

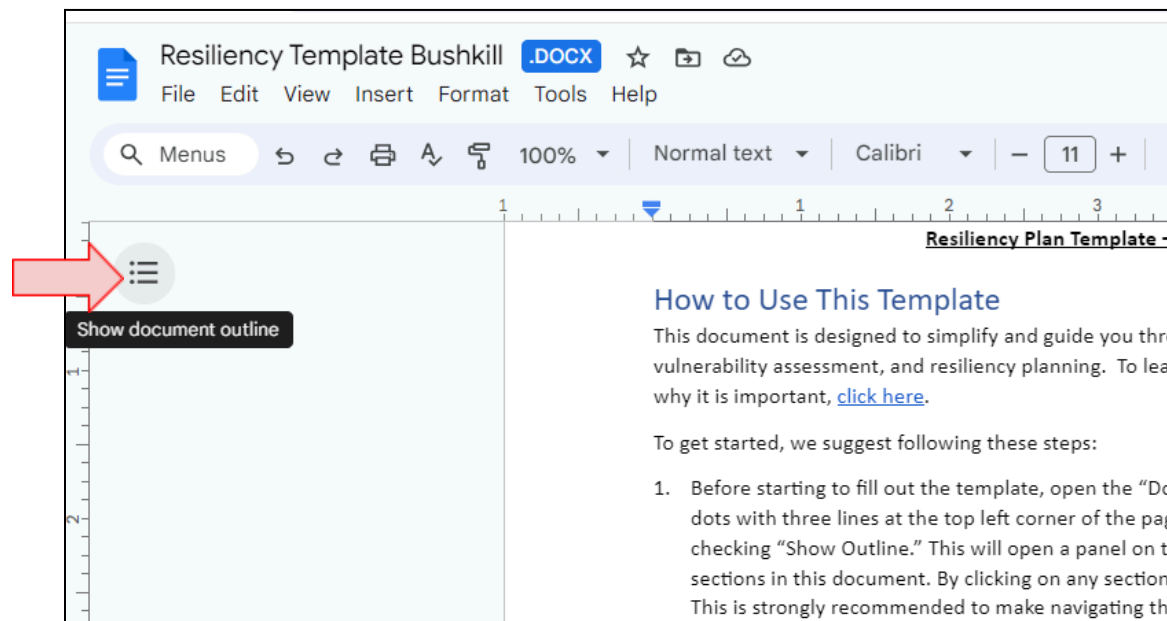
Resiliency Plan Template

How to Use This Template

This document is designed to simplify and guide you through the process of asset mapping, hazard and vulnerability assessment, and resiliency planning. To learn more about what resiliency planning is and why it is important, [click here](#).

To get started, we suggest following these steps:

1. Before starting to fill out the template, open the “Document Outline” by either clicking on the three dots with three lines at the top left corner of the page (see image below) or clicking on the “View” menu and then checking “Show Outline.” This will open a panel on the left side of your screen that lists all of the sections in this document. By clicking on any section, you can jump to that part of the document. This is strongly recommended to make navigating this long document easier.



2. Review the hazards listed in each section and the questions asked about each hazard. Note that the questions are roughly the same for each hazard.
3. Assemble materials that might help inform the plan, including municipal maps, photos or accounts of past hazard events, other municipal plans, regional or state Hazard Mitigation Plans, and information related to any current programs such as emergency communication systems, flood response, stormwater management, etc. If you have been designated to complete the template, you might also consult with other staff or officials from your municipality to understand their priorities for the plan and any information they would like to see included. This collaboration can also occur after you have filled out the template to get feedback on what is included in the process of getting the plan adopted by your municipality.
4. Go through each section and answer the prompts to provide information about resilience in your municipality. In each section you will see yellow text boxes for you to fill in information. You will also

see links throughout that you can click to jump to different places within the document as an alternative to using the Document Outline.

5. In addition to the text you enter in this template, you can include photos, maps, and images in your final resiliency plan. These could be inserted into specific sections of the plan or included as an appendix at the end of the plan.
6. After completing the template, you may choose to reformat the information you have entered into a more formal “report” document with paragraphs of text rather than bulleted question prompts and responses.
7. If at any point you have a question or encounter an issue with the template, please email Lauren at lfosbenner@nurturenaturecenter.org.

Resiliency Planning

Resiliency planning focuses on both emergency response after a disaster and longer-term actions that reduce risk and vulnerability to hazards over time. By creating a resiliency plan, your municipality will set goals and identify specific actions to become more prepared for a variety of potential hazards. You will also begin the proactive process of building resilience to ever-changing future hazards by enhancing and linking existing community assets.

This template is for a resiliency plan with an environmental/climate focus, so some non-natural hazards like civil disturbances, drug overdoses, etc. are not included.

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Municipality Overview

- a. Please provide a brief (1-2 paragraph) description of your community. It should highlight what you think are the most important features or characteristics of your municipality. Some examples might include descriptions of population size, demographic information, the local economy, and geography.

Please type your response here.

- b. Please describe any particular events or stories that are important to understanding or characterizing your community's experiences with hazards.

- c. Is there an organization or physical location in your community that serves as a designated resiliency hub of any kind? If not, can you think of a potential location for one?

- d. What plans already exist for your municipality that may be relevant to resiliency? For example, a comprehensive plan, open space plan, emergency operations plan, stormwater management plan, etc. If a version of any of the plans is available online, please include the link.

- e. Please list and briefly describe any sustainability-related ordinances or initiatives currently in place in your municipality.

Please continue to the next page to begin planning for each priority hazard in your municipality, or [click here to go back to the top of the document to view the full list of hazards.](#)

Hazard 1 out of 14: FLOODING

- a. Is your municipality vulnerable to flooding? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address flooding and make your community more resilient to its effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

Please type your response here.

- c. Please provide at least one short-term goal for your community to become more resilient to flooding. A short-term goal might be something like: Take required steps for participation in the National Flood Insurance Program. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Consult with county emergency management for guidance on utilizing the National Flood Insurance Program. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in flood-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to this hazard is expected to change over time, please provide at least one long-term goal for your community to become more resilient to flooding. A long-term goal might be: Establish natural infrastructure to increase resilience in high-risk flooding areas of the community. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example, write and pass an ordinance requiring natural infrastructure on new development projects in high-risk flooding areas. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 2 out of 14: WATER QUALITY

- a. Is your municipality vulnerable to water quality issues? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address water quality and build resilience of your community's water resources. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to address water quality issues. A short-term goal might be something like: Improve community knowledge of how to prevent non-point source pollution. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Work with fishing and boating groups to develop and share educational materials. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the sources of water pollution, a growing number of residents being exposed to poor water quality, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how water quality issues may change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Improve water quality monitoring to target areas with the most pollution for mitigation. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Partner with Penn State Extension Master Watershed Stewards to apply for a grant to support water testing supplies. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 3 out of 14: INVASIVE SPECIES

- a. Is your municipality vulnerable to invasive species? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address invasive species and make your community more resilient to their effects. Examples could include schools, libraries, volunteer groups, faith-based organizations, watershed or gardening groups with expertise, community centers, centers for art, science, or history, non-profit organizations, parks, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to invasive species. A short-term goal might be something like: Reduce spread of Japanese knotweed in a community park. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Work with local watershed organizations and other volunteers to coordinate an invasive species removal day in a community park. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to invasive species is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Establish an ongoing program to monitor natural areas and address any invasive species. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: work with local Extension office to secure funding and volunteers to run natural area monitoring program. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 4 out of 14: WINTER STORMS

- a. Is your municipality vulnerable to winter storms? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address winter storms and make your community more resilient to their effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to winter storms. A short-term goal might be something like: Increase residents' knowledge about how to understand a winter storm forecast. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Create an educational campaign with a local non-profit about winter storm forecasts and how to stay safe, and distribute materials at the community center and via social media. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to winter storms is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Establish a new community warming center/shelter. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: research funding opportunities for warming centers offered by state or federal agencies like PEMA or FEMA. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 5 out of 14: EXTREME HEAT/HEAT WAVES

- a. Is your municipality vulnerable to extreme heat? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address extreme heat and make your community more resilient to its effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to extreme heat. A short-term goal might be something like: Increase residents' knowledge about how to stay cool during extreme heat. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Partner with libraries and community centers to co-promote their facilities as places to go to cool down. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to this hazard is expected to change over time, please provide at least one long-term goal for your community to become more resilient to extreme heat. A long-term goal might be: Use green space to reduce urban heat island effect. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Begin planning and seeking funding for tree planting and green space along popular downtown pedestrian routes. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 6 out of 14: DROUGHT

- a. Is your municipality vulnerable to drought? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address drought and make your community more resilient to its effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to drought. A short-term goal might be something like: Reduce water use for lawns and landscaping. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Partner with local gardening or watershed groups to make and distribute rain barrels. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to this hazard is expected to change over time, please provide at least one long-term goal for your community to become more resilient to drought. A long-term goal might be: Increase water conservation in municipal government operations. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example, create demonstration areas in municipal parks for gardens and landscaping that do not require irrigation. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 7 out of 14: PANDEMICS

- a. Is your municipality vulnerable to pandemics? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address pandemics and make your community more resilient to their effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to pandemics. A short-term goal might be something like: Increase residents' knowledge about how to keep themselves and those around them healthy. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Create an educational campaign with employers about washing hands, taking sick days, and getting annual flu vaccines, and distribute materials in workplace breakrooms. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to pandemics is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Improve vulnerable populations' access to healthcare services. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: work with local hospital and high school volunteer group to establish program providing free car rides to health appointments for elderly residents. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 8 out of 14: RADON EXPOSURE

- a. Is your municipality vulnerable to radon exposure? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address radon exposure and make your community more resilient to its effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to radon exposure. A short-term goal might be something like: Increase residents' knowledge about how to test for radon. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Create an educational campaign with a local high school class about radon, and distribute materials at the community center and via social media. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to radon exposure is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Make radon testing and mitigation more proactive. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Work with local landlords and real estate agents to develop a new policy requiring radon testing annually in rented residential buildings. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 9 out of 14: WILDFIRES

- a. Is your municipality vulnerable to wildfires? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address wildfires and make your community more resilient to their effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to wildfires. A short-term goal might be something like: Increase residents' knowledge about what determines the risk of wildfires. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Create an educational campaign with a local non-profit about wildfires, and distribute materials at local parks. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to wildfires is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Expand wildfire training and resources at the local fire department. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Work with fire department to apply for grants for new equipment and training. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 10 out of 14: HAILSTORMS

- a. Is your municipality vulnerable to hailstorms? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address hailstorms and make your community more resilient to their effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to hailstorms. A short-term goal might be something like: Increase residents' knowledge about how to get forecast information about hailstorms. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Create an educational campaign with a local news source that will be shared on TV, radio, and social media. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to hailstorms is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Develop community knowledge of what to do before, during, and after hailstorms. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: work with real estate agents to develop a booklet of information for new residents that includes how to respond to common hazards in the area, including hailstorms. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 11 out of 14: SINKHOLES/SUBSIDENCE

- a. Is your municipality vulnerable to sinkholes/subsidence? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might help address sinkholes/subsidence and make your community more resilient to their effects. Examples could include schools, college/universities, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to sinkholes/subsidence. A short-term goal might be something like: Increase residents' knowledge about sinkhole risk and how to stay safe. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Create an educational campaign with a local university class about sinkhole risk featuring stories from residents who have had sinkholes on their property. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to this hazard is expected to change over time, please provide at least one long-term goal for your community to become more resilient to sinkholes/subsidence. A long-term goal might be: Develop a program to help residents with sinkholes on their property access resources to recover quickly. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example, work with PEMA and FEMA to connect residents to resources. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 12 out of 14: LAND USE CHANGES

- a. Is your municipality vulnerable to impacts from land use changes? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might be relevant to challenges associated with land use change. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, and zoning laws. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to successfully address and respond to challenges associated with land use change. A short-term goal might be something like: Understand current resident priorities regarding land use. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Work with public libraries to host community discussions regarding land use priorities. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect the effects of land use changes to evolve over time? This could include changes in the intensity of the hazard itself, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how land use is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Adjust zoning and planning policy to future needs of the municipality. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: work with the planning commission and neighboring municipalities to develop a multi-municipal plan that identifies specific areas for industrial development and preserves other areas for agriculture or open space. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 13 out of 14: AIR QUALITY ISSUES

- a. Is your municipality vulnerable to poor air quality? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might be relevant to challenges associated with air quality. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to successfully address and respond to challenges associated with air quality. A short-term goal might be something like: Improve understanding of air quality within the municipality. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Work with nearby college or university students to monitor air quality. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect the effects of air quality issues to change over time? This could include changes in the intensity of the hazard itself, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how air quality is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Improve residents' ability to stay safe in times of poor air quality, such as when wildfire smoke is present. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: work with county public health office to secure funding for air conditioners and air purifiers for community centers, low-income residents, etc. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Hazard 14 out of 14: LIGHTNING STRIKES

- a. Is your municipality vulnerable to lightning strikes? If you select yes, please answer the remaining questions in this section to populate the final Resiliency Plan. If you select no, this hazard will not be included in your Resiliency Plan. You can skip the remaining questions below and move on to the next hazard.

- yes
 no, [click here](#) to go to next hazard

- b. List any community assets that might be relevant to challenges associated with lightning strikes. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to successfully address and respond to challenges associated with lightning strikes. A short-term goal might be something like: Improve participation in emergency alert/reverse 911 system. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Work with local grocery stores or corner stores to distribute informational materials about the emergency alert system with every purchase. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect vulnerability to lightning strikes to change over time? This could include changes in the intensity of the hazard itself, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how lightning strikes are expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. A long-term goal might be: Increase availability of safe shelters in the event of a lightning storm. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For example: Work with schools, community centers, or other organizations with large facilities to develop plans to use their space as emergency shelter. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to respond to the next hazard, or [click here to go back to the top of the document](#).

Additional Hazard 1 out of 3 (optional)

- a. If there is a hazard your municipality is vulnerable to that was not addressed above, please identify it here so it can be included in the Resiliency Plan. If there are no more hazards to add, please proceed to the [“Next Steps”](#) section:

- b. List any community assets that might help address this hazard and make your community more resilient to its effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to this hazard. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to this hazard is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to add another hazard, or [click here to go back to the top of the document](#).

Additional Hazard 2 out of 3 (optional)

- a. If there is a hazard your municipality is vulnerable to that was not addressed above, please identify it here so it can be included in the Resiliency Plan. If there are no more hazards to add, please proceed to the [“Next Steps”](#) section:

- b. List any community assets that might help address this hazard and make your community more resilient to its effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to this hazard. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to this hazard is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For more guidance on identifying actions that will support your goals, [click here](#).

Please continue to the next page to add another hazard, or [click here to go back to the top of the document](#).

Additional Hazard 3 out of 3 (optional)

- a. If there is a hazard your municipality is vulnerable to that was not addressed above, please identify it here so it can be included in the Resiliency Plan. If there are no more hazards to add, please proceed to the [“Next Steps”](#) section:

- b. List any community assets that might help address this hazard and make your community more resilient to its effects. Examples could include schools, government buildings, libraries, food banks, emergency services, hospitals, faith-based organizations, community centers, centers for art, science, or history, non-profit organizations, parks, public transportation systems, walking or biking trails, ordinances, zoning laws, and bodies of water. For more guidance on how to identify assets, [click here](#).

- c. Please provide at least one short-term goal for your community to become more resilient to this hazard. For more guidance on creating effective goals, [click here](#).

- d. For each short-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For more guidance on identifying actions that will support your goals, [click here](#).

- e. How do you expect your vulnerability to this hazard to change over time? This could include changes in the intensity of the hazard itself due to climate change, a growing population of residents in hazard-prone areas, an increasing number of non-English speaking residents creating a need for new strategies for communication, etc. Please discuss any predicted changes that will impact your community's vulnerability to this hazard.

- f. Considering how vulnerability to this hazard is expected to change over time, please provide at least one long-term goal for your community to become more resilient to this hazard. For more guidance on creating effective goals, [click here](#).

- g. For each long-term goal you list above, establish at least one specific action step to help achieve that goal. Think about leveraging assets for this hazard as you come up with actions. For more guidance on identifying actions that will support your goals, [click here](#).

If you would like to add any more hazards to the plan, you can copy the above “Additional Hazard” section and paste it below as many times as needed.

Otherwise, please continue to the next page to complete the final section of the template, or [click here to go back to the top of the document](#).

Next Steps

When thinking about implementation, it will be helpful to consider personnel, funding/other resources, prioritization, and measures of success for each goal and action step. Please use the space below to begin brainstorming within each of those categories:

- a. Personnel – Which people or groups will be responsible for carrying out the short-term and long-term actions? Please list some of the people and groups who will have large roles in implementing this resiliency plan:

- b. Funding/other resources – What types of funding, partnerships, expertise, or other resources will be needed for each action? How will those resources be secured? Please list some potential sources of funding and other resources or strategies to identify those sources:

- c. Prioritization – Which actions need to be completed immediately, and which will be started later? Please identify some of the most urgent action steps as well as those that would be most beneficial and therefore may be prioritized even if they are not as urgent:

- d. Measures of success – How will you track progress toward the goals you set in this plan? Please describe some possible methods for monitoring and reporting success:

Thank you for completing the resiliency plan template. Nurture Nature Center is interested in documenting the ways this template has been used by municipalities throughout our region and beyond. If you are willing to share your completed template with us, please email it to Kate Semmens, Science Director, at ksemmens@nurturenature.org.

Appendix A: Identifying Community Assets

Assets can include a wide range of resources, from individuals' skills to important institutions to elements of the physical environment. The [U.S. Climate Resilience Toolkit](#) defines assets as “the people, places, and services that your community agrees are important to protect.” Assets provide resources and community strength to build resilience to hazards.

When identifying assets, you might consider different categories, including but not limited to:

- Government Services - municipal buildings, plans and ordinances, fire/police/EMS, public works, etc.
- Infrastructure - bridges, transportation, flood control structures, recycling centers, etc.
- Economic - banks, businesses, major employers, etc.
- Natural - recreation areas, open space, ecosystems, etc.
- Health - medical facilities, food system, mental health services, etc.
- Social and Cultural - museums, K-12 schools, colleges and universities, libraries, nonprofit organizations, community events, places of worship, etc.
- Housing - apartments, houses, shelters, housing communities, etc.
- Community - community leaders, activists/concerned citizens, neighborhood associations, etc.

Your assets should be specific to your community - for example, rather than listing “municipal buildings” you might list “City Hall on 4th Street,” or rather than listing “major employers” you might list “St. Luke’s Children’s Hospital”.

You might ask, “What features, services, and opportunities make this a good place to live and work? What neighborhoods, historic sites, schools, tourist attractions, or retail centers make this place special?” Some communities utilize a [community street audit](#) to identify assets by sending community members out to record the assets they encounter on a walk in the community.

Examples:

- Liberty Park - amphitheater, sports fields, walking path
- Riparian areas along Cook’s Creek - trees and plants
- Lehigh Valley Hospital
- Main Street Business District
- Chamber of Commerce
- Farmer’s market
- Boys and Girls Club, YMCA
- School district facilities

Resources:

- [FEMA’s Community Lifelines](#) - FEMA focuses on assets that are most relevant to community functioning in times of crisis or disruption.
- [Resilient NJ: Identify and Prioritize Assets](#)
- [NCFH Community Asset Mapping Guide](#)

Appendix B: Setting Effective Goals

Goals describe the outcomes you intend to bring about in a particular time frame. The goals should focus on high-level strategies and conditions you want to achieve rather than actions you want to take. For example, a goal might be something like “reduce the quantity and speed of stormwater runoff during heavy rains,” while things like “start a public education campaign about the benefits of green space” or “apply for grants to plant trees and shrubs in areas that experience heavy runoff” are actions. Any goals you create should strike a balance between being ambitious and motivating but also reasonable and accomplishable.

To identify goals for increased resiliency in the face of a particular hazard, think about any past hazard events in your community and how they could have gone differently. Would a higher level of awareness, communication, available resources, or improved physical infrastructure have led to better outcomes?

Finally, consider whether your goal is likely achievable in the short-term or the long-term. In general, think of short-term goals as those that can be achieved through a single concentrated push. They typically address more immediate and urgent needs. Long-term goals are achieved through more complex efforts, possibly in different phases over time. There are no set guidelines on what timeframe is considered short-term or long-term. This is something that your municipality will have to decide. Alignment with budget and/or election cycles are possible strategies to make the distinction (e.g., short-term goals can be achieved in a single budget cycle or prior to the next election, while long-term goals take multiple budget cycles or require implementation across multiple election cycles).

Examples: Short-Term Goals

- Reduce street flooding from blocked storm drains.
- Increase residents' knowledge about how to identify invasive species.
- Increase access to radon testing devices.
- Ensure residents are prepared to stay in their homes for several days if an earthquake disrupts a major roadway.
- Identify areas at highest risk of landslides.
- Understand current resident priorities regarding land use.

Examples: Long-Term Goals

- Establish natural infrastructure to protect high-risk flooding areas of the community.
- Improve resident access to affordable tree care services.
- Establish an ongoing program to monitor natural areas and address any invasive species.
- Establish a new community emergency center.
- Improve vulnerable populations' access to healthcare services.
- Improve infrastructure in areas most prone to landslides to reduce risk.

Resources

- [EPA guidance on setting general and specific climate goals](#)
- [Examples of municipal energy efficiency goals](#). The majority of these are quantitative, but your goals might not be easily quantifiable.

Appendix C: Creating Action Steps

After you've identified your goals, consider what specific actions need to be taken to reach those desired outcomes. To achieve a more informed community or better preparedness for a hazard like flooding, what concrete things need to be done? The action statements could address things such as: Do you need more information about the hazard in your community? How will you get that information? Are any changes needed to local government to focus on climate issues, such as the creation of a committee or task force? What policy changes are needed to address hazards? Where can you obtain funding to implement this plan? What individuals and organizations need to be involved in work to implement this plan? How will you recruit them? How will you get community input and buy-in?

In addition to actions that will be taken by municipal officials or staff, consider actions that invite civic participation, such as volunteering or participation on Environmental Advisory Councils. Resiliency is a community-wide effort, and your plan should include actions that a variety of community members will take. Identifying actions that use existing assets is a good strategy to include different parts of the community. For example, if you've identified a key community meeting space in a park or city building as an asset, consider hosting an event series there. If a major employer is a key asset, consider how they might be a partner in resiliency efforts that will affect their employees or their business.

Examples:

- Work with the local Parks and Public Works Departments to identify commonly flooded areas, and create a plan to convert them into native wetlands.
- Create an educational campaign with a local non-profit about community flooding risk, and distribute materials at the community center and via social media.
- Secure funding for tree removal in areas affected by Emerald Ash Borer infestations
- Draft an ordinance requiring green infrastructure on any new industrial development including warehouses
- Apply for a grant from the Arbor Day Foundation and work with local tree care businesses to provide pruning or other services at free or reduced rates for low-income residents.
- Work with the local Extension office to secure funding and volunteers to monitor natural areas for invasive species.
- Create an educational campaign about radon exposure with a local high school media class.
- Work with PennDOT and LANTA to distribute a survey asking about any landslide risk along the routes people use to commute to work.

Resources:

- [U.S. Climate Resilient Toolkit: Step 3. Investigate Options](#)
- [FEMA Disaster Resilience Case Studies](#)
- [Lehigh Valley Hazard Mitigation Plan](#), or your relevant regional or state Hazard Mitigation Plan