

Village of Amesville
Athens County, Ohio
Natural Hazard Mitigation Draft Plan
REVISED September 2004

Village of Amesville Natural Disaster Draft Plan

3.1 Adoption by Local Governing Body

Amesville Village Council adopted this draft plan on December 30, 2003. It was revised and re-adopted in September 2004.

3.2 Planning Process

This plan was prepared for the Village of Amesville by Corinne Colbert, who was hired by the village in April 2003 to serve as plan coordinator.

Amesville is a small, rural village with a population of 184, according to the 2000 Census. There are a handful of businesses (a convenience store, a restaurant, the local branch of a regional bank, a post office, a plant nursery, and some small home-based enterprises), all with local ownership or representation.

Athens County is rural; there are no neighboring communities directly adjacent to Amesville. Planning and development activities are conducted by the Athens County City/Planner.

An announcement concerning the development of the disaster plan and formation of the core group was made in the village newsletter, which is hand-delivered to all residents monthly and also is available at several sites throughout the village. Those attending the core group meetings were Mayor Frank Hare, representing village government and the two local churches (for which he is pastor); Village Council President John O'Donnell, who also is a member of the volunteer fire department; and Colbert, a resident since 1996. Also involved in the plan's preparation were Bob Eichenberg, Athens City/County Planner, who prepared draft plans for the county and the Village of Trimble; and Rich Kasler, superintendent of the Amesville Water Works.

The core group met with Rick Warren of the Ohio Emergency Management Agency on March 27, 2003, to discuss the requirements for the plan. Colbert was hired as coordinator at the April 2, 2003, village council meeting.

The village's existing plans, studies, reports, and technical information solely concerned flooding, including a 1999 federal Hazard Mitigation Grant Program project application. Colbert consulted with Eichenberg, as he had already conducted initial research on hazard events in Athens County for plans he was drafting for the county and the Village of Trimble. (Being a small, rural county, little or no historical data exists for individual communities other than Athens, the county seat.) Information on other hazards was found at various government Web sites per mitigation planning materials provided by FEMA and OEMA.

She reported monthly to village council meetings, which proceedings are reported in the monthly village newsletter. Copies of her reports are in Appendix A.

Colbert prepared the draft plan following the steps outlined in *Ohio Natural Hazard Mitigation Planning Guidebook* (OEMA, July 12, 2002). After initial review by members of village council in late November 2003, the completed draft plan was hand-delivered to all village residents and to the offices of the Federal Valley Watershed Group on December 3, 2003, with a cover letter explaining the plan and directing them to submit comments and suggestions to Colbert by December 12, 2003. Copies also were made available at the convenience store, post office, bank, and restaurant. Only two comments were received. Village council adopted the draft plan in a special meeting on December 30, 2003.

When the draft plan was returned by FEMA in June 2004, copies were sent to the Ames-Bern Amesville Volunteer Fire Department, the Athens County Red Cross, the Athens County Solid Waste Conservancy District, the Ohio Department of Natural Resources' Division of Water, and the superintendent of the Federal Hocking Local School District.

3.3 Risk Assessment

3.3.1 and 3.3.2 Identifying Hazards and Profiling Hazard Events

The first step in risk assessment was to identify potential hazards. As the village is located in the foothills of the Appalachian Mountains, some 600 miles from the nearest ocean, we felt safe in assuming that we are not at risk for tsunamis or coastal storms. The village has an unfortunately well-established risk of flooding; data on flooding came from Flood Insurance Rate Maps and reports from previous flood events. The village's risks for earthquakes, tornadoes, landslides, and wildfires were assessed using Web sites listed in *Understanding Your Risks* (FEMA 386-2, August 2001).

This section also includes profiles of recorded hazard events. Athens City/County Planner Bob Eichenberg had already compiled a list of historic weather-related hazard events for the county; as noted previously, a village as small as Amesville has little or no specific data. Although many of the actual events were not recorded specifically for Amesville, they either are likely to have affected the village or could possibly affect the village in the future. Sources for the information are the National Data Climatic Center and *Thunder in the Heartland: A Chronicle of Outstanding Weather Events in Ohio* by Thomas W. Schmidlin and Jeanne Appelhans Schmidlin (Kent State University Press, 1996). The full listing of recorded hazard events is in Appendix B. Maps, including a base map of the village with overlays showing flood zones and federal maps indicating the village's location in wind and earthquake zones, is in Appendix C.

High Winds and Tornadoes

Historically, the most frequently recorded hazard events are high winds, either in connection with thunderstorms or as windstorms. Winds as high as 62 knots (July 4, 1983) have been recorded in Athens County. Between 1969 and 2002, thunderstorm and other high winds have caused nearly \$1.5 million in property damage to Athens County; thankfully, no deaths and only eight injuries are recorded for that period.

Southeastern Ohio does not often experience tornadoes; only one has been reported in Athens County (in May 1980) and just six in the region between 1886 and 2002. Thus, our vulnerability to tornadoes is rather low.

Flooding

By far the most significant natural disasters associated with the village are flooding. Amesville sits in a bowl at the major confluence of the Federal Creek Watershed; three creeks converge in or just outside of town. The village experienced six major floods in the 20th century:

- 1913: A major flood recorded at seven (7) feet deep on the main street.
- 1920s: A major flood recorded as two (2) inches below the flood of 1913.
- 1963: A major flood in March that was 5 feet higher than the 50-year frequency flood. Floodwaters were recorded at seven (7) feet deep on the main street.
- 1968: A major flood recorded at higher than the flood in 1963.
- 1997: A major flood in March, which is believed to have exceeded the level of the 1963 and 1968 floods. Floodwaters at the main intersection of town (Franklin and State streets) were measured at nearly 3 feet.
- 1998: A major flood in June, which exceeded the 100-year flood plain and is the worst flood in recorded village history. Floodwaters at the main intersection of town were measured at over 9 feet.

In addition, the village routinely experiences minor flooding that close roads out of town and block some village streets.

Following the 1998 flood, the village embarked on a \$1.37 million mitigation project funded by OEMA and the Federal Emergency Management Agency. Through the project, the village purchased and demolished 23 flood-prone structures and retrofitted another five to elevate utilities above the flood level.

Most of the village lies above the floodplain, including our churches, elementary school, and most houses. However, some private homes and most of the village's business district remains in the area flooded in 1997 and 1998. It should be noted that most of these properties are *not* in the 100-year floodplain as defined by the USGS and FEMA.

Other Weather Hazards

Spring and summer storms may carry hail; 29 incidents are recorded between 1982 and 2002, including .75 inches in Amesville on August 15, 1996. Hail has caused \$285,000 in property damage countywide during the recording period.

Amesville held the state record for highest recorded temperature (110 degrees) from August 1918 to 1934. Summer temperatures often reach the 90s, and can touch the low 100s. Winter temperatures can plunge as low as -25 in Athens, the closest reporting station to Amesville.

Ohio has suffered seven droughts between 1895 and 2002. These droughts have not historically affected the village water supply.

Athens County has experienced at least one blizzard a year from 1993 to 2003 (with a reprieve in 1997 and 1998). Ice storms are less frequent, with three reported, including two within weeks of each other in 1994.

Other Natural Disasters

Ohio sits in the New Madrid Fault zone, and could be affected by earthquakes. However, there are no recorded instances of earthquakes in Amesville.

Much of the region is covered by state or national forests, which presents the potential for wildfires. Although the area immediately surrounding Amesville is either open fields or very lightly forested, the Gifford State Forest is a few miles northeast of town. No wildfires have historically affected Amesville.

Although Athens County does experience landslides, they have not historically affected Amesville. Much of the town's housing stock is on a hillside, but the slope is not steep and the ground is stable

No dams affect the Federal Valley Watershed, in which Amesville sits.

3.3.3 Assessing Vulnerability: Identifying Assets

Village population per the 2000 U.S. Census is 184.

A count of structures from property tax cards obtain from the Athens County Auditor's Office equals 179 structures, including traditional homes and mobile homes (65 residences total), government buildings (2), commercial buildings (8), schools (2), churches (2), and various sheds, barns, lean-tos, and other freestanding structures. Total estimated market value of all structures in the village is \$5.6 million (per Athens County Auditor). A list of all structures and their estimated value is in Appendix D.

Part of the village is subject to flooding (see Appendix C), although many of the most vulnerable structures were demolished or flood-proofed in a federal HMGP

project carried out between 1999 and 2001. We will assume that for other hazards, the entire village is vulnerable.

The village office and the Ames-Bern Amesville Volunteer Fire Department are housed in a building on Moore Street. The village is home to two churches; an elementary school and a Head Start center (which closed in 2004); two public-service organization halls (Grange and Masons); and six commercial businesses.

The village maintains 2.4 miles of streets. Two of these are state highways — State Street is Ohio Route 550, and Main Street is Ohio Route 329 — totaling .7 mile. Culverts are located underneath Liberty, Franklin, and Main streets just north of Zarley Alley. There is a bridge across Federal Creek on Ohio 550 at the western edge of town.

The village has its own water works comprising two wells on Jago Valley Road just west of town. Each well has a pump that draws water into the on-site pump house, where the water is chlorinated. Also in the pump house is a 3,000-gallon retention tank, which holds chlorinated water until it is sent through high-surface pumps through a sand filter. The chlorinated and filter water is then pumped to a 100,000-gallon storage tank that sits on top of the town's main hill. The village usually has a four-day supply of water in the tanks.

Verizon maintains a telephone switching station on Franklin Street. Columbia Gas has a regulator station on Ohio Route 550 on the eastern edge of town.

3.3.4 Assessing Vulnerability: Estimating Potential Losses

Losses Common to All or Several Potential Hazards

Several hazards—including high winds, tornadoes, flooding, blizzards, ice storms, earthquake, and wildfire—could cause **extended electrical outages** from downed power lines. Without electricity, the village cannot pump water to homes and businesses. A sustained power outage would leave the population vulnerable to extremes in temperature (hot and cold) and cause food in refrigerators and freezers to spoil in hot weather.

In June 1997, the California Energy Commission issued a report on a survey of residential and business customers affected by an August 1996 power outage that lasted up to six hours. Some residential and commercial customers reported being without power for more than a day. Only 8.8 percent of the residential customers surveyed reported losses from the outage; those losses ranged from \$49 to \$5,500, with most reported under \$200; average loss would be \$125. A third of commercial customers surveyed reported losses from the outage, ranging from \$300 to \$12,000 for an average of \$6,150. (A copy of this report is available online at <http://www.energy.ca.gov/reports/70097003.html>.)

From this data, we estimate that a six-hour loss of power in Amesville would cause approximately \$750 in residential losses and \$12,300 in commercial losses. The losses could be expected to increase with longer outages.

These same hazards could **disrupt telephone service**. Although the local switching station has been elevated above the 1998 flood level, telephone lines could be knocked down. Amesville is not covered by cellular service, which means that loss of land lines cuts the village off from communication with outside areas. The danger here is that the village would not be able to communicate its needs to disaster, medical, or law-enforcement authorities.

Flooding, blizzards, ice storms, earthquakes, landslides, or wildfires could block roads into the village, cutting it off from **emergency services**. (State routes 550 and 329, the only roads into the village, frequently flood.) Although the local volunteer fire department is headquartered in Amesville, medical and law-enforcement facilities are located in Athens, 10 miles away. During the 1998 flood, an elderly woman experiencing heart problems was evacuated to the nearest hospital by helicopter.

High Winds/Tornadoes

Structural damage from high winds or tornadoes is estimated at anywhere between \$500 to \$4.6 million, depending on the path and severity of the storm.

Flooding

Although the 1999–2001 flood mitigation project left no structures within the federally designated 100-year floodplain, 23 structures (homes and businesses) that were flooded in 1998 remain. Of those, one has been elevated above flood level and four have had utilities moved above flood level. Nine of the remaining structures are residences; 1998 substantial damage reports show the properties with a total cash value of \$461,262 and \$285,461 in estimated damages. A summary of substantial damage reports from 1998 is in Appendix E.

The back-to-back floods of 1997 and 1998 forced one local business, an antiques shop, to close. Following the 1998 flood, the Manna House convenience store took out \$52,000 in loans to cover its losses in inventory and equipment; the store also was closed for five months, incurring an estimated \$100,000 in revenue losses. This figure would stand for losses due to tornadoes or other catastrophic natural hazard events as well as flooding. The village post office incurred an estimated \$100,000 in inventory and equipment losses. We were unable to obtain damage/loss information from the owner of the village restaurant, but the Manna House's losses probably would serve as a good guide.

In past floods, the only damage to the village water works has been to the pumps. The wells and tanks are generally full, providing sufficient pressure to keep floodwater out. In 1998, the pump house itself was flooded and the electric pumps had to be taken apart and cleaned.

Amesville fortunately has experienced no injuries or loss of life in past floods, although rescues of residents in some flood-prone homes often were conducted in fast-rising water (and some escaped from second-floor windows into boats). Most of those structures were demolished in the village's flood mitigation project. Only two residences remain at significant flood risk (at 8 S. Franklin St. and 16 Main St.)

Floodwaters are filthy, carrying sewage, dead animals, and other disease-causing pollutants. After the 1998 flood, tetanus shots were offered to village residents and those assisting with clean-up by the Red Cross, which also provided bleach and other disinfecting supplies.

Extreme Heat/Cold

The main dangers from extremes in temperature are to people, rather than property. Many homes in the village do not have central air conditioning or even window air-conditioning units to combat prolonged high temperatures. Severe cold is a danger if electricity fails, leaving people without the means to run their furnaces.

Drought

Prolonged drought has the greatest impact on water supplies. Historically, drought has not drastically affected the village's water supply. In the 1999 drought, one of the driest years in Ohio history, static levels in the village water tank remained at 15 feet.

Agricultural properties within the village are used to raise hay for livestock. Extended droughts could force farmers to buy hay, squeezing their budgets.

Blizzards/Ice Storms

The primary dangers caused by snow or ice storms are isolation and loss of electricity. If roads are impassable due to snow or ice, the village is cut off from medical care. Loss of electricity due to downed power lines leaves homes without heat.

Earthquake

According to the U.S. Geological Survey, Amesville would experience less than 10% ground motion in earthquakes with up to 1.0 SA at peak acceleration in the 10% and 5% probability of exceedance in 50 years. This corresponds to a very low likelihood of property damage.

At 2% probability of exceedance, the village could experience 13% to 16% ground motion, causing minor damage to structures. The key danger is in the village's predominance of older structures. At 10% ground motion at PGA, the U.S.G.S. says, structures built before 1940 "perform poorly" and those built before 1975 have "vulnerabilities." Most of Amesville's 65 residences date to the

late 19th and early 20th centuries. Only 11 homes were built after 1940; of those, only three were constructed after 1975. The village does include several modular homes. The U.S.G.S. does not define “perform(s) poorly,” but if we assume 80 percent damages to the 54 homes that predate 1940 (total value: \$1.85 million), structural losses for those structures alone could exceed \$1.4 million.

Wildfire

Most of the land surrounding Amesville is only lightly forested, as much of it is in agricultural use. However, the region itself is heavily forested, including national and state forests. Wildfires are unlikely to damage homes in Amesville, but smoke from fires could pose a public health threat.

Landslide

Bob Eichenberg, Athens City/County Planner, is producing a landslide risk map for the village. This map has not yet been available.

3.3.5 Assessing Vulnerability: Analyzing Development

Growth in Amesville is severely limited. There is little available space in town for new structures; there are only a few vacant lots. FEMA restrictions on construction in mitigated greenspace further limit potential growth.

3.4 Mitigation Strategy

3.4.1 Local Hazard Mitigation Goals

The village has already done much to reduce its risks associated with flooding through the 1999–2001 FEMA mitigation project. Only 23 structures that were damaged in the 1998 flood event remain in the village; five of those have been retrofitted to elevate utilities (or the entire house, in one case) above flood level.

The village’s remaining mitigation goals are focused on improving public safety with an emphasis on personal responsibility and cooperation with other entities.

Our identified priorities are:

1. To provide information about natural hazards and risk reduction to all residents.
2. To establish methods to coordinate information sharing with Athens County, other municipalities, businesses, and other agencies or organizations.
3. To improve the village’s ability to notify every resident of an impending natural hazard.
4. To ensure public safety during and after a hazard event.
5. To design the built and landscaped environment to minimize loss or damage from natural hazards.

3.4.2 Identification and Analysis of Mitigation Measures

The core group met several times to discuss potential hazards, their effects on lives and property, and ways to mitigate those effects.

As a village with only 184 inhabitants, 65 residences, and five occupied commercial structures, Amesville does not have building codes other than those of Athens County or the State of Ohio. Measures to protect private structures from damages by high winds, tornadoes, ice storms, blizzards, and the like is difficult to legislate in a town of our size. We do not have enough cable subscribers to initiate an emergency alert system (in fact, the village's cable provider is reportedly planning to cease operations within the next year, as most residents now use satellite television providers). The risk of earthquake is so low that it seems not to be cost effective to modify structures against them.

In short, the core group strongly feels that our mitigation measures should focus on public safety, including the loss of electrical power and telecommunications; damage to the village water plant; and public safety, including access to safe shelter, medical assistance, and clean drinking water.

The village already has taken steps to prepare for various types of hazards. In March 1989, village council adopted an emergency water contingency plan that includes, among other items, detailed locations of the wells, maps of piping, procedures to notify water customers of an emergency, and how to handle problems such as power outages, water line breaks, loss of storage capability, wells out of service, and system depressurization or contamination. A copy of the water contingency plan is attached. The village also has ordinances in place requiring mobile and modular homes to be placed on a permanent foundation; regulating setback distances from property lines for structures (to lessen the risk of fire spread); requesting a mutual aid agreement with Athens County; and pertaining to flood insurance regulations. The village also has requested updated floodplain mapping from the U.S. Geological Survey.

The village is fortunate to have an active and well supplied volunteer fire department within its boundaries. Firefighters have proved invaluable in the past in dealing with hazards, aiding in the evacuation of residents during flooding and helping with clean-up. The fire department has a portable defibrillator, which will be invaluable if the village's access to medical facilities is limited by a disaster. The department also will re-install its siren; codes are published in the monthly village newsletter so residents are aware of various warnings.

And of course, the village already has completed a significant mitigation project pertaining to flooding, our most common and devastating natural hazard. One-fourth of the village's property tax base has been acquired and demolished; one home has been elevated; and several others have been retrofitted for

“floodproofing.” Although they were not eligible to participate in the village’s federal flood mitigation grant project, the Grange, Masons, convenience-store owner, and post office have wet-floodproofed their properties to allow for easy clean-up after flooding. The village maintains a list of vulnerable properties, prioritized for aid should high waters threaten. The prioritizing of these measures was done by the core group and the coordinator who developed the Plan with a review by the village council. Factors involved in the prioritizing included: feasibility – what could be implemented immediately or in a few months; economic considerations – what is affordable as the village deals with the loss of tax base resulting from the flood mitigation efforts, which involved the purchase and demolition of a number of properties and also deals with declining Local Government Funds resulting from state budget decisions; social impact – what will the community accept and support; and environmental concerns – fortunately our list of measures does not appear to have significant environmental impact. The village also is undertaking steps to improve village sewage facilities, which will decrease the risk of disease from raw sewage in flood waters.

New Construction

Amesville has very limited space for new construction. The limited space is also affected by the lack of space for adequate sewage disposal. The village is working on a plan for decentralized sewage systems but even when this proposal becomes an actuality there will be little or no increase in new building.

Amesville has a Floodplain Ordinance, which has been approved by ODNR. Since flooding is the primary natural hazard with which the village deals, this is our major control related to new building. Permits are required for building in the floodplain. Amesville is not large enough to develop and enforce other kinds of building codes and thus is dependant on County and State code requirements and enforcement. Should additional space for building become available due to demolition of existing structures or through some other means all of the provisions of the Floodplain Ordinance, State and County codes, and the provisions of this plan will be applicable. We would note that our Floodplain Ordinance is more restrictive than most because of our history of floods exceeding the designated 100-year level.

Critical Facilities

The comments above for new construction also apply to critical facilities. Amesville has two critical facilities: the phone exchange building and the area Volunteer Fire Department. Following the June 1998 flood, which was approximately 12ft. deeper than the “hundred year” flood level, Verizon Phone Co. built a new exchange building with all of the essential electronic equipment elevated above the level of the 1998 flood. The village received grant funds to build a new village building with truck bays for the area Fire Department and that building is on high ground above the level of the 1998 flood. The only other critical facility related to the village is the water treatment plant, which has been flooded only in 1998 and is outside of the village limits. All of these facilities

meet the state code for wind and snow loads. At this time we do not anticipate the need for any other critical facilities.

Existing Buildings

In the Amesville flood mitigation program following the 1998 flood most of the homes which were subject to flooding were purchased and demolished. Only four residences are remaining that are subject to flooding in floods of the level of March of 1997 and September of 2004. The owners of two of these residences have now had their homes elevated since the September 2004 flood. All flood plain structures are subject to the Floodplain Ordinance.

Many of the structures in the Village of Amesville are in the one hundred year age range and were built very well. We are not aware of any significant wind, rain or snow load damage in the past thirty or more years.

In addition to the critical facilities listed above, our infrastructure includes the water system, storm sewer and street system, and the public utilities. We have little control over the public utilities as a village. An emergency plan for the water system is in place and this plan has been updated and copies are being made. Our storm sewer system is functioning adequately. Our streets are maintained on an ongoing basis. and the public utilities. We have little control over the public utilities as a village. An emergency plan for the water system is in place and this plan has been updated and copies are being made. Our storm sewer system is functioning adequately. Our streets are maintained on an ongoing basis.

Specific activities by type of hazard:

Measures for All Types of Hazards

1. Distribute seasonal hazard awareness brochures throughout the village. This is provided in the monthly newsletter which is delivered to all village homes and businesses.
2. Include seasonal hazard awareness and safety information in the monthly village newsletter, including directions for creating a family disaster plan and supply kit. This will be completed by the end of 2005 and delivered to all village homes and businesses.
3. Through the monthly village newsletter, encourage residents to obtain and maintain sufficient property insurance coverage. This will be completed by the end of 2005.
4. Maintain a list of residents to be checked on in emergencies (e.g., elderly, chronically ill, families with small children). This list is in place and is updated periodically.
5. Arrange shelter agreements with Amesville Elementary and the Presbyterian Church for residents and stranded travelers. These arrangements are in place and are reconfirmed as necessary.

6. Obtain three-phase backup generator to run village water pumps. This is currently under review by the Water Committee.
7. Arrange agreement with Ames-Bern-Amesville Volunteer Fire Department to use fire department generators in emergencies. This agreement is already in place.
8. Stockpile water at fire department for distribution in emergencies. This should be completed by the end of 2005.
9. Identify a heliport location for emergency medical evacuation if roads are blocked or impassable. This should be identified by the end of 2005.
10. Obtain a satellite telephone for village officials' use in emergencies. The availability and feasibility of this is being reviewed by village council.
11. Secure grant funding to provide NOAA weather radios for residents. The feasibility and availability of funds for this is currently being reviewed by village council. It may be adequate to have eight to ten radios in the homes of village leaders.

High Winds/Tornadoes

1. Encourage residents with basements to offer shelter to those without basements in case of tornado.
2. Offer residents information on how to build a safe shelter in their homes. This information will be provided in the village newsletter by the end of 2005.
3. Include information on debris control in the village newsletter. This will be completed by the end of 2005.

Flooding

1. Install signs in the parking areas of Gifford Park warning motorists of the possibility of flooding. This will be done by the end of 2005.
2. Distribute information on the National Flood Insurance Program and encourage residents' participation. This has already been done by way of the village newsletter. Ongoing information will continue to be distributed through the village newsletter.
3. Explore installation of a stream monitoring system to provide advance warning of flash floods. This requires action by Athens County and/or the State of Ohio and involves land outside the village limits.
4. Explore use of dry dams or holding ponds to reduce flooding. Again, this requires action by Athens County and/or the State of Ohio and involves land outside the village limits.
5. Explore possibility of elevating or moving the village water plant. The feasibility of this will be studied in 2005 in light of the fact that flood waters reached the plant only in 1998, an unusually high flood.
6. Follow the Flood Plain Ordinance limiting new construction in the flood plain. This is ongoing.

Extreme Heat/Cold

1. Include information on state aid programs for heating/cooling bills for eligible individuals in the village newsletter. This information is provided on a regular basis.

Drought

1. Create village policy for water restrictions. In times of need water conservation notices are delivered to all village homes, village businesses, and other water customers. This is ongoing.
2. Encourage wise water use in the village newsletter. This will be completed by the end of 2005.

Blizzards/Ice Storms

1. Create a list of possible shelters and coordinate use of shelters as needed. This list now exists.
2. Establish cooperation with county officials on Level 3 emergencies. The village is in regular communication with the County Disaster Agency and other officials.

Earthquake

1. Work with Columbia Gas to develop maps of gas line shut-off valves. The incidence of earthquakes is very low and measures are under study by village council.

Landslide

1. We are awaiting a landslide risk map for the village from Bob Eichenberg, Athens City/County Planner. This map is not yet available from the County Regional Planning Office.
2. The village is developing a sewage plan, which may include restrictions on the type and location of sanitary systems to reduce the effect of drainage on landslides. The initial engineering plans for a decentralized sewage system for the village will be completed in the summer of 2005 and will take into account soil slippage areas.

1.4.3. Implementation of Mitigation Measures

For information on the timeline for implementation of mitigation measures, see the action plan spreadsheet in Appendix F. We are awaiting FEMA 386-5, which is supposed to provide guidance for cost/benefit analysis in mitigation planning. Thus far we have not received a copy of that document.

3.5 Plan Maintenance Procedures

3.5.1 Monitoring, Evaluating, and Updating the Plan

The mayor will convene an ongoing mitigation committee, comprising representatives of village government, the Ames-Bern Amesville Volunteer Fire Department, local residents, and other interested parties. The committee will oversee implementation of the plan's actions. The committee will meet as needed to review and revise the plan.

At the village council meeting each July, council and the mayor will review the plan to see which items have been achieved and what new items might be added. New actions and strategies as recommended will be written into the plan and adopted by village council at the August meeting.

3.5.2 Implementation through Existing Programs

The village council's Natural Hazard Mitigation Committee consists of the Mayor and at least one council member. This group reviews the Natural Hazard Plan periodically and consults with the Water Superintendent and Fire Department leaders as needed. Any information needing to be included in the monthly newsletter is provided to the village fiscal officer who prepares the newsletter.

The Mayor is a member of the Athens County Regional Planning Commission and meets regularly with that group. A copy of the village plan is in the Planner's Office and information from plans for parts of the county adjacent to Amesville is available to the village as needed.

The village has a floodplain ordinance per FEMA regulations, which is re-adopted annually. Changes to the ordinance are made according to FEMA and the Ohio Department of Natural Resources as suggested.

The village also maintains an emergency plan for the water department.

Most of the plan's communication aspects can be handled through the village newsletter, which is distributed monthly to each residence and business in the village following the regular village council meeting. Copies of the newsletter also are available at the post office and village businesses.

The village also will benefit from some actions contained in the Athens County natural hazard mitigation plan.

While a village the size of Amesville (currently 184 residents) does not have an extensive comprehensive planning process, we do planning in several interrelated areas. We have a Floodplain Ordinance, which we enforce. We have a plan for our park, which was built on mitigation lands, that continues to guide park development as funds and labor are available. We have a recently updated contingency plan for our water system. We are in the process of developing a decentralized sewage system, which will be managed by the village under EPA

permitting standards. The Natural Hazard Plan becomes a part of this package of plans, which guide the village. The Mayor and the council and its committees are responsible for overseeing the implementation of all plans. We take part in and receive help from the Athens County Regional Planning Commission in our work.

3.5.3 Continued Public Involvement

Progress on the plan's actions will be reported in the monthly village newsletter. Residents' comments and suggestions will be solicited through the newsletter as well. The June newsletter will include a notice that the plan will be up for revision and renewal at the July meeting, and anyone interested in revising the plan will be encouraged to participate.

Changes to the plan that directly involve Amesville Elementary, county property, or other entities will be noted to the authorities for those entities, and their comments and suggestions invited.

Appendix A
Coordinator's Reports to Council

**Village of Amesville
Natural Hazard Mitigation Planning Project
Monthly Report for July 2003**

Activities

1. Entered data from county tax cards to determine the value of all structures at risk from various hazards. The village comprises 222 parcels with more than 360 structures. Total value of all structures almost \$5.6 million.

I pulled out all tax cards for village properties that are incorrectly classified. Sally or Kathleen should contact the auditor's office to make sure these parcels are classified as exempt (rather than residential or commercial).

NEXT STEP: I need to determine the number of people living in each house/property. Such specific information is not available from the Census.

2. I met with Bob Eichenberg, Athens County Planner, on Tuesday to talk about the origins of information about the hazard events his office compiled for the county disaster plan.

NEXT STEP: As of today (8/4/03), I assume that many of the hazard events on the county list will apply to Amesville (e.g., heavy snow, ice storm, rain). After talking with Bob, I will contact appropriate agencies/individuals for any information that has to be specified for Amesville (e.g., high winds, lightning).

3. Created a base map of the village based on the county auditor's plat map.

NEXT STEP: I will digitize the flood insurance map to apply to the base map. I believe this is the only hazard event that has/could affect only part of the village, so all other maps will be for the entire village.

Plans for August/September

I will need to meet with Frank and/or other council and community members to work on the vulnerability analysis and estimated losses.

I'll know by the next council meeting if I'm having carpal tunnel surgery, which would put me out of commission for computer work for three or four weeks (most likely in September). I will be on vacation September 20–28.

Submitted by Corinne Colbert, project coordinator
August 4, 2003

Village of Amesville Natural Hazard Mitigation Planning Project Monthly Report for August 2003

Activities

1. The hazard assessment is essentially complete. Bob Eichenberg, who has written disaster plans for the county and the village of Trimble, says I can use the hazard assessment his office assembled, since most of those events (heavy snow, ice storm, high winds, etc.) either have occurred in Amesville or are just as likely to occur here as in other areas of the county.
2. To complete the profile of hazard events, I created a digital flood map overlay for the base map I created last month. The overlay is in three parts, showing the FEMA floodplain, the areas flooded in 1997, and areas flooded in 1998.

NEXT STEP: With input from Frank and other village residents, I could create a fourth overlay showing areas most frequently flooded (like yesterday's flood).

3. To further the community profile, I entered complete structural data from county tax cards into the property database I began last month. This entailed breaking down the total structural value per property into individual structures and entering their descriptions from property tax cards.

NEXT STEP: The final step in the community profile is determine the number of people in the flood zone. A rough head count of households flooded in 1998 should do it; I can accomplish this with input from Frank and other village residents.

Plans for September/October

To get the plan preparation ready for the draft stage, I will need to meet with Frank, John, and any other interested residents/council members to discuss those issues that need greater input than just my judgment. These include developing hazard-specific disaster scenarios for critical issues such as public health and safety, important facilities, and economic impact; identifying potential problems facing the village based on the history of hazard events; and setting mitigation goals for those problems. This step should be accomplished by late October.

I will be unable to write or use a computer from September 16 until roughly October 7 due to carpal tunnel surgery.

Submitted by Corinne Colbert, project coordinator
September 3, 2003

Village of Amesville

Natural Hazard Mitigation Planning Project Monthly Report for October 2003

Activities

1. To be honest, I didn't achieve a great deal in October. I had carpal tunnel surgery on September 16, which put me out of action until the week of October 13.
2. I met with Frank Hare and John O'Donnell to brainstorm potential problems posed by the most likely hazard events (flooding, high winds, snow/ice storms) and the unlikely, but statistically probable (earthquake). A copy of our list is attached; your thoughts and/or additions are welcome and necessary.
3. I obtained a copy of the natural hazard action plans created by Bob Eichenberg's office for the Village of Trimble and the county. Frank, John and I should meet to compare these plans and see how ours should be adjusted.

Plans for November and December

1. Frank, John and I should meet to finalize the hazards matrix within the next two weeks.
2. I will write the draft plan and submit it for council's approval in December. This may require a special meeting, as it is unlikely that I will have a draft ready by the December 3 council meeting.

Submitted by Corinne Colbert, project coordinator
November 12, 2003

**Village of Amesville
Natural Hazard Mitigation Planning Project
Monthly Report for November 2003**

Activities

1. No one on council contacted me with further suggestions for mitigation activities. John, Frank and I met again to finalize the list of mitigation actions.
2. The draft plan is attached. Everyone should read through it and make suggestions or comments by next Friday, December 12.
3. I will make copies of the plan (including an executive summary explaining the plan and its development) and leave them at the post office, Manna House, and Kasler's restaurant with flyers encouraging residents to review the plan and contact me with their comments.

Plans for December

1. All comments and suggestions should be directed to me by next Friday, December 12. I will incorporate those suggestions and prepare a final draft plan. Council will need to set a special meeting during the week of December 15 to adopt the plan.
2. I will submit the adopted plan to OEMA and FEMA by December 31 as required by those agencies.

Submitted by Corinne Colbert, project coordinator
December 3, 2003

Appendix B
List of Historic Hazard Events

Appendix C
Base Map
Flood Maps
Earthquake Zone Map
Wind Speed Map

Base Map



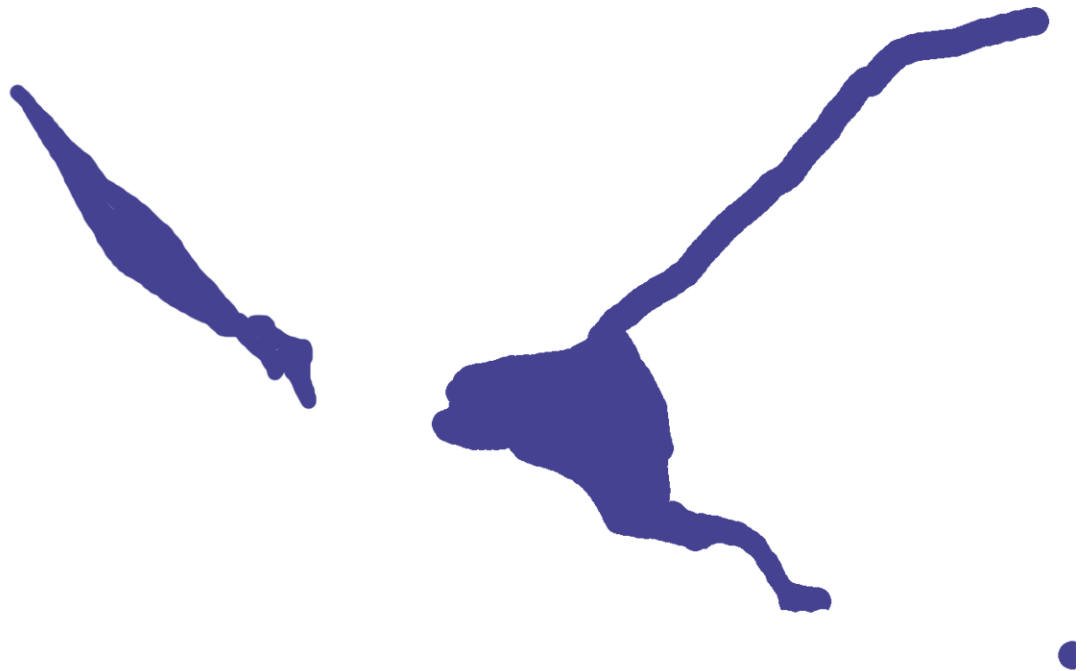
FEMA Flood Zone Overlay



1997 Flood Event Overlay



1998 Flood Event Overlay



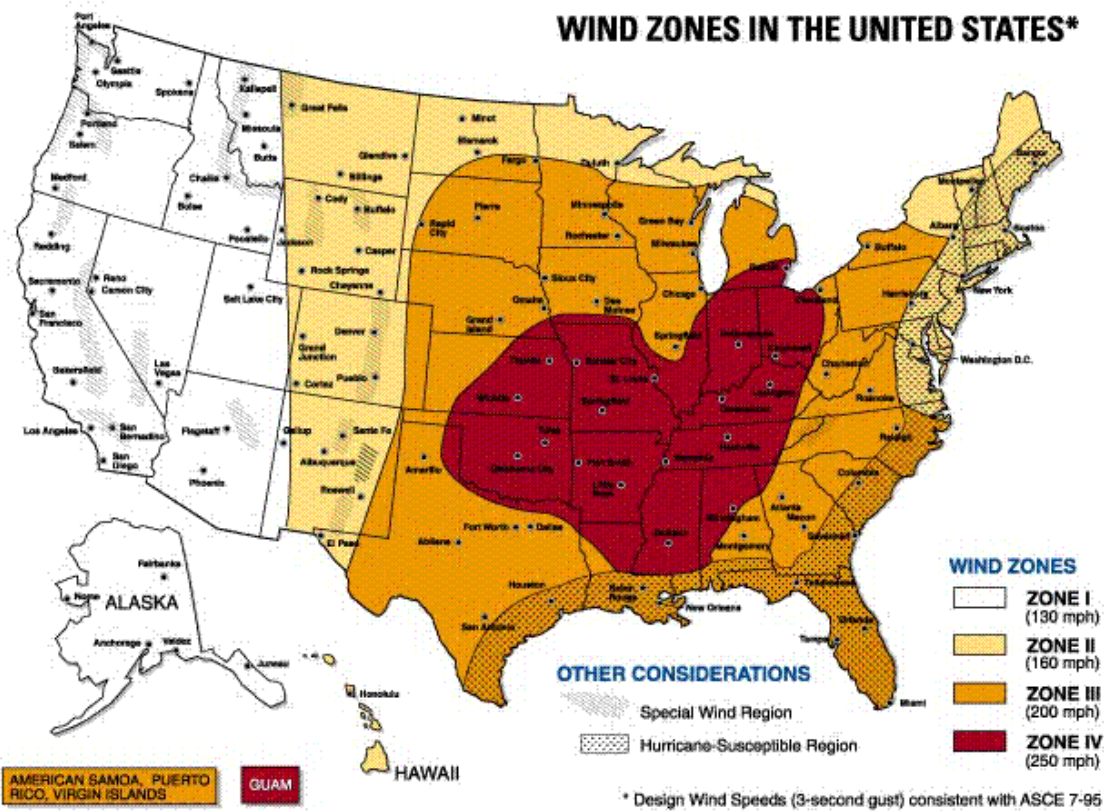
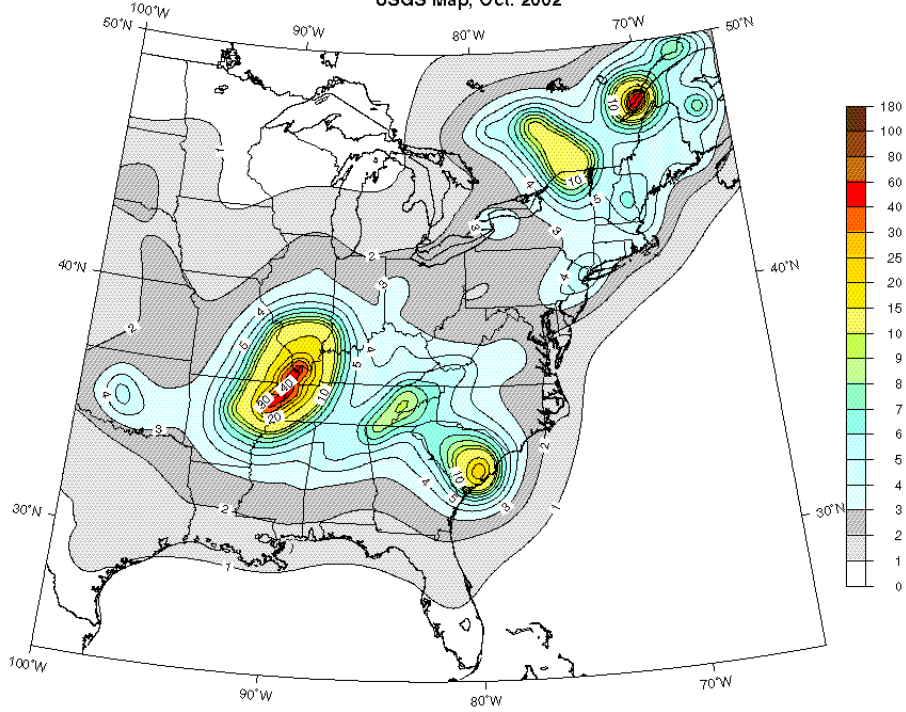
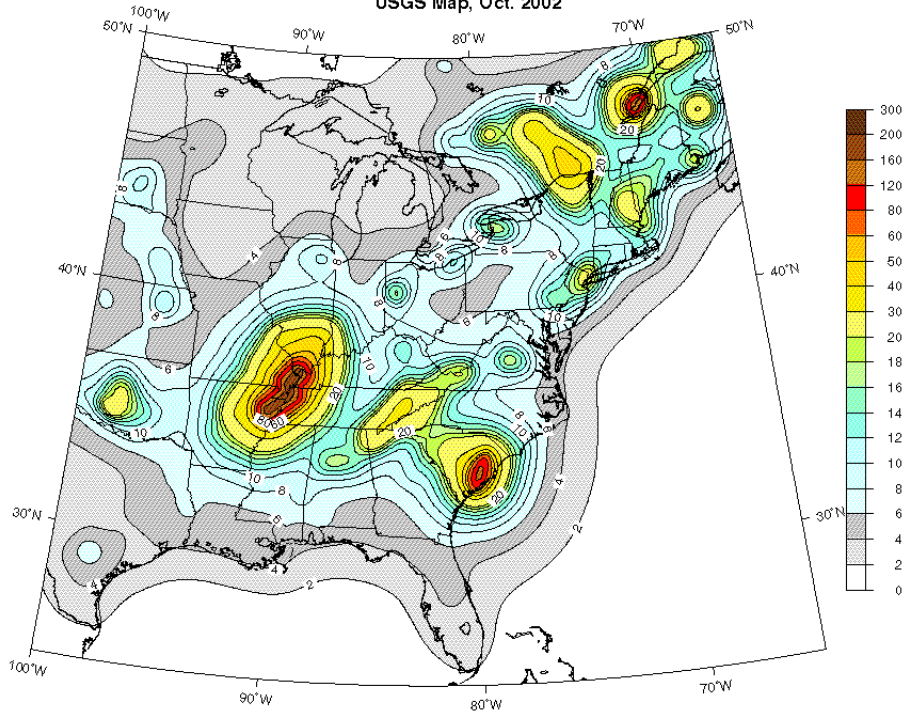


Figure I.2 Wind zones in the United States

Peak Acceleration (%g) with 10% Probability of Exceedance in 50 Years
USGS Map, Oct. 2002



Peak Acceleration (%g) with 2% Probability of Exceedance in 50 Years
USGS Map, Oct. 2002



Appendix D
Amesville Structures and Their Values
Per Athens County Auditor, 2003

Appendix E
1998 Flood Substantial Damage Report Summaries

Appendix F
Village of Amesville
Natural Hazard Mitigation Action Plan

Appendix G
Village of Amesville
Resolutions, Ordinances and Other Documents
Pertaining to Safety and Emergency Preparedness