

## SECTION 3: PLANNING PROCESS

### INTRODUCTION

This section includes a description of the Planning process used to develop the Plan, including how it was prepared, who was involved in the process, and how the public was involved.

The process followed to develop the Town of Shandaken Flood Mitigation Plan had the following primary objectives to ensure that the Plan met the requirements of the CRS:

- Form a planning team
- Define the planning area
- Establish a steering committee
- Coordinate with other agencies
- Review existing programs
- Engage the public.

These objectives are discussed in the following sections.

### FORMATION OF A PLANNING TEAM-ORGANIZE THE RESOURCES

This planning project was initiated and overseen by the Town of Shandaken and the **Shandaken Area Flood Assessment and Remediation Initiative (SAFARI)**. SAFARI's mission is to reduce the flood hazard vulnerability in the planning area to ensure that residential and business communities can thrive within a healthy environment. SAFARI in conjunction with the Town of Shandaken represented by the Town Supervisor hired Tetra Tech, Inc. to assist with development and implementation of the plan. While SAFARI is an advisory committee, the Town Supervisor oversees the land use and planning in the town and is committed to supporting the committee's recommendations as appropriate. The Tetra Tech project manager assumed the role of the lead planner, reporting directly to the Town of Shandaken Supervisor. A planning team was formed to lead the planning effort, made up of the following members:

- Robert Stanley—Town of Shandaken Supervisor and Chair of SAFARI
- Richard Stokes—Town of Shandaken Floodplain Manager
- Eric Hoffmeister—Town of Shandaken Department of Public Works
- Candace Balmer—Town Consultant to facilitate data collection and plan review
- Cynthia Bianco, Tetra Tech—Lead Project Planner
- Alison Miskiman—Tetra Tech Risk Assessment Lead

This team provided input to the planning committee and established the guidelines for the planning process.

The Town of Shandaken Flood Mitigation Plan (FMP) was written using the best available information obtained from a wide variety of sources. Throughout Plan development, a concerted effort was made to gather information from municipal and regional agencies and staff as well as stakeholders, federal and state agencies, and the residents of the Town (**CRS Step 1**). SAFARI solicited information from local agencies and individuals with specific knowledge of certain natural hazards and past historical events, as

well as considering Planning and zoning codes, ordinances, and other recent Planning decisions. The natural hazard mitigation strategies identified in this Plan have been developed through an extensive Planning process involving local, county and regional agencies, and Town residents and stakeholders.

This section of the Plan describes the mitigation Planning process, including (1) Planning Committee involvement and efforts; (2) local involvement; (3) stakeholder and public involvement; and (4) integration of existing data, Plans, and information.

**DEFINING THE PLANNING AREA**

The planning area was defined as the Town of Shandaken with special emphasis on the hamlets of Phoenicia and Mt. Tremper.

**PLANNING COMMITTEE AND OTHER STAKEHOLDER SUPPORT**

Many entities supported preparation of this Plan; the Planning Committee and other stakeholders involved in the process are presented below.

**EARLY PLANNING EFFORTS**

While this planning effort represents the first time the Town of Shandaken has worked to develop a CRS compliant local plan, it does not represent the start of hazard risk management efforts in the Town. Various regional, county and local agencies and governments including the Ashoken Watershed Stream Management Program, the NY Department of Environmental Conservation, NY Department of Environmental Protection, Cornell Cooperative Extension Service, and the Ulster County Soil and Water Conservation District have been involved in natural hazard risk assessment, mitigation planning and project activities, prior to and/or unrelated to the current planning effort. Such activities provide a strong foundation for subsequent efforts, and an awareness and understanding of the need for and benefits of mitigation planning across a broad range of regional, county and local governments and stakeholders.

**PLANNING COMMITTEE INVOLVEMENT AND EFFORTS**

The Town Board was of the opinion that SAFARI comprised of appropriate municipal personnel, local emergency first responders, and other stakeholders would be an effective body to guide the overall process, provide significant input, and effectively partner with Tetra Tech to develop a successful Plan. Thus, the Board approved the SAFARI committee by resolution to guide and oversee all phases of the planning effort. (Table 3-1).

Leadership roles and ground rules were established during the meeting on March 14, 2012. SAFARI agreed to meet bi-monthly or as needed throughout the course of the plan’s development. The planning team facilitated each SAFARI meeting, which addressed a set of objectives based on the established scope. SAFARI met 8 times from 11/17/11 through 1/20/12. Meeting agendas, notes and attendance logs areas available are provided in Appendix C.

Table 3-1. Town of Shandaken SAFARI (Shandaken Area Flood Assessment and Remediation Initiative) Flood Mitigation Planning Committee

Name	Organization	Title
Robert Stanley	Town of Shandaken	Town Supervisor, Committee Chair
Eric Hofmeister	Town of Shandaken	Town DPW Director
Rich Stokes	Town of Shandaken	Code Enforcement, Floodplain Administrator

Name	Organization	Title
Candace Balmer	RCAP Solutions	Consultant, Data Collection and Review Facilitator
Liz Higgins/Leslie Zucker	Cornell Cooperative Extension (CCE)/Ashoken Watershed Stream	
Vincent Bernstein	Town of Shandaken	
John Horn	Town of Shandaken	
David Corrigan	NYS DOT	
Danyelle Davis	NYC DEP	
Deron Davis	USDA NRCS	
Doug Dekoskie	NY DEP	
Brian Drumm	NYS DEC Region 3	
Amanda Lavallo	Ulster County DOE	
Mark Lewis	NY DEC	
Elizabeth Reichheld	NYC DEP	
Cory Ritz	UCSWCD	
Keith Savoury	NYS- DOT	
Pat Ferracane	NY DEC	
Dave Bolles	UCDPW	
Andrew Emrich	UCDPW	
Doris Nieves	Mt. Tremper Landowner	
Aaron Bennett	Ulster County DOE	
Brent Gotsch	CCE	
Bob McCormack	CCE	
Faye Storms	Save Our Shandaken (S.O.S).	

Notes:

NY DOT- New York State Department of Transportation  
 NY DEP: New York State Department of Environmental Protection  
 NYS DEC: New York State Department of Environmental Conservation  
 USDA NRCS: United States Department of Agriculture-National Resources Conservation Service  
 UCSWCD: Ulster County Soil and Water Conservation District  
 Ulster County DOE: Ulster County Department of the Environment  
 UCDPW: Ulster County Department of Public Works  
 CCE: Cornell Cooperative Extension

The Committee supported the following planning activities, under the guidance and direction of the contract consultant:

- Establish Plan development goals;
- Establish a timeline for completion of the Plan;
- Ensure that the Plan meets the requirements of CRS, FMA, and FEMA and NYSOEM guidance;



- Solicit and encourage the participation of regional agencies, a range of stakeholders, and citizens in the Plan development process;
- Assist in gathering information for inclusion in the Plan, including the use of previously developed reports and data;
- Organize and oversee the public involvement process;
- Consider a comprehensive range of alternatives;
- Review and prioritize actions;
- Develop, revise, adopt, and maintain the Plan.

Members of SAFARI (individually and as a whole), as well as key stakeholders, convened and/or communicated on an as-needed basis to share information and participate in workshops to identify hazards; assess risks; identify critical facilities; assist in developing mitigation goals, objectives and actions; and provide continuity through the Plan development process to ensure that natural hazards vulnerability information and appropriate mitigation strategies were incorporated into the Plan. Each member of SAFARI reviewed the Plan, supported interaction with other stakeholders and assisted with public involvement efforts.

Table 3-2 presents a summary of SAFARI and general project planning efforts implemented during the development process for this Plan. It also identifies which DMA 2000 requirements the activities satisfy.

Table 3-2. Summary of Mitigation Planning Activities / Efforts

Date	Activity/ CRS Requirement	Description of Activity	Participants
11/17/11	SAFARI Meeting	Project schedule, scope, contractual agreement	Rob Stanley - Shandaken Candace Balmer - RCAP Solutions John Horn - Shandaken Danny Davis - NYC DEP Doris Nieves - Mt. Tremper Landowner Aaron Bennett - UC DOE Cory Ritz - UCSWCD Gretchen Rae - CCE
1/20/2012	SAFARI Meeting	Kick-Off Data Collection and Public Outreach Planning, Public Questionnaire	Candace Balmer – RCAP Solutions John Horn – Shandaken Liz Higgins – CCE Eric Hofmeister – Shandaken Elizabeth Reichheld – NYCDEP Rich Stokes – Shandaken Cory Ritz – UC SWCD Robert Stanley – Shandaken Brent Gotsch – CCE Bob McCormack – CCD Faye Storms – S.O.S. Cynthia Bianco – Tetra Tech
2/13/2012	Working Group Meeting	Data Collection, Project Status	
3/5/2012	Public Meeting	Presentation of Planning Process, Public Input	Kathy Nolan – Shandaken Resident Sandi Walker – Phoenicia Resident Helen Morelli - Phoenicia Resident Jacqui Gagliemetti - Phoenicia Resident Tina Rice - Phoenicia Resident Robert Slits – Shandaken Resident Brian Grant – Chichester Resident Grace Grant – Chichester Resident

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Date	Activity/ CRS Requirement	Description of Activity	Participants
			Jerome Litwack - Phoenicia Resident
3/15/2012	SAFARI Meeting	Flood Response Plan input, status, NFIP request, Mission Statement, Goals and Objectives, Resident outreach cover letter.	
5/31/2012	SAFARI Meeting	Draft Flood Response Plan comments, data needs for risk assessment, public outreach/questionnaire status, Goals and Objectives discussion,	Candace Blamer – RCAP John Horn – Shandaken Planning Board Elizabeth Reichheld – NYCDEP Rich Stokes – Shandaken CEO Cory Ritz – UCSWCD Rob Stanley – Shandaken Supervisor Brent Gotsch – CCEUC Aaron Bennett – UC Dept. of Env. Gretchen Rae – CCE Doris Nieves – Mt Tremper Resident
7/19/2012	SAFARI Meeting	Update of Flood Mitigation Plan status	Brent Gotsch – CCEUC Cory Ritz – UCSWCD Rob Stanley – Shandaken Supervisor Danyelle Davis – NYCDEP John Horn – Shandaken Planning Board Candace Blamer – RCAP Aaron Bennett – UC Dept. of Env. Eric Hofmeister – Shandaken Hwy Superintendent Doris Nieves – Save our Shandaken; Mt. Tremper Resident Gretchen Rae – CCE Ulster County Rich Stokes – Shandaken CEO Cynthia Bianco – Tetra Tech Alison Miskiman – Tetra Tech
11/1/2012	SAFARI Meeting	Report of updated vulnerability analysis based on new list of critical facilities, project status, review of goals and objectives	Cory Ritz – UCSWCD Leslie Zucker – CCEUC Brent Gotsch – CCEUC Gretchen Rae – CCEUC Beth Reichheld – NYCDEP Dennis Dempsey – NYCDEP John Horn – Shandaken Planning Board Candace Balmer – RCAP Aaron Bennett – UC Dept. of Env. Cynthia Bianco – Tetra Tech (via phone)
12/11/2012	SWOO Meeting	Strengths, Weaknesses, Obstacles and Opportunities workshop.	
1/24/2013	SAFARI Meeting	Review of action items	Brent Gotsch, Danyelle David, John Horn, Rob Stanley, Eric Hofmeister, Aaron Bennet, Beth Reichfeld, Leslie Zucker, Adam Doan, Christina Appleby, Cynthia Bianco, Candace Balmer
2/4/2013	Public Meeting	Presentation of Planning Process and Vulnerability Assessment	
2/6/3013	Working Group Meeting	Revisions to Flood Warning and Response Pan, Mitigation strategy discussion.	
2/20/2013	SAFARI Meeting	Mitigation strategy discussion	Brent Gotsch, Aaron Bennet, John Horn, Robert Stanley, Adam Doan,



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Date	Activity/ CRS Requirement	Description of Activity	Participants
3/23/13	Public Meeting	Presentatioin of Draft Plan to the Public	Hofmeister, Doris Nieves, Leslie Public, Alison Miskiman, Tetra Tech, Paul Miller Tetra Tech, Shandaken Town Board



**Stakeholders Involved in Mitigation Planning**

This section presents (1) Town involvement, (2) State and regional agency involvement, and (3) public participation – citizen involvement.

**Municipal and Local Involvement**

SAFARI and/or its members and contract consultant met and communicated with relevant representatives of the Town to obtain data and information, review existing Plans and capabilities, and facilitate the identification of appropriate mitigation initiatives. Further, these departments have reviewed the Draft Plan and provided direct input during its development.

The Town of Shandaken departments and agencies that have been involved in this effort include:

Town of Shandaken Department
Town Supervisor
Building Department
Clerk's Office
Fire Department
Public Works
Planning Board
Code Official-Floodplain Administrator

Specifically the committee members provided input as detailed below.

- Town of Shandaken Officials: Town Supervisor responsible for project and grant contract management, Chair of Hazard Mitigation Planning Committee, provided administrative services, plan review, facilitation of meetings, assisted with public outreach; liaison for press releases, web postings, communications. Town clerk provided communication support. Shandaken Public Works Department: Planning Committee members; provided data and information on hazards, inventory, vulnerabilities; developed goals and objectives; identified and developed potential mitigation actions; reviewed plan sections; assisted with public and stakeholder outreach.
- Town of Shandaken Department of Public Works: Planning Committee member; provided data and information on hazards, inventory, vulnerabilities; developed goals and objectives; identified and developed potential mitigation actions; reviewed plan sections; assisted with public and stakeholder outreach.
- Town of Shandaken Planning Board: Informed of planning process; provided data and input to plan including identifying specific hazard areas that need to be addressed in the Plan; supported public outreach through local civic website coverage.
- Town of Shandaken Building Department-Code Official, Floodplain Administrator: Provided site visit to view flood-stricken areas, provided code enforcement data,
- Ashoken Stream Management Program, Cornell Cooperative Extension Service, NYDEP, NYDEC: Provided data and input to plan including identifying specific hazard areas that need to be addressed in the Plan and available hydrological data.



**Coordination with Other Agencies- Federal, State, County, and Regional Agency Involvement**

Opportunities for involvement in the planning process were provided to local and regional agencies involved in flood hazard mitigation, agencies with authority to regulate development, businesses, and other private and nonprofit interests (**CRS Step 3**). This task was accomplished by the planning team as follows:

- **Steering Committee Involvement**—Agency representatives were invited to participate on the Steering Committee.
- **Agency Notification**—The following agencies were invited to participate in the plan development from the beginning and were kept apprised of plan development milestones:  
 These agencies received meeting announcements, meeting agendas, and meeting minutes by e-mail throughout the plan development process. These agencies supported the effort by attending meetings or providing feedback on issues.
- **Pre-Adoption Review**—All the agencies listed below were provided an opportunity to review and comment on this plan, primarily through the plan secure shared site and the plan website (see Section-PUBLIC INVOLVEMENT). Each agency was sent an e-mail message informing them that draft portions of the plan were available for review. In addition, the complete draft plan was sent to the Insurance Services Office, FEMA’s CRS contractor, for a pre-adoption review to ensure CRS program compliance.

Throughout this Planning process, the Town of Shandaken actively sought the involvement of a wide range of county, state and regional stakeholders, including:

Stakeholder
Ashoken Stream Management Program
NY Department of Environmental Conservation
Ulster County Department of the Environment
Ulster County Soil and Water Conservation District
Cornell Cooperative Extension Services
FEMA RiskMap Representatives
Ulster County Department of Public Works

At a minimum, these stakeholders were advised of the planning process and provided the opportunity to review and provide direct input to the Plan during its development. Further, SAFARI and/or its members and contract consultant, met and/or directly communicated with many of these stakeholders to obtain data and information, review existing plans, and facilitate the identification of appropriate mitigation initiatives. Specific information obtained from these stakeholder is cited and/or referenced throughout this Plan.

**PUBLIC INVOLVMENT**

Broad public participation in the planning process helps ensure that diverse points of view about the planning area’s needs are considered and addressed. CRS credits are available for providing opportunities to comment on disaster mitigation plans during the drafting stages and prior to plan approval, as well as for optional public involvement activities (**CRS Step 2**).



### Strategy

The strategy for involving the public in this plan emphasized the following elements:

- Include members of the public on the Steering Committee.
- Use a questionnaire to determine the public's perception of flood risk and support of mitigation initiatives.
- Attempt to reach as many planning area citizens as possible using multiple media.
- Identify and involve planning area stakeholders.

### Stakeholders and the Steering Committee

Stakeholders are the individuals, agencies and jurisdictions that have a vested interest in the recommendations of this plan. The effort to include stakeholders in this process included stakeholder participation on the Steering Committee. Stakeholders targeted for this process included:

- Property Owners
- Owners/operators of businesses within the floodplain
- Environmental advocacy groups/Citizen Action Group (Save Our Shandaken S.O.S)

### Questionnaire

An on-line natural hazards preparedness citizen survey was developed to gauge household preparedness that may impact the Town and to assess the level of knowledge of tools and techniques to assist in reducing risk and loss of those hazards. The questionnaire asked 24 quantifiable questions about citizen perception of risk, knowledge of mitigation, and support of community programs. The questionnaire also asked several demographic questions to help analyze trends.

The answers to its 24 questions helped guide the Steering Committee in selecting goals, objectives and mitigation initiatives. The Town embarked on a door-to-door campaign to contact Floodplain residents and assist them personally with filling out the questionnaire. This campaign focused on residents in historically floodprone areas and those with NFIP claim history. The town has committed to maintaining lists of floodplain residents based on those with property exposure as indicated by the analysis presented in Section 5 of this plan. Approximately 50 residents were contacted in this manner. The questionnaire was also advertised in a public Town Board Meeting (televised) and posted on the Town website.

Over 80 questionnaires were completed both online and in person during the course of this planning process. This number is not sufficient to establish trends, but the responses did provide SAFARI and planning team with feedback to use throughout the planning process. SAFARI used survey results to support the selection of guiding principles, goals and objectives discussed in Section 6. The survey results were also used in the review of alternatives and selection of mitigation initiatives. The complete questionnaire and a summary of its findings can be found in Appendix C.

### Public Meetings

An open public meeting to present the planning process was held on March 5, 2012 at the Shandaken Town Hall. During that meeting the planning process was presented including a description to flood mitigation planning, its benefits, and a description of the National Flood Insurance Program and the Community Rating System and how it can help reduce flood vulnerability in the town. A copy of the presentation is included in Appendix C. A second public meeting to present the planning process and

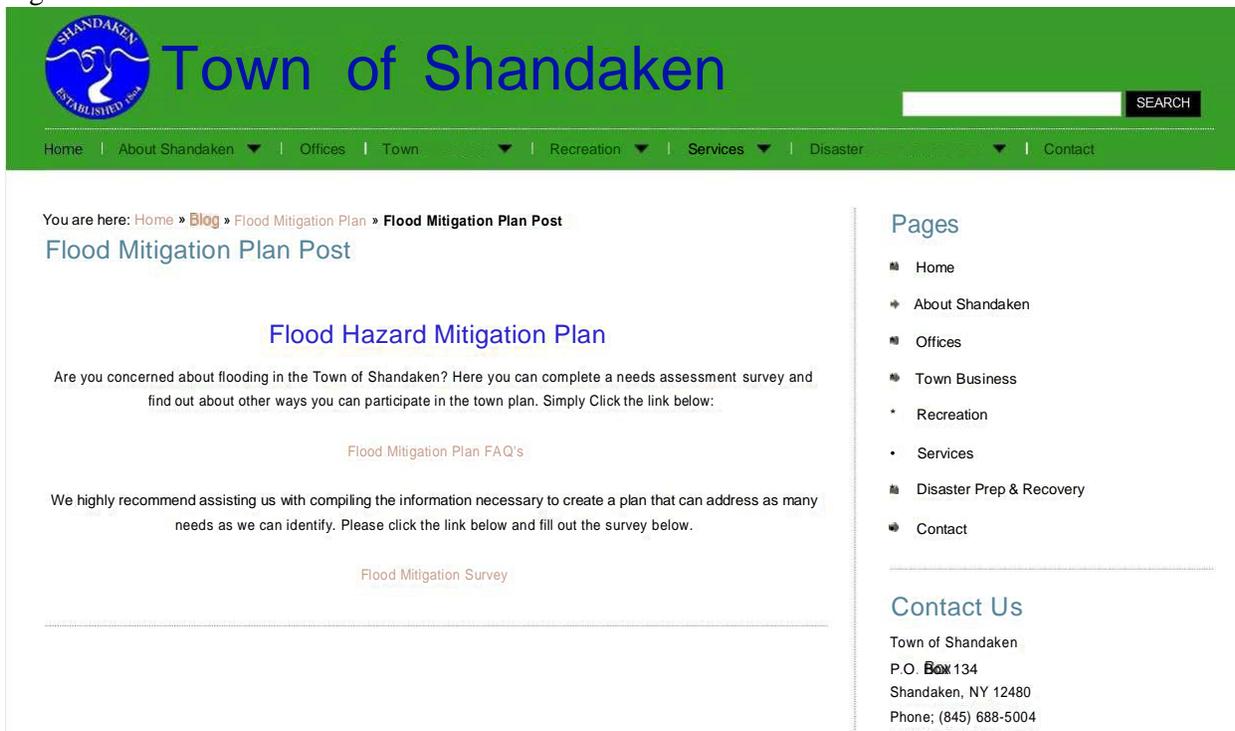
vulnerability assessment was held on February 20, 2013 at the Shandaken Town Hall. The purpose of this meeting was to present the planning process status in addition to highlighting the vulnerability assessment. A copy of the presentation is included in Appendix C.

The final public meeting to present the draft plan was held on May 23, 2013 at the Shandaken Town Hall. This meeting was advertised via a press release sent to all media outlets. This meeting was held at the beginning of the published public comment period, which ran until July 22, 2013.

**Internet**

At the beginning of the plan development process, a website (<http://www.shandaken.us/flood-mitigation-plan/flood-mitigation-plan-post/>) was created to keep the public posted on plan development milestones and to solicit relevant input (see figure 3-2):

Figure 3-2: Screenshot of Town website



The site’s address was publicized in all press releases and public meetings. Information on the plan development process, SAFARI, the questionnaire and draft of the plan was made available to the public on the site throughout the process. The Town intends to keep a website active after the plan’s completion to keep the public informed about successful mitigation projects and future plan updates. The Draft Plan was posted to the public website on June 24, 2013.

**COORDINATION WITH EXISTING PLANNING EFFORTS AND PROGRAMS**

Local municipalities are charged with the development of local FMPs required under Section 322 of the Stafford Act. Therefore, the FHMP Committee coordinated the development of this FMP. In the State of New York, local municipalities are authorized to prepare local disaster Plans based on the contention that they are best equipped to assess their strengths and weaknesses, opportunities, and constraints. Local governments have intimate knowledge of the local geography, and in a disaster, local government personnel are on the front lines providing personnel and equipment to support the community.

Examples of other hazard mitigation programs in which the Town is involved with are the National Flood Insurance Program (NFIP) and the Hazard Mitigation Grant Program (HMGP). These programs assist the Town in receiving funding for flood mitigation projects and flood insurance (this Plan can also provide funds to mitigate other natural hazards). Data from the Town, based on participation in these programs, was incorporated in the risk assessment in Section 5 and used to identify mitigation options in Section 6. Continued involvement in these flood-related programs will help to administer funds and resources to support this HMP.

**DISASTER MITIGATION ACT OF 2000**

The federal Disaster Mitigation Act (DMA) of 2000 (Public Law 106-390) provides the legal basis for FEMA mitigation planning requirements for state, local and Indian tribal governments as a condition of mitigation grant assistance. The DMA amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by replacing previous mitigation planning provisions with new requirements that emphasize the need for planning entities to coordinate mitigation planning and implementation efforts. The law added incentives for increased coordination and integration of mitigation activities at the state level by establishing two levels of state plans. The DMA also established a new requirement for local mitigation plans and authorized up to 7 percent of Hazard Mitigation Grant Program funds to be available for development of state, local, and Indian tribal mitigation plans.

Participation in FEMA 404 HMGP may cover mitigation activities including raising, removing, relocating or replacing structures within flood hazard areas.

**National Flood Insurance Program**

Established in 1968, the NFIP provides federally-backed flood insurance to residents of communities that enact and enforce regulations that more carefully regulate development within floodplain areas. For individual property owners to be eligible to buy the federally-backed flood insurance, their property must be located within a community that participates in NFIP.

For a community to be eligible in NFIP, it must adopt and enforce a floodplain management ordinance to regulate proposed development in floodplains and officially designate a local floodplain coordinator/administrator. The intent of the program is to ensure that new construction does not exacerbate existing flood hazards and is designed to better withstand flooding. The community also has Digital Flood Insurance Rate Maps (DFIRM) that at a minimum show floodways, 100-year flood zones, and 500-year flood zones. Mitigation activities related to this program are included in Section 6 and data from FEMA Region II regarding NFIP Insurance Reports was used in the risk assessment for the flood hazard included in Section 5.

The Town of Shandaken floodplain administrator is Mr. Nunzio Pietrosanti who has been involved in this planning process, at minimum providing specific flood-related information and mitigation initiatives, as well as providing review and input on the planning documents.



### **Community Rating System (CRS)**

The NFIP has been successful in protecting property owners who acquire flood insurance through the program from catastrophic financial losses due to flooding, and in requiring that new buildings constructed within 100-year flood plains are better protected from flood damage.

In the 1990s, the Flood Insurance Administration (FIA) established the CRS to encourage local governments to increase their standards for floodplain development. The goal of this program is to encourage communities, through flood insurance rate adjustments, to implement standards above and beyond the minimum required in order to:

- Reduce losses from floods
- Facilitate accurate insurance ratings
- Promote public awareness of the availability of flood insurance

The CRS is a voluntary program within the NFIP that encourages floodplain management activities that exceed the minimum NFIP requirements. Flood insurance premiums are discounted to reflect the reduced flood risk resulting from community actions to meet the CRS goals of reducing flood losses, facilitating accurate insurance rating and promoting awareness of flood insurance.

For participating communities, flood insurance premium rates are discounted in increments of 5 percent. For example, a Class 1 community would receive a 45 percent premium discount, and a Class 9 community would receive a 5 percent discount. (Class 10 communities are those that do not participate in the CRS; they receive no discount.) The CRS classes for local communities are based on 18 creditable activities in the following categories:

- Public information
- Mapping and regulations
- Flood damage reduction
- Flood preparedness.

CRS activities can help to save lives and reduce property damage. Communities participating in the CRS represent a significant portion of the nation's flood risk; over 66 percent of the NFIP's policy base is located in these communities. Communities receiving premium discounts through the CRS range from small to large and represent a broad mixture of flood risks, including both coastal and riverine flood risks.

### **THE CLEAN WATER ACT**

The federal Clean Water Act (CWA) employs regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's surface waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

Evolution of CWA programs over the last decade has included a shift from a program-by-program, source-by-source, pollutant-by-pollutant approach to more holistic watershed-based strategies. Under the watershed approach, equal emphasis is placed on protecting healthy waters and restoring impaired ones. A full array of issues are addressed, not just those subject to CWA regulatory authority. Involvement of



stakeholder groups in the development and implementation of strategies for achieving and maintaining water quality and other environmental goals is a hallmark of this approach.

## **INTEGRATION OF EXISTING DATA AND PLANS INTO MITIGATION PLAN**

The Mitigation Plan integrates local and federal data and plans as discussed below.

### **Local Regulations, Codes, Ordinances and Plans**

The following local regulations, codes, ordinances and plans were reviewed during this planning process in an effort to develop mitigation planning goals, objectives and mitigation strategies that are consistent across local and regional planning and regulatory mechanisms; and thus develop complementary and mutually supportive plans.

The “Legal and Regulatory” capability assessment, included as Table 6-1 in Section 6, provides a listing of the local codes, ordinances, regulations and planning mechanisms available in the Town, and reviewed during this planning process.

### **Local Data**

SAFARI and the contract consultant reviewed and incorporated existing data and plans to support the Mitigation Plan. A number of electronic and hard copy documents were made available to support the planning process. These documents are too numerous to list below; therefore, a summary is provided. A complete listing is included in the references section of this document.

- Local and regional Geographic Information System (GIS) data
- Documentation of past mitigation actions and grant applications
- Historic maps
- FEMA Flood Insurance Study and Flood Insurance Rate Maps
- Town and Regional Emergency Management Plans
- Watershed and Hydrologic Reports, Studies, and Analyses
- State, County, and Town Land Use Planning Codes, Regulations, and Ordinances
- Town Budget Summaries
- Articles from Local News and Media Outlets

Cross-referencing this Plan with documents like those above as they are updated will need to occur and has been included in Section 6 as mitigation activities.

### **Federal and State Data**

Federal and State data was collected and used throughout the mitigation process including:

- US Census data
- HAZUS-MH provided data
- FEMA “How To” Series (386-1 to 386-4, and 386-7)

**Other Plans, Reports, and Data**

A summary of the reports and plans provided by the Town of Shandaken and reviewed in the preparation of this plan is included in the following Record of Review Matrix.

Record of the review of existing programs, policies, and technical documents

Existing Program/Policy/Technical Documents
Section 905(b) Reconnaissance Study – Esopus and Plattekill Creeks Watershed, Ulster and Greene Counties,
Upper Esopus Creek Management Plan (Cornell Cooperative Extension, January 2007)
Flood of April 2-3, 2005, Esopus Creek Basin, New York (USGS Open File Report 2007-1036, 2007)
Magnitude and Frequency of Floods in New York. (USGS Scientific Investigation Report 2006-5112, 2006)
The Stony Clove Creek Stream Management Plan (Greene County Soil and Water Conservation District and
Comprehensive Plan for the Town of Shandaken (July 2005)
Ashokan Reservoir Watershed Hydrologic Study, New York (FEMA, August 2012)
Ulster County, New York, Comprehensive Emergency Management Plan (April 2007)
Ulster County, New York, Multi-Jurisdictional Natural Hazard Mitigation Plan (February, 2009)
Ulster County Planning Board Land Use Referral Guide: Local Wetland Regulations (November, 2008)
Water Quality Monitoring Plan (Ashokan Watershed – Release Channel Operations) (May, 2013)
Interim Ashokan Release Protocol (NYSDEC/New York City DEP, October 18, 2011)
Hydrologic Analysis Technical Support Data Notebook for Ashokan Reservoir Watershed Hydrologic Study, New
Town of Shandaken, New York, Flood Insurance Study (FEMA, February 17, 1989)
Town of Shandaken, New York, Flood Damage Prevention Ordinance (April 14, 1993)
Stormwater Pollution Prevention Plan Permit Requirements by Ulster County (Ulster County DPW, March 7, 2008)
Ulster County Transportation Plan (April, 2003)
Ulster County Planning Board. Planner’s Memo. Mining: The Regulatory Split (October, 1993)
Ulster County Planning Board. Planner’s Memo. Outdoor Lighting (September, 2000)
Historical Flooding in Phoenicia, NY 1779 – Present - Technical Report (Taylor, Ritz, and Higgins, Date Unknown)
NOVEMBER 6, 2010. Operations and Services - Hydrologic Services Program, NWSPD 10-9. DEFINITIONS AND GENERAL TERMINOLOGY. (Signed) October 22, 2010. David B. Caldwell Date Director, Office of Climate, Water, and Weather Services
National Weather Service Manual 10-950, Operations and Services: Hydrologic Services Program (NOAA NWS,
National Weather Service Instruction 10-922, Operations and Services: Hydrologic Services Program (NOAA
Daily Freeman News. Study: Expect more eroded material in Ashokan Reservoir (Kemble, Tuesday, October 2,
Ulster County Department of Highway Subdivision Requirements
Ulster County Charter, Article VII: Department of Planning (Date Unknown)
Ulster County Subdivision Requirements. Ulster County DPW. November, 2008.
NYS Realty Subdivision Laws. Article 11, Title II Public Health Law. Article 17, Title 15 Environmental Conservation Law. New York State Department of Health, Division of Environmental Health Protection. February, 2003.



A complete list of the existing data and plans used to support this HMP is included in the references section of this document. By incorporating data from existing programs into this Plan, the Town also was able to identify the relevance of mitigation planning to these existing programs. Implementation of this Plan through these existing plans is identified as a specific mitigation action in several areas in Section 6 of this Plan.

### **CONTINUED PUBLIC INVOLVEMENT**

The Town of Shandaken is committed to the continued involvement of the public. Therefore, copies of the Plan are available for review on their public website (), as well as at the Town Clerks Office at .

After completion of the Plan, implementation and ongoing maintenance will become a function of the HMP Committee. SAFARI will review the Plan and accept public comment as part of an annual review and as part of five-year mitigation Plan updates.

A notice regarding annual updates of the Plan and the location of Plan copies will be publicized annually after the HMP Committee's annual evaluation and posted on the public web site.

Mr. Robert Stanley, has been identified as the ongoing Town Flood Mitigation Plan Coordinator (see Section 7), and is responsible for receiving, tracking, and filing public comments regarding this Plan. Contact information is:

Rob Stanley, Town Supervisor  
Town of Shandaken  
Town Hall  
Phone: (845) 688-7165

The public will have an opportunity to comment on the Plan as a part of the annual mitigation planning evaluation process and the five-year mitigation Plan update. The Flood Mitigation Coordinator is responsible for coordinating the plan evaluation portion of the meeting, soliciting feedback, collecting and reviewing the comments, and ensuring their incorporation in the five-year Plan update as appropriate; however, members of SAFARI will assist the Coordinator. Additional meetings may also be held as deemed necessary by SAFARI. The purpose of these meetings would be to provide the public an opportunity to express concerns, opinions, and ideas about the Plan.