

## I. PLANNING PROCESS

### A. Purpose and Scope of Plan

#### 1. Plan preparation

The development of the Town and Village of Arcade Hazard Mitigation Plan can be considered a three-phase process. The first phase was the development of the Town and Village of Arcade Flood Mitigation Action Plan, which was completed in September 1999. The second phase was the completion of a hazard analysis using the automated program HAZNY (Hazards New York) in 2002. The third phase was the development of the all Hazard Mitigation Plan, which includes the integration of the Flood Mitigation Action Plan and the hazard analysis.

The Village and Town of Arcade had experienced several floods in the past, resulting in severe damage to residential, commercial, and public property as well as risks to the safety of residents and others. Beginning in October 1997, meetings to discuss flooding problems and streambank erosion issues in the Village and Town of Arcade had been held and attended by a number of local, regional, state and national agencies.

From these discussions the Arcade Flood Mitigation Planning Committee was formed. The Village, as lead agency on behalf of the Town and Village, applied for and was awarded a Federal Emergency Management Agency Flood Mitigation Assistance - Planning Grant from the New York State Emergency Management Office. The Committee expanded its membership to review flood risks and hazards, encourage public involvement, develop mitigation activities, and recommend action steps to alleviate flood-related problems in the Village and Town of Arcade.

In 2002, based on the Disaster Mitigation Act of 2000, the Town and Village of Arcade applied to the New York State Emergency Management Office, and was awarded a grant to complete an all hazard mitigation plan. In October 2002 the Planning Committee came together to do an initial hazard analysis under the direction of the New York State Emergency Management Office (SEMO). The Planning Committee finalized the Town and Village of Arcade Hazard Analysis Report in December of 2002 and used it as the basis for the development of this report.

#### a. Planning Committee

The Town and Village of Arcade Hazard Mitigation Plan was prepared by the Genesee/Finger Lakes Planning Council under the direction of the Planning Committee (see Table 1).

<b>Table 1 - Planning Committee</b>			
<b>Agency</b>	<b>Title</b>	<b>Last.</b>	<b>First.</b>
<b>Village Of Arcade</b>			
	Mayor	Doster	Mike
	Superintendent of Public Works	Kilburn	Larry
	Clerk/Treasurer	Offers	Joanne
	Fire Chief	Williams	Neil
	Police Chief	Laird	John
	Planning Board	Hebdon	Jamie
	Zoning	Zielonka	Marv
	Historian	Mason	Jeff
<b>Town Of Arcade</b>			
	Supervisor	Berwanger	Doug
	Highway	Lester	Chris
<b>Wyoming County</b>			
	Emergency Management Office	Reger	Jim
	Planning & Development	Tindell	Richard
<b>Genesee Finger Lakes Regional Planning Council</b>			
	Director	Zorn	David
	Associate Planner	Haremza	Jason
	Assistant Planner	Simmons	Courtne
<b>Arcade Merchants</b>			
	President	Kempf	Linda
<b>Chamber Of Commerce</b>			
	Arcade	Kurzawa	David
<b>Pioneer Central School</b>			
	Principal	Munro	Kevin
<b>New York State</b>			
	Department of Environmental Conservation	Anderson	Rebecca
	State Emergency Management Office	Clark	Bill
	State Emergency Management Office	Maloney	Kerry
	Department of Transportation	Johnston	Ed
<b>Federal</b>			
	Army Corps' of Engineers	Berkley	Phil
<b>Insurance</b>			
	Arcade Agency	Slocum	Eric
<b>Industries</b>			
	Koike Aronson	Moran	Mike
	Prestolite Electric	Koch	Bill
	Pioneer Credit Recovery	Balus	Kathy
	American Precision	Biggie	John
	Tpi- Arcade	Pohlman	Jack
<b>Other</b>			
	Arcade Herald	Rix	Judy

The documentation provided below offers a brief synopsis of each meeting held by the Planning Committee and the Public Outreach/Preparation Subcommittee (POPS), Flood Hazard Assessment Subcommittee (FHAS), and Flood Solutions Development Subcommittee (FSDS) during the development of both the Flood Mitigation Action Plan and the all Hazards Mitigation Plan. The Village of Arcade's Superintendent of Public Works took attendance and notes for each meeting.

## Full Committee

*December 18, 1998* – The Committee held its initial meeting to discuss the overall purpose of the plan (including preliminary goals and objectives) and begin developing a process to involve the public and identify flood hazard areas.

It was decided that a Public Outreach and Participation Subcommittee (the POPS) and a Flood Hazard Assessment Subcommittee (the FHAS) would be formed and each member of the Committee present chose to work on one of the two subcommittees.

*January 15, 1999* – A review of actions by the POPS at their initial meeting was presented to the Committee. The goals and objectives of the flood mitigation action plan were discussed along with possible action steps and the progress of the planning process.

*February 19, 1999* – The Committee reviewed the progress of the POPS and FHAS and a check on the planning process, and further discussion of the goals and objectives of the plan took place. An identification of critical facilities followed along with possible action steps for making flood information readily accessible to residents, businesses, and others.

*March 19, 1999* – The responses from the residential/agricultural survey developed by the POPS were given to the G/FLRPC for tabulation and analysis. A copy of the POPS's commercial/industrial survey was shown to the Committee for review and comments. Public information meetings, as suggested by the POPS, were also discussed. The data collected by the FHAS were reviewed and the Committee explored other possible sources of data collection.

*April 16, 1999* – A discussion of several warning systems to be used in the event of a flood was given and the relevance of each one to Arcade followed. An initial draft of the basemap showing the floodway, floodplain, municipal boundaries, roads, and hydrography was reviewed. The Committee also reviewed the work done by the subcommittees.

*May 21, 1999* – The Committee decided that the work of the POPS was complete and that the Committee at its monthly meetings would handle any additional public outreach and participation activities. The activities of the FHAS were discussed and that the work of that subcommittee would be completed following its next meeting.

*June 18, 1999* – The Committee decided that for the month of July, it, the FHAS, and the POPS would be combined to form the Flood Solutions Development Subcommittee (FSDS). A draft of the flood mitigation action plan was distributed for comments and review to the Committee members present with additional copies to be sent to members not able to attend. A copy of the *Flood Solutions Worksheet* developed by the Southern

Tier Central Regional Planning and Development Board was distributed for the upcoming FSDS meeting.

*October 23, 2002* – The Committee met with SEMO to begin preparation of an all Hazard Mitigation Plan. The SEMO gathered information from the Committee for the development of the initial Hazard Analysis Report (HAZNY).

*December 10, 2002* – The committee reviewed and completed the Hazard Analysis Report (HAZNY), completed the risk assessment, reviewed land use and development trends, and identified other existing associated plans.

*January 8, 2003* – The Committee reviewed and updated the Flood Mitigation Action Plan and reviewed the outline of the all Hazard Mitigation Plan.

February 26, 2003 – The Committee developed and reviewed the mitigation strategy for the all Hazard Mitigation Plan.

*March 26, 2003* – The Committee reviewed the draft all Hazard Mitigation Plan and considered plan maintenance procedures and the adoption process.

#### Flood Hazard Assessment Subcommittee (FHAS)

*January 7, 1999* – The FHAS inventoried existing reports, studies, and data that was available from federal, state, county, and local agencies and departments. Also reviewed was existing work underway by the Wyoming County SWCD and the NRCS. A survey of structural elevations in the village and town was considered and deemed a worthwhile task provided that funding was available.

*February 25, 1999* – The topics addressed included the surveying of structures at various locations throughout Arcade and damage to the Arcade & Attica Railroad as a result of the past summer's flooding and other floods.

The number and location of structures to be surveyed for ground elevation and first floor elevation was clarified and damage to tracks owned by the Arcade & Attica Railroad was discussed along with action steps for alleviating similar damage in the future.

*March 25, 1999* – The primary focus of the meeting was the identification and surveying of structures that have been repeatedly damaged by flooding (according to the surveys) and the use of this data to the Committee in determining appropriate action steps to mitigate damages due to flooding.

Aerial photos of the village and town from 1963, 1974, 1985, and 1990 were provided by the Wyoming County SWCD and the members present identified areas where Cattaraugus and Clear Creeks and their tributaries had diverged from their previous course, new development had occurred, and flooding problems were persistent.

*April 23, 1999* – The FHAS reviewed proposed structures to be surveyed in the village and town. Revisions to the list were made and were approved for submission to Douglas C. Myers Professional Land Surveyor, P.C.

*May 28, 1999* – The critical facilities in the village and town were finalized and placed on a draft map for digitization in the GIS. Areas flooded during the June 26, 1998 flood, but not shown on the FIRM, were delineated and placed on the draft map for approval at the June 18 meeting of the Committee.

#### Public Outreach/ Participation Subcommittee (POPS)

*January 14, 1999* – The POPS addressed the issues of educating property owners on the NFIP, developing surveys to address flood damage from the previous summer, and providing the *Arcade Herald* with information on the flood mitigation action plan and planning process.

*January 22, 1999* – The meeting focused on the NFIP and raising awareness of its benefits to homeowners. The meeting served as an informational session on the NFIP and the pros and cons of the program were discussed. The residential/agricultural and commercial/industrial surveys were developed.

*February 11, 1999* – It was announced that the residential/agricultural surveys had been sent and that the commercial/industrial survey would also be mailed shortly. The POPS carried on the planning of informational meetings regarding flood insurance, contacting local newspapers concerning the plan, and other possible meetings and topics for the future.

*March 11, 1999* – There was a review of the commercial/industrial survey and the survey was sent to local businesses. Further preparation for the public information meetings was carried out as was continuing communication with local newspapers.

*April 8, 1999* – Dates and venues for three public participation meetings in May was finalized and announced to the local press. A flier for the meetings was produced, comments were made, and the flier was to be distributed after a review by the Committee. Presentations for the meetings were developed and passed on for review by the Committee.

#### Flood Solutions Development Subcommittee (FSDS)

*July 16, 1999* – The comments and revisions of the draft report were submitted and the additional flooded areas of the June 26, 1998 flood were finalized. Proposed streambank erosion remediation projects in the village and town were presented by the Wyoming County SWCD. Many of the proposed projects were determined to have a positive impact on flooding in Arcade.

*July 23, 1999* – The FSDS worked through the *Flood Solutions Worksheet* and discussed the full range of possible action steps and solutions to the flooding problems in Arcade. The flood solution recommendations provided in this plan are the outcome of not only this meeting and the previous FSDS meeting, but the diligent efforts of the Committee and the other two subcommittees.

#### b. Public Involvement and Participation

The Planning Committee itself represents a large cross-section of the general public in the Town and Village of Arcade. In addition there has been extensive public involvement and participation in the development of both the Flood Mitigation Action Plan and the all Hazard Mitigation Plan.

For the development of the Flood Mitigation Action Plan the Planning Committee and, in particular, the Public Outreach/Participation Subcommittee focused on increasing residents' awareness of the flood mitigation action plan and planning process and solicited input from residents regarding the extent of previous flooding and possible solutions.

In early March 1999, a survey was sent to residents and businesses requesting information regarding past flooding. The survey included questions pertaining to past flooding, source of floodwater and proximity to creeks, depth of water on property, and damage to property among others.

Of the nearly 1200 residential/agricultural surveys sent, over one-third were returned. Due to such a high response rate, the survey served as an invaluable resource in identifying areas susceptible to flooding not shown on the Flood Insurance Rate Map (FIRM). A large percentage of the commercial/industrial surveys were also returned.

In May 1999, the Village and Town of Arcade sent a flier to residents publicizing three events regarding the flood mitigation action plan, planning process, and National Flood Insurance Program. Two of the events were informational meetings.

The first informational meeting was held on May 5, 1999 and utilized displays and a short presentation by the Genesee/Finger Lakes Regional Planning Council to introduce the planning process to residents. A question and answer session followed in which residents voiced their opinions and concerns regarding the flood mitigation action plan and received feedback from Committee members.

The local school district (Pioneer Central School District) held its annual fair on May 8, 1999 and the Village of Arcade's booth included a video of the previous summer's severe flooding (June 26, 1998) and several informational displays on the flood mitigation action plan for the village and town. Representatives from the Planning Committee were available to answer questions and provide insight into the planning process.

At both the May 5, 1999 public information meeting and the Pioneer Community School Fair there were copies of the survey available for residents and businesses to complete if they had not done so already. In addition, blank notecards were available for persons wanting to leave comments or suggestions for the Committee to review at future meetings.

The third event was a flood insurance informational meeting organized by the Arcade-Knight Agency and the Independent Insurance Agency of New York. A representative from the NFIP gave a presentation and answered questions regarding the program.

Then in 2003, during the development of the all Hazard Mitigation Plan, two public meetings were held. The first, on January 29, 2003, discussed the findings of the hazard analysis report and the second on April 28, 2003, reviewed the full all Hazard Mitigation Report.

Local newspapers in Wyoming and Genesee counties also served as a medium for informing citizens of the flood mitigation action plan and opportunities for participation in the planning process.

c. Review and Comment by Outside Partners, Neighboring Communities, Local and Regional Agencies

The Draft Plan was distributed to the following agencies and municipalities for review and comment:

- Wyoming County Emergency Management Office
- Wyoming County Industrial Development Agency
- Wyoming County Planning & Development
- Genesee/Finger Lakes Regional Planning Council
- New York State Department of Environmental Conservation Region 9
- New York State Department of Transportation
- Town of Freedom, Supervisor, Ron Ashworth
- Town of Yorkshire, Supervisor, Dick Fuller
- Town of Sardinia, Town Clerk, Betsy Marsh

**B. Authority**

At the regular Village of Arcade Board meeting held January 7, 2003, the following resolution was passed:

ESTABLISHMENT OF ALL HAZARDS COMMITTEE

Motion by Mayor Doster, seconded by Deputy Mayor Wood and unanimously carried the, Village Board of Trustees establish an All Hazards Committee that will consist of various representatives from the Village of Arcade, the Town of Arcade, local businesses, Wyoming County, the Wyoming County Soil and Water Conservation District, the New York State Department of Environmental Conservation and the State

Emergency Management Office. This committee will have the authority to draft an All Hazards Plan for the Village and Town of Arcade for submittal to the Village and Town Boards.

## II. RISK ASSESSMENT

### A. Hazard Analysis

#### 1. Hazards New York (*HAZNY*)

On October 23, 2002, the Town and Village of Arcade, in conjunction with the New York State Emergency Management Office, conducted a hazard analysis using the automated program *HAZNY* (Hazards New York). Revisions and additions were made at the December 10, 2002 Town and Village of Arcade Hazard Mitigation Plan Planning Committee Meeting. *HAZNY* was developed by the American Red Cross and the New York State Emergency Management Office. The results of this hazard analysis are presented in this report.

*HAZNY* is an automated interactive spreadsheet that asks specific questions on potential hazards in a community and records and evaluates the responses to these questions. *HAZNY* also includes historical and expert data on selected hazards. *HAZNY* is designed specifically for use by groups, rather than individuals. The Town/Village assembled a group of 14 local officials to consider and discuss the questions and issues raised by the *HAZNY* program. Representatives from the State Emergency Management Office facilitated the meeting and recorded the results.

The Group analyzed 28 hazards potentially affecting the Town/Village. *HAZNY* rated each hazard based on the assessment and assigned a numerical value. These values are categorized as follows:

<b>321 to 400</b>	<b>HIGH HAZARD</b>
<b>241 to 320</b>	<b>MODERATELY HIGH HAZARD</b>
<b>161 to 240</b>	<b>MODERATELY LOW HAZARD</b>
<b>44 to 160</b>	<b>LOW HAZARD</b>

The analysis ranked the 28 hazards (see [Table 2](#)) and considered hazards that occur most often, hazards that occur with no warning, and hazards that present the greatest danger to life (see [Table 3](#)).