



9.30 TOWN OF ROSEBOOM

This section presents the jurisdictional annex for the Town of Roseboom. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Roseboom’s risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.



9.30.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Roseboom’s hazard mitigation planning primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact	Additional Point of Contact
Name: Patti Gustafson Title: Town Supervisor Phone Number: (607) 264-3046 Address: 126 County Highway 50, Cherry Valley, NY 13320 Email: roseboomtownsupervisor@gmail.com	Name: Mitchell Vanburen Title: Highway Supervisor Phone Number: (607) 264-3293 Address: 126 County Highway 50, Cherry Valley, NY 13320 Email: roseboomhwy@gmail.com	Name: Curtis VanDewerker Title: Deputy Town Supervisor Phone Number: (607) 264-3050 Address: 126 County Highway 50, Cherry Valley, NY 13320 Email: roseboomtownsupervisor@gmail.com
Floodplain Administrator		
Name: Lloyd Stannard Title: Code Enforcement Officer Phone Number: (518) 231-7779 Address: 126 County Highway 50, Cherry Valley, NY 13320 Email: middleburghcodes@gmail.com		

9.30.2 Municipal Profile

The Town of Roseboom is a community in Otsego County, located in the northeastern portion of the county in central New York State. It is bordered to the north by the Town of Cherry Valley, to the south by the Town of Decatur, to the east by Schoharie County, and to the west by the Town of Middlefield. The town consists of approximately 33.2 square miles of land. The topographic quadrangle location is divided between four areas: East Springfield, Sprout Brook, Westford and South Valley resting in what is referred to as the Mohawk Valley/Appalachian Uplands. The area is very picturesque with an assortment of soils, vegetation, and geological materials. In the Town of Roseboom, the Cherry Valley Creek, Pleasant Brook, and Snyder Creek are part of the Upper Susquehanna subbasin that ultimately flows to the Chesapeake Bay. There are three hamlets located within the town: The hamlet of Roseboom is at the intersection of State Routes 166 and 165. Traveling to the east along Route 165 is the tiny hamlet of Pleasant Brook and farther along is the hamlet of South Valley. (Town of Roseboom 2019)

Population

The estimated 2017 population was 664, a 6.6 percent decrease in population from 2010 (711 persons). Data from the 2017 U.S. Census American Community Survey estimates that 5.1 percent of the Town of Roseboom



population is 5 years or younger and 20.6 percent is 65 years or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

History and Cultural Resources

The Town of Roseboom was founded from part of the Town of Cherry Valley in 1854, and the town name is that of early landowners and settlers, Abram and John Roseboom. (Town of Roseboom 2019)



Growth/Development Trends

The Town of Roseboom did not note any residential/commercial development that has occurred since 2013 or any planned major residential or commercial development, or major infrastructure development anticipated in the next five years.

Table 9.30-1. Growth and Development

Property or Development Name	Type (e.g., Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2013 to Present					
None					
Known or Anticipated Development in the Next Five (5) Years					
None					

9.30.3 Hazard Event History Specific to the Town of Roseboom

Otsego County has a history of natural events as detailed in Volume I, Section 5.0 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the county and its municipalities. The history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) for the Town of Roseboom is consistent with that of Otsego County. Table 9.30-2 provides details regarding municipal-specific loss and damages the town experienced during hazard events. Information provided in the table below is based on reference material or local sources.

Table 9.30-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Otsego County Designated?	Summary of Event	Municipal Summary of Damages and Losses
June 26- July 11, 2013	Severe Storms and Flooding (DR-4129)	Yes	A series of storms included severe thunderstorms, heavy rain, and flash flooding across central New York State and Otsego County.	The town reported damages as detailed below.
May 13-22, 2014	Severe Storms and Flooding (DR-4180)	Yes	On May 16, heavy rainfall resulted in flash flooding and washed out roads.	Although the county was impacted, the town did not report any damages.
November 17-27, 2014	Severe Winter Storm, Snowstorm, and Flooding (DR-4204)	No	A snowstorm developed on November 26th. Snowfall amounts ranged from 7-11 inches across the county. The highest amount of 11 inches fell in Cooperstown.	The town reported damages as detailed below.



Dates of Event	Event Type (Disaster Declaration if applicable)	Otsego County Designated?	Summary of Event	Municipal Summary of Damages and Losses
March 14-15, 2017	Severe Winter Storm and Snowstorm (DR-4322)	Yes	Snowfall ranged between 3- and 4-feet in Otsego County. Many municipalities, and counties declared states of emergencies and/or travel bans. New York State also declared a state of emergency.	The town reported damages as detailed below.

Notes:

DR Major Disaster Declaration (FEMA)

N/A Not applicable

The town reported that for DR-4129, approximately 10 residents on Adair Road were stranded due to Upper Adair Road closure on 6/27/13. Although there was water infiltration into the Town Office Building, no FEMA claim was submitted. The town had significant amounts of regular & overtime as well as outside contractual costs; used for emergency repairs for roadways and debris removal. The following infrastructure damage was reported for this event:

- Site 1: Adair Road—due to high velocity water several areas of the roadway and bank were washed out. Several culverts and culvert-headwalls were damaged. Large quantities of stony-debris were deposited on the lower portion of the road.
- Site 2: Gage Road—due to high velocity water the culvert was washed out and part of the road shoulder was damaged.
- Site 3: Morton Road—due to high velocity water the ditches over-flowed and caused shoulder erosion. Rocky debris was deposited in a large culvert.
- Site 4: Edwards Road—due to high velocity water a culvert headwall was washed out and displaced. A portion of roadway was washed out.
- Site 5: Kirshman Road—based on knowledge of prior rain events; large amounts of woody debris materials were removed that would have plugged a double-tube culvert.
- Site 6: Snyder Creek on Hoose Road—due to high velocity water a large quantity of stony-debris was deposited at the headwall of the Snyder Creek culvert, threatening the bank to erode.
- Site 7: Bussman Road—due to high velocity water the northeast bank of the creek (un-named) was eroded, which threatened the bank and bridge footing.

The town reported that for DR-4322, Storm Stella, due to high rates of snowfall, some residents were temporarily stranded on roadways and in residences due to significant accumulations of snowfall making roads and driveway impassable. Although there were no road closures, the town had significant amounts of regular & overtime; used for emergency snow removal on roadways.

For DR-4204, during heavy rain event, storm runoff from the mountain overtops the culvert system, which consists of 30' x 48" plastic pipes, caused damages to the roadway, road closures, and loss of access to residents in emergency vehicles. The existing culvert size was insufficient to handle the amount of run off created by storm(s). Therefore, there was damage to the culvert system and roadway. Costs incurred for labor, fringe benefits, equipment usage, contractual vendors, materials, and administrative. Costs associated with removal of existing culvert system, excavating the stream bed, and installing a larger culvert.



9.30.4 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazards of greatest concern and risk to the Town of Roseboom. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0 (Risk Assessment).

Hazard Risk Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating town or village could have differing degrees of risk exposure and vulnerability compared to Otsego County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Roseboom. The Town of Roseboom has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town changed the hazard ranking for earthquake from Low to Medium based on past events. The town agreed with the remainder of the calculated hazard rankings.

Table 9.30-3. Hazard Risk/Vulnerability Risk Ranking

Hazard of Concern	County Hazard Ranking	Community Hazard Ranking
Drought	Medium	Medium
Earthquake	High	Medium*
Extreme Temperature	High	High
Flood	Medium	Medium
Landslide	Low	Low
Severe Storm	High	High
Severe Winter Storm	High	High
Wildfire	High	High

Notes: The hazard ranking calculation is based on probability of occurrence and impacts on population, property, and the economy. Refer to Section 5.3 for the hazard ranking methodology.

* The municipality changed the initial ranking of this hazard based on event history and municipal experience.

Critical Facilities Flood Risk

NYS DEC Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for state projects located in flood hazard areas. The law provides that no such projects related to critical facilities shall be undertaken in a special flood hazard area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2 feet above the base flood elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the state places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must





be protected to the 500-year flood event or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection. (NYS DHSES 2017)

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents HAZUS-MH estimates of the damage and loss of use to critical facilities as a result of a 1 percent annual chance flood event.

Table 9.30-4. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None identified						

Identified Issues

The municipality has identified the following vulnerabilities within their community:

- Loss of power to critical facilities.
- Flooding of Stannard Hill Rd. culvert.

9.30.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of mitigation planning into existing and future planning mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Town of Roseboom.

Table 9.30-5. Planning and Regulatory Tools

Tool/Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Comprehensive Plan	Yes	Local	Town Board & Town Planning Board	Comprehensive Plan – Town of Roseboom Adopted: Dec 2016
Capital Improvements Plan	Yes	Local	Town Board	Long-Term Capital Improvement Plan; Resolution #7 -2018. Adopted: Sept 13, 2018



Tool/Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Floodplain Management / Basin Plan	No	-	-	-
Stormwater Management Plan	No	-	-	-
Open Space Plan	No	-	-	-
Stream Corridor Management Plan	No	-	-	-
Watershed Management or Protection Plan	No	-	-	-
Economic Development Plan	No	-	-	-
Comprehensive Emergency Management Plan	No	-	-	-
Emergency Operation Plan	No	-	-	-
Evacuation Plan	No	-	-	-
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	No	-	-	-
Regulatory Capability				
Building Code	Yes	State & Local	Code Enforcement Officer	NYS Building Code
Zoning Ordinance	No	-	-	-
Subdivision Ordinance	No	-	-	-
National Flood Insurance Program (NFIP) Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Code Enforcement Officer	Resolution 2017-02
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	State, Local	Code Enforcement Officer	Resolution 2017-02
Growth Management Ordinances	No	-	-	-
Site Plan Review Requirements	No	-	-	-
Stormwater Management Ordinance	No	-	-	-
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	No	-	-	-
Real Estate Disclosure Requirement	Yes	State	NYS Department of State, Real Estate Agent	NYS mandate, Property Condition Disclosure Act, NY Code – Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	No	-	-	-



Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Roseboom.

Table 9.30-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Town of Roseboom Planning Board
Mitigation Planning Committee	Yes	Town Board & Highway Superintendent
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Maintenance programs to reduce risk	Yes	Town Board & Highway Superintendent
Mutual aid agreements	No	-
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	No	-
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Code Enforcement Officer, Councilperson Gage
Planners or engineers with an understanding of natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes*	Lloyd Stannard, Code Enforcement Officer
Surveyor(s)	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Town Assessor
Scientist familiar with natural hazards	No	-
Warning systems/services	No	-
Emergency Manager	Yes	Town Board & Highway Superintendent
Grant writer(s)	No	-
Staff with expertise or training in benefit/cost analysis	Yes	Town Supervisor & Deputy Supervisor
Professionals trained in conducting damage assessments	No	Defer to DEC, ACOE, Professionals as needed

Fiscal Capability

The table below summarizes financial resources available to the Town of Roseboom.

Table 9.30-7. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No



Financial Resources	Accessible or Eligible to Use (Yes/No)
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other	No

Community Classifications

The table below summarizes classifications for community programs available to the Town of Roseboom.

Table 9.30-8. Community Classifications

Program	Do You Have This? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	Yes	Storm Ready County	2015
Firewise Communities classification	No	-	-
Natural disaster/safety programs in/for schools	No	-	-
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	No	-	-
Public-private partnership initiatives addressing disaster-related issues	No	-	-
Other	No	-	-

Note:-
 N/A Not applicable
 - Unavailable

The classifications listed above relate to the community’s ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community’s capabilities in all phases of emergency management (preparedness, response, recovery, and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule (<https://www.isomitigation.com/bcegs/>)





- The ISO Mitigation online ISO’s Public Protection (<https://www.isomitigation.com/ppc/>)
- New York State Climate Smart Communities (<http://www.dec.ny.gov/energy/56876.html>)
- The National Weather Service Storm Ready (<https://www.weather.gov/stormready/communities>)
- The National Firewise Communities (<http://firewise.org/>)

Self-Assessment of Capability

The table below provides an approximate measure of the Town of Roseboom’s capability to work in a hazard mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.30-9. Self-Assessment Capability for the Municipality

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and regulatory capability	Funding	-	-
Administrative and technical capability	Funding	Using Contractual Vendors (Excavation) and Highway Superintendent. Note: we do not have funding to have an on-staff engineer.	-
Fiscal capability	Funding Note: Town has a small tax base with limited funds to meet mitigation projects	-	-
Funding and staff	Funding & residents	-	-
Community resiliency capability	Funding Note: Town has a small tax base with limited funds to meet mitigation projects	-	-
Capability to integrate mitigation into municipal processes and activities	Funding & staff	-	-

National Flood Insurance Program (NFIP)

NFIP Floodplain Administrator (FPA)

The town reported that the NFIP Floodplain Administrator is Lloyd Stannard, Code Enforcement Officer.

National Flood Insurance Program (NFIP) Summary

As of July 31, 2018, there were no NFIP policies or claims paid. The following table summarizes the NFIP statistics for the Town of Roseboom.

Table 9.30-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Roseboom (T)	0	0	\$0	0	0	0

Source: FEMA 2018

Notes:

(1) Policies, claims, RL, and SRL statistics provided by FEMA Region 2, and are current as of June 30, 2018. Total number of RL properties does not include SRL properties. Number of claims represents claims closed by July 31, 2018.

(2) Total building and content losses from the claims file provided by FEMA Region 2.





- (3) *Number of policies inside and outside of flood zones is based on latitude and longitude coordinates provided by FEMA Region 2 in the policy file. FEMA noted that for a property with more than one entry, more than one policy could have been in force or more than one Geographic Information System (GIS) specification was possible. Number of policies and claims, and claims total, exclude properties outside Otsego County boundary, based on provided latitude and longitude coordinates.*

Resources

The Code Enforcement Office works with the Otsego County FPA for floodplain management activities. The town does not provide any education or outreach to the community regarding flood hazards/risk, and flood risk reduction.

Compliance History

The town is in good-standing with the NFIP. The most recent Community Assistance Visit (CAV) was on March 8, 2017.

Regulatory

The Town of Roseboom adopted Resolution 2017-02 NFIP Resolution that includes the NYS 2-foot freeboard requirement. (Town of Roseboom 2017)

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures, which is also indicated below.

Planning

Existing Integration

The Town of Roseboom has a Comprehensive Plan that was adopted December 2016 that considers areas of natural hazards. The plan provides in inventory of Environmental and Natural Resources; discussion of strengths, weaknesses, opportunities, and threats; and goals and objectives for development.

Opportunities for Future Integration

The Town of Roseboom can reference the county Hazard Mitigation Plan (HMP) with projects that mitigate stormwater flooding in their Comprehensive Plan. The Comprehensive Plan could be listed on the town's website. The Town of Roseboom could develop the following plans: stormwater management plan, open space plan, comprehensive emergency plan, recovery plan.

Regulatory and Enforcement (Ordinances)

Existing Integration

The Town of Roseboom reported that it does not have any land use or zoning regulations. Town Planning does not make decisions with respect to natural hazard risk management.



Operational and Administration

Existing Integration

Planning Board: The Town of Roseboom Planning Board is responsible for reviewing and updating the master plan. The Planning Board does not have functions with respect to managing natural hazard risk.

Stormwater Management: Stormwater management in the town is performed by the Highway Superintendent.

Additional Capabilities: The Town has staff or contract with firms that have experience with developing Benefit-Cost Analysis, Substantial Damage Estimates, or preparing grant applications for mitigation projects.

The town does not have a municipal planner or contract planning firm. Floodplain Management functions are performed by the Otsego County FPA and the Code Enforcement Officer, while the Town Board and Highway Superintendent address natural hazards, as needed. The Town Board, Code Enforcement Officer, and Highway Superintendent have job descriptions that relate to hazard management.

Town staff do not receive training or continuing professional education with supports natural hazard risk reduction. Town staff do not participate in associations, organizations, groups, or other committees that support natural hazard risk reduction and build hazard capabilities.

Opportunities for Future Integration

The Town of Roseboom does not have regulatory requirements for additional actions for hazard mitigation. The town could develop land use or stormwater regulations to decrease hazard risk (e.g., steep slopes, riparian buffers). Town staff are open to trainings and interested in certification programs.

Funding

Existing Integration

The Town of Roseboom does not have a Capital Improvements Budget nor include budget for mitigation-related projects (e.g., improved stormwater management/drainage, hardening of critical facilities and infrastructure). The town would use road maintenance appropriations, if funds are available, or road reserve funds.

The Town of Roseboom was awarded grant funding for the Edwards Road Tube Replacement (FEMA 4204); total budget \$ 47,121.50; Federal Share 75 percent; NYS Share 12.5 percent; Town Share 12.5 percent.

Opportunities for Future Integration

The Town of Roseboom could apply for more grants or allocate municipal funding for hazard mitigation activities.

Education and Outreach

Existing Integration

The Town of Roseboom lacks internet service and does not have a system to provide public outreach for informing citizens about natural hazards.

Opportunities for Future Integration

The town could use internet service to notify residents in the community.



Sheltering, Evacuation, and Temporary Housing

Temporary housing, evacuation routes, and sheltering measures must be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation and Sheltering Needs

The Town of Roseboom has not identified officially designated shelters or evacuation procedures. During an event, the town will work with emergency responders and the county to identify evacuation routes and emergency shelters.

Temporary and Permanent Housing

The Town of Roseboom has identified the following potential sites for the placement of temporary housing for residents displaced by a disaster:

- Town Storage Barn, State Rt. 165, minimal capacity (approx. two temporary homes). Water well, septic system, electric service, and other utilities would be required.
- Town Gravel Bank, Middlefield Rd., capacity of three to four temporary homes, significant site work/grading would be necessary. Water well, septic system, electric service, and other utilities would be required.

The town has very little municipal property. Acquisition of private property would be the only option for relocating houses in the floodplain.

9.30.6 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2013 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now ongoing programs and capabilities are indicated as such in the following table and can also be found under "Capability Assessment" presented previously in this annex.



Table 9.30-11. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2021 HMP or Discontinue 2. If including action in the 2021 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
1	Move salt/sand storage and Municipal Offices to a location that is above 100 yr. floodplain. (Town will buy land).	Flood	When streams flood, salt/sand storage contents are taken into streams, which have to be cleared. Municipal buildings have flooded in the past and would not sustain any new event.	Town Supervisor	Complete	Cost	Unknown	1. Discontinue. 2. 3. Moved salt and sand storage. Municipal building still needs to be relocated, but this is not a priority.
						Level of Protection		
						Damages Avoided; Evidence of Success	Salt and sand will not be discharged.	
2	Develop, coordinate, and implement a program to identify public or private land to place temporary short-term and long-term housing units for residents displaced by a disaster.	Flood	The town did not identify short- and long-term housing for displaced residents.	Emergency Services, Public Works, Hazard Mitigation Committee Rep.	Complete	Cost	Unknown	1. Discontinue. 2. 3. Analyzed long- and short-term housing. No long-term is available. Short-term will be in the addition of the First Christian Church of the South Valley (Family Ministry Center) and the Women’s Club building that could house families.
						Level of Protection		
						Damages Avoided; Evidence of Success	Town has short-term housing and will rely on the county for long-term housing.	
3	Develop, coordinate, and implement a program to protect critical facilities to the 500-year flood before, during and following a flood event.	Flood	The town had not identified and evaluated critical facilities that are in the flood plain.	Emergency Services, Public Works, Hazard Mitigation Committee Rep.	Complete	Cost	Municipal budget	1. Discontinue. 2. 3. See #1.
						Level of Protection		
						Damages Avoided; Evidence of Success	Moved salt and sand.	
4	Retrofit community church to enable capacity to house community members during hazards. This includes: cots and bedding, kitchen, and electrical hook-up transition switch.	Flood	The town did not identify short- and long-term housing for displaced residents.	County Highway Dept./Municipal Highway Superintendents	Complete	Cost	Unknown	1. Discontinue. 2. 3. See #2. Family ministry center was built. There is a large kitchen and living facility. The town is in the process of purchasing a portable propane generator for backup electricity. Cots and bedding would be from donations.
						Level of Protection		
						Damages Avoided; Evidence of Success	Town has short-term housing and will rely on the county for long-term housing.	



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2021 HMP or Discontinue 2. If including action in the 2021 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Unknown	
5	Purchase (2) portable diesel generators (15 – 20K capacity, single-phase, 60-cycle, generator to sustain critical buildings during electrical outage).	Flood, Tornado, Winter Storm, Extreme Temperature	Generated needed for critical facilities during a power outage.	Municipality Buildings	In process	Cost	Unknown	1. Include in HMP. There is budget for this year to purchase a portable propane generator. 2. Will purchase in 2020 an additional backup generator. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success	No power loss.	
6	Build (2) cell towers for communications during hazards and emergency communications.	Flood, Tornado, Winter Storm, Extreme Temperature	Town does not have communications during an emergency.	County Office of Emergency Services (OES), County All Hazards Mitigation Committee	In progress	Cost		1. Include in HMP. State highway that runs through the town is a dead zone. The county is renting land and put a tower for emergency communication. The county is exploring options with ATT to rent space on the emergency tower to provide cell service for the town. 2. Emergency communications for the county are complete. Ongoing for resident communication. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
7	Develop an emergency notification plan and purchase communication equipment for first responders and community officials, and compatible with adjacent communities, schools, state police and other emergency service agencies.	Flood, Tornado, Hurricane, Extreme Temperature, Drought, Wildfire	Town lacked an emergency notification plan and services.	Town Board	Complete	Cost	Unknown	1. Discontinue. 2. 3. Plan developed with understanding with the board and first responders that will meet at town hall, but emergency services are mostly dictated by the county.
						Level of Protection		
						Damages Avoided; Evidence of Success	Town can communicate with a county during an emergency.	
8	Purchase portable generator and trailer to supply emergency power to critical facilities for Town Barn and other critical facilities in the event of power failure during disasters.	Flood, Tornado, Hurricane, Extreme Temperature, Drought, Wildfire	Generated needed for critical facilities during a power outage.	Town Board	See #5	Cost		1. Include in HMP. There is budget for this year to purchase a portable propane generator. 2. Will purchase in 2020 an additional backup generator. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
9	Relocate lower section of Adair Rd. away from creek	Flood	Flooding occurred on Adair Rd.	Highway Superintendent	Complete	Cost	Unknown	1. Discontinue. 2.
						Level of		



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing Capability, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2021 HMP or Discontinue 2. If including action in the 2021 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Protection Damages Avoided; Evidence of Success		
	ravine and up size the Pleasant Brook Creek Culvert tube.						No more road flooding	3. FEMA, DEC, USACE, and the town investigated. Installed larger culvert as solution.
10	Increase culvert tube on Stannard Hill Rd. to handle a 100-year flood without flooding over the road.	Flood	Flooding occurred on Stannard Hill Road.	Highway Superintendent	In progress	Cost		1. Include in HMP. Town has been in the progress of replacing tubes to increase capacity. 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Roseboom has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2013 HMP:

- The town upsized the following culverts:
 - Gage Road
 - Adaire Road
 - Hanson Road
 - Hoose Road
 - Doc Ahlers Road
- Edwards Road culvert is currently in the process of upsizing.

Proposed Hazard Mitigation Initiatives for the Plan Update

Table 9.30-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Roseboom would like to pursue in the future to reduce the effects of hazards. Some of these initiatives are previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and can be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as “high”, “Medium”, or “Low”. The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.30-13 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.30-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Description of Solution?	Critical Facility (Yes/No)	EHP Issues?	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category / CRS Category
T. Roseboom-1	Purchase portable generator and trailer.	1, 2	Flood, Tornado, Hurricane, Extreme Temperature, Drought, Wildfire	Problem: In times of power outages, the Town Barn and other critical facilities lack power during disasters. Solution: Purchase portable generator and trailer to supply emergency power to critical facilities.		Yes	No	6 months – 5 years	Town Board	\$20,000	The town will maintain function of critical facilities.	HMGP/ PDM and town budget and possible state	High	SIP/ PP, ES
T. Roseboom-2	Increase culvert tube on Stannard Hill Rd.	2	Flood	Problem: In times of increased stormwater events, the capacity of the culvert is exceeded, and water overtops the culvert and floods the road. Solution: The Town of Roseboom would increase the diameter of the culvert tube on Stannard Hill Rd. to handle a 100-year flood level.		No	No	1 year	Highway Superintendent	\$250,000	Avoid costly repairs, lengthy detours, and minimize response costs.	FEMA HMGP and PDM, CHIPs and town budget	High	SIP/ SP

Notes:

Not all acronyms and abbreviations defined below are included in the table.

*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- PDM Pre-Disaster Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.





- *Structure and Infrastructure Project (SIP)*-- These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- *Natural Systems Protection (NSP)* – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- *Education and Awareness Programs (EAP)* – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions can also include participation in national programs, such as StormReady and Firewise Communities.

CRS Category:

- *Preventative Measures (PR)*-- Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- *Property Protection (PP)*-- These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)*-- Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)*-- Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)*-- Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)*-- Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.

Critical Facility:

- Yes  - Critical Facility is located in 1% floodplain.



Table 9.30-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
T. Roseboom-1	Purchase portable generator and trailer.	0	1	0	1	0	0	0	0	1	0	1	0	1	1	6	Medium
T. Roseboom-2	Increase culvert tube on Stannard Hill Rd.	1	0	1	1	1	-1	1	0	0	0	0	1	0	0	5	Medium

Note: Section 6 (Mitigation Strategies) conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.30.7 Future Needs to Better Understand Risk/Vulnerability

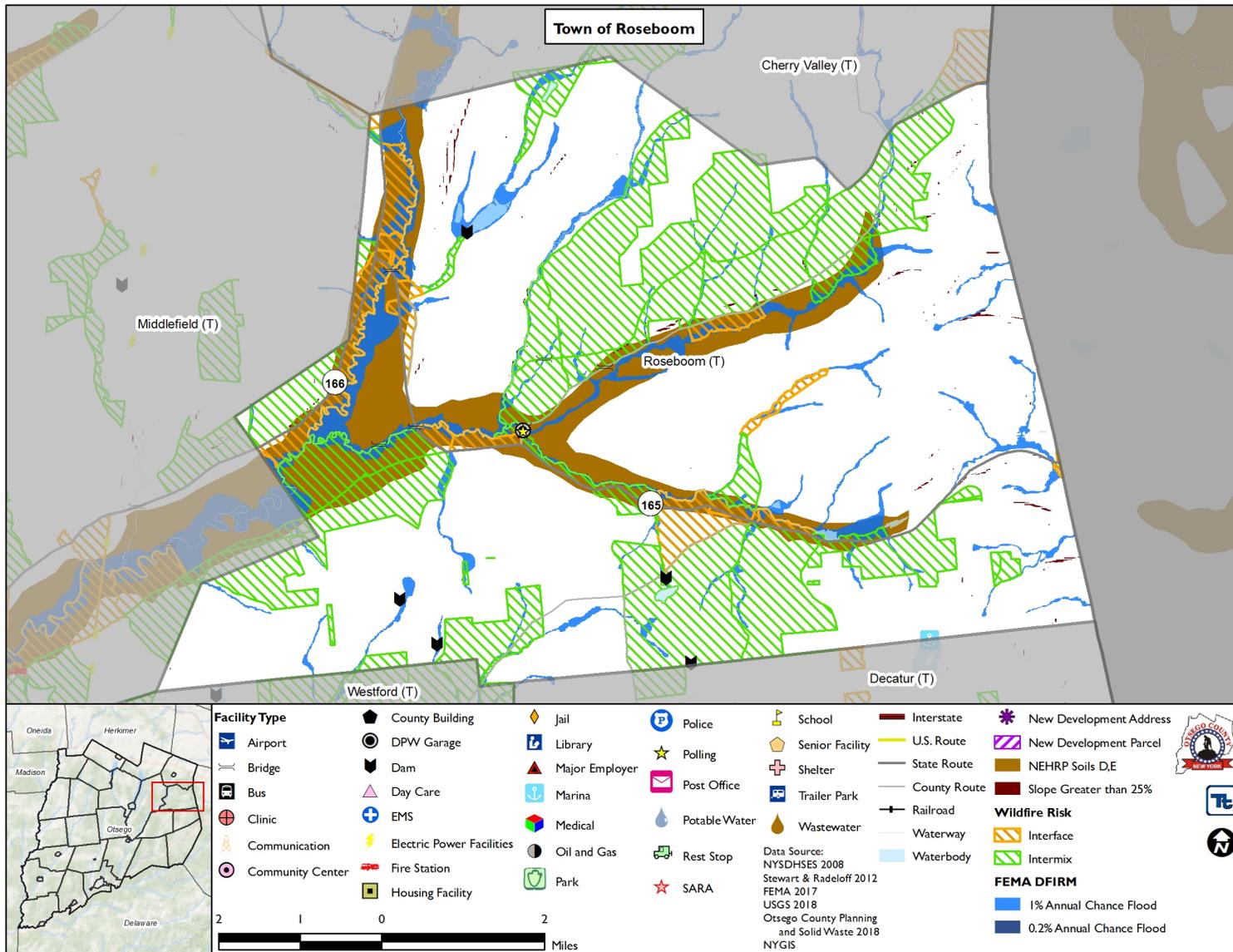
None at this time.

9.30.8 Hazard Area Extent and Location

The Town of Roseboom Hazard Area Extent and Location Map was generated for the Town of Roseboom that illustrates the probable areas impacted within the municipality. This map is based on the best available data at the time of the preparation of this plan and is adequate for planning purposes. The map was generated only for those hazards that can be clearly identified using mapping techniques and technologies and for which the Town of Roseboom has significant exposure.



Figure 9.30-14. Town of Roseboom Hazard Area Extent and Location Map





9.30.9 Staff and Local Stakeholder Involvement in Annex Development

The Town of Roseboom followed the planning process described in Section 3 (Planning Process). This annex was developed over the course of several months with input from many town departments, including the Town Supervisor, Highway Supervisor, and Deputy Town Supervisor. The Town Supervisor represented the community on the Otsego County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).



Town of Roseboom Worksheet #1			
Project Name:	Purchase portable generator and trailer.		
Project Number:	T. Roseboom-1		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Tornado, Hurricane, Extreme Temperature, Drought, Wildfire		
Description of the Problem:	In times of power outages, the Town Barn lacks power during disasters. This can create challenges for the town employees to respond to the needs of the town in severe weather events.		
Action or Project Intended for Implementation			
Description of the Solution:	Purchase and install a permanent generator to supply emergency power to the Town Highway facility.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	500 year	Estimated Benefits (losses avoided):	No loss of service for workers relying on emergency facilities.
Useful Life:	5 to 30 years	Goals Met:	1, 2
Estimated Cost:	\$20,000	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	Medium	Desired Timeframe for Implementation:	Within 5 years
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	HMGP, PDM, Budget
Responsible Organization:	OES, Hazard Mitigation Committee Rep.	Local Planning Mechanisms to be Used in Implementation if any:	Provide emergency power to critical infrastructure
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Purchase 1 portable generator	\$7,000 to-\$10,000	Town provides solution.
	Move the function of the highway garage to alternate location	Unknown	Large enough facility to house this operation is difficult to find.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Purchase portable generator and trailer.	
Project Number:	T. Roseboom-1	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	0	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	0	
Multi-Hazard	1	
Timeline	0	
Agency Champion	1	
Other Community Objectives	1	
Total	6	
Priority (High/Med/Low)	Medium	



Town of Roseboom Worksheet #2			
Project Name:	Increase culvert tube on Stannard Hill Rd.		
Project Number:	T. Roseboom-2		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Tornado, Hurricane, Extreme Temperature, Drought, Wildfire		
Description of the Problem:	In times of storms, water overtops Stannard Hill Rd. damaging the roadway, restricting access for residents and emergency response.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Roseboom would increase the diameter of the culvert tube on Stannard Hill Rd. to handle a 100-year flood level to reduce the effects of severe weather events to that immediate area.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	100-year	Estimated Benefits (losses avoided):	Avoid costly repairs, lengthy detours, and minimize response costs
Useful Life:	30 years	Goals Met:	1, 2
Estimated Cost:	\$250,000	Mitigation Action Type:	Structure and Infrastructure Project (SIP)
Plan for Implementation			
Prioritization:	Medium	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	1 year	Potential Funding Sources:	HMGP, PDM, Municipal Budget
Responsible Organization:	Highway Superintendent	Local Planning Mechanisms to be Used in Implementation if any:	Flood Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Relocate roadway	500,000 or more	Expensive and road would need to be closed at times.
	Close Road - dead end to a single access.	Minimal	Restrict access to residents and emergency responders, one-way in could be dangerous in emergency situations.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Increase culvert tube on Stannard Hill Rd..	
Project Number:	T. Roseboom-2	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Culvert could fail as is under heavy rain condition
Property Protection	0	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	-1	
Fiscal	1	
Environmental	0	
Social	0	
Administrative	0	
Multi-Hazard	0	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
Total	5	
Priority (High/Med/Low)	Medium	