# Request for Proposals (RFP) Naugatuck Valley Council of Governments Regional Multi-Jurisdictional Natural Hazard Mitigation Plan

for:

Ansonia, Beacon Falls, Bethlehem, Bristol, Cheshire, Derby, Middlebury, Naugatuck, Oxford, Plymouth, Prospect, Seymour, Shelton, Southbury, Thomaston, Waterbury, Watertown, Wolcott, Woodbury

The Naugatuck Valley Council of Governments (NVCOG), a political subdivision of the State of Connecticut serving the central-western Connecticut Planning Region, is issuing this RFP to select a consultant to develop a regional, multijurisdictional Natural Hazard Mitigation Plan (NHMP) for its nineteen (19) member municipalities. The NHMP will address regional natural hazards and strategies toward resilience in the face of climate change and natural disasters. The end product will be a consolidated regional, multijurisdictional NHMP to be adopted by each NVCOG municipality and approved by the Federal Emergency Management Agency (FEMA).

# Background and Purpose:

The Naugatuck Valley Council of Governments (NVCOG) was formed in 2015 by the consolidation of the Council of Governments of the Central Naugatuck Valley (COGCNV) and the Valley Council of Governments (VCOG), along with two municipalities from the Central Connecticut Regional Planning Agency (CCRPA). Existing NHMP's were initiated by these predecessor organizations. The municipalities of Bristol and Plymouth were included in the CCRPA multijurisdictional NHMP. The municipalities of Ansonia, Derby, Seymour and Shelton were included in the VCOG multijurisdictional NHMP. The former COGCNV municipalities all have single jurisdictional NHMPs: Beacon Falls, Bethlehem, Cheshire, Middlebury, Naugatuck, Oxford, Prospect, Southbury, Thomaston, Waterbury, Watertown, Wolcott and Woodbury. The existing NHMPs to be updated may be found at <a href="https://nvcogct.gov/what-we-do/emergency-management/pre-disaster-mitigation-plans/">https://nvcogct.gov/what-we-do/emergency-management/pre-disaster-mitigation-plans/</a>.

The purpose of this project is to update the various single and multijurisdictional NHMPs and develop a consolidated multijurisdictional plan in compliance with FEMA standards and requirements that will serve as the approved Natural Hazard Mitigation Plan for each municipality of the Naugatuck Valley planning region. The NHMP will identify natural hazards and risks, existing capabilities, and activities that can be undertaken by a community to prevent loss of life and reduce property damages associated with the identified hazards. Public safety and property loss reduction are the driving forces behind this plan. However, careful consideration also must be given to the preservation of history, culture and the natural environment of the region.

The area of the NVCOG encompasses about 422 square miles in the Central Western portion of the State of Connecticut and includes parts of Litchfield, New Haven, Hartford and Fairfield Counties. The 2015 NVCOG regional population was estimated at 448,180 persons. The NVCOG region's topography varies from rolling hills in the Northeast to steep slopes in the south. Many municipalities are heavily forested. The area includes two major rivers: the Naugatuck River bisects the region and flows from north to south, and the Housatonic River flows along the western regional boundary from Northwest to Southeast. It is these north-south ridges and river valleys that define the landform of the area. Historically the area has experienced severe storms, hurricanes, snow, ice storms, flooding and landslides.

# Funding:

The NVCOG Regional Natural Hazard Mitigation Plan will be funded through the Connecticut Department of Emergency Services and Public Protection's (DESPP) Division of Emergency Management and Homeland Security (DEMHS) (Award # PDMC-PL-01-CT-2018-003) via the Federal Emergency Management Agency's (FEMA) FY 2018 Pre-Disaster Mitigation (PDM) Grant Program (Competitive Fed Grant No. EMB-2019-PC-0005). The PDM Program is authorized by Section 203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (1974) (codified as amended at 42 U.S.C. §5133).

### Oversight:

The NVCOG will be the lead agency of the NHMP and will administer, coordinate and oversee the planning process. The NVCOG will foster inter-agency cooperation between local governments, state and federal agencies, residents and other stakeholders to ensure that a coordinated and efficient hazard mitigation planning process is developed.

The consultant will work with the NVCOG staff and municipal staff from all 19 member towns and cities, the Connecticut Department of Energy and Environmental Protection (DEEP) and DEMHS to develop the NHMP for review and approval by DEMHS and FEMA. Once approved by FEMA, the consultant will guide the adoption of the plan by each of the nineteen (19) NVCOG member municipalities. The plan development process and plan content shall align with the Scope of Services outlined in Attachment A of this RFP, and with all terms and conditions associated with the PDM grant award.

# Submission Requirements:

By submitting a proposal in response to this RFP, the prospective consultant represents that they have read, examined and understand the anticipated work as described in the Scope of Services and is capable of performing the work to achieve the objectives of this planned project.

#### **REQUIRED DOCUMENTATION**

The proposal **must** contain the following information:

- 1. Firm(s) name, size, and related experience on similar projects;
- 2. Proposed Work Program (Scope of Services). Attachment A of this RFP presents the draft scope of work and provides guidance on the types of tasks the NVCOG wants completed as part the project. The proposer is encouraged to develop a work program for this project which you feel will best meet the project's objectives as you understand them;
- 3. Detailed project budget, including fee proposal, indirect rate, profit margin, and estimated other direct costs. The proposed project budget shall be provided in a separate, sealed envelope.
- 4. Qualifications (Resumes) of Key Personnel to be assigned, and identification of the Project Manager;
- 5. Proposed project organization, including items to be done under subcontract by others;
- 6. Disadvantaged Business Enterprise (DBE) firm(s) name, size, related experience on similar projects and their tasks as they relate to this study, if any See Attachment B DBE form;
- 7. Subcontractor's qualifications, and experience;
- 8. A schedule;
- 9. Certification Regarding Lobbying (see required FEMA federal clauses, Page 9) which may be found at <a href="http://nvcogct.org/content/vendors">http://nvcogct.org/content/vendors</a>.

NOTE: RFP responses not meeting these minimum requirements may be disqualified.

**Signature Requirements.** Proposals must be signed by a duly authorized official of the firm. Consortiums, joint ventures, or teams submitting proposals will not be considered unless it is established that all contractual responsibility rests solely with one contractor or one legal entity, which shall not be a subsidiary or affiliate with limited resources. Each proposal should indicate the entity responsible for execution on behalf of the proposal team.

**Proposals to Be In Effect**. Each proposal shall state that it is valid for a period of not less than sixty (60) days from the date of receipt.

The proposer must provide six (6) paper copies and one (1) digital copy of their submission in a sealed envelope bearing on the outside the name of each firm, full address, and the date and time proposal is due. Digital copies, in a PDF file format no larger than 35 MB, may be emailed separately to <a href="mailto:irogalski@nvcogct.gov">irogalski@nvcogct.gov</a>.

All submissions shall be clearly marked "NVCOG Regional Natural Hazard Mitigation Plan", and shall be delivered to:

Joanna Rogalski, Senior Regional Planner Naugatuck Valley Council of Governments 49 Leavenworth St, Third Floor Waterbury, CT 06702

The proposal must be received no later than **2:00 pm on Friday, February 28**<sup>th</sup>, **2020.** Proposals received after the date and time prescribed shall not be considered.

### Information & Inquiries:

**News Releases.** Written approval by the NVCOG will be required prior to any public disclosure regarding this proposal, or any other subsequent awards.

**Updates and amendments** to this RFP can be found at <a href="http://nvcogct.org/content/vendors">http://nvcogct.org/content/vendors</a> or can be obtained by contacting the NVCOG directly. Interested consultants are responsible for monitoring updates and amendments. Respondents are free to amend or replace an already-submitted proposal up until the REP submission deadline.

All inquiries regarding this RFP must be submitted in writing via email to Joanna Rogalski, Senior Regional Planner at <a href="mailto:irogalski@nvcogct.org">irogalski@nvcogct.org</a> with "Natural Hazard Mitigation Plan RFP" in the subject line. The NVCOG will respond in writing via email up to seven days before the RFP response submittal deadline. All questions and their responses will be posted at <a href="http://nvcogct.org/content/vendors.">http://nvcogct.org/content/vendors.</a> It is the responsibility of interested consultants to monitor the website for questions and responses.

No contact with any other NVCOG staff, town personnel or project partner other than the authorized contact person is allowed until such time as an award has been made.

#### **Selection Process:**

Responses to the RFP will be evaluated in accordance with the following criteria:

- 1. Qualifications of the consultant and subcontractors (15%);
- 2. Caliber and qualifications of key personnel assigned to the project (20%);
- 3. Ability to perform the services according to the scope of services outlined in RFP Attachment A (15%);
- 4. Thoroughness and creativity of work program and responsiveness to the project objectives (10%);

- 5. Experience with similar areas of study or in related projects (15%);
- 6. Fee proposal and project budget including fee proposal, indirect rate, profit margin, and estimated other direct costs (25%).

A Consultant Selection Committee comprised of representatives from three member municipalities and the NVCOG staff will evaluate the submitted proposals and develop a short list of qualified consultants. Based on the evaluation of submittal proposals, the Consultant Selection Committee will recommend a preferred consultant to the NVCOG Board for concurrence and endorsement. The NVCOG will initiate scope and fee negotiations with the selected consultant. The fee proposal submitted as part of this RFP will serve as the basis for negotiations of the fee for services for the project. The Consultant Selection Committee will prepare an independent cost estimate prior to opening and review of submitted fee proposals. If a negotiated fee cannot be mutually agreed to by both parties, the NVCOG will terminate negotiation and begin negotiation with the second ranked firm.

The firm awarded the contract under this RFP, must meet all Municipal, State and Federal affirmative action and equal employment opportunity practices. This will include compliance with E.O. 11246, "Equal Employment Opportunity," as amended by E.O. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity," Department of Labor."

#### **COMPENSATION TO CONSULTANTS**

A contract will be executed between the selected consultant and the NVCOG. The services set forth in the negotiated scope of work will be compensated on a lump sum basis, not to exceed the negotiated fee, with Direct Charges billed based on actual costs incurred.

# Other Requirements:

#### Freedom of Information

Respondents are advised that any and all materials submitted in response to this RFP shall become the sole property of NVCOG and shall be subject to the provisions of Section 1-210 of the Connecticut General Statutes (re: Freedom of Information).

#### **Incurred Costs**

This RFP does not commit the NVCOG or any of its Municipalities to award a contract or to pay any costs incurred in the preparation of a response to this request. Neither the NVCOG nor its member municipalities will be liable in any way for any costs incurred by respondents in replying to this RFP.

#### Insurance

The NVCOG requires Consultants to provide and maintain adequate professional liability for errors and omissions in the minimum amount of Two Million Dollars (\$2,000,000) and automobile liability insurance in the minimum amount of One Million Dollars (\$1,000,000). The Consultant(s) and subcontractors shall carry workman's compensation insurance. Proof of adequate insurance must be included in the bid application.

#### Personnel

The Contractor shall provide the professional services identified in this Scope of Services and requested by the NVCOG. The proposal must identify the person or persons who will be responsible for conducting the work as listed in this scope of services, and include a copy of each person's resume, experiences with municipal/government clients and listing of references.

The NVCOG is requesting that a senior experienced person be the primary representative for your firm in actually performing the services.

#### Length of Service

It is expected that the agreement and work covered by this RFP and Scope of Services shall extend for two (2) years from the date of execution of an agreement between the NVCOG and the consulting firm or team with an NVCOG option to extend the agreement by one year. No delivery of services shall start without written contract issued by the NVCOG.

#### Contract/ Agreement

The successful bidder shall enter into a contract with the NVCOG and agree to abide by all state and federal contractual requirements. By signing the agreement with the NVCOG, the Consultant agrees to perform work as specified in the Scope of Services and accepts the terms and conditions set forth in the contract.

#### Acceptance or Rejection by the NVCOG

The NVCOG reserves the right to accept or reject any or all responses submitted for consideration, to waive any informalities and/or technicalities, or to negotiate separately in any manner necessary to serve the best interests of the NVCOG. Respondents whose responses are not accepted shall be notified in writing.

#### Amending or Canceling RFP

The NVCOG reserves the right to amend or cancel this RFP, prior to the due date and time, if it is deemed to be in its best interest to do so.

#### Affirmative Action

The NVCOG and its member municipalities participating in this RFP are equal opportunity employers and require an affirmative action policy from all consultants as a condition of doing business with the NVCOG or its member municipalities, as per Executive Order 11246 as amended by E.O. 11375, and as supplemented by regulations of 41 CFR Part 60. By responding to this RFP, all consultants agree to this condition of doing business with the NVCOG or its member municipalities and, should they choose to audit for compliance, the consultant agrees to cooperate fully.

#### Disadvantaged Business Enterprise (DBE)/Small Business Enterprise (SBE)

It is the policy of NVCOG to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. All firms qualifying under this solicitation are encouraged to submit a proposal and selection will be based on and conditioned upon satisfying the requirements described in this RFP and Scope of Services. These requirements apply to all proposers, including those who qualify as a DBE or SBE. Responses that fail to give proof of DBE certification and description of project involvement will not be identified as including DBE participation.

#### Protest Procedures

 The procedures established hereunder shall be available to contractors for the purpose of handling and resolving disputes relating to procurements hereunder. A protestor must exhaust all administrative remedies hereunder before pursuing a protest in any court of law. Where applicable, any information received under such procedures shall be disclosed to the Federal Emergency Management Agency ("FEMA") and a protestor must exhaust all administrative remedies before pursuing a protest with the FEMA.

- 2. The term "contractor" means any person, firm, or corporation, which has contracted or seeks to contract (bidder or proposer) with the NVCOG.
- 3. The term "hearing officer" shall mean a person, appointed by the Chairman of the NVCOG, to hear and decide allegations made by any contractor relating to procurements hereunder.

#### **Hearing Procedure**

- 1. Any contractor may file a written protest of the procurement procedures involved herein with NVCOG, within ten (10) days of the date of the NVCOG's Decision regarding a selection of a contractor with respect to a Bid/RFP/RFQ.
- 2. A hearing shall be conducted in accordance with C.G.S. Section 4-176e through 4-18a, as amended, which are incorporated herein. The hearing officer shall issue a written decision within ninety (90) days of the last date of such hearing and state in the decision the reasons for the action taken.
- 3. Where applicable, review of protests by FEMA will be limited to the NVCOG's failure to have or follow its procedures, or its failure to review a complaint or protest. An appeal to FEMA must be received by the cognizant FEMA regional or Headquarters Office within five (5) working days of the date the protestor knew or should have known of the violation.

# Attachment A- Scope of Services Consultant Services to Develop a Regional Natural Hazard Mitigation Plan

# Objective of Project:

The objective of this project is to develop a consolidated regional multijurisdictional Natural Hazard Mitigation Plan (NHMP) which will serve as updates to the existing NHMP's for the municipalities of Ansonia, Beacon Falls, Bethlehem, Bristol, Cheshire, Derby, Middlebury, Naugatuck, Oxford, Plymouth, Prospect, Seymour, Shelton, Southbury, Thomaston, Waterbury, Watertown, Wolcott, Woodbury, and identify projects and mitigation strategies which may strengthen regional resilience. The updates will reflect any requirements of EPA, FEMA, and/or DEMHS.

The consultant will address the hazards that are possible in the municipalities and deemed appropriate by cooperating communities. The categories of inland flooding, hurricanes and tropical storms, summer storms (including tornadoes, hail, and lightning), winter storms (including nor'easters, severe ice storms, snow, and freezing hazards), earthquakes, landslides, dam failure, and wildfires will be used in the planning process.

This Scope of Services incorporates provisions of FEMA's Local Mitigation Plan Review Guide (FEMA, October 1, 2011). The consultant will work with the appropriate state agencies and FEMA to ensure that the regional natural hazard mitigation plan is consistent with the most recent update or revision to the Local Mitigation Planning Handbook (as of release, March 2013).

# Plan Review and Regional Advisory Committee

The regional advisory committee will consist of representatives from NVCOG municipalities and NVCOG staff. At the local level, each municipality involved in this update will select a primary contact for the technical review and advisory committee.

# Task 1 – Project Initiation, Data Collection, and Administration

The NVCOG will administer the project and work with the consultant to ensure adherence to the project scope and schedule. Under this phase of the project, the strategy and a framework for the updates of Natural Hazard Pre-Disaster Mitigation Plans will be set; potential hazards and affected areas based on the existing plans will be identified and inventoried; data will be systematically gathered; and members of the public and other stakeholders will be engaged and involved throughout the planning process. Specifically, the following work tasks are proposed:

- **1.1 Kick-Off Meeting**: At the onset of this project, the consultant will attend a meeting of the NVCOG Board to present the purpose of the project and describe the scope and planning tasks. The meeting will formulate a project plan and identify municipal resources and stakeholders for subsequent coordination. Following the meeting, NVCOG will publicly announce the kickoff of the project.
- **1.2 Local NHMP Advisory Committee Meetings**: Within four weeks of the kick-off meeting, the consultant will meet with municipal staff in each municipality to describe the purpose and need for hazard mitigation plans, the planning process, potential outcomes and mitigation grant opportunities, and the types of information to be gathered. These meetings will also serve the gather information about the location, severity and extent of natural hazards that have occurred in recent years. Potential members of these local NHMP advisory committees may include:

- Chief Elected Officials or their designees
- Members of Local Emergency Planning Commissions (LEPCs)
- Staff from Public Works or Highway Departments
- Building Officials or staff from Building Departments
- Municipal Engineers
- Fire Chiefs
- Staff from Municipal Planning and Zoning/Land Use Departments

At least one consultant representative will attend each session.

- **1.3 Natural Hazard Mitigation Workshops:** The NVCOG in collaboration with the consultant will hold a series of hazard vulnerability and mitigation workshops based on appropriate geography to identify vulnerable areas, locate critical facilities, and discuss the effects and responses to past and recent natural events. The workshops will be organized and moderated by the NVCOG and the consultant will be present to provide technical information. These workshops will serve as the first public meetings to review and identify potential project and receive comments about hazard effects and/or areas that should be included in the planning process.
- **1.4 Data Collection**: Consultant will gather available data, mapping, information, and reports from relevant state and federal agencies, utility companies, municipal agencies, available news articles, and non-government organizations. The following is a preliminary list:
  - The existing Natural Hazard Pre-Disaster Mitigation Plans;
  - Local, Regional, and State plans of conservation and development;
  - Municipal codes;
  - Zoning Regulations;
  - Subdivision Regulations;
  - Inland Wetlands and Watercourses Regulations;
  - Other regulations or ordinances that may be related to hazard mitigation;
  - Local and regional Emergency Operations Plans (EOPs);
  - DEEP dam safety files and dam failure inundation mapping;
  - Dam inspection reports and Emergency Action Plans (EAPs) or EOPs;
  - Flood Insurance Rate Maps (FIRMs);
  - Flood Insurance Studies (FIS);
  - Hurricane surge mapping;
  - Evacuation routes and critical facilities;
  - American Red Cross sheltering plans;
  - Repetitive Loss Property lists from the CT Department of Energy and Environmental Protection (DEEP);
  - Public Works complaint logs and files;
  - Snow plow routing and priorities;
  - Snow and ice management policies;
  - Lists of floods, earthquakes, tornadoes, downbursts, hurricanes, tropical storms, nor'easters, hail storms, blizzards, and other severe events;
  - National Climate Data Center (NCDC) storm event data;
  - Publicly-available information regarding losses in the NVCOG region from the disaster

- declarations that have occurred since the last Single and Multi-Jurisdictional Hazard Mitigation Plans were adopted (<a href="http://www.fema.gov/disasters/grid/state/31">http://www.fema.gov/disasters/grid/state/31</a>);
- Copies of mitigation grant applications submitted by the 19 communities for consideration under the HMGP, PDM, FMA, RFC, and SRL programs in the last five years; and
- The Connecticut Hazard Mitigation Plan.
- Comprehensive Economic Development Strategy (CEDS) for the Naugatuck Valley Economic Development District
- **1.5 Public Meetings**: The consultant will prepare for and lead at least two public informational meetings in each of the participating municipalities. The project workshops (Task 1.3) will serve as public information meetings to present the history and purpose of hazard mitigation planning, the five FEMA mitigation funding programs, and the project scope of work and receive comments about hazard effects and/or areas that should be included in the planning process. A general public information meeting will be held to present the draft NHMP and proposed pre-disaster mitigation projects, if any. The NVCOG and the individual communities will be responsible for organizing the meetings, arranging the meeting location and advertising and posting public notices to the constituents. Public comments will be assembled and meeting minutes will be appended to the Regional NHMP.
- **1.6 Administration**: Consultant will participate in bi-weekly teleconference calls to discuss project status and any problems or issues. The intent of these bi-weekly calls is to maintain the project timeline. The consultant will also be required to submit project progress reports with invoices.
- **1.7 Project Webpage:** A project webpage will be developed and maintained on the NVCOG website to provide up-to-date information about the project. The consultant will be responsible for providing content to the webpage.

# Task 2 – Risk and Vulnerability Assessment

Under this task, potential natural hazards and affected areas will be identified, inventoried, mapped and assessed. Specifically, the assessment will focus on flooding, hurricanes, winter storms and nor'easters, summer storms and tornadoes, earthquakes, landslides, dam failure, and wildfires. Tasks will be completed by the consultant unless otherwise indicated. The following work tasks will be conducted:

- **2.1 Mapping of Land Use and Zoning**: The consultant will work with the municipalities and NVCOG staff to review existing zoning and development trends and develop GIS-based land use and zoning maps. Future potential areas of development will be identified and mapped, including developments under review by local land use commissions and others that have been speculated.
- **2.2 Historical Summary of Recent Natural Hazard Events**: The consultant will summarize recent natural events that have occurred in the region and describe the extent to damage caused and the response to the event.
- **2.3 Flood Hazard Areas:** FEMA-designated floodplains and floodways will be mapped. Areas of potential flooding and vulnerable land/structures will be identified/reviewed. Land use and zoning mapped as part of Task 2.1 will be overlaid onto these layers as well. Drainage basins within the study area will be appraised on GIS mapping and described in narrative form.

- **2.4 Historical Flooding:** A history of flooding problems will be compiled from available information and interviews with municipal staff and others. Known flood-prone areas (referenced relative to streets, neighborhoods, and/or drainage basins) will be identified and described, including areas affected by nuisance and other issues. Critical and known problem areas will be visually surveyed and photographed as part of this effort.
- **2.5 Critical Facilities:** Critical facilities will be identified, described, and mapped (if allowed by local representatives). Critical facilities will include municipal offices, including public works and emergency response facilities; hospitals and medical facilities; designated primary and backup shelters; other places where people may congregate; facilities that cannot be easily evacuated such as assisted-living homes; power generation and transmission facilities; and infrastructure such as roads, wastewater, and water system components.
- **2.6 Dams**: An inventory of high hazard dams will be conducted based upon data and information on file at the CT DEEP, as well as municipal and water utility files. The locations of moderate and high hazard dams will be mapped along with conditions and failure inundation areas if this information is available.
- **2.7 Vulnerabilities to Flooding**: The consultant will describe, evaluate, and map existing structures and infrastructure (including roads, bridges and culverts) vulnerable to flooding, as well as potential areas of development vulnerable to flooding; and organize structures and properties by type (residential, commercial, etc.) and characteristics (areas, locations). Potential flooding problems from upstream communities, Repetitive Loss Properties and Severe Repetitive Loss Properties will be tabulated. Future climate impacts will also be evaluated.
- **2.8 Existing Mitigation**: The consultant will describe existing flood mitigation, inclusive of all six standards categories (prevention, property protection, structural projects, public education and awareness, natural resource protection, and emergency services). Regulations will be included as well. These measures will be evaluated along with the capabilities and resources to implement such measures. Existing flood mitigation measures will be identified. These may include education, "Reverse 911"-type warning systems such as CodeRed, flood insurance, Community Rating System (CRS) participation, detention/retention, stream channel modifications, bridge and culvert replacement, wet and dry flood proofing, regulation revisions or amendments, structure relocation or elevation, etc.
- **2.9 Wind Hazards**: The wind hazards events (winter storms, summer storms and tornadoes, hurricanes and tropical storms) and hazard effects will be described. Vulnerabilities will be evaluated based upon historic climatological data, as well as written and verbal documentation of past occurrences and responses to such events. Similar to flooding issues, the history, existing mitigation measures, and objectives and actions will be developed.
- **2.10 Wildfire Hazards**: Wildfires and their effects (fire, heat, and smoke) will be described. Vulnerabilities will be evaluated based upon historic records, as well as written and verbal documentation of past occurrences and responses to such events. History, future climate impacts, existing mitigation measures, and objectives and actions will be developed.
- **2.11 Earthquake Hazards**: Earthquakes and their effects (shaking and liquefaction) will be described. Vulnerabilities will be evaluated based upon historic records, as well as written and verbal documentation of past occurrences and responses to such events. History, existing mitigation measures, and objectives and actions will be developed.

- **2.12 Landslide Hazards**: Landslides and their effects will be described. Vulnerabilities will be evaluated based upon historic records, as well as written and verbal documentation of past occurrences and responses to such events. Areas of steep and sever slope will be identified. History, existing mitigation measures, and objectives and actions will be developed, including proposed regulations to protect steep slope areas.
- **2.13 Climate Vulnerability Assessment**: The consultant will describe the general climate of the region and perform a climate vulnerability assessment as outlined in Sustainable CT's Action 404 "Assess Climate Vulnerability." The task should be done in such a way that earns each municipality in the NVCOG region at least 25 credits.
- **2.14 HAZUS Flood Module**: The latest version of the HAZUS-MH model will be run for calculation of flood event losses and damage estimates.
- **2.15 HAZUS Hurricane Wind Module**: The latest version of the HAZUS-MH model will be run for calculation of hurricane wind event losses and damage estimates. Actual hurricane data and probable wind events will be included.
- **2.16 HAZUS Earthquake Module**: The latest version of the HAZUS-MH model will be run for calculation of earthquake losses and damage estimates. Four potential earthquakes will be modeled on the four potential scenarios presented in the State Hazard Mitigation Plan.
- **2.17 Hazard Rankings**: The consultant will rank all hazard events and hazard effects separately using a standardized quantitative system similar to the methods used for other hazard mitigation plans.
- **2.18 Project Meeting**: The consultant is expected to attend quarterly meetings with the NVCOG Regional Advisory Committee to provide updates and status on the project.

# Task 3 – Recommendations and Plan Development

- **3.1 Development of Recommendations**: Under this phase of work, mitigation measures will be developed for each hazard and area of vulnerability identified under Task 2. The anticipated effectiveness of such measures will be provided and recommendations for future evaluation, assessment, and action will be offered. Strategies to be evaluated will be grouped into the categories prevention, protection of property, protection of natural resources, emergency services, structural projects, and public information/education efforts.
- **3.2 Preliminary Benefit-Cost Analysis**: Although formal benefit-cost analysis (BCA) will not be completed for each recommendation within the planning study, the consultant will utilize its experience with FEMA's BCA toolkit and process to estimate a range of benefit-cost ratios and cost effectiveness for recommended projects.
- **3.3 Ranking of Recommendations**: The consultant will rank recommendations using STAPLEE or other acceptable method in combination with the benefit-cost ratios and the likelihood of qualifying for federal funding. Recommendations that could be easily fit into the five mitigation funding programs (HMGP, PDM, FMA, RFC, and SRL) will be noted and those that are most easily processed for funding applications

(mitigation for hurricane winds, riverine and coastal flooding, wildfires, and earthquakes) will be additionally tagged for ease of Hazard Mitigation Plan use. Staff from each municipality will provide input to this task.

**3.4 Regional Plan Document including Nineteen Local Plan Updates**: The methods, analysis, and recommendations from previous tasks will be assembled and presented in a working draft Regional Natural Hazard Mitigation Plan, which will include sections for each municipality.

The plan and its municipal sections will be organized as follows:

- Introduction (Purpose, Authority, Description of Funding Programs, Scope, Documentation of Planning Process, and Identification of Hazards)
- Profile (Geographical, Historical, Cultural, Development Trends, Climate)
- Critical Facilities and Areas of Concern
- Flooding (Setting; Hazard Assessment; Historic Record; and Potential Mitigation Measures, Strategies, and Alternatives)
- Hurricanes and Tropical Storms (Setting; Hazard Assessment; Historic Record; and Potential Mitigation Measures, Strategies, and Alternatives)
- Summer Storms and Tornados (Setting; Hazard Assessment; Historic Record; and Potential Mitigation Measures, Strategies, and Alternatives)
- Winter Storms (Setting; Hazard Assessment; Historic Record; and Potential Mitigation Measures, Strategies, and Alternatives)
- Earthquakes (Setting; Hazard Assessment; Historic Record; and Potential Mitigation Measures, Strategies, and Alternatives)
- High Hazard Dams (Setting; Hazard Assessment; Historic Record; and Potential Mitigation Measures, Strategies, and Alternatives)
- Wildfires (Setting; Hazard Assessment; Historic Record; and Potential Mitigation Measures, Strategies, and Alternatives)
- Landslides (Setting; Hazard Assessment; Historic Record; and Potential Mitigation Measures, Strategies, and Alternatives)
- Summary of Recommendations by municipality
- Implementation Table and Schedule (Proponent Agency or Department, Priority Mitigation Strategies, Monitoring, Evaluating and Updating the Plan, Plan for Continued Public Involvement)
- Technical and Financial Resources
- Documentation of the planning process (meeting minutes, public meeting announcements, copies of power point presentations, etc.)
- HAZUS-MH documentation

The plan and its regional section will include but not be limited to the following:

- Climate Vulnerability Assessment
- Regional Recommendations for Mitigation
- Regional Prioritization of Projects
- Review of current NVCOG programs and plans and how they may support mitigation measures, strategies and Alternatives

**3.5 Draft Plan Review**: The consultant will provide a digital copy of the draft NHMP (via email or ftp site) to the identified representative of each of the 19 NVCOG member local NHMP advisory committees and the NVCOG staff representative for review by staff and other interested persons as described above under

- Task 1.2. The local NHMP advisory committee representative will be responsible for coordinating local review, including from members of the local emergency planning advisory committee, collecting and compiling staff comments, and submitting the comments to the NVCOG. NVCOG will provide comments to the consultant.
- **3.6 Draft Plan Meeting**: Once all comments are collected and compiled, the consultant will edit the draft NHMP to address and integrate comments. A meeting of the regional advisory committee will be held to accept the suggested changes and resolve any conflicting comments
- **3.7 Final Draft Plan for Public Comment**: Upon concurrence of all comments, a final draft plan will be produced. The final draft plan will be posted to the municipal websites and the NVCOG website to allow for public comments.
- **3.8 Public Discussion**: Comments will be sent to the municipal contact person in each of the 19 municipalities on the final draft plan in written or electronic format.
- **3.9 Final Draft Plan for CT DEMHS Review**: The final draft plan will be revised to include any public comments and a final draft plan will be produced for CT DEMHS review.

# Task 4 – CT DEMHS and FEMA Review and Approval

- **4.1 DEMHS Review**: One copy of the final draft plan will be submitted to CT DEMHS for review. The DEMHS reviewers prefer that plans be submitted electronically.
- **4.2 Plan Edits**: Upon receipt of comments from DEMHS, the final draft plan will be revised (if necessary) and sent back to DEMHS to forward to FEMA.
- **4.3 FEMA Review and Edits**: Upon receipt of comments from FEMA, the final draft plan will be revised (if necessary) and sent back to DEMHS and FEMA.
- **4.4 Conditional Approval**: The consultant will secure a Conditional Approval from FEMA. At this time, the final draft plan will be ready for adoption by the legislative bodies of Ansonia, Beacon Falls, Bethlehem, Bristol, Cheshire, Derby, Middlebury, Naugatuck, Oxford, Plymouth, Prospect, Seymour, Shelton, Southbury, Thomaston, Waterbury, Watertown, Wolcott and Woodbury.
- **4.5 Local Adoptions**: The consultant and NVCOG will attend the public hearing in each municipality held to adopt the final draft plan as the Regional NHMP. During these meetings, the consultant and NVCOG will briefly present the planning process and explain the need for adopting and maintaining the plan. Signed resolutions will be provided by the municipal clerks to NVCOG who will forward to the consultant.
- **4.6 Final Approval:** The consultant will secure final approval letters from FEMA.
- **4.7 Final Copies**: Upon municipal approval, five (5) hard copies of the Regional NHMP will be provided to each municipality for in-house filing, as well as a digital copy in a PDF format.

# Attachment B DBE Form FUNDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY

BID/RFQ/RFP#		
required for each contr		st for proposals. A completed form is onse to this solicitation and for each of the necessary. Please provide the following
FIRM'S NAME:		
PRIME CONTRACTOR	SUBCONTRACTOR	
FIRM'S ADDRESS:		
AGE OF FIRM:		<del></del>
DISADVANTAGED BUSI	NESS ENTERPRISE?* Yes	No
If yes, Certified by the S	tate of Connecticut Department of Tra	ansportation?
Yes	No	
ANNUAL GROSS RECEIF	PTS:	
Under \$500,000	\$500,000 - \$999,999	\$1,000,000 - \$1,999,999
	\$2,000,000 - \$4,999,999	\$5,000,000 -9,999,999
	\$10,000,000 - \$14,999,999	\$15,000,000 -24,999,999
* Disadvantaged busine	ess enterprise or DBE means a for-prof	it small business concern—
• •	•	als who are both socially and economically ercent of the stock is owned by one or more

(2) Whose management and daily business operations are controlled by one or more of the socially and

economically disadvantaged individuals who own it.