data related to resilience.
- 3) Maps depicting unique or relevant indicators/data related to long-term risk or resilience, as appropriate based on initial consultation with DEP.

The Planning Context Report will ultimately be a chapter of the Action Plan for the Ventnor Regional Team.

Deliverable(s)

- 1) Planning Context Report

TASK 2 – COMMUNITY AND STAKEHOLDER ENGAGEMENT

It is expected that the planning process will include a robust and multi-faceted community and stakeholder engagement effort. This effort is expected to be a community-driven regional planning process that envisions how the region can collectively address current and future flood concerns. The Consultant Team will lead a thorough and effective community outreach effort to ensure community awareness and gather community input and support during both phases of the project with input from DEP, the Regional Team, other stakeholders, and the public. A variety of innovative engagement methods will be utilized to meaningfully engage a broad cross-section of community members. This is expected to be a substantial effort taking up a significant portion of the budget for Phase I – Plan Development. It is expected that all the results of the following subtasks will inform future tasks in development and implementation of the Action Plan.

Additionally, it is expected that the community outreach will be designed to have an equitable and inclusive community engagement approach to promote a fair process of engagement. It is a core objective of the Resilient NJ program to engage and address the needs of socially vulnerable and under-represented populations throughout both the Plan Development and Implementation phases. To assist with this effort, the Ventnor Regional Team includes a community-based organization with experience working with socially vulnerable populations in the region.

The Consultant Team shall develop a Community and Stakeholder Engagement report, including an Engagement Plan, that details the process and outcomes of the engagement efforts. All deliverables identified in Task 2.1 – 2.4 shall be included in the report.

Deliverable(s)

- 1) Community and Stakeholder Engagement Report

Task 2.1 Engagement Plan

The Consultant Team shall draft a Stakeholder and Community Engagement Plan (Engagement Plan) in consultation with members of the Ventnor Regional Team and with oversight by DEP. This plan shall detail the methods and timing of all outreach efforts for both phases of the Resilient NJ program. The Engagement Plan will be updated periodically to track the stakeholder engagement process and modify approaches as necessary. The Consultant Team shall utilize a wide range of approaches in conducting public engagement. Engagement methods shall be chosen to advance programmatic objectives while responding to the unique characteristics of the region. Engagement should not be limited to any single outreach or engagement strategy.

In addition to the public engagement strategies, the Engagement Plan shall detail any planning/steering committees or advisory group(s), how they will be engaged in the process, and metrics for tracking the effectiveness of the Engagement Plan. The Engagement Plan will identify neighborhood-level engagement strategies and opportunities. Consultants must demonstrate how engagement will be maintained throughout the process to maintain interest and participation from stakeholders.

In order to ensure the development of a strong engagement plan for the region, DEP has awarded a grant to Enterprise Community Partners, Inc. (Enterprise) to assist with the development and enhancement of the engagement plan. Enterprise will provide consulting, support, and resources for the Regional and Consultant Teams as they develop the Plan. This support will include providing guidance on best practices for engaging socially vulnerable populations. The Consultant Team will be expected to participate in up to 3 in-person meetings and 2-4 remote meetings to coordinate with Enterprise. Enterprise will serve entirely in a supportive role for the Resilient NJ program; the Consultant Team will have final responsibility for the development and execution of the Engagement Plan.

Deliverable(s)

- 1) Draft Engagement Plan for review by DEP and the Ventnor Regional Team
- 2) Final Engagement Plan, revised based on comments from DEP and the Ventnor Regional Team

Task 2.2 Engagement/Outreach

This task shall address public engagement throughout both phases of the Resilient NJ program. It is expected there will be appropriate public outreach and engagement in Phase II for each/all actions that are selected.

Engagement and outreach efforts may be executed using various platforms, media, or other techniques identified by the Consultant Team. Outreach efforts should be innovative with an overall goal of regional saturation. Attention shall be paid to the diversity of neighborhoods in the region with distinct cultural identities, socioeconomic characteristics, and architectural and urban forms. Special attention shall be given to socially vulnerable populations (see Task 2.3). The Consultant Team is expected to identify and execute engagement methods that will be successful in meaningfully engaging socially vulnerable populations.

It is expected that outreach will include, but is not limited to:

- a minimum of two meetings for planning/steering committees;
- a minimum of one public meeting, for each of the Tasks 2-6; and,
- utilization of additional engagement methods beyond public meetings to engage populations.

The Consultant Team should indicate the anticipated number of meetings and other engagement activities in its fee proposal accounting for the size and diversity of the region.

The Consultant Team shall be responsible for developing outreach and communication materials for the project. To ensure effective communication within the region, all written materials requesting input and participation from the public for any CDBG-DR related activity will be translated into Spanish. These documents will also be made available upon request in any of the other 10 languages required by the New Jersey Department of Community Affairs' Language Access Plan (LAP) found at www.renewjerseystronger.org – Plans & Reports. A list of the languages available for translation shall be included at the bottom of all printed materials intended for public outreach.

DEP, through the CMF, will provide translation services for written materials as well as on-call translation services at public meetings, if needed. The Consultant Team shall provide the CMF with the appropriate materials with enough time to allow for translation. The Engagement Plan shall identify the appropriate languages for translation for the Ventnor Region.

Deliverable(s)

- 1) Meeting materials, as appropriate
- 2) Meeting notes, as appropriate
- 3) Results from innovative engagement methods, as appropriate
- 4) Tracking of outreach/engagement metrics throughout process

Task 2.3 – Socially Vulnerable Populations

Socially vulnerable populations have been traditionally underrepresented in resilience planning efforts and the Resilient NJ program seeks to remedy this within the project areas. The work proposed for this task should be scoped to meet the overall Resilient NJ program objectives of a community-driven planning process that incorporates socially vulnerable and underrepresented populations. Socially vulnerable populations are defined by Sapam Singh, et al. (2014) as individuals and groups of people who are challenged in their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard based on physical or socioeconomic factors (Singh, 2014). Key characteristics can include but are not limited to: age (elderly and very young); low income; language other than English spoken at home; limited access to transportation; inadequate housing/shelter; low educational attainment; ethnic minorities; physically and mentally challenged; and special medical needs. It is expected that the Consultant Team will modify its approaches as needed to ensure all socially vulnerable populations within the region are appropriately engaged throughout the entire project.

The Ventnor Regional Team includes the American Red Cross. This organization will provide support to the Consultant Team for the identification and engagement of socially vulnerable populations.

Task 2.4 – Visioning

As part of the execution of the Engagement Plan, the Consultant Team shall be expected to lead the public within the region through a long-term (through 2070) community visioning

process that provides community members an opportunity to identify their goals, objectives, and values. This vision will inform the Resilience and Adaptation Scenarios (Task 4) and the basis of the actions. The visioning process should not be limited to the community's response to flooding hazards but should be designed to consider all aspects of the community's character and identity through a resilience lens. Visioning should, at a minimum, occur before the detailed risk assessment.

The Consultant Team shall prepare a Visioning Report with a vision statement, goals and objectives, and concept graphics, as appropriate, demonstrating to DEP and the Ventnor Regional Team that it understands what is considered important in the region and how the region wants to look and feel in the future. The vision will be used to evaluate the success of the selected Resilience and Adaptation Scenarios. The Visioning Report will ultimately be a chapter of the Action Plan for the Ventnor Regional Team.

Deliverable(s)

- 1) Visioning Report including a final vision statement and supporting documentation

TASK 3 – ASSET COLLECTION AND RISK ASSESSMENT

The Consultant Team will be expected to perform asset collection and a risk assessment for the Ventnor Region using the Risk Assessment Methodology outlined in Attachment A.

Task 3.1 – Asset Collection

For the purposes of the Resilient NJ program, assets are considered places, things, processes or services.

Places may include: special neighborhoods, areas, or facilities where economic, environmental, and/or social functions of the community occur.

Things may include: features that the community values or critical or other infrastructure that supports places, processes or services.

Processes or services may include: social, cultural, economic, government, or professional networks and services that are essential to day-to-day life and livability and/or support operations during and after a disaster.

Assets can also exist on a spectrum of having beneficial or negative qualities. Liabilities such as superfund sites, criminal hot spots, or traffic hazards may be considered an asset for the purposes of evaluation.

The Consultant Team shall work with the Ventnor Regional Team to identify important community assets in the region. It is expected this task will involve significant public input. The Consultant Team shall determine the best methods to collect and store the necessary data. The Consultant Team shall include the information in a geodatabase and provide it to DEP upon completion of the task. It is anticipated that this process may result in more assets than can be utilized for the risk assessment, and scenario development. The Consultant

Team shall work with the Ventnor Regional Team to prioritize assets using a methodology appropriate for the Project.

Deliverable(s)

- 1) Tabular and geodatabase of asset information, including prioritization if appropriate
- 2) Individual asset profile tables; see Attachment A.

Task 3.2 – Baseline Risk Assessment

The Consultant Team will perform a baseline risk assessment for four (4) potential flood conditions (to be provided by DEP) to understand how the existing landscape, and identified assets, may be vulnerable to flood events now and in the future. The risk assessment shall consider flooding from precipitation, coastal storms, and chronic tidal flooding. These baseline risk assessments will inform the development and assessment of the Resilience and Adaptation Scenarios.

The risk assessment will generally use data, models, and methods provided by DEP, as detailed in Attachment A. The Consultant Team will work with DEP and the CMF to determine if any modifications to these methods and models are necessary and/or feasible within the final scope and budget.

Some communities will likely have undergone partial risk assessments as part of previous planning initiatives that monetize or qualitatively assess exposure to these hazards. It is expected that these risk assessments will be insufficient and/or outdated for the purposes of the Resilient NJ program. However, if the Consultant Team believes the data to be sufficient and meeting the expected outcomes of the Risk Assessment methodology, a memo documenting the assertion can be drafted and submitted for review by DEP and the CMF.

The Consultant Team shall develop an Asset Collection and Risk Assessment Report detailing the process, assumptions, information, summaries, and conclusions of the risk assessments. All deliverables identified above shall be included in the report. This Report will ultimately be a chapter of the Action Plan for the Ventnor Regional Team.

Deliverable(s)

- 1) Asset Collection and Risk Assessment Report

TASK 4 – RESILIENCE AND ADAPTATION SCENARIOS

Task 4.1 – Resilience and Adaptation Scenario Development

With an understanding of existing and anticipated risk to the region, the Consultant Team will propose a minimum of three (3) resilience and adaptation scenarios and a “No Action” Scenario for consideration by the Ventnor Regional Team, project stakeholders, and the public. The scenarios are an opportunity to demonstrate to the Regional Team that there are multiple options to advance resilience within the region while meeting the community’s vision. Each scenario shall include:

Scope of Work and Request for Quotes for Regional Projects Consultant Teams

- a suite of planning actions, policies, and projects to address the identified risks and build resilience in the region in a manner that meets the regional vision;
- a linked set of strategies and actions, or pathways to resilience and adaptation;
- a timeline showing how the risk(s) identified through the planning process over time will be addressed
- renderings/conceptual drawings or other visualization products to present the scenarios to DEP, stakeholders, and the public.

Scenarios shall be developed to provide communities with real choices about how they may plan for their future. It is expected that the scenarios will respond to the vision developed by the community, although it may sometimes be necessary to provide alternatives if achieving elements of the vision are not possible. If this is the case, this shall be communicated to the Regional Team in a timely fashion. Planning, policy actions, and projects within each scenario should be linked together and build upon each other to provide co-benefits. Consultant Team will be expected to identify innovative approaches to solving resilience challenges as part of their scenarios.

Products to present the scenarios must be designed to ensure the regional teams, stakeholders, and the broader public understand and are able to make informed decisions about their preferences. The development of both the scenarios and the associated visualization products are expected to be major undertakings requiring significant resources within the overall framework of the Resilient NJ program. Choices about how scenarios will be differentiated from each other will be made in collaboration with DEP. DEP will have final approval over the choices that are made.

The scenarios will be developed using the Scenario Development and Evaluation Methodology to be provided by DEP after Consultant selection. Variations to this approach must be approved in writing by DEP. The methodology includes multiple questionnaires to help brainstorm and evaluate the scenario as it's being developed to ensure the strategies respond to the region's vision, reduce future risk to identified assets, and enhance the overall resilience of the region, including its socially vulnerable populations. Consultant Teams will have an opportunity to provide feedback on the methodology prior to its execution.

The Consultant Team shall produce a Scenario Development Memo detailing each scenario, all of the actions that are included, why it was developed as such, how it will address the vision of Regional Team, the goals and objectives of the scenario, and the Resilient NJ program identified in the bid solicitation document. Materials developed under this scenario will be used in the evaluation of the Innovation Award as described under **Innovation Award** below.

Deliverable(s)

- 1) Scenario Development Memo for each scenario
- 2) Visualization products to present the scenarios to DEP, stakeholders, and the public

Task 4.2 – Scenario Evaluation and Selection

Each resilience and adaptation scenario will be evaluated using the Scenario Development and Evaluation methodology developed specifically for the Resilient NJ program. The Scenario Development and Evaluation methodology uses qualitative and quantitative analyses to provide a comprehensive understanding of how each scenario would affect the region if it were to be fully realized and how it will perform under various flood conditions.

The evaluation and its outcomes will be used in conjunction with the visualization products produced in Task 4.1 to inform selection of the preferred resilience and adaptation scenario by the Regional Team. To inform the decision, the Consultant Team will gather input from the Regional Team, stakeholders, and the public, modify the scenario as appropriate, and finalize the suite of actions that will be included in Task 5.

The Consultant Team shall develop a Resilience and Adaptation Scenario Report detailing the development, evaluation, and selection of the Preferred Scenario. All deliverables identified above shall be included in the report. This Report will ultimately be a chapter of the Action Plan for the Ventnor Regional Team.

Deliverable(s)

- 1) Completed evaluation for each scenario
- 2) Resilience and Adaptation Scenario Report

Innovation Award

The Resilient NJ program seeks innovation in the field of resilience planning. After development of the scenarios, the Consultant Team, in conjunction with the Ventnor Regional Team, if desired, will present the final scenarios to all Regional and Consultant Teams from the four Resilient NJ Program regions at an event organized by the CMF and DEP, which is noted under Task 8. This event is to showcase how the scenarios creatively address the vulnerabilities while meeting the vision of the Ventnor Region. Consultant Teams may use any materials created under the previous tasks to support their presentation for consideration of the award.

The Consultant Team who wins this competition, based on the criteria below, may be eligible for additional funding, up to \$250,000, for Phase II. This is in addition to and separate from the work budgeted under this request for quotes. **The innovation award or the subsequent work effort should not be included in the quotation submitted in response to this request.**

The decision to offer an innovation award will be made by a panel of experts at DEP based on the group of scenarios that are submitted to DEP as part of Task 4.1 – Resilience and Adaptation Scenario Development. The Panel will evaluate the scenarios and the presentation of the scenarios using the criteria below:

- 1) The scenarios reduce risk to flood hazards. This includes, but is not limited to, direct risk reduction, and may include both physical and non-physical actions (15 points);

- 2) The scenarios are specifically adapted to the unique characteristics of the communities and ecology of the region and respond to the vision articulated by the Regional Teams (15 points);
- 3) The scenarios utilize actions that are designed to create social, cultural, economic, ecological, and environmental co-benefits (20 points);
- 4) The scenarios tie actions together to create greater benefits than each action would create on its own (20 points);
- 5) The scenarios present the region with multiple approaches to building resilience and addressing potential flooding hazards to allow for community discussion and decision-making (15 points); and
- 6) The scenarios are determined to be equitable in the distributions of costs, benefits, and risk across populations subgroup. This will be evaluated based on a method developed by DEP using the following measurements (15 points):
 - a. "Fair Process:" Measuring equity and inclusion based on the fairness of the process for representation of SVPs; or
 - b. "Equal Outcomes:" Measuring based on equal outcomes- distribution of a policy's costs, benefits, and risk across population subgroups.

DEP reserves the right to not distribute an innovation award if it determines that none of the scenarios developed by the Consultant Team are significantly innovative. Only submissions that meet project deadlines will be eligible for consideration.

TASK 5 – REGIONAL RESILIENCE AND ADAPTATION ACTION PLAN

Once the preferred scenario has been selected and prioritized, the Consultant Team shall draft a Regional Resilience and Adaptation Action Plan around that preferred scenario for the region. The Action Plan will identify responsible parties, cost of implementation, potential funding sources, and implementation timelines for each action. The Consultant Team will work with the Regional Team to prioritize the actions and identify which actions are most appropriate and advantageous to pursue in Phase II. Actions should be selected in accordance with HUD requirements and in consultation with DEP.

The Consultant Team will gather input from the Regional Team, stakeholders, and the public on the draft Regional Resilience and Adaptation Action Plan and modify it as appropriate, producing a final Regional Resilience and Adaptation Action Plan.

Deliverable(s)

- 1) Draft Action Plan
- 2) Final Action Plan including consideration of comments received

TASK 6 –PHASE II: IMPLEMENTATION

The Consultant Team, in consultation with the Regional Team shall, with DEP approval, select actions from the Action Plan to advance as part of Phase II - Implementation. However, with prior approval from DEP, actions may be identified and initiated prior to the finalization of the Action Plan.

It is expected that:

- a minimum of approximately one-third of the overall budget submitted for this Request for Quotes shall be allocated for this task;
- the actions selected will be completed prior to May 31, 2022 and within budget;
- the outcomes can be realized in either the short-or long-term;
- the outcomes will have regional or local impact; and
- meet the eligibility requirements determined by HUD (24CFR570.205).

As directed by HUD (24CFR570.205) eligible implementation actions must be considered “planning-only” activities, which include data gathering, studies, analysis, preparation of plans, and the development of ordinances. These funds can be used to advance analysis for long-range planning and solutions. Conceptual design work, feasibility analyses, and cost-benefit analyses for specific projects are also permissible. Given the restrictions from HUD, the funds **cannot** be used for creating engineering or architectural drawings in support of construction. At no point will construction occur as part of the Resilient NJ program, nor shall architectural or engineering plans be developed. It is permitted and encouraged to identify these types of projects in scenarios and in the Action Plan; however, they may not be chosen as implementation activities.

The Consultant Team shall develop an Implementation Memo detailing the actions selected for implementation and a proposed work plan.

The Consultant Team shall be responsible for the delivery of all draft and final products associated with the selected action(s).

It is expected that appropriate community engagement will continue through this task. Community engagement for this task should be included in the budget for Task 2.2 above.

Deliverable(s)

- 1) Implementation Memo, including Workplan outlining timelines and deliverables anticipated under this task, including how stakeholders and the public may be engaged during this Phase
- 2) All draft deliverables for comment
- 3) All final deliverables in print and/or electronic format, as appropriate

TASK 7 - PROJECT WEBSITE

The Consultant Team shall develop, host, maintain, and regularly update a public facing website for the project. The project website shall be updated throughout the process to continue to provide information about the status of the project and how to get involved, at a minimum. All project deliverables shall be posted on the project website unless indicated otherwise by DEP. The Consultant Team shall assist DEP in ensuring the public facing website shall remain available after completion of the project.

Deliverable

- 1) Project website

TASK 8 – MEETINGS, CONFERENCE CALLS AND GENERAL PROJECT TEAM COORDINATION

The Consultant Team shall schedule regular meetings with the Regional Team and DEP to monitor progress for the duration of the Resilient NJ program. These meetings may take place within the Ventnor Region, Trenton, NJ or other locations as appropriate. The Consultant Team shall prepare the agenda, facilitate meetings, prepare meeting summaries, and distribute copies to the attendees.

The Consultant Team will also meet with DEP throughout the length of the project. These meetings will include, but are not limited to:

- SIROMS Training – Two staff from the Consultant Team shall attend training on SIROMS in Trenton, New Jersey. The training will help the users understand the functionality of the system and how to successfully upload the required documents. This is a one-time training and will take approximately two hours.
- Project Kick Off Meeting(s) – Within 30 business days of receiving the notice to proceed on execution of this scope of work, the Consultant Team’s PM and other key personnel shall participate in a project kick off meeting, which will take place at DEP offices in Trenton, New Jersey. At this meeting, contract requirements, timelines, and team member roles and responsibilities will be clarified. Within 45 business days of this notice, the Consultant Team will hold a kick-off meeting with the Ventnor Regional Team.
- Status/Progress meetings – The Consultant Team’s Project Manager and relevant staff shall meet with DEP at least every three (3) weeks to report on the progress of all tasks for the duration of the project. These meetings may be conducted in person or by conference call but will be in-person at least quarterly. The Consultant Team shall:
 1. Schedule all meetings;
 2. Prepare meeting agenda; and
 3. Distribute a copy of the agenda to the meeting participants no later than two (2) business days prior to all meetings or conference calls;
 4. Prepare meeting summaries and transmit to DEP no later than two (2) business days after the meeting.
- Up to 25 additional meetings or conference calls may be scheduled to resolve issues as they arise, for the duration of the project.
- Scenario Presentation – Consultant Team are expected to present their final scenarios pursuant to Task 4.2 – Innovation Award.
- Workshops and trainings – As part of the Resilient NJ program, the Consultant Team may be expected to send a minimum of one staff member to attend identified workshops or trainings on relevant issues related to community resilience in the region. The trainings or workshops may be designed as professional development

for the Consultant Team or as an opportunity to solicit feedback from the Consultant Team to inform state policy, programs, or priorities. These workshops may include topics such as engaging underrepresented populations, identifying community resilience metrics, resilience project funding and financing, risk communication techniques, etc. A maximum of ten (10) full-day workshops will be identified under this task.

Deliverable(s)

- 1) Meeting summaries for Progress/Status meetings only

ADMINISTRATIVE REQUIREMENTS

In addition to the tasks identified above, the Consultant Team will comply with administrative requirements listed below in accordance with HUD and DEP requirements.

Progress Reporting

The Consultant Team shall be responsible for reporting all project progress. This requires:

1. Uploading all project progress reports to SIROMS on a monthly basis; and
2. Ensuring that all progress reports are submitted in a mutually agreed upon format and include the following:
 - a. Task Name or description per the Scope of Work;
 - b. Task Status;
 - c. Activities completed and anticipated for the next month; and
 - d. Percent completed. Refer to **Attachment B** for a sample progress report.

Invoicing

All requests for payment shall be uploaded to SIROMS by the Project Team at least quarterly and no more than monthly. The Consultant Team's Project Manager shall ensure that all requests for payment:

1. Include employee timesheets;
2. Are signed by the employee's supervisor;
3. Are supported by completed activities/tasks described in the monthly progress reports; and
4. Include the **Invoice Summary Table – Attachment C**.

All activity to be reimbursed by the Resilient NJ program and all deliverables must be submitted in SIROMS, reviewed, and approved by both the CMF and DEP, by May 31, 2022. Final invoicing and progress report must be submitted in SIROMS by June 30, 2022.

Uploading documents to the Resilient NJ SharePoint site

The CMF will provide a SharePoint site for Regional and Consultant teams to collaborate on projects and serve as a repository for work products. The Consultant Team's Project Manager shall ensure that all draft and final work products developed by the Consultant Team are uploaded to the site regularly, but at least monthly.

SUBMISSION OF QUOTE PROPOSALS

If a prequalified vendor is not able to respond to this Request for Quotes for the Ventnor Regional Team Project Scope of Services due to a conflict of interest or scheduling issue, it shall decline the request for competitive pricing in writing to DEP within three (3) business days of receipt of the request. Scheduling issues may include if the Consultant Team would not have capacity to execute this scope of work on the timeline required, due to capacity constraints resulting from ongoing or anticipated projects.

Prequalified vendors may submit questions no later than 12:00 noon, February 3, 2020. Please submit questions to Carmen.Valentin@dep.nj.gov. Responses to questions will be emailed to all prequalified vendors.

Both electronic and hard copies of the quote proposal are required. Quotes will be reviewed and scored according to the criteria in **Attachment D - Evaluation Criteria**.

One electronic copy of the quote proposal must be submitted to Carmen.Valentin@dep.nj.gov by 12:00 Noon, EST on February 18, 2020, and in accordance with the hourly rates awarded, as a result of Bid Solicitation 19DPP00368. Problems with electronic submission of the application should be directed to Carmen Valentin at (609) 984-0058 from Monday through Friday, 9:00 am to 4:00 pm.

Additionally, three hard copies of the quote proposal and one hard copy of the bid proposal previously submitted as part of Bid Solicitation 19DPP00368 must accompany the quote proposal, postmarked no later than 5:00 P.M. EST on February 18, 2020, and mailed to:

Attn: Carmen Valentin
NJ Department of Environmental Protection
Office of Climate Resilience
Bureau of Climate Resilience Planning
401 E. State St., 7th floor wing
P.O. Box 402
Trenton, NJ 08625-0402

The quote proposal must include the following:

- a. A statement demonstrating why the Consultant Team is uniquely qualified to work on the Ventnor Regional Team's regional project;
- b. A detailed description of how the Consultant Team will complete each identified task in the Scope of Work. Steps and level of effort should be tailored to the region;
- c. Name, title, and qualifications of personnel that will be assigned to each task and their experience to complete it successfully;
- d. A Work Schedule identifying the associated deliverable items to be submitted as evidence of completion of each task and/or sub-task; and

- e. A comprehensive budget showing the person-hours proposed to meet the requirements of the request for competitive quotes. The budget shall be designed to reflect the tasks, sub-tasks, or other work elements required by this request for quotes. The budget shall set forth, for each task, sub-task or other work element, the total number of person-hours, by labor category, proposed to complete the assignment. The hourly rates used for each labor category shall be the all-inclusive hourly rates specified in the Contract.

Appendix A: Asset Risk Profile Examples

Asset Risk Profile Example 1

Asset Assessment	
Asset Description	
Asset	Municipal Building
Asset Type	Government Services
Asset Location	15 Main St. Floodtown, NJ
Why Asset is Important	This facility serves the main government functions of the community.
Community Value (1-3) Include a 1-3 sentence justification on why this value was assigned	2 - This asset is significantly valued by the community and is where all municipal services are coordinated. Although residents may not physically visit the building regularly, the services provided occur daily (Police, Fire, DPW, Permitting, etc.).
Implications of Permanent Asset Loss	While the municipal building may be permanently lost, the municipal offices housed there would still need to exist. The municipal government is crucial to the function of the community, so municipal buildings would have to be moved to another location. However, only basic municipal services would be available while a new location was established.
Previous Flooding Event Details	
Flood Event 1	
Has the Asset Been Damaged During a Recent Flood Event?	No
What type of flooding occurred?	NA
Date of Flood Event	NA
High Water Mark	NA
Depth of Water	NA
Monetized Loss Associated with the Flood Event	NA
Description of Loss	NA
HAZUS Estimated Loss	
Current Flood Condition 1	\$XXX,XXX in damages
Current Flood Condition 2	\$XXX,XXX in damages
Future Flood Condition 1	\$XXX,XXX in damages
Future Flood Condition 2	\$XXX,XXX in damages
Future Flood Condition 3	\$XXX,XXX in damages
Future Flood Condition 4	\$XXX,XXX in damages
Non-HAZUS Findings	
Finding 1	Study X finds that town buildings are critical to continued operations of the community they serve.

Asset Risk Profile Example 2

Asset Assessment	
Asset Description	
Asset	Gateway Park
Asset Type	Natural
Asset Location	3 Park Rd. Floodville, NJ
Why Asset is Important	This is the largest park in the community, and it provides various recreational opportunities to local families and visitors. This park is an important place where community members meet friends and socialize.
Community Value (1-3) Include a 1-3 sentence justification on why this value was assigned	1 - This asset is critical to the function of everyday life and is an essential component of the community it serves
Implications of Permanent Asset Loss	Complete inundation of the park would result in the loss of the park as a community amenity. The park's athletic fields, playgrounds, and walking paths offer residents important outdoor opportunities. With permanent loss, the next nearest park with these amenities is 20 miles away and would require motor vehicle transportation. The time and cost of transportation would therefore limit community accessibility.
Previous Flooding Event Details	
Flood Event 1:	
Has the Asset Been Damaged During a Recent Flood Event?	Yes
What type of flooding occurred?	Moderate flooding
Date of Flood Event	06/05/2015
High Water Mark	23ft NAVD88
Depth of Water	2ft
Monetized Loss Associated with the Flood Event	\$12,000
Description of Loss	Flooding destroyed a playground and damaged a restroom building.
HAZUS Estimated Loss	
Current Flood Condition 1	NA
Current Flood Condition 2	NA
Future Flood Condition 1	NA
Future Flood Condition 2	NA
Future Flood Condition 3	NA
Future Flood Condition 4	NA
Non-HAZUS Findings	
Finding 1	The park charges nominal fees for official usage of athletic fields and the event center. Estimated lost revenue for X days would be \$X,XXX.
Finding 2	Each year the park hosts a music festival. The festival attracts over 20,000 people whom spend money at nearby hotels, restaurants, and food trucks during the event.

Asset Risk Profile Example 3

Asset Assessment	
Asset Description	
Asset	Hospital
Asset Type	Health
Asset Location	30 Medical Way, Watertown, NJ
Why Asset is Important	The community relies on the local hospital to see to all major health problems of community residents.
Community Value (1-3) Include a 1-3 sentence justification on why this value was assigned	1 - This asset is critical to the function of everyday life and is an essential component of the community it serves
Implications of Permanent Asset Loss	The community relies on the hospital for emergency medical services as well as everyday medical services. If the hospital were to be permanently lost, the next nearest hospital is 30 miles away. Health and well-being would be negatively impacted and lives may be lost.
Previous Flooding Event Details	
Flood Event 1:	
Has the Asset Been Damaged During a Recent Flood Event?	Yes
What type of flooding occurred?	Extreme Flooding
Date of Flood Event	10/29/2012
High Water Mark	15ft NAVD88
Depth of Water	5ft
Monetized Loss Associated with the Flood Event	\$500,000
Description of Loss	Emergency room facilities and equipment were heavily damaged during Sandy. Backup generators were also damaged.
HAZUS Estimated Loss	
Current Flood Condition 1	\$XXX,XXX in damages
Current Flood Condition 2	\$XXX,XXX in damages
Future Flood Condition 1	\$XXX,XXX in damages
Future Flood Condition 2	\$XXX,XXX in damages
Future Flood Condition 3	\$XXX,XXX in damages
Future Flood Condition 4	\$XXX,XXX in damages
Non-HAZUS Findings	
Finding 1	The emergency action plan (EAP) for the hospital indicates the emergency room entrance will be the first to flood in a storm event. Capacity for the emergency room is 100 patients, however, typical excess bed capacity on higher floors is no more than 30, thus limiting how many patients could be moved in the event of a flood. Thus, the vulnerability of the emergency room currently puts patients and staff at risk.

Asset Risk Profile Example 4

Asset Assessment	
Asset Description	
Asset	Business District
Asset Type	Economic
Asset Location	50-165 Main St. Flood City, NJ
Why Asset is Important	The business district of the community provides goods and services for residents of the community, including grocery stores, pharmacies, gas stations, doctors' offices, and restaurants.
Community Value (1-3) Include a 1-3 sentence justification on why this value was assigned	1 - This asset is significantly valued and is used by many community members daily.
Implications of Permanent Asset Loss	Community functioning would be severely impacted by loss of food and health care availability. Secondary to that would be loss of tax revenue for the municipal operating budget.
Previous Flooding Event Details	
Flood Event 1:	
Has the Asset Been Damaged During a Recent Flood Event?	No
What type of flooding occurred?	NA
Date of Flood Event	NA
High Water Mark	NA
Depth of Water	NA
Monetized Loss Associated with the Flood Event	NA
Description of Loss	NA
HAZUS Estimated Loss	
Current Flood Condition 1	NA
Current Flood Condition 2	NA
Future Flood Condition 1	NA
Future Flood Condition 2	NA
Future Flood Condition 3	NA
Future Flood Condition 4	NA
Non-HAZUS Findings	
Finding 1	Urban flooding from heavy rain events has become frequent in recent years in the district, limiting access for hours at a time. Any larger event would not only limit access for days on end, but also cause widespread damages.
Finding 2	Based on a local economic development study, a 10% rain event would flood roads for a day and result in \$80,000 in lost economic activity.
Finding 3	Businesses have been asking municipal officials about financial incentives to raise or floodproof structures, however little traction has been made.

Asset Risk Profile Example 5

Asset Assessment	
Asset Description	
Asset	Evacuation Route
Asset Type	Infrastructure
Asset Location	State Rt. 50, Coastal Cove, NJ
Why Asset is Important	This is the main roadway leading out of the community. During a flood event or other emergency residents rely on this street for evacuation.
Community Value (1-3) Include a 1-3 sentence justification on why this value was assigned	3 - This asset is important to the community for daily access, but not used often as an evacuation route.
Implications of Permanent Asset Loss	If the route was lost due to permanent inundation or massive structural damages, most of the community would be inaccessible. Abandonment of structures would likely ensue, businesses would shutter and residents would be forced to relocate in a hectic fashion.
Previous Flooding Event Details	
Flood Event 1:	
Has the Asset Been Damaged During a Recent Flood Event?	No
What type of flooding occurred?	Consistent Minor (Nuisance) Flooding
Date of Flood Event	XX/XX/20XX
High Water Mark	Xft
Depth of Water	Xft
Monetized Loss Associated with the Flood Event	\$XX,XXX
Description of Loss	Loss was associated with erosion-damaged infrastructure along the roadway (pavement and lighting).
HAZUS Estimated Loss	
Current Flood Condition 1	NA
Current Flood Condition 2	NA
Future Flood Condition 1	NA
Future Flood Condition 2	NA
Future Flood Condition 3	NA
Future Flood Condition 4	NA
Non-HAZUS Findings	
Finding 1	Past flood events indicate that the evacuation route is prone to flooding. Portions had to be closed during the spring and summer of 2016, 2017, and 2019.

Asset Risk Profile Example 6

Asset Assessment	
Asset Description	
Asset	Drug & Alcohol Rehabilitation Services
Asset Type	Health
Asset Location	Multiple Offices
Why Asset is Important	Rehab services provide a support network for people who struggle with addiction diseases .
Community Value (1-3) Include a 1-3 sentence justification on why this value was assigned	1 - This asset is critical to the function of everyday life and is an essential component of the population it serves
Implications of Permanent Asset Loss	Participants would face a high degree of relapse, potential job loss, family disfunction, increase in crime, overdoses etc. As a result, quality of life within the community would be negatively impacted.
Previous Flooding Event Details	
Flood Event 1:	
Has the Asset Been Damaged During a Recent Flood Event?	No
What type of flooding occurred?	N/A
Date of Flood Event	N/A
High Water Mark	N/A
Depth of Water	N/A
Monetized Loss Associated with the Flood Event	N/A
Description of Loss	N/A
HAZUS Estimated Loss	
Current Flood Condition 1	NA
Current Flood Condition 2	NA
Future Flood Condition 1	NA
Future Flood Condition 2	NA
Future Flood Condition 3	NA
Future Flood Condition 4	NA
Non-HAZUS Findings	
Finding 1	A disruption in rehab services caused by a cut in funding in 2018, resulted in the denial of services to 50 people. 2018 also saw a 22% increase in overdoses deaths over 2017.

Asset Risk Profile Example 7

Asset Assessment	
Asset Description	
Asset	Chem Company Superfund Site
Asset Type	Environmental
Asset Location	27 River Road
Why Asset is Important	The site is currently contaminated with PCBs and is directly adjacent to the river. It is currently awaiting remediation but has not been funded yet.
Community Value (1-3) Include a 1-3 sentence justification on why this value was assigned	3 - This asset is not of value to the community, but instead is a liability.
Implications of Permanent Asset Loss	The contamination of the river ecosystem and potential resulting health hazards to wildlife and humans is a concern.
Previous Flooding Event Details	
Flood Event 1:	
Has the Asset Been Damaged During a Recent Flood Event?	No
What type of flooding occurred?	N/A
Date of Flood Event	N/A
High Water Mark	N/A
Depth of Water	N/A
Monetized Loss Associated with the Flood Event	N/A
Description of Loss	N/A
HAZUS Estimated Loss	
Current Flood Condition 1	NA
Current Flood Condition 2	NA
Future Flood Condition 1	NA
Future Flood Condition 2	NA
Future Flood Condition 3	NA
Future Flood Condition 4	NA
Non-HAZUS Findings	
Finding 1	A flood event above 10' NAVD88 has the potential to cause large-scale erosion and contamination of the river.

Resilient NJ

*RISK ASSESSMENT
METHODOLOGY*

January 16, 2020



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1. Introduction

Resilient NJ builds on the existing efforts and capabilities within the state to create and implement creative regional planning solutions to address current and future flood-related hazards, environmental resource protection, and the promotion of sustainable/smart growth development in both riverine and coastal communities. This unique program brings together Consultant Teams to help communities imagine creative and implementable solutions to flooding issues that increase resilience, enhance the value and integrity of the ecologic and economic resources in the region, improve public access and recreation opportunities, and reach underserved and socially vulnerable populations.

Conducting this risk assessment, as part of the Resilient NJ program, will help the Consultant Team, along with the Regional Team, understand the flood risk of locally valued assets, understand key regional assets that are significant to the region's function, and identify where interdependencies between assets exist. The risk assessment will be performed by the Consultant Teams, with insight and feedback from the Regional Teams.

The methodology described in this document shall be used to identify and assess flood risk and vulnerability for the Resilient NJ program. Assets identified and prioritized will be assessed for damages and losses using several flooding conditions. Deliverables resulting from the risk assessment will include Asset Risk Profiles, an associated database, and a Risk Assessment Report, which are described in more detail in Section 5 of this document. These risk and vulnerability results shall help inform the development and evaluation of resilience and adaptation scenarios (*Task 4*).

2. Flooding Conditions

The Resilient NJ risk and vulnerability assessment shall use two current and four future flooding conditions determined and provided by DEP. The flooding conditions consider combinations of increased rainfall (both intensity and depth), storm surge, tidal flooding and sea level rise (SLR). HEC-RAS models of each flooding condition will be provided. Consultant Teams may adjust and refine the models as needed to more accurately reflect local conditions. This should only be done in coordination with, and with approval from DEP. The resultant outputs, flood inundation extents and depths, can then be used to assess risk and vulnerability. More details on the flooding conditions are described below. A complete mapping methodology will be provided after Consultant Teams have been selected for each project.

Flooding Condition Development

The development of the flooding conditions are based upon a combination of rainfall, storm surge, sea level rise (SLR), and tidal flooding. Rainfall considers an intense, short-duration event as well as a longer 24-hour event. Storm surge baselines use the Mean Higher High Water

(MHHW) elevations reported at the Sandy Hook tide gauge (for northern regions) and the Atlantic City tide gauge (for southern regions). (For regions within the Mullica-Toms watershed, models were produced using both tide gauges. Since communities in this watershed may find one tide gauge MHHW level more applicable to the region than the other, regions will choose what they view as the appropriate MHHW level to use, with approval from DEP.) An increase of 2.4 feet is used for the 2070 SLR projection, which is the central estimate for the high emissions scenario from 2019 Rutgers University’s Science and Technical Advisory Panel’s (STAP) report. Finally, a Sandy surge event equivalent, occurring in 2070, was also modeled.

See *Figure 1* for tide gauges and corresponding watershed applicability.

Figure 1 Map of Divide Between Gauges Used for Mapping



Using the storm event factors described above, as well as terrain data, soil information, and land use data, floodplains were developed using a two-dimensional (2-D) rain on grid model with HEC-RAS.

Final Flooding Conditions

Six (two current and four future) models displaying different potential flood conditions will be provided to each region. *Table 1* shows the different model inputs used for each of these conditions.

Table 1 *Flooding Conditions Available for Risk Assessment*

Flooding Condition	Type
Current	a. MHHW + 2% annual chance, 2-hour storm event
	b. MHHW + 1% annual chance, 24-hour storm event
Future	c. MHHW + SLR 2070 (2.4 ft)
	d. MHHW + SLR 2070 (2.4 ft) + (2% annual chance, 2-hour storm event + 10% increase in rainfall)
	e. MHHW + SLR 2070 (2.4 ft) + (1% annual chance, 24-hour storm event + 10% increase in rainfall)
	f. MHHW + SLR 2070 (2.4 ft) + Superstorm Sandy in 2070 (High Water Mark = 8.3 ft)

The two current flooding conditions are provided for insight into present flooding vulnerabilities and areas that may require immediate attention. The four future flooding conditions will be used to assess anticipated flood risk for each region to the year 2070. All flooding conditions should be used in detailing the risk and vulnerabilities within the region and how those risks may change over time. These six flooding conditions will be utilized while developing and evaluating the scenarios.

3. Assets

Within the Resilient NJ regions, there are assets that contribute to the region’s identity and future vision. An important component of Resilient NJ will be identifying and recognizing these assets and their regional significance. Through information gathering during the planning context, outreach, and visioning efforts of Resilient NJ, assets important to the region and its future vision will be highlighted and prioritized.

What is an Asset?

Assets are features within a community that are valued. These can include facilities, populations, processes, services, functions, institutions, or networks that are essential to day-to-day life, rapid disaster recovery, and long-term resilience of communities. They are the places, people, events, processes, and things that define communities. Assets may or may not be a physical structure; however, all assets should be assigned a location for the purpose of the Risk Assessment. For the Resilient NJ program, Consultant Teams will work with the communities to identify these assets.

Asset Types

The Resilient NJ regions should consider assets not usually identified in standard risk assessments. Critical facilities may be included, but assets that are valued for cultural, natural, public health, social, economic, governmental services, infrastructure, or housing reasons should

be included as well. Assets can be owned, managed, or provided by local communities, other government entities, non-governmental or private entities.

Assets can relate to communities in both positive and negative ways. Positive assets (business districts, schools, social diversity, festivals, parks, etc.) are assets communities promote and preserve. Negative assets (traffic, prisons, superfund sites, empty retail space, degrading infrastructure, etc.) are assets communities try to fix and improve. Flooding can impact each type so it is important to consider and include both in this program.

Prioritizing Assets

Certain regions may identify hundreds to thousands of assets. In these situations, it is impractical to assess each one against the many flooding conditions for Resilient NJ. As a result, an asset prioritization process should be established and performed. Prioritization should consider frequency and location within each flooding condition first, followed by prioritization based upon community importance using an array of factors determined by the region. Prioritization results are best captured using a scalable ranking system that is either descriptive or numeric. This prioritization methodology will be determined by the Consultant Teams, in coordination with the Regional Team, and will not be determined by DEP.

Once assets are prioritized, the actual number that are included in the risk assessment will depend on the scope and budget of each region.

4. Risk Assessment

Overview

This methodology includes several approaches to assess the risk and vulnerability of the identified assets. Consultant Teams will conduct a Hazus analysis on all primary structures in the region. However, only prioritized assets shall be assessed using the non-Hazus methods, which are monetized, quantitative, and qualitative approaches. Consultant Teams may also use their own discretion when assessing assets with these methods. Not all methods need to be applied to each asset, as some asset losses may be difficult to monetize or quantify. All assets, however, should have a qualitative description of risk and vulnerability.

Teams should also consider unique regional characteristics when assessing risk and vulnerability. For example, there is a temporal nature to the population of Jersey Shore communities. Populations typically swell between Memorial Day and Labor Day while remaining lower outside of the summer season. Risk assessments should be performed accordingly, while also documenting assumptions.

Hazus Analysis

All primary structures in the region, regardless of whether they are considered priority assets or not, shall be assessed using Hazus 4.0 or greater. The purpose is to provide a broad understanding and estimation of structural risk in the region. Only an assessment of individual buildings is needed for this step – census block or tract analyses are not necessary. The results can be helpful in estimating losses avoided for physical structures as part of the scenario evaluation (*Task 4.2*). Data requirements, methodology, and deliverables are described below.

Hazus Data Requirements

The following geospatial data will be required for the Hazus analysis.

- Tax Parcels with MOD IV Tax Data (2019 or newer)
- Building Footprint Points (Centroids)
- Depth Grids for each Flooding Condition

The tax parcels and MOD IV tax data can be obtained from the NJ Office of GIS. A complete building footprint dataset for each region will likely come from a combination of the following sources, depending on geographic coverage and extent of each region. Only primary structures shall be included. Accessory structures such as garages and sheds are not necessary.

- DEP Building Footprints – available for all FEMA 1% and 0.2% floodplain extents
- Local County or Community Building Footprints
- Microsoft Bing Building Footprints
- Tax Parcels

Tax parcels shall only be used as a last resort, if footprints are not available in any of the prior options. If tax parcels are to be used, a centroid of the parcel shall be created and then adjusted to match the location of the structure, using best available orthoimagery.

Hazus Data Preparation

Building footprint points and flooding condition depth grids are the two inputs Hazus needs to perform a loss analysis. Building footprint points shall be prepared as follows, while the flooding condition depth grids can be used as is, or with regional adjustments to local conditions, with DEP approval.

Building Footprint Point Preparation Steps:

- 1) Create a comprehensive building footprint point dataset from the sources described in the data requirements section. The point shall represent the centroid of the building.

- 2) Perform a join of the building footprint points with the Tax Parcels with MOD IV data and assign the following attributes to the points:
- Construction Type (Wood, Steel, Concrete, etc.)
 - Construction Year
 - Foundation Type
 - Height
 - Number of Stories
 - Occupancy Type (Residential, Commercial, Agriculture, etc.)
(Convert into Hazus codes: RES1, RES2, COM1, etc.)
 - Square Footage
 - Contents Value
 - Replacement Value of Structure:

$$\text{Replacement Value} = \frac{\text{Assessed Improvement Value (Structure)}}{\text{Total Assessed Value (Structure + Land)}} \times \frac{\text{Property Taxes}}{\text{Effective Tax Rate (\%)}}$$

The above equation was developed based the following:

$$\text{General Tax Rate (\%)} = \frac{\text{Property Tax}}{\text{Assessed Value}}$$

$$\text{Effective Tax Rate (\%)} = \frac{\text{Property Tax}}{\text{Equalized Value (Market Value)}}$$

By utilizing the effective tax rate formula, an equalized market value for replacement of the structure can be determined.

Note that some of these attributes are required for Hazus to run. Population of these attributes should be made using readily available data, and assumptions or estimates made as needed and also documented. Extensive data development or field survey is not required. For multiple main buildings on a single parcel, use best judgement to assign values based upon the MOD IV data.

- 3) Assign a First Floor Elevation (FFE) to each building footprint point using the following order of precedence. Be sure to capture the source in a Source_FFE field as well.
- a. Elevation Certificate (if available)
 - b. Ground Elevation at the point using the latest available elevation data plus 0.5 ft

Hazus Methodology

Consultant Teams shall use the User-Defined Facility (UDF) Analyses functionality in Hazus on the prepared building footprint point data for each flooding condition. This will analyze losses on a point-by-point basis, where each point is considered a UDF. Outputs will be estimated structural and content damages in dollars (\$) and percentages (%).

Hazus Deliverables

Consultant Teams shall produce deliverables depicting outputs from the Hazus analysis in meaningful ways. This will include narratives, maps and tables that shall summarize and highlight the results, substantially damaged structures, critical facility losses, hot spots and clustering of high losses, and prioritized asset losses.

Non-Hazus Analyses (Monetized, Quantitative and Qualitative Methodologies)

To present a comprehensive understanding of risk and vulnerability to the Regional Teams, Consultant Teams should utilize monetized, quantitative, and qualitative methods as part of the Resilient NJ risk and vulnerability assessment. Given the variation across regions and potential asset prioritization, the Resilient NJ program is not being prescriptive on which methods to use. However, the Consultant Teams, in coordination with members of the Regional Team, should be able to populate the Asset Risk Profile as described in the Deliverables section of this methodology.

Non-Hazus findings should include relevant and valuable information that is captured during the planning processes of Resilient NJ. This can include, but is not limited to, monetized values, quantitative values, indexed values, or qualitative information or assessments. See *Table 2* for examples of Non-Hazus Analyses.

Table 2 Examples of Non-Hazus Analyses that can Inform the Risk Assessment

Non-Hazus Analyses	Examples
Monetized Values	<ul style="list-style-type: none"> • The cost to close an asset for the duration of the flooding event and associated lost revenue • Lost income due to workplace or transportation closures during and after a flood • Cleanup costs associated with a flooding event
Quantitative Values	<ul style="list-style-type: none"> • The number of identified assets located in the floodplain/impacted area • Number of people that would be unable to work if the asset were to temporarily or permanently close • Number of days a facility may have to remain closed • Percentage or portions of evacuation routes inundated or impacted
Qualitative Information	<ul style="list-style-type: none"> • A case study relevant to the specific type of asset describing importance to the community • Analysis of historical trends relevant to an asset and its vulnerability • Information provided during the outreach process on the asset

Non-Hazus findings will vary on an asset by asset basis and therefore should be analyzed and used on an asset by asset basis. Some specific examples of calculating non-Hazus analyses are outlined in *Table 3*.

Table 3 Examples of Specific Non-Hazus Asset Analyses

Loss Type	Analysis Method
Impacted Recreational Assets (\$)	The facility closure resulting in lost revenue as well as cleanup and repair costs can be determined.
Impacted Ecosystem Services (\$)	The economic value of ecosystem services could be assessed by leveraging the acreage of ecosystem types and a per acre value estimate for each.
Incurred Mental Health Treatment Costs (\$)	A per person mental health treatment cost could be applied to the percent of population affected by the disaster.
Evacuation Route Vulnerability to Flooding	Evacuation routes could be assessed in relation to inundation areas and depths. Extent of flooding, as well as average, minimum and maximum depths for certain sections can be reported.
Community Assets in Inundation Areas	The number of identified assets within each flooding condition inundation area may be determined.
Increased Commuting Time	This could be calculated by estimating an assumed increase in travel time per person per direction for daily commutes.
Case Study on Evacuating Assisted Living Facilities in a Flood Event	Case studies on assets could be referenced for relevant research that can inform risk and vulnerability. In the example of an assisted living facility, the procedures used to evacuate residents could help inform evacuation plans, costs, zoning changes, etc.

5. Summary of Results

Results from the risk assessment shall be summarized at the individual level for prioritized assets as well as through a contextual risk assessment summary for the entire region. Each deliverable is described in more detail below.

Deliverables

The Asset Risk Profile is a summary page highlighting the risk assessment findings of each prioritized asset. The intent is to capture Hazus, monetized, quantitative, and qualitative findings in one location. The profile is especially important as a place to capture short narratives on prioritized assets explaining their importance to the community, their risk, implications of permanent loss, and other findings not easily communicated by numbers. The completed profile will allow for a comprehensive understanding of risk and vulnerability at the asset level. The profile format is shown below, with examples using a variety of assets included in **Appendix A**.

Table 4 Blank Asset Profile

Asset Assessment	
Asset Description	
Asset Name	
Asset Type	
Asset Location	
Why Asset is Important	
Community Value (1-3) (1, Highest, 3 Lower) Include a 1-3 sentence justification on why this value was assigned	
What are the Implications of Permanent Asset Loss to the Community / Region?	
Previous Flooding Event Details	
Flood Event 1:	
Has the Asset Been Damaged During a Recent Flood Event?	
What type of flooding occurred? (nuisance, urban drainage, coastal, riverine, etc)	
Date of Flood Event	
High Water Mark (w/Vertical Datum)	
Depth of Water	
Monetized Loss Associated with the Flood Event	
Description of Loss	
Hazus Estimated Loss (If applicable)	
Current Flood Condition 1	
Current Flood Condition 2	
Future Flood Condition 1	
Future Flood Condition 2	
Future Flood Condition 3	
Future Flood Condition 4	
Non-Hazus Findings	
Finding 1	
Finding 2	

The Asset Risk Profile Database is a Hazus-formatted geospatial database that compiles the risk profile data of each prioritized asset. The database will not be able to capture the longer narrative descriptions located in the profile, but should capture numeric information and shorter text entries. It is a complimentary deliverable to the full profiles, designed for summarizing and querying at the regional level. The database should include the fields and associated data used

for the Hazus analysis (if applicable), as well as numeric and short text entries from the profiles. A template of the database format is shown below. Note that additional fields should be added to capture more than one flooding event, Hazus losses, etc.

Table 5 *Asset Risk Profile Database Template*

Asset Name	Hazus Fields	Asset Type (String)	Asset Location (String)	Comm Value (Short Integer)	Recent Flood Event 1 (String)	Recent Flood Event 1 Date (String)	High Water Mark (String)	Vertical Datum (String)	Depth of Water (Long Integer)	Monetized Loss (Long Integer)	Hazus FC1 (Double)	Hazus FC2 (Double)	X Coor (Long Integer)	Y Coor (Long Integer)	

The Risk Assessment Report is a narrative from the region explaining the risk and vulnerability processes used, assumptions, results, findings, conclusions, and next steps. It is expected that this summary be at least a few pages to adequately describe the effort. This may also include information gathered during the planning context step, as well as during community engagement, in order to tell a complete story of what is at risk in the region. It is anticipated that the findings described in this summary will then be an important part of the scenario development.