

Chapter 4

Partnering with Communities

Chapter 4

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Overview

Funding from the US Department of Commerce, Economic Development Administration (US EDA) allowed the project team to partner with seven communities in five study areas to develop detailed analyses of flood risk and identify specific projects to reduce impacts on local businesses and critical infrastructure. The work outlined in the previous chapters helped narrow and focus the list of potential communities. The next phase of the project was where the on-the-ground work really began – field analysis, public input and outlining specific projects designed to mitigate or reduce risk to businesses with costs, and potential funding sources highlighted. Key to the work in these five areas was the partnership, participation and dedication of elected and volunteer officials, business leaders, homeowners and other interested stakeholders.

Once the top five study areas were identified, the team contacted leaders in the seven communities to explain the project, provide an overview of the expected deliverables, the time commitment and resources required from the community and invite them to participate. These calls took place with either the town manager, Selectboard chair, town planner or a combination of local representatives.

After the seven communities agreed to participate, a consulting team of river scientists and engineers were hired to assist in the detailed analysis of the river corridor, review of past reports and develop specific project recommendations (the Request for Proposals can be found in Appendix 4.1 along with a list of the consultants selected). This consultant team also met with the town representatives and invited interested members of the steering committee to walk the river with them. They also participated in public forums.

It's All about Partnership

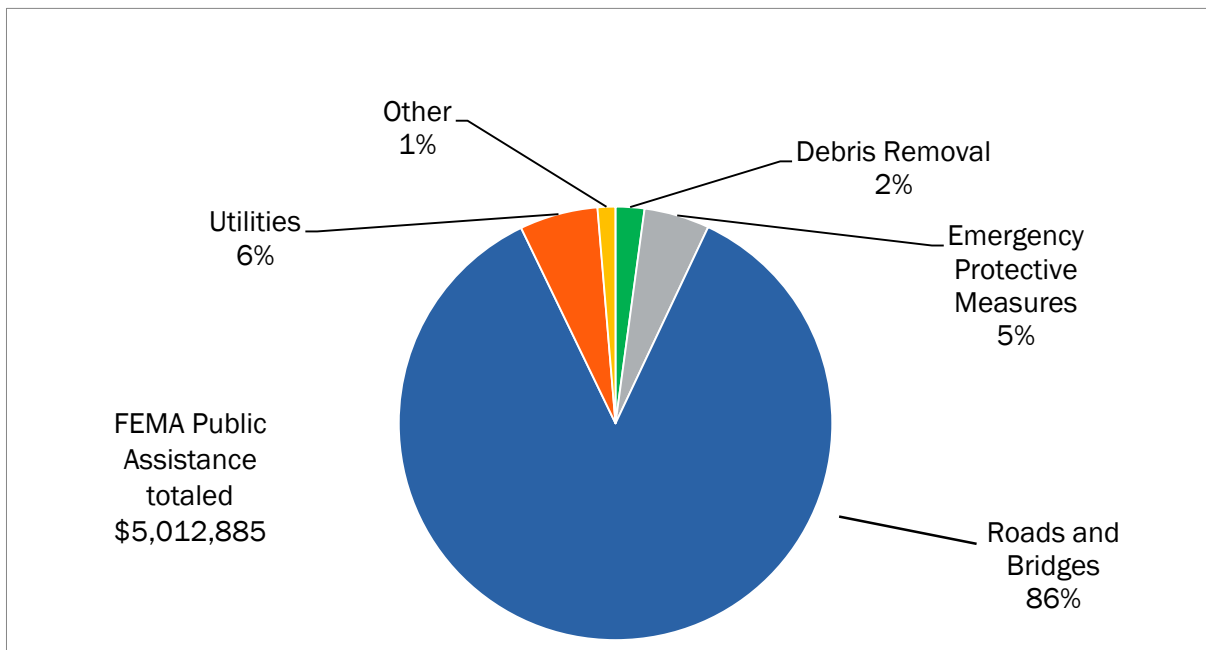
The project team hosted an orientation meeting with the steering committee in each community to explain the project to a larger group, describe the local commitment and answer questions. In preparation, it sent a welcome letter and information packet containing a project overview, a case study from Bennington, Vermont on which this project was based, an overview of the local study area and roles and responsibilities (see Appendix 4.2 for the welcome packet materials). Steering committee members, five-to-seven in number, were pulled together by the town and included the

If a community raises reasons why it might not be able to implement projects or suggests limiting stakeholder participation in the steering committee, consider this reluctance in your screening process. Try and determine the reason for the reluctance to participate and decide if there is a need to work with a different community.

town manager, members of the Selectboard and planning commission. Some communities included state legislators, conservation commissioners, managers of the downtown organization, leaders in local sustainability groups and business groups. The project team asked the town to include diverse viewpoints to ensure that a mix of community perspectives were included in the early planning. It also asked for members with a good track record of implementing projects. The goal was to ensure that the steering committee had the ability to win broader community support to implement the project team's recommendations with support from various partners and state agencies.

At the meeting, the project team and consultants provided background on the project, then took questions from the group and outlined the team's commitment to coordination and collaboration. The local steering committee shared information on past flooding damage, past plans and projects, river and watershed studies and pertinent bylaws with the consultants (see Figure 4.1). The team wanted to be sure to build upon or reinforce past work, not re-invent the wheel or start from scratch.

Figure 4.1: 2011 Flood Damage Costs in Woodstock by Category



The group also discussed the schedule for upcoming field observation and how best to involve and notify property owners along the river. It was decided that property owners should be notified via mailed postcard that provided an overview of the project, explained that the team would be surveying the river and included a project website and phone number to find additional information or ask questions. Property owners were asked to notify the team if they did not want people in the river near their property. (see Appendix 4.3 for sample notification letter to landowners).

The consultant team then reviewed existing information about each of the five study areas [which was an area smaller than the entire town(s)]. This included a review of available stream geomorphic data provided by VT ANR as well as town plans, local hazard mitigation plans, and any river corridor plans or past projects in the area.

Working with the steering committee in each community, a public forum was held. Before the forum, the Regional Planning Commissions (RPCs) presented at local Rotary, and Chamber of Commerce meetings. Flyers, emails and calls were made inviting the public to the meeting. Op-Eds were drafted for the local papers sharing information on the projects. At these forums, a summary of the project was outlined, recent flood resiliency efforts initiated by the town were highlighted and potential risks identified. The bulk of the forum time was devoted to gathering information from community participants (see Figure 4.2). To help guide the discussion, four questions were asked:

1. What are the hazards and risk areas in the town?
2. What worked and what has already been done since Irene to protect infrastructure and to reduce risk to businesses?
3. What still needs to be addressed in the interests of long-term resilience and sustainability?
4. What information should the final report include and how should this information be presented?

Vermont's Regional Planning Commissions

Most Vermont communities are led by part time volunteers, many of whom do not have the time and expertise to plan and implement changes to reduce local flood risk. Vermont's 11 RPCs provide professional staff to help towns with a range of services from local transportation, land use and emergency planning to GIS mapping and analysis. RPCs can help communities understand how their decisions about development, floodplain management and conservation affect downstream communities. The new regional resiliency plan requirements, along with efforts to link transportation and watershed planning, play an important role in helping communities beyond their borders to reduce flood risks.

Figure 4.2: Woodstock Community Forum Held on October 2, 2014



Meeting notes were drafted and shared with the steering committee and those that attended the meeting. Their comments and edits were included before the notes were finalized and shared on town-specific webpages developed by the project team. The meetings were taped for public access television, where it was possible, to expand participation and awareness.

Fieldwork and Data Review

Reviewing maps and previous reports, and analyzing input gathered at the forum along with historic flood data provided a foundation of understanding for the consultant team (see Table 4.1 of historic flood damage data in Brandon). Such information helped them understand the goals of the community, past work conducted and recommendations suggested. Nevertheless, walking the river, making observations, taking measurements and noting post Irene changes in the channel conditions were key to developing the project specific recommendations for each community (see Figure 4.3).

Table 4.1: Neshobe River, Brandon, VT Flood Events and Damage

Flood Date	Damage Description	Estimated Recovery Cost
November, 1927	Major flooding damage to downtown	Unknown
September, 1938	Major flooding damage to downtown	Unknown
April, 1996	Flooding affects Brandon	\$10,000
June, 1996	Flash flooding	\$10,000
July, 2003	Flash flooding in Brandon and Forest Dale	\$25,000
February, 2008	Flash flooding affects Forest Dale	\$100,000
August, 2011	Major damage throughout Town	>\$800,000

Figure 4.3: Fieldwork Makes the Difference – Measuring Undersized Culvert



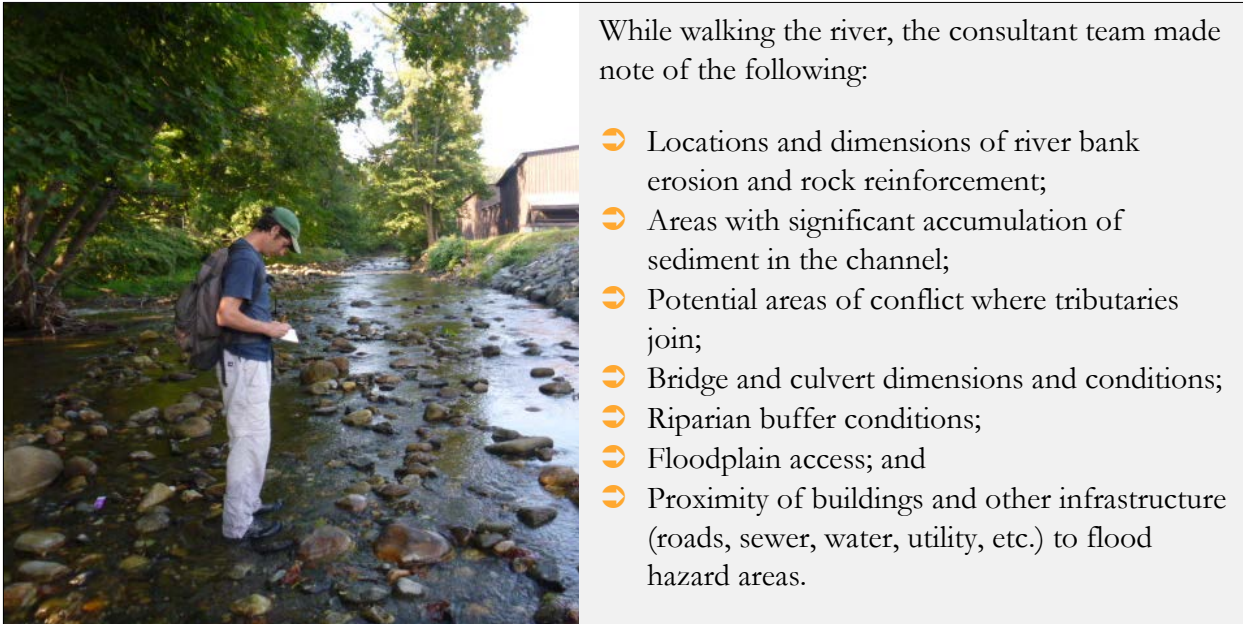
River Data Collection

After the first public forum, the river scientists on the team walked the river in the study area to observe the current conditions of the river and floodplain and to note the proximity of river features to economic assets (see Figure 4.4). The fieldwork objectives were to:

- ➔ observe the current conditions of the river and floodplain compared to previous geomorphic data;
- ➔ make note of any changes since 2011's spring flooding or Tropical Storm Irene;
- ➔ note the proximity of river features to economic assets;

- ➔ make a field determination of flood and erosion risk;
- ➔ photo-document field conditions; and
- ➔ identify locations where additional data collection is needed.

Figure 4.4: River Data Collection



The consultants also conducted Phase II stream geomorphic assessments (SGA) which is a physical study of a river's geology, size, shape, movements, and existing conditions which affect river flow patterns and stability. This was also a field check of VT ANR's river corridor maps. Any differences between the results of VT ANR's modeling and the field work were noted and forwarded to VT ANR. Cross sections of the rivers were also taken via laser level or comparable instrumentation to understand variables such as bankfull width and depth of the channel in relation to elevation of floodplain which indicates how easily the river can access its floodplain. In select areas, limited survey was conducted to provide a base map for conceptual design alternatives. Along with a list of project specific recommendations, each community report included conceptual

design alternatives for two or more of those project recommendations. These conceptual designs provide detailed information to be used for funding applications, request for proposals, grants, and provide design solutions that other communities could use. The survey and design for each conceptual project was preliminary and required future phases to develop detailed project designs, costs, construction plans and permitting.

Figure 4.5: Gunner's Brook in Barre City



Analysis: Businesses At-Risk

The team conducted a GIS mapping analysis to identify at-risk businesses and facilities in the flood hazard zones using FEMA FIRM maps and VT ANR's State River Corridor maps. These map layers and E-911 non-residential buildings were overlaid to identify commercial buildings at-risk. The businesses at highest risk have at least a portion of their buildings in the designated FEMA floodway. During a flood event, the floodway typically conveys the highest velocity waters and is one of the areas of greatest erosion risk. Also of importance is identifying businesses and important facilities and utilities in the 100-year floodplain (also known as the Special Flood Hazard Area) and the State River Corridor. The team developed a table that provided a breakdown of the number of businesses and employees that work in these buildings within these three flood hazard zones. These data only show if buildings are within the flood zone and do not show the elevation of the building relative to the flood zone elevation. This information was reviewed by the RPC partner for each of the five communities. This analysis for Woodstock is shown in Table 4.2.

Table 4.2: Businesses in Flood/ Erosion Hazard Zones in Woodstock Study Area

	Floodway	100-year Flood Zone	State River Corridor
Number of businesses	3	19	26
Number of employees	61	169	366

Policy and Program Review

Reducing the impacts of floods involves an ongoing process of evaluating and adjusting policies to minimize risks through protection, prevention and education. Accordingly, the VERI team first reviewed the municipal plan, hazard mitigation plans and land use regulations in each of the five communities to identify the policies they contain and those that are absent. Where available the team also reviewed related plans for capital improvements, conservation, emergency preparedness and continuity of operations. These documents were reviewed with the goal of identifying gaps and opportunities to improve the flood preparedness, safety and resilience of residents, visitors, businesses and local government.

The team then used the US EPA’s flood resiliency checklist that was developed from a study in the Mad River Valley in Vermont (Checklist can be found: <http://www2.epa.gov/sites/production/files/2014-07/documents/flood-resilience-checklist.pdf>). This checklist includes overall strategies to improve flood resilience as well as specific strategies to conserve land and discourage development in river corridors; to protect people, businesses, and facilities in vulnerable settlements; to direct development to safer areas; and to implement and coordinate stormwater management practices throughout the whole watershed.

The checklist review for each of the five study areas found (full checklist review can be found in each of the community reports):

- ➔ Barre City currently employs 10 of 56 items on the checklist including the discussion of strategies to determine whether to relocate structures that have been repeatedly flooded. Barre Town employs 17 of 56 items on the checklist including the implementation of non-regulatory strategies to conserve land in river corridors through easements, buyouts, and the transfer of development rights.

- ➔ Brandon currently employs 28 of 56 items on the checklist including buyouts for frequently flooded property, regulatory measures to limit development in flood prone areas, and utilizing steep slope development regulations.
- ➔ Brattleboro employs 33 of 56 items on the checklist, including participating in the National Flood Insurance Program Community Rating System, 15 adopting floodplain development limits that go beyond FEMA's minimum standards for SFHAs, and promoting better management of stormwater runoff (including through regulation).
- ➔ Enosburgh currently employs 28 of 56 items on the checklist including regulatory measures to limit development in areas subject to flooding, and utilizing steep slope development regulations.
- ➔ Woodstock currently employs 33 of 56 items on the checklist including promoting better management of stormwater runoff, utilizing steep slope development regulations, and encouraging new development in safer areas.

The team also noted each community's rating for the Emergency Relief Assistance Fund (ERAF). In 2014, the state of Vermont updated ERAF requirements to provide matching funding for federal assistance after federally-declared disasters. This program allows towns in Vermont to increase the amount of state aid they could receive as a match to federal aid for post-disaster recovery. Certain damage costs from federally-declared disasters are reimbursed 75% by federal money. The state of Vermont contributes an additional 7.5% of the total cost, but will increase that up to 17.5% if municipalities adopt certain plans, policies, and programs to reduce the risk of floods. The ERAF review for Barre City and Town can be seen in Table 4.3

Table 4.3: ERAF Review for Barre Town and City

Steps to increase state aid to 12.5%	Barre Town	Barre City
Participation in the National Flood Insurance Program	X	X
Adoption of 2013 State Road & Bridge Standards	X	--
Adoption of Local Emergency Operations Plan	X	X
Adoption of Local Hazard Mitigation Plan	X	X
Step to increase state aid to 17.5%		
Adopt no new development in a River Corridor	--	--
Adoption of a River Corridor or Flood Hazard Protection areas and Participation in the Federal Community Rating System Program	--	--
ERAF Match	12.5%	7.5%

The results of both reviews identified planning or policy opportunities that were then organized into four groups: Regulations, Community Planning, Emergency Planning, and Education and Outreach. The distribution of opportunities to improve policy and programs were incorporated into each community report. A summary of the number of recommendations in each group across all five study areas can be found in Table 4.4.

Table 4.4: Summary of Policy and Program Recommendations

VERI Totals Policies/Programs	
Land Use Regulations	29
Community Planning	25
Emergency Planning	32
Education and Outreach	18

The results of the plan and policy reviews were then combined and scored with either a 1 (ineffective), 3 (limited) or 5 (effective) using the following three objectives:

1. Reduces flood risk (proposed project lowers the flood level);
2. Reduces erosion risk (proposed project lessens the vulnerability to erosion); and
3. Protects businesses, infrastructure and property.

The three scores were added to provide a total score. Cost and ease of implementation, political realities and limitations as well as input from the community were also considered. To assist the town with implementation, potential partners and funding sources were identified. Each recommendation was further explained and next steps were identified. This information was compiled into easy to read charts. (Full checklists for each community can be found in the appendix for each community report in Appendix 4.4.)

Site Specific Projects

Existing river data and stakeholder knowledge were used to develop specific flood protection projects in each of the five VERI study areas. This information, in conjunction with field work, documenting economic assets and further discussions with stakeholders helped set the stage for these recommendations.

Across all five communities, the recommended projects fall into four primary categories as summarized in Table 4.5.

Table 4.5: Summary of Project Specific Categories

Category	Description
Building and Site Improvements	Lowers the risk of flooding and/or erosion to specific properties through improvements to the building and/or surroundings, e.g., sealing off buildings to prevent water infiltration.
Channel and Floodplain Management	Lowers the risk of flooding and/or erosion to properties along the river through the improvement of natural river and floodplain functions, e.g., tree plantings along unstable river banks.
Infrastructure Improvements	Lowers the risk of flooding and/or erosion to roadways and other municipal or state-owned infrastructure, e.g., increasing the size of bridges and culverts to pass more flood waters.
Public Safety Improvements	Lowers the risk of flooding and/or erosion to properties through the avoidance of future flood risks, e.g., FEMA buyouts of improved properties highly vulnerable to flooding.

User-Friendly Tables

When deciding how best to communicate recommendations for project-specific, as well as plan and policy updates, the project team decided on a table format. Every effort was made to reduce technical jargon so that anyone in the community could easily understand where the project was located, what the project was, how it would help local businesses or protect infrastructure, estimated costs and timeline as well as potential funding sources. The team used icons similar to ‘consumer reports’ to indicate how each recommendation met the goals set by the team (reduces flood risk, reduces erosion risk, protects businesses, infrastructure, property). The tables were designed to be a road map that the community could use to solicit input, gather support or prioritize funding.

A table summarizing recommended projects to protect businesses and infrastructure from flooding, along with maps showing the location of each project site, were developed for each of the communities, along with the relevant economic asset and flood hazard information.

To begin, the team screened and prioritized each project. Each project received a score of 1 (ineffective), 3 (limited) or 5 (effective) for the three objectives:

1. Reduces flood risk (proposed project lowers the flood level);
2. Reduces erosion risk (proposed project lessens the vulnerability to erosion); and
3. Protects businesses, infrastructure and property.

The three scores were added to provide a total score, which was then weighted based on the importance of the project in the region.

Projects that would result in a regional economic boost and help keep businesses open were given the highest weighting, while projects that would offer minimal economic benefit to the business economy were assigned a lower weighting. Many of the high priority projects are from the ‘Infrastructure Improvements’ category, as those at-risk areas potentially affect the greatest number of community members and businesses.

The project-specific recommendations for each community can be found in the appendices within each community report. A summary of the number of recommendations in each group across all five study areas can be found in Table 4.6.

Table 4.6: Summary of Project Specific Recommendations

VERI Total Projects	
Building and Site Improvements	14
Channel and Floodplain Management	25
Infrastructure Improvements	31
Public Safety Improvements	10

Project partners and stakeholders, including representatives from VT DHCD, VT ANR, VTrans, RPCs and the steering committee in each community, provided feedback on a draft list of mitigation strategies before the draft was released for public comments. The feedback was incorporated into the final prioritization of projects.

After incorporating edits from the community steering committee, the project team hosted a second community forum to share the list of policy and project recommendations to decrease flood risk and ensure businesses remain open (see Figure 4.5). At the forum, community members asked questions, provided input and helped rank the proposed list of priority recommendations. These comments, requests for additions and prioritization were incorporated into the final report for each community (community reports can be found at [http:// accd. vermont.gov/strong-communities/opportunities/planning/resiliency/VERI](http://accd.vermont.gov/strong-communities/opportunities/planning/resiliency/VERI)).

Figure 4.6: 2015 Community Forum in Barre



The project team provided the following recommendations for next steps for the communities to ensure that the project recommendation move forward to implementation:

- Solicit input from individuals and businesses at future community meetings regarding specific projects and overall project prioritization.
- Prioritize one to two projects to pursue each year with assistance from partners, and funders identified in the recommendation tables.

- ⇒ Apply for one to two grants each year to advance project development and/or designs.
- ⇒ Implement projects as funding allows.
- ⇒ Monitor project success.

The project team provided information on organizations and programs that can assist town officials. Implementing these projects and updating related flood policies will, over time, help these five areas become safer and more resilient to future floods.

Community Engagement

A key part of this initiative was to create interest and participation in the overall project, as well as support for the recommendations. Communities should not underestimate the outreach required, especially if the latest flood or disaster is not fresh in the minds of the townspeople. The project team used the RPC's local relationships in each of the five communities to lead this charge. Creating this interest is critical as it is needed for successful implementation of the various recommendations. The report and recommendations were designed as a five year road map that, if implemented, would avoid, reduce and mitigate risk to local businesses, infrastructures, homes and local economy.

The following tools were used to create awareness, communicate, gather input and share results:

- ⇒ **Website:** A webpage was built for each community to provide a general overview of the project, share information on upcoming meetings, meeting notes, and report drafts as well as case studies and funding opportunities.
- ⇒ **Media Outreach:** Newspaper ads, online community forums and calendar postings, flyers and posters on town bulletin boards/related events, town official email blasts, community forum letters and postcards.
- ⇒ **Landowner and Business Mailings:** Field work notification postcards, community forum letters and postcards were developed. Chamber of Commerce email blasts provided updates and feedback opportunities for the local business community.

- ➔ **Op-Eds:** The project team drafted and distributed two local and state-wide op-eds to media outlets before each of the public forums to raise awareness and let community members know about the upcoming meetings.
- ➔ **Going to Local Businesses:** The RPC partner in each community set up coffee chats with local businesses and property owners to let them know about the project, how they can participate and gather concerns and suggestions in a smaller setting. They also went to meetings of business groups such as the Chamber of Commerce and Rotary, recognizing that getting business owners to evening meetings can be challenging.
- ➔ **Local Access TV:** Where available, we partnered with local access TV to tape the public meetings to run on local stations to reach a wider community audience.

Figure 4.7: Future Flooding is Now



Before the community and project reports were finalized, torrential rainfall caused flash flooding in the study area in one of our project communities in July of 2015—Gunners Brook in Barre City and Town. Debris from upstream rushed towards downtown Barre and gathered behind the Harrington Avenue Bridge. Logs 2-3 feet in diameter mixed with tree limbs, rocks and other debris. With no natural channel available, the river jumped the banks and flooded the nearby neighborhood and carried thick mud into neighborhood homes, along downtown streets and local businesses.

The next day sunny weather turned the mud into a fine dust, creating a dustbowl in the central business district. Barre’s community report had recommended removing the bridge – a choke point where debris dams the brook and floods nearby homes. It also recommended buying out 25-30 homes in that neighborhood and creating a public park that could also act as a floodplain to collect debris and allow floodwater to slow and spread – reducing damage to downtown businesses and roadways and protecting local homes. While this is an expensive and long-term project, the same area suffered a similar flood in 2011. Consequently, the VERI recommendations are receiving greater scrutiny and interest because of this recent flood event.

Funding Recommended Projects

VERI supported, in part, the development of VT ANR's statewide River Corridor GIS analysis and maps that provided the foundation for developing a risk assessment protocol in communities in Vermont. It also supported all the field work, community outreach and development of project recommendations, conceptual designs and final reports in the five study areas. At the end, each community had a suite of options to eliminate, reduce or avoid risks to businesses and local infrastructure and ensure businesses remained opened, repetitive damage and repair costs to roads and bridges reduced and local economies remain strong. However, each of these recommendations requires funding to implement.

This EDA grant did not fund implementation of any of the recommendations. The VERI project team realized that funding these recommendations was critical if the project goals are to be realized. Thus, the team has reached out to potential partners such as the Vermont Land Trust, and the Vermont Housing and Conservation Board, potential funders such as the Vermont Community Foundation and the Vermont Economic Development Authority as well as state agency partners to help identify ways to fund priority projects in each community. VT DHCD, as the project lead, will continue to partner with others to fund projects, update plans and bylaws, and track results.

The State and its partners are committed to supporting VERI communities implementing local programs as part of a comprehensive strategy to reduce the state's flood risks. However, ultimate responsibility to implement the recommendations rests with the communities.

Appendix 4.1

**Request for Proposals
to conduct a Flood Hazard Mitigation Analysis
for the
Vermont Department of Housing and Community Development**

May 27, 2014 (revised)

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State of Vermont
Department of Housing and Community Development
Request for Proposals
Flood Hazard Mitigation Analysis for the
Vermont Economic Resiliency Initiative (VERI)

I. General Terms and Conditions for Services

A. INTRODUCTION

The Vermont Department of Housing and Community Development (DHCD) is requesting proposals from qualified bidders to conduct flood hazard mitigation analysis in five Vermont towns and to develop location-specific strategies to mitigate flood risks and avoid future flood losses. These strategies will be used in the Department's report to the US Economic Development Administration (EDA) for the Vermont Economic Resiliency Initiative (VERI).

In May 2013, the Vermont Agency of Commerce and Community Development received disaster recovery funding from the EDA to implement the VERI. The goals of VERI are to:

1. Help the state analyze threats to Vermont's areas of economic activity,
2. Develop plans to reduce impacts and avoid future losses, and
3. Help our communities and businesses make the changes needed to bounce back quickly when disaster strikes.

Led by the DHCD, in partnership with the Agency of Natural Resources (ANR), Agency of Transportation (AOT), and Vermont's Regional Planning Commissions (RPCs), VERI has mapped places where natural hazard risks - primarily flooding - intersect with areas of economic activity and associated infrastructure. Five Priority Areas have been selected (see page 22) for a detailed assessment of location-specific hazards. A series of two workshops for town officials, businesses and community members will be held in each town during the summer, 2014 and winter, 2015, led by DHCD and the RPCs. The community-specific strategies developed in these workshops, together with the deliverables of this project, will be included in plans to help those communities prepare for, manage and decrease risk, and avoid future losses. The overall completion date for VERI is May 1, 2015.

Other objectives of this project are to assist these towns as they separately prepare Local Hazard Mitigation Plans and address Flood Resiliency planning requirements for their Town Plans. The deliverables of this flood hazard mitigation analysis will assist towns in identifying flood risks and specific projects for reducing the vulnerability of infrastructure and businesses vital to the local economy. It is understood that further study will be required, outside this Scope of Work, to develop detailed project designs, costs, construction plans, and permitting.

For the purposes of this RFP, “bidder” refers to an individual, a firm, or a team of individuals and/or firms that may respond to this RFP to provide comprehensive services as outlined in this RFP or some portion or division of same.

B. NATURE OF PROPOSAL

The proposal submitted shall represent a firm and binding offer. The determination of whether a proposal may be withdrawn is solely at the discretion of the Commissioner of the DHCD or the Commissioner’s designee. However, in no event shall a proposal be withdrawn unless the request for withdrawal is filed within five days after the date of submission, and the bidder establishes that the proposal contains a material mistake, and that the mistake occurred despite the exercise of reasonable care.

There is no expressed or implied obligation for the DHCD to reimburse bidders for any expenses incurred in preparing proposals in response to this request. The DHCD reserves the right to retain all proposals submitted. All information submitted becomes the property of DHCD. DHCD reserves the right to issue supplemental information or guidelines relating to this RFP, to make modifications to, or withdraw the RFP. Once a proposal is submitted, the bidder (including specific staff assigned to the project) may not be changed without written notice to and consent of DHCD. All costs incurred in the preparation of the submittal and participation in the selection process are the sole responsibility of the bidder.

All federal requirements of EDA, as stated in “Financial Assistance Standard Terms and Conditions,” and all applicable State requirements must be adhered to and will be part of a contract for services. Bidders are subject to 2 C.F.R. Part 1326, Subpart C “Governmentwide Debarment and Suspension (Nonprocurement)” as well as 15 C.F.R. Part 28, “New Restrictions on Lobbying.” Bidders should familiarize themselves with these provisions, including the certification requirement. Bidders must include a Form CD-512, “Certification Regarding Lobbying—Lower Tier Covered Transactions,” completed without modification. Small businesses, Minority Business Enterprises and Women’s Business Enterprises are encouraged to submit proposals.

The bidder selected will be invited to negotiate a contract, and a contract will be executed between the bidder and the DHCD using the State of Vermont’s Standard Contract forms and provisions. All contracts are subject to review by State of Vermont legal counsel, and a project will be awarded upon signing of an agreement or contract, which outlines terms, scope, budget, performance measures, and other necessary items.

In negotiating the contract, the bidder and DHCD will agree on the project schedule (including project status meetings), and overall management plan for the completion of draft documents according to the Schedule for Deliverables outlined in Section II of this document. The schedule will provide the DHCD sufficient time for review and

comment on all drafts, and time for the bidder to incorporate any recommended changes into the final drafts.

C. SUBMISSION REQUIREMENTS

Respondents must submit one (1) digital copy (PDF) and three (3) printed copies of the proposal **by 4:30 p.m., Friday, June 13, 2014** to the Vermont Department of Housing and Community Development, 1 National Life Drive, Davis Building, 6th Floor, Montpelier, VT 05620-0501. Proposals that are not received by this deadline or that are not complete or signed will not be considered. **Proposals arriving via facsimile or e-mail will not be accepted.**

Any questions regarding this RFP should be directed to:

Vermont Department of Housing and Community Development
Attn: Sally Hull, Planning Coordinator
1 National Life Drive
Davis Building, Sixth Floor
Montpelier, Vermont 05620-0501
Phone (802) 828-1365
Email sally.hull@state.vt.us

Bidders are encouraged to submit notice of their Intent to Bid by Wednesday, May 28, 2014. Intent to Bid must be submitted in writing and include the bidder(s) name, lead contact person, address, phone, email, and that the bidder(s) intends to submit a proposal re: Vermont DHCD Request for Proposal, Flood Hazard Mitigation Analysis for the Vermont Economic Resiliency Initiative.

All questions regarding this RFP must be submitted **in writing** to Sally Hull at the address or email listed above, with a copy to Mike Kline, ANR Rivers Program, at the address above or email to mike.kline@state.vt.us. All RFP questions must be received at DHCD by **Wednesday, May 28, 2014**, by letter or email only. DHCD will post responses to written questions by **Friday, May 30, 2014**, on the RFP website at <http://vermontbusinessregistry.com/Default.aspx> and distribute via email to all bidders who submitted an Intent to Bid. The DHCD reserves the right to select which questions it will answer.

D. SPECIFICATIONS

Proposals must address all specifications in the RFP. Bidders who have submitted notice of Intent to Bid will be notified in writing if the DHCD makes any changes to proposal specifications. Verbal agreements or instructions from any source are not authorized.

E. AWARD

The selection will be made based on an evaluation of the cost and content of the proposals and the qualifications and references of the bidder. The DHCD reserves the right to reject any or all proposals or any part thereof, to waive technicalities, correct errors, and to make a selection solely as it deems to be in the best interest of DHCD.

F. TERM OF ENGAGEMENT

The term of the contract to be negotiated shall be from the date of Contract Signature by DHCD to April 15, 2015, unless extended by approval of both parties. The final report must be completed and transmitted via email for digital copies and via US Mail for hard copies to Sally Hull at DHCD by February 27, 2015.

II. Nature of Services Required

A. SCOPE OF WORK

The DHCD is seeking proposals from contractors to conduct analyses of VERI's five Priority Areas, listed below, and to develop location-specific strategies to mitigate flood risks and avoid future flood losses.

The Priority Areas and some of the pertinent beneficial data for these areas are shown below. Bidders should note that Flood Mitigation Analyses in each town will focus on a limited geographic area within each town.

Note that because agreement to participate by the communities listed is pending, this document is subject to modification.

1. Barre City and Barre Town – Gunners Brook, approximately 3.0 river miles from the Barre town line to Stevens Branch in Barre City. In view of existing encroachments, identify areas that could be enhanced for floodplain access, as well as corridor protection measures in Barre Town that might benefit the City. Critical infrastructure includes Route 14 and other major collectors that serve the designated downtown and places of business there. Barre City has done Phase 1 and limited Phase 2 Stream Geomorphic Assessments and a River Corridor Plan. LIDAR and a HEC model are available.
2. Brandon – The Neshobe River, approximately 5.0 river miles from the confluence of Leicester Hollow Brook through Brandon Village. Critical infrastructure includes Route 7, Route 73, and Route 53, plus other major collectors. Brandon has done Phase 1 and 2 Stream Geomorphic Assessments and a River Corridor Plan.

3. Brattleboro – Whetstone Brook, approximately 5.5 river miles from West Brattleboro to the confluence with the Connecticut River. Analysis should focus primarily on mitigation opportunities relating to the river corridor and its intersection with Route 9 and other major collectors that serve the designated downtown, major employers such as Brattleboro Memorial, and local economic driver the Brattleboro Farmer’s Market. Brattleboro has done Phase 1 and 2 Stream Geomorphic Assessments and a River Corridor Plan.
4. Enosburg – Tyler Branch, approximately 5.25 river miles from the confluence of Beaver Meadow Brook and Cold Hollow Brook to the town line. Analysis should focus on flooding issues related to Tyler Branch Road and other major collectors that serve the agricultural producers and land in town. Enosburg has done Phase 1 and 2 Stream Geomorphic Assessments and a River Corridor Plan. Some LIDAR data are available.
5. Woodstock – The Ottauquechee River mainstem, approximately 6.4 river miles from Bridgewater village to West Woodstock outside of Woodstock Village. Opportunities should be identified for floodplain restoration projects. The river runs along US Route 4, a key asset that is critical to moving goods and services on an east-west axis in Vermont, from Hartford, through Woodstock, to Killington and Rutland. Opportunities exist for active restoration related to post-TS Irene stream alterations. Woodstock has done Phase 1 and 2 Stream Geomorphic Assessments, and some LIDAR data are available, as well as a new HEC model produced by USGS in 2013.

The towns and RPCs will provide for the consultant’s use all data sets available from tax maps, aerial photos, and previous flood information. It is anticipated that some field data (e.g., measured cross-sections of the riverbed and floodplains) within the study area may be needed, and this contingency should be addressed in the response to this RFP. Existing Hydraulics Engineering Center - River Analysis System (HEC-RAS) and geomorphic assessment data will be provided by the ANR Rivers Program.

The State of Vermont, RPCs, and Priority Area municipalities are seeking these plans to answer the following questions specific to the economic assets listed above:

1. What avoidance strategies will mitigate hazards to existing or future economic assets by protecting and restoring upstream and adjacent river corridor and floodplain functions?
2. What retrofits, removals, relocations or other forms of remediation would reduce the vulnerability of existing infrastructure and businesses?
3. What river, river corridor, and floodplain restorations would reduce vulnerability by increasing flood attenuation and achieving least erosive, equilibrium conditions?
4. What wet/dry flood-proofing practices would be necessary to address residual risks?

B. WORK PRODUCT

During the term of the contract, the consultant shall report progress and review a preliminary inventory of mitigation strategies with DHCD and ANR, and to consider adjustments to the work product, if necessary. DHCD acknowledges that the amount of data available will drive the form and type of recommended mitigative measures in the final report; a semi-quantitative report is anticipated, not full-scale modeling.

C. SCHEDULE FOR DELIVERABLES

(Note this schedule is subject to change)

October 31, 2014	Progress review meeting with DHCD and ANR to present preliminary inventory of mitigation strategies.
January 1, 2015	Draft report due with detailed data modeling of location-specific hazards for five Priority Areas, showing the impact of hazard events at a community level, based on sensitivity assessment.
January 1-30, 2015	Participation in second round of five DHCD community workshops in each town to present mitigation strategies.
February 27, 2015	Final report due.

D. REQUIRED DELIVERABLES

- A preliminary inventory of mitigation strategies.
- A draft report including any data models produced for location-specific hazards in the five Priority Areas.
- A Final Report summarizing findings and recommended strategies for each of the five Priority Areas.
- Supporting maps and field data produced for this study
- HEC-RAS model and outputs, if produced for this study
- One or more conceptual designs for mitigation projects in each of the five Priority Areas

Unless otherwise negotiated to the satisfaction of DHCD, the consultant retained shall submit a written final report to DHCD no later than February 27, 2015. The required deliverables shall be presented in both hardcopy and electronic formats. The electronic version shall be in PDF format. The bidder must provide 10 (ten) bound paper copies of the final report and associated deliverables, one digital copy (PDF) and the native editable file format of the final report and required deliverables.

The bidder shall provide the native editable files (.docs, .xls, etc.) for any and all tables, databases, reports, and maps. All GIS mapping and databases produced for this project will be provided to DHCD at the completion of this project including all metadata (this includes the description, projection and attribution definitions) and

versions of geodatabases used when applicable.

DHCD shall be the proprietor and owner of all contract work product, including the final report and all data purchased or provided therein.

III. Proposal Requirements

A. DESCRIPTION OF PROPOSAL

1. **Title Page** - showing the proposal's topic, the bidder's name, lead contact person, address, telephone number, email address, and the date of the proposal.
2. **Transmittal Letter** - signed by a person authorized to legally bind the bidder, and containing a brief statement of the bidder's understanding of the work to be done, a commitment to perform the work within the time period, a statement of why the firm or individual believes itself to be best qualified to perform this service, and a statement that the proposal is a firm and irrevocable offer.
3. **Description of Services to be Rendered** - describing the proposed approach and process that will be used to accomplish the services and produce the work products outlined in Section II of this RFP, including:
 - a) A statement and discussion of the bidder's analysis of this RFP's requirements, including:
 - any proposed modifications to the Scope of Work with an explanation of the reason for the modification, and a detailed outline of the proposed program for executing the objectives of this RFP;
 - a description of the number of direct hours of activity by each principal and program staff who will work on the project, broken out by major activity; and
 - statements and discussion of anticipated major difficulties and problem areas, together with potential or recommended approaches for their solution.
 - b) A description or rationale for the proposal, including;
 - an explanation of why the number of direct hours proposed will be sufficient to the task; and
 - a statement of the extent to which the proposed approach and program can be expected to meet or exceed requirements and specifications of the Scope of Work.
4. **A work plan and schedule for the engagement** - including the appropriate starting and ending dates of specific activities, the issuance date of any first draft of the assessment and the issuance date of the final report.

5. **Description of Bidder** - proposal must provide a description of the bidder's enterprise including number of employees and number of years experience doing work comparable or relevant to this RFP. If any sub-contractors are to be used, then the bidder must provide similar information for the sub-contractors. The proposal must indicate lead bidder and the role of each consultant (and sub-consultant) on the team with a project organization chart.
6. **Qualifications** - proposal must identify the individual(s) that would work on this project including Principal-In-Charge and Project Engineer, show title and company name, qualifications, experience, and any other pertinent information to show knowledge and experience relative to regional and/or local economic forecasting and housing needs assessments, particularly in Vermont.
7. **Resumes** - proposal must include detailed qualifications and levels of competence of individuals to be assigned to the project. This should include the total number of such individuals at each level and the estimated number of hours to be spent by each person.
8. **References** - provide names of at least three references for whom a similar project has been completed within the last five years, including a description of services performed, with a contact person, address, and telephone number for each.

B. COST OF PROPOSAL

Bidders should be mindful that DHCD has allocated a maximum amount of \$150,000 for this study.

Included with each proposal shall be a section addressing cost. This section shall contain all pricing information relative to performing the services described in this RFP and shall include:

1. A total, all-inclusive maximum proposal price to contain all direct and indirect costs including all out of pocket expenses and detail of each. The DHCD will not be responsible for expenses incurred in preparing this proposal and such costs should not be included. The detailed budget should be broken down by task and team member, and include the maximum direct and indirect hourly rates for all individuals involved. In addition, the budget should provide an estimated budget for completing each task of the proposed Scope of Work, including an estimate of all projected staff hours.
2. A page titled **ALL-INCLUSIVE MAXIMUM PRICE** detailing all professional fees and associated expenses presented in a format that supports the total all-inclusive maximum proposal that is being tendered.

3. Proposed Manner of Payment and/or Payment Terms.

IV. Evaluation of Proposals

A. REVIEW PERSONNEL

Proposals will be evaluated by a selection committee including DHCD staff and key partners including the ANR Rivers Program. The DHCD will make the final decision regarding which bidder(s) to retain for this study, and will be solely responsible for the execution of any contractual arrangements with that bidder(s).

B. REVIEW CRITERIA

1. Initial screening of proposals will determine if each proposal includes the work tasks presented in the Scope of Work.
1. Following the initial screening, the review will focus on:
 - a. The responsiveness of the proposal,
 - b. The ability to complete the project within the required timeframe,
 - c. The qualifications of the consultant and the personnel to be assigned to the project,
 - d. The overall strategy and design of the proposal in addressing the proposed services and work tasks, and
 - e. Cost.

The selection committee will review the proposals and evaluate each based on the following criteria:

CRITERIA		MAX. POINTS
A)	Prior experience and demonstrated knowledge of:	
i.	Flood hydrology, hydraulics, and river morphology, and	15
ii.	Demonstrated history of effective schedule and budget management for projects of similar scale and budget.	10
B)	Organization size and structure of bidder's firm or partnership, as related to ability of the firm to complete the work to be performed	10
i.	Qualifications of staff to be assigned	10
ii.	Supervision to be exercised over staff by firm's management. Education, position in firm, years and types of experience will be considered for all personnel.	5

C)	Bidder understands of work to be performed. This will be determined by the approach to the work and the time estimates to perform each activity.	
i.	Quality of understanding of work	10
ii.	Adequate staff to meet deadline	10
iii.	Realistic time estimates for each activity	10
iv.	Realistic budgets for each activity	10
D)	Total cost.	10
MAXIMUM POINTS		100

C. SELECTION PROCESS

DHCD reserves the right to reject any and all proposals and to negotiate with more than one firm at the same time. Bidders whose submissions are not selected will be notified in writing or email.

Each proposal will be independently evaluated by the selection committee on Factors A through D above.

D. INTERVIEW FRAMEWORK

The top evaluated bidder(s) may be invited to discuss their proposal(s) and qualifications with the selection committee prior to awarding the contract. The purpose of this phase is to evaluate the capabilities and qualifications of the bidder. The interview will allow the bidder to demonstrate their experience and qualifications, their proposal offering and approach, and allow the selection committee to ask targeted questions to the bidder.

The final Scope of Work with specified deliverables may be modified through negotiation of the final contract. The final project team may also be modified through negotiation of the final contract. Any expenses resulting from the interview will be the sole responsibility of the bidder.

V. Acknowledgement of Attachment C - Standard State Contract Provisions

The selected bidder will be expected to execute a contract that contains the most recent Attachment C - Standard State Contract Provisions in effect, which is attached for signature by the bidder and submittal with the proposal.

List of Consultants Selected

- ➔ Bear Creek Environmental, LLC: Mary Nealon
- ➔ DuBois & King, Inc.: Matt Murawski
- ➔ Fitzgerald Environmental Associates, LLC: Evan Fitzgerald
- ➔ Landslide Natural Resource Planning, Inc.: Amy Sheldon
- ➔ Milone & MacBroom, Inc.: Roy Schiff

Appendix 4.2

Welcome Letter

August 4, 2014

Steven Mackenzie
City Manager
City of Barre
6 North Main Street, Suite 7
Barre VT 05641

Dear Mr. Mackenzie:

We are delighted Barre City has agreed to partner with the state and regional agencies on the Vermont Economic Resiliency Initiative (VERI), a program designed to help municipalities analyze their flood risks and identify steps to minimize rebuilding and recovery costs – and ensure businesses stay open.

VERI is modeled on the success of a similar project in Bennington (case study enclosed) that reduced the flood impacts of Tropical Storm Irene and saved the town and businesses millions of dollars in economic damages. The project is funded by the US Economic Development Administration (EDA), and led by the Vermont Department of Housing & Community Development (DHCD), in partnership with the Agency of Natural Resources, Agency of Transportation, and Vermont's Regional Planning Commissions.

Barre City is one of seven Vermont communities participating in this initiative. The communities were selected via a thorough state-wide assessment process that identified areas with significant amounts of businesses and infrastructure susceptible to flooding and river erosion. Barre City was chosen because it has a relatively high level of economic activity; is a large city with a designated downtown; has a significant amount of vulnerable infrastructure; and has 169 vulnerable commercial buildings. In addition, Barre City's situation in central Vermont was an important factor, as well as the location of a state office building there and many commercial utility customers. The Agency of Natural Resources also recommended that Barre Town and Barre City be studied together because the watershed study area crosses both boundaries.

VERI will offer community leaders and stakeholders guidance to reduce threats to life, property, and employers that can result from flooding and severe weather. Specifically, we will produce an action plan with strategies to minimize losses and help businesses and communities recover quickly in the event of a flood. We will also provide tailored checklists to reduce risks to specific activities such as farming, municipal operations, or tourism.

The program will begin by helping your town understand how Gunners Brook moves through developed areas. To do this, we have hired river scientists to study approximately 3.0 river miles of Gunners Brook, from the Barre town line to the Stevens Branch in Barre City. Through this analysis, we will identify the locations in town that may be threatened by future flooding. Other activities include a river study project kick off meeting with the river scientist, DHCD, and Central Vermont Regional Planning Commission in **early August 2014**, as well as community education workshops in **September 2014** and **January 2015**.

By participating in this program, your community will learn more about the options available to reduce future costs from loss of businesses, or road, culvert and bridge repair. These options may include methods to better manage storm water, protect existing capital investments, and maintain the local transportation network. The work in Barre City (and the other communities in the program) will also serve as a model to help other Vermont towns take the necessary steps to reduce the economic impacts of floods.

Enclosed are the following additional materials that explain the project and its outcomes:

- a summary of the Vermont Economic Resiliency Initiative,
- a map of the key river segments in Barre City where river scientists will focus their study, and
- a case study of cost savings achieved in Bennington through a similar project.

Your Role

This is an exciting opportunity for Barre City and we appreciate your support. Here is what we need from you to assure a successful outcome:

- River scientists will be walking the Gunners Brook and it is important that property owners receive advance information about the project and the purpose of the scientists' work. Dan Currier of Central Vermont Regional Planning Commission will need your help creating a list of property owners along the brook for him to notify.
- Please share the enclosed materials with landowners, community groups and businesses via the town's website, Front Porch Forum, and other appropriate means. Dan will contact you shortly to coordinate and support these outreach efforts.
- Please attend an informal project kickoff meeting with DHCD, the Regional Planning Commission, and our river science consultants from Bear Creek Environmental. We aim to have this meeting in early August. Dan will be in touch with you to schedule the date.
- Dan will also need your assistance to identifying local data – tax maps, aerial photos, and information on previous floods and history of damages. He will also need your help creating lists of local economic assets, infrastructure and systems, as well as identifying business establishments that may be vulnerable to flooding.
- Last, Dan will need your help identifying stakeholders to invite to the community forums in September 2014 and January 2015. We also request that municipal leadership support and attend both meetings too.

Project Contacts

Following is a roster of the key people working on this project in Barre City. To assure good communications, we ask that you include both the RPC and DHCD in all emails and other correspondence on activity related to the project:

- DHCD - Chris Cochran, 1 National Life Drive, Montpelier, VT, chris.cochran@state.vt.us, (802) 828-5212.
- Central Vermont Regional Planning Commission – Dan Currier, 29 Main Street, Suite 4, Montpelier, VT, currier@cvregion.com, (802) 229-0389.

Many thanks again for your participation. We look forward to meeting you in person at the kickoff meeting. If you have any questions in the meantime, please do not hesitate to contact us.

Sincerely,

Noelle MacKay

Commissioner
Department of Housing &
Community Development

Susan Sinclair

Executive Director
Central Vermont Regional Planning
Commission

Enclosures



Vermont Economic Resiliency Initiative

Agency of Commerce
and Community Development

Helping Vermont businesses and communities bounce back from disasters

Twenty-five to forty percent of businesses affected by a disaster never reopen. That is an economic impact that residents, businesses, local communities and Vermont cannot afford.

With funding from the US Economic Development Administration (EDA), the Vermont Department of Housing and Community Development, working with the Agencies of Natural Resources and Transportation and the Regional Planning Commissions, launched the Vermont Economic Resiliency Initiative (VERI) to help ensure Vermont remains open for business when disaster strikes.

VERI will help the state and local communities by evaluating local flood risk to business and infrastructure, and identify the steps communities and the state can take to minimize rebuilding and recovery costs and ensure businesses stay open – saving jobs and maintaining our economy.

Project Overview

In the first phase of the project, the VERI team evaluated and ranked areas where economic activity and associated infrastructure are at high risk of flooding.

Based on this state-wide assessment, input from our steering committee and interest from local municipalities, five areas in seven communities (Barre City and Town, Brandon, Brattleboro, Enosburg Village and Town, and Woodstock) were selected for a more detailed analysis of the local flood risks to the community and businesses. This analysis provides the foundation for the team to develop community-tailored action plans to reduce the loss of jobs, inventory, revenue, as well as the cost to repair roads, bridges and other key infrastructure.

The action plans will help:

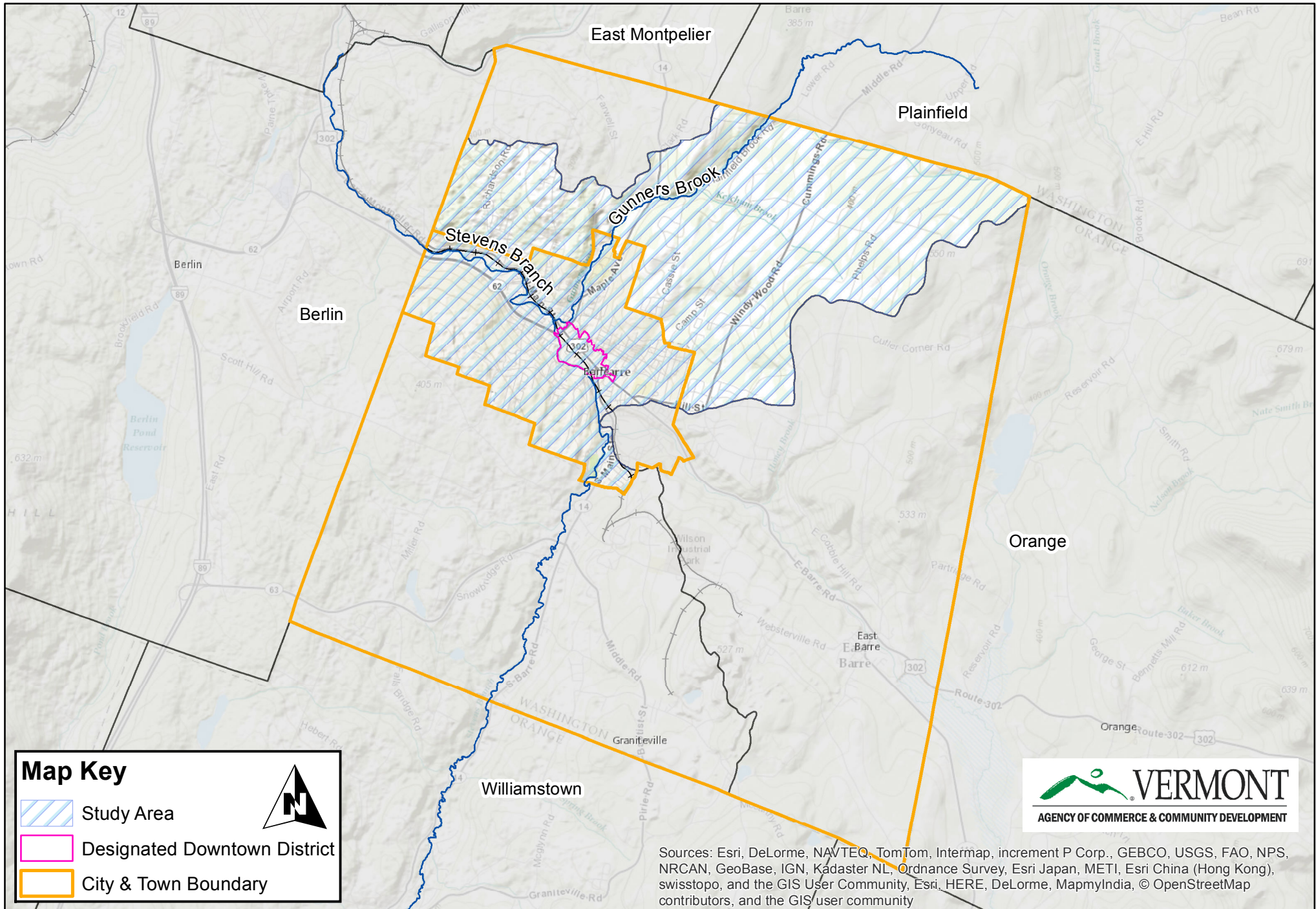
- minimize future damage to buildings roads, power, communications, and sewer and water systems,
- reduce the number of businesses impacted by disasters,
- speed business recovery, resumption and return to productivity,
- assure Vermont goods and services can continue reach their markets, and
- ensure residents return to their jobs more quickly and maintain their incomes.

Taken together, the local action plans will provide templates to help other Vermont communities better understand the risks and consequences of flooding, and take steps to reduce future damages and disruptions to local businesses.

For more information:

http://accd.vermont.gov/strong_communities/opportunities/planning/resiliency/VERI

Gunners Brook and Stevens Branch Barre City & Barre Town, VT





Before



After

Photo Credits: Milone and MacBroom

Living with Roaring Branch

Bennington Case Study

As in most Vermont communities, Bennington's Roaring Branch River flows through its downtown. Dan Monks, Bennington Planning Director described the river aptly, saying, "When there are big storms, it's terrifying and it's loud, that's why they call it the Roaring Branch; so people who live near it are well aware of the destructive power of the river."

Like many towns across Vermont and the nation, Bennington's strategy to manage the Roaring Branch was to build berms, and deepen, narrow and straighten the river channel to make its downtown safe for economic development. Frequent floods and millions of dollars later in damage and reconstruction costs, Bennington began to see that these methods to control the river to protect life and property only made matters worse.

Thanks to the proactive leadership of Bennington's town officials and the State of Vermont; however, Bennington has successfully reduced flood risks to roads and bridges, residential properties, and the commercial center, saving the town and taxpayers' money and staying open for business when flooding occurs.

The New Approach

Beginning with a public involvement process led by the Bennington Planning Department, the Vermont Agency of Natural Resources, and consultants Milone & MacBroom, residents agreed that work to protect the town's economic center and public safety was needed and long overdue.

First, Bennington identified areas of economic activity that might be impacted by a major flood, noting key employers, infrastructure and support functions such as fire, police, and town offices. They then analyzed the flood risks in specific locations in their community. Next, Bennington listed changes that could reduce or eliminate risk to key areas by reducing the river's energy during flooding and spreading river water out on open land. Changes included updating policies and regulations, removing levees, identifying key culvert upgrades, and land that could return to use as a floodplain.

Putting this plan into action, Bennington initially adopted new flood hazard zoning regulations to keep new buildings and people out of harm's way. Since no buildings would be permitted within the Roaring Branch's floodplain, the Town became eligible for increased funding from the State of Vermont, and they took advantage of these funds for floodplain restoration work that would follow.

Next came floodplain restoration activities. A four-foot rock wall was constructed to stabilize the riverbank. Thirteen acres of floodplain were reconnected to the river channel, and the river was given more room in which to flow and flood. Together these actions serve to reduce flood risk by slowing the river and lessening its destructive power – protecting existing properties and minimizing mud and silt build-up on roads.

For more information:

http://accd.vermont.gov/strong_communities/opportunities/planning/resiliency/VERI



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Based on this state-wide assessment, input from our steering committee and interest from local municipalities, five areas in seven communities (Barre City and Town, Brandon, Brattleboro, Enosburg Village and Town, and Woodstock) were selected for a more detailed analysis of the local flood risks to the community and businesses. This analysis provides the foundation for the team to develop community-tailored action plans to reduce the loss of jobs, inventory, revenue, as well as the cost to repair roads, bridges and other key infrastructure.

The action plans will help:

- minimize future damage to buildings roads, power, communications, and sewer and water systems,
- reduce the number of businesses impacted by disasters,
- speed business recovery, resumption and return to productivity,
- assure Vermont goods and services can continue reach their markets, and
- ensure residents return to their jobs more quickly and maintain their incomes.

Taken together, the local action plans will provide templates to help other Vermont communities better understand the risks and consequences of flooding, and take steps to reduce future damages and disruptions to local businesses.

For more information:

http://accd.vermont.gov/strong_communities/opportunities/planning/resiliency/VERI

Appendix 4.3

Sample Notification Letter

September 3, 2014

Dear Landowner:

I am writing to you and other landowners along the Whetstone Brook in Brattleboro to let you know about an upcoming study. The Vermont Agency of Commerce and Community Development (ACCD), with assistance from Windham Regional Commission (WRC), is conducting an assessment of the Whetstone Brook in Brattleboro. The study is part of the Vermont Economic Resiliency Initiative (VERI), an ACCD program designed to help municipalities analyze their flood risks and identify steps to minimize recovery and rebuilding costs, and ensure businesses are more resilient and better able to survive disasters.

VERI will offer community leaders and stakeholders guidance to reduce flooding and severe weather threats to life and property, as well as an action plan with strategies to minimize losses and help businesses and communities recover quickly. VERI is modeled on the success of a similar project in Bennington (case study enclosed) that reduced the flood impacts of Tropical Storm Irene and saved the town and businesses millions of dollars in economic damages.

Landslide Natural Resource Planning of East Middlebury, Vt., along with Milone and MacBroom, Inc., is working with ACCD and WRC to conduct this assessment. Field surveys will be done from early September through November 2014. Most of the survey work is conducted in the stream channel. However, it may be necessary for the scientists to access the stream bank to take measurements and make observations. We hope you'll assist this effort by allowing river scientists access to the banks along the brook that runs through your property. The scientists assume all liability during these assessments as they are required to carry comprehensive liability insurance.

Once we have a better understanding of the Whetstone, especially its characteristics post Tropical Storm Irene, a plan will be developed to increase safety by reducing flood and erosion hazards—an initiative that will also save taxpayer money, and achieve a healthier Whetstone Brook overall. The first of two community workshops on VERI and the Whetstone Brook is planned for October of this year.

Please return the enclosed postcard if you do NOT wish to give river scientists access to the stream banks on your property, and /or if you would like more information. If you have questions, please feel free to contact WRC staff members Kim Smith (ksmith@windhamregional.org) or Jeff Nugent (jnugent@windhamregional.org) by email or phone (802-257-4547). Thank you for your help.

Sincerely,

Jeff Nugent
GIS Planner

Appendix 4.4 Community

Reports

- [Barre Community Report](#)
- [Brandon Community Report](#)
- [Brattleboro Community Report](#)
- [Enosburg Community Report](#)
- [Woodstock Community Report](#)