



# Guide to Expanding Mitigation

CONNECTING WITH AGRICULTURE AND FOOD SYSTEMS

REGION 10



FEMA

RiskMAP  
Increasing Resilience Together

The *Guide to Expanding Mitigation: Connecting with Agriculture and Food Systems* can help community officials create effective connections with individuals and businesses in this critical sector. The guide is designed to improve understanding, preparation and planning for hazard events by local officials.

This guide also gives community and tribal leaders information they need to:

- Begin conversations.
- Build partnerships.
- Plan for and invest in mitigation projects.

These steps can increase the resilience of local and regional food systems.

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Local, fresh food is a priority in this region. Restaurants boast farm-to-table entrees. Weekly farmers markets pop up throughout rural and urban neighborhoods. Dockside fish markets dot our coastlines. The agriculture and food sector is important to local economies. Food is essential, yet communities in Alaska, Idaho, Oregon and Washington often overlook risks affecting the local food system when they plan for natural hazards.

Acting to mitigate the risks of future disaster events increases community resilience. It can also protect the vital local resources where people farm, ranch, fish, hunt and gather food. Communities and tribes should include members of the food systems network in their hazard mitigation planning process to better understand and address this sector's key challenges through resilience-based efforts.



## WHAT ARE FOOD SYSTEMS?

According to the American Planning Association, they are a geographically integrated chain of activities that connect the production, processing, distribution and consumption of food.

While food systems are discussed throughout, this guide mainly focuses on agriculture and food production. This is used as an umbrella term to refer to both commercial and subsistence-based farming, ranching, fishing, hunting and gathering activities (see page 3 for more information on common types of agriculture and food production in our region).

Learn more about food systems at: <https://www.planning.org/knowledgebase/food/>.

## HAZARD MITIGATION PLANNING PROCESS

State, local, tribal and territorial governments use hazard mitigation planning to identify their risks and vulnerabilities to natural disasters. Planning includes developing long-term strategies for protecting people and property from future hazard events ([FEMA.gov](https://www.fema.gov)). FEMA requires hazard mitigation plans for certain grants and non-disaster programs.



## AGRICULTURE AND FOOD PRODUCTION IN OUR REGION

Protecting local resources and products from natural hazard events can support and enrich local and global food security. This, in turn, strengthens the local economy.

Alaska, Idaho, Oregon and Washington offer a wide variety of goods. Wine, fish, produce, dairy and livestock are just a sample. In this region, rural communities also rely heavily on independent growing, gathering, hunting and fishing to survive. When we consider the variety of wild and farmed resources, the number of people the sector employs, our dependency on these resources for food, and the economic impact of losing them, it is clear that mitigating the effects of hazardous events is essential.



### WHAT IS FOOD SECURITY?

In brief, it is a community's ability to access (physically and economically) enough safe and nutritious food. For more information on how the United States Department of Agriculture (USDA) is working toward global food security, visit: <https://www.usda.gov/topics/food-and-nutrition/food-security>.

## COMMON TYPES OF AGRICULTURE AND FOOD PRODUCTION IN OUR REGION



### Agriculture

The science or practice of farming, including growing crops and raising animals to produce food, fiber, fuel and other products.



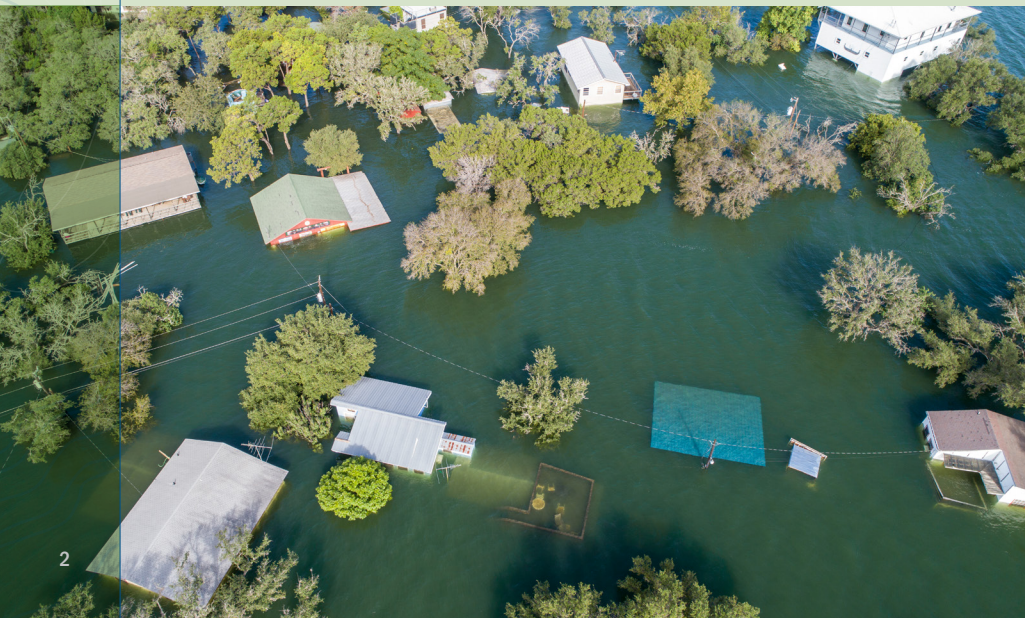
### Aquaculture (also referred to as aquafarming)

Cultivating aquatic animals and plants, such as shrimp, fish, oysters, clams and seaweed. This farming can use either inland (freshwater) or coastal (brackish or seawater) areas.



### Subsistence-Based Activities

Hunting, fishing, gathering and farming for food and goods that are mostly consumed by the farm family, with little surplus for sale or trade. The lands used for hunting, fishing and gathering are managed to support the reproduction of target species.



## REGIONAL AGRICULTURE AND FOOD PRODUCTION

### — ALASKA

Subsistence-based use of fish and game for consumption is prioritized **first** in Alaska.

Farmers use greenhouses and nurseries to extend the short growing season—making this the **second largest agricultural sector** in the state (by dollar value), after aquaculture.

Rural subsistence users harvest an estimated **36.9 million pounds** of wild foods each year.



**More than 60%** of the commercial seafood harvested in the U.S. comes from here.



### — IDAHO

Agriculture, the largest industry, provides **20% of the gross state product** each year.

Potato crops here account for **30%** of the nation's total.



Up to **85%** of the world's sweet corn seed is grown here.



Idaho is the **top** producer of barley and trout, the **number two** producer of hops and sugar beets and **third** producer of cheese and milk in the U.S.

### — OREGON

Oregon is the nation's **top** producer of hazelnuts, rhubarb and blueberries.

Agriculture makes up nearly **11%** of the state's exports.



The state exports around **80%** of its agricultural products (to other states or countries).



Diverse growing regions and access to the Pacific Ocean result in over **220 commodities**.

### — WASHINGTON

Washington grows **70% of all apples** in the U.S.



Coastal areas include thriving port locations and markets for **seafood**.



The state is the **number one** producer of apples, blueberries, pears, hops, spearmint oil and sweet cherries in the U.S.

**Steelhead trout** and **salmon** fisheries are cooperatively managed by the state and local tribes.



## ENGAGING AGRICULTURE AND FOOD PRODUCTION PARTNERS IN MITIGATION PLANNING

How can we make our communities' agriculture and food production more disaster resilient? Involve farmers, ranchers, fishers and subsistence users in hazard mitigation planning. Bringing these key parties into the planning process will help a community or tribe understand the crucial role of this sector and its potential vulnerabilities. It will also reveal new ways to reduce risk and create resilience. In addition, the people who own, manage and live off the land will become partners in enhancing its resiliency. There are four key ways to foster these types of meaningful partnerships:

- **Identify complementary plans.**
- **Actively pursue collaboration.**
- **Support and connect with your partners.**
- **Look for partners outside the immediate community.**



### ENGAGING WITH FARMERS TO DEVELOP AN AGRICULTURE RESILIENCE PLAN

In Washington, the Snohomish County Conservation District (SCD) formed a steering committee of 11 local farmers. The members represented a variety of farm types, sizes and locations around the county.

This group provided the SCD with valuable insights into questions and issues raised by local farmers. They discussed resilience planning, climate change, growth and salmon habitat. This collaboration resulted in realistic, actionable, and effective assessment tools, including a Flooding Prediction Tool and a Climate Visualization Tool. Their partnership produced mitigation and adaptation strategies that specifically address climate change, flooding, ground water levels, crop impacts from warmer weather and more.

By partnering with experts in agriculture, the SCD strengthened its planning process and built relationships. It also added the needs of those in fishing and farming to the balance.

To learn more about the Agriculture Resilience Plan, visit: <http://www.floodplainsbydesign.org/stories/featured/agricultural-resilience/>.

### Identify Complementary Plans

Complementary plans, like the Agriculture Resilience Plan highlighted on page 6, can help inform the hazard mitigation planning process. These plans can reveal shared objectives and provide a record of past and ongoing activities. Collaborating on separate planning efforts can also identify existing abilities to plan for and apply mitigation activities. Integrating planning efforts can help communities prepare for natural hazard events and speed their recovery.

### Actively Pursue Collaboration

Enlist agricultural partners in planning. Inviting farmers, fishers, ranchers, subsistence users and others to participate can help identify vulnerabilities and mitigation opportunities. Their involvement in planning can align the community's understanding of its hazards of concern, the tolls of past events, potential impacts of future events and ways to reduce risks.

### Support and Connect Your Partners

Involving groups from the agriculture and food production sector in mitigation planning may also benefit other areas of emergency management. Cultivating these connections can lead to new or strengthened partnerships. Involving private businesses and subsistence-based community groups in hazard mitigation planning can build stronger relationships between the agriculture and food production sector and local governments. When various organizations collaborate, the plan can result in mitigation projects that benefit multiple partners.

### Look for Partners Outside the Immediate Community

There are many opportunities for partnerships. Consider organizations and agencies at the federal, state, regional and local levels. They may support local agriculture, food producers or subsistence users. For example, USDA's Natural Resources Conservation Service (NRCS) partners with local communities, Tribal Conservation Districts, nonprofit organizations such as the Alaska Villages Initiative and others. They work to protect rural landscapes and native lands and expand agriculture and fisheries. Many of their projects relate to mitigation and resilience. In one case in Alaska, NRCS worked with native villages to install all-terrain vehicle trails and walkways. The trails reduce erosion and protect habitat to conserve critical hunting and fishing grounds.



### **PARTNERSHIP TO AID FIRE CYCLE**

In 2016, the Bureau of Land Management partnered with local ranchers, the Idaho Department of Lands, Mountain Home Rangeland Fire Protection Association and the Idaho Department of Transportation. They began a 10-year project to build a system of roadside wildfire fuel breaks. This project will create 356 miles of breaks between Boise and Glens Ferry to help stop the fire cycle in Idaho.

For more information, visit: <https://idrange.org/wp-content/uploads/2017/05/paradigm-feature.pdf>.

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### **PARTNERSHIP IN DROUGHT MITIGATION**

Public Utility District No. 1 of Whatcom County, Washington received a grant from the U.S. Bureau of Reclamation to develop a Drought Contingency Plan.

- The plan was finalized in 2019. It includes detailed mitigation and response actions for a range of stakeholders and sectors, including agriculture, forestry and aquaculture.
- The Public Utility District developed the plan with staff from the county, cities and tribes within the county, the State Department of Ecology, the Ag Water Board and others.

To learn more: <https://www.pudwhatcom.org/resource-management/drought-contingency-plan/>.





## SAMPLE PARTNERS TO CONSIDER

Specific organizations and partners invited to the planning process will vary based on location. Here is a list of typical partners to consider from the food systems sector.

<b>FEDERAL</b>	<ul style="list-style-type: none"> <li>• National Institute of Food and Agriculture</li> <li>• National Oceanic and Atmospheric Administration</li> <li>• United States Department of Agriculture               <ul style="list-style-type: none"> <li>- USDA Farm Service Agency</li> <li>- USDA Natural Resources Conservation Services</li> <li>- USDA Northwest Climate Hub</li> <li>- USDA Rural Development</li> <li>- USDA Risk Management Agencies</li> </ul> </li> <li>• U.S. Army Corps of Engineers Silver Jackets</li> <li>• U.S. Department of Interior – Bureau of Indian Affairs</li> </ul>
<b>REGIONAL</b>	<ul style="list-style-type: none"> <li>• Climate Impacts Groups</li> <li>• Tribal Agriculture Councils</li> </ul>
<b>STATE</b>	<ul style="list-style-type: none"> <li>• Academic Institutions</li> <li>• Cooperative Extensions</li> <li>• State Departments of Fish and Wildlife</li> <li>• State Departments of Agriculture</li> </ul>

## LOCAL

- Agricultural Advisory Committees
- Agriculture and Feed Supply Stores
- Agriculture Development Boards
- Board of Fisheries
- Board of Game
- Certified Organic Growers Association
- County Boards of Agriculture
- Employment Development Departments
- Farm Bureaus
- Farmers Markets
- Food Policy Councils
- Grocery Stores
- Nonprofit Associations
- Production Facilities
- Soil and Water Conservation Districts
- Trucking and Transportation Facilities/Partners

## TRIBAL

- Environmental Planning Departments
- Fish and Game Enforcement Departments
- Fisheries Departments
- Harvest Management Departments
- Natural Resources Departments
- Shellfish Hatchery Departments
- Tribal Councils
- Wildlife Programs Departments

## FOOD SYSTEM RISK AND VULNERABILITY ANALYSIS

Naming the vulnerabilities, needs and mitigation options is the first step in effective planning. How might we protect the infrastructure and other services that are vital to this sector? Think in terms of emergency managers, community planners and subsistence users.

### Overview of Hazards and Key Considerations



#### DROUGHT

- How are farms and local lands affected by drought each year?
- Has drought affected natural growing patterns and food availability in past years?
- What can be done to mitigate the impacts of drought in agriculture?
- Are drought-resistant crops available?



#### EARTHQUAKE

- What effects might an earthquake have on farms that rely on well water? *Even moderate earthquakes can disable water wells.*
- What effects might an earthquake have on transportation routes for goods and services?
- Can areas where commodities and livestock are kept and stored withstand an earthquake event?
- How might a large offshore earthquake and accompanying tsunami affect coastal food production and ports?
- How could this affect supply and distribution channels?



#### TSUNAMI



#### EXTREME HEAT

- Have increasing land and sea temperatures been an issue in the past 10 years?
- How have unusually high temperatures affected annual yields of crops and animals? What effect could they have in the future?
- Have higher temperatures made the snow melt faster? If so, what are the local effects?
- How does heat affect production, harvest and other activities?



#### FLOOD

- How have rain patterns changed in the past decade? How might those patterns continue to change?
- Is there land downstream from a burn scar or an area vulnerable to wildfire that could be vulnerable to post-wildfire flooding?
- How does flooding affect land used for agriculture and livestock?
- Is coastal and riverine fishing affected by high tides and flood events?
- Has building in local floodplains caused more agriculture fields to become drainage sites during flooding events?



#### SEA LEVEL RISE

- Are the potential effects of sea level rise well understood and anticipated?
- Which farms and hunting and gathering locations are at risk from future flooding?
- Will saltwater change the water table that farmers rely on or affect sites in other ways?
- Will fisheries and ports be affected?



#### SOIL HAZARDS

*Many natural hazards can cause accidental toxic spills, seeping or other changes to the natural soil.*

- Are landslides a concern in this area?
- How have prior hazards affected local soil?
- What nearby industries or facilities may be of concern?



#### WILDFIRE

*Wildfires can be especially dangerous for ranches, livestock, and lands managed for subsistence-based uses. It can cause health issues in the animals that survive and financial losses from ruined crops, altered landscapes and other damages. Impacts from wildfires may have long-lasting affects: changes caused to the landscape can increase the risk of flooding, erosion and mudflow.*

- How has wildfire affected past production and harvest seasons?
- How does wildfire smoke affect production and livestock health?
- Are measures in place to mitigate the impacts of post-wildfire flooding for landowners, managers and users?
- How has wildfire affected gathering and hunting activities?





### SEVERE STORMS (Winter, Wind, Lightning)

- How are livestock affected by severe storms?
- Are structures such as wind breaks needed to shelter animals?
- How are crops and yields being stored? Are they protected from the most extreme elements?
- Have severe storms caused limited access or reduced safety for hunting and gathering?



### PANDEMIC/ EPIDEMIC

- Are protections in place to keep a pandemic or epidemic from disrupting the supply chain?
- Are necessary provisions, such as sanitization stations, available to maintain health and safety?
- Is personal protective equipment readily available for farmworkers and producers?



### ADDITIONAL CONSIDERATIONS

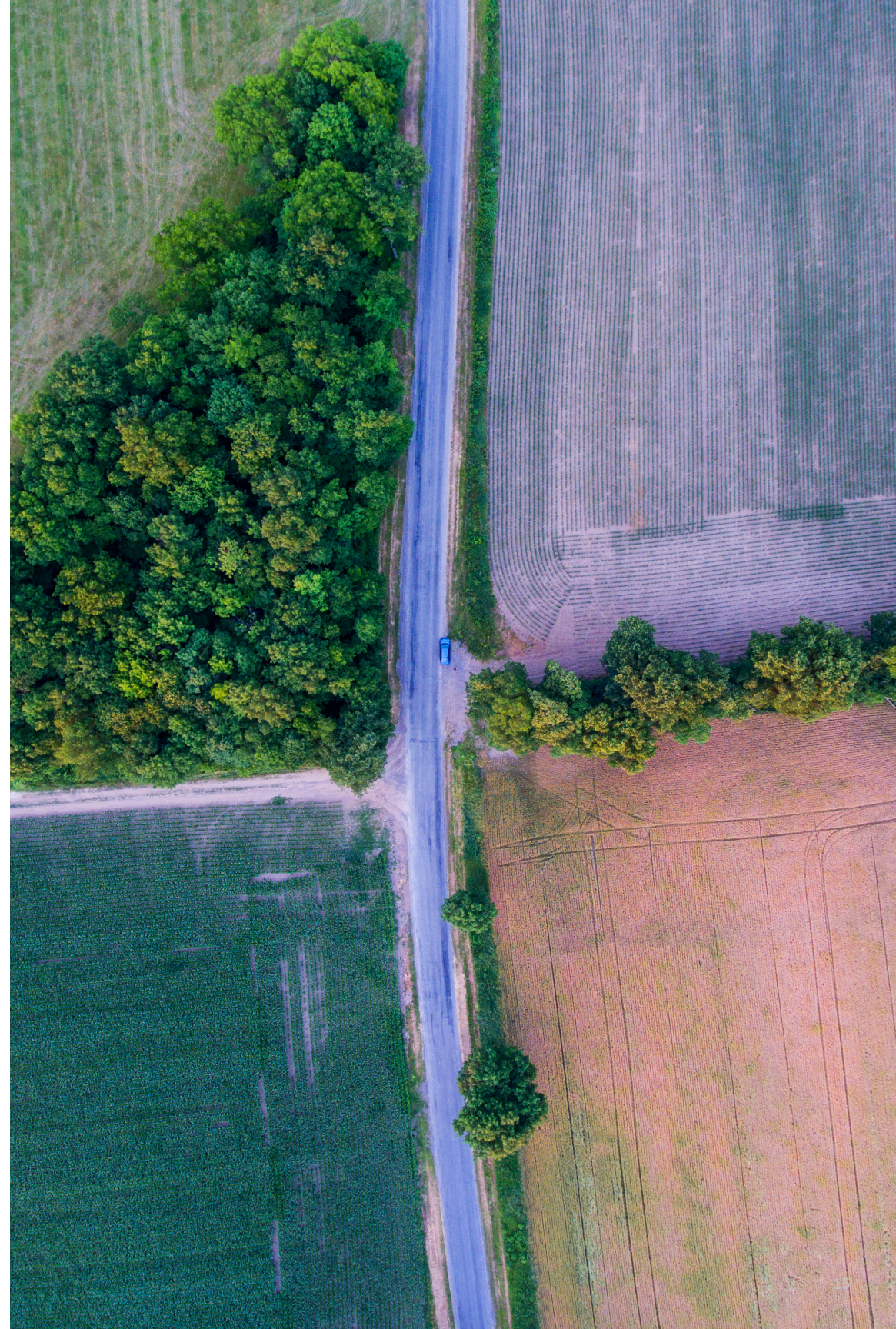
- To what degree are farms, ranches and hunting and gathering lands vulnerable to changes from development, erosion, dam controls, land management practices and nonpoint source pollution?
- Are changing weather patterns affecting hunting and gathering seasons or the availability of local resources?
- What are the special needs of subsistence growers, gatherers and fishers?
- Do farmers/producers have an evacuation plan for themselves and their livestock in case of a natural hazard event?



#### DID YOU KNOW?

Climate change affects natural hazards. Rising temperatures, precipitation changes, extreme weather events, season changes, lower livestock productivity and sea level rise may all threaten food systems in our region.

For information on how Washington is preparing for climate change, view the 2012 strategy document *Preparing for a Changing Climate* at: <https://fortress.wa.gov/ecy/publications/publications/1201004.pdf>. Chapter 8 discusses agriculture.



## AGRICULTURAL AND WORKING LANDSCAPES ENHANCE RESILIENCE

Local emergency managers, planners and officials should consider how to use working landscapes as part of an overall hazard mitigation strategy. Seasonal or planned farming in floodplains can keep higher risk properties and structures from being built there. Farmland preservation programs can keep these lands agricultural. These programs may use contracts or conservation easements that pay farmers to keep using the land for agriculture. Many private land trusts, as well as state and federal programs such as the Natural Resources Conservation Services (NRCS), work to preserve farmlands.

Many soil health practices by individual farmers can reduce drought conditions, erosion and flood hazard risks downstream. No-till planting, the use of cover crops or perennial crops, like alfalfa, and sustained biodiversity can reduce erosion and flooding. They do this by holding the soil in place and raising the level of moisture the soil can absorb. According to the Union of Concerned Scientists, these soil health practices can reduce water runoff from extreme weather events by up to 20%. As well as protecting downstream properties, this replenishes the natural water table. Planting vegetative buffers are another useful and low-cost tool to reduce risk. They protect the streams they border. Federal funds to share the cost of creating these buffers are available through USDA programs such as NRCS' Environmental Quality Incentives Program and Farm Service Agency's (FSA) Conservation Reserve Program.



### AGRICULTURE AS A PREFERRED LAND USE IN A FLOODPLAIN

The Flood Mitigation Policies of the Lummi Nation in Washington states that land uses that “preserve the natural flood storage and conveyance functions of the floodplain,” including agriculture, are preferred.

To review the Lummi Nation Hazard Mitigation Plan, visit: [https://www.lummi-nsn.gov/userfiles/79\\_MHMP%202015%20Update%20FINAL%20wAPPENDICES.pdf](https://www.lummi-nsn.gov/userfiles/79_MHMP%202015%20Update%20FINAL%20wAPPENDICES.pdf).

### COVER CROPS USED TO PREVENT SOIL EROSION

The winter of 2017 brought record rainfall and severe snow and ice storms to the Willamette Valley in Oregon. Many farms in the region struggled with soil erosion. Ioka Farms, a 120-acre hazelnut orchard in Silverton, persevered due to its cover crop planted between the hazelnuts.

For more information, visit: <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/or/newsroom/stories/?cid=nrcseprd1332825>.

Government and local groups that support agriculture and food production play an important role in advancing hazard mitigation in working landscapes.

- Soil and Water Conservation Districts, state governments and local NRCS and FSA offices work with farmers and landowners to enhance resilience, both before and after hazard events.
- Programs such as NRCS' Emergency Watershed Protection Program and FSA's Emergency Conservation Program help communities with response and recovery efforts to protect natural resources and land.
- County and tribal districts work with individual farmers and landowners to keep agriculture sustainable and lands resilient.
- NRCS and FSA offer financial assistance for landowners to offset the cost of projects that improve private properties.

Through the mitigation planning process, communities and tribes can explore these complementary funding sources as mitigation strategies.





## MOTIVATING ENVIRONMENTAL PROTECTION AND MITIGATION THROUGH SMALL GRANTS



In Washington, the Whatcom County Conservation District helps local farmers develop livestock farm plans to increase farming sustainability, efficiency and profitability.

- The planning process aligns farming practices with the Whatcom County Critical Areas Ordinance (CAO).
- Farmers who plan to use critical areas on their property (defined by the CAO as wetlands, streams and critical recharge areas) must have an approved farm plan on file with the county.
- Farmers are eligible for a small grant that supports minor improvements, like adding fencing to keep animals out of waterways to prevent water pollution or gutters on farm buildings to prevent runoff.

More information on the Small Farm Program can be found here: <https://www.whatcomcd.org/small-farm>.

## PRESERVING NATURAL RESOURCES TO PROTECT SUBSISTENCE-BASED ACTIVITIES

In Alaska, the Tyonek Tribal Conservation District (TTCD) covers 6.6 million acres. Its mission is to conserve, enhance and encourage the wise use of natural resources.

- Preserving subsistence resources—fishing, hunting, gathering—nourishes the tribe’s culture and heritage, as well as their physical needs.
- TTCD works with the Native Village of Tyonek, the Tyonek Native Corporation, NRCS, the U.S. Fish & Wildlife Service, the Alaska Department of Fish & Game and others to monitor, preserve and restore habitat.
- Its projects have included removing barriers to safe fish passage (such as undersized or poorly placed culverts) to ensure salmon have access to their spawning grounds. Other projects create fire breaks to mitigate the impacts of wildfires.

For more information, visit: <https://ttcd.org/>.

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## PRACTICES THAT MONITOR FOREST HEALTH AND ENHANCE RESILIENCE

In Alaska, the Hoonah Native Forest Partnership brought together federal, state, local and tribal governments and nonprofit groups. They used remote sensing and field surveys to assess the region’s forest health and value for subsistence hunting and gathering. Based on this data, the partnership targeted conservation and resilience practices.

Learn more at: <https://storymaps.arcgis.com/stories/b14cc554ba9b400cb60c14184ed41c11>.



## FUNDING MITIGATION PROJECTS

Bringing in partners who understand the available funding is an important part of planning. Many funding opportunities will support plan building and mitigation efforts for the food systems sector. These include funds from the USDA, their NRCS branch, the FSA and many others. These agencies help private owners increase the resilience of their land by offsetting the cost of reducing impacts from natural hazards.

FEMA does not directly fund private sector projects nor agricultural mitigation projects. However, FEMA's Hazard Mitigation Assistance grants can support projects to mitigate hazards—like drought and flooding—that affect food systems. FEMA's Building Resilient Infrastructure and Communities (BRIC) program emphasizes investing through innovative partnerships. It has an added focus on infrastructure projects and community lifelines, which include “food, water and shelter.”

- To learn more about FEMA's community lifelines, visit: <https://www.fema.gov/emergency-managers/practitioners/lifelines>.
- For more funding opportunities, see our resources section on page 23 of this booklet.

## PANDEMIC RESPONSE AND FARMWORKER PROTECTION

COVID-19 resulted in housing and transportation restrictions and enhanced sanitization measures for agricultural workers. In response, the Oregon Department of Agriculture and Oregon Watershed Enhancement Board joined forces to create the Food Security and Farmworker Safety Program (FSFS). Leveraging COVID-19 relief funds, FSFS aimed to secure Oregon's food chain supply and protect essential producers and farmworkers through a reimbursement-oriented grant program.

Farm owners were eligible to be reimbursed for expenses incurred to protect their workforce. These included adjusting housing structure, installing plexiglass and more sanitization stations and portable toilets, increasing transportation to allow for social distancing and more.

Those involved in the FSFS program identified key takeaways that can be widely applied to natural hazard mitigation and response.

- **Look to uncommon relationships.** Oregon Watershed Enhancement Board's expertise in grant management and experience in developing robust documentation structures made them an ideal—if unexpected—partner for Oregon's Department of Agriculture.
- **Word of mouth is an asset, and early and transparent outreach is key.** When engaging with another sector, avoid the spread of misinformation by reaching out to provide accurate information and resources.
- **Response cannot take place in a vacuum.** For individuals, disaster and natural hazard events are not isolated—consider how such events overlap. Anticipate cascading impacts. Prepare to be flexible.
- **Reduce surprises.** It is hard to prepare for a pandemic since the effects are not always understood. Think through the various ways a virus might spread (and the impacts other hazards may cause) to identify the right precautions to apply.
- **Establish a financial support system.** Food producers often operate with low profit margins and thin budgets. Large spikes in cost have direct, negative impacts. Setting up a financial support system to apply the mitigation is critical to success and important for the community being helped.

## RESOURCES FOR FOOD SYSTEMS AND HAZARD MITIGATION EFFORTS

### Extension Disaster Education Network

<https://eden.lsu.edu/>

*Disaster-specific courses, exercises, and resources from educators in extension programs.*

### FEMA Guidance: Floodplain Management Requirements for Agricultural and Accessory Structures

<https://www.fema.gov/media-collection/floodplain-management-requirements-agricultural-and-accessory-structures>

*Guidance bulletin that clarifies and refines the requirements that apply to certain agricultural structures in Special Flood Hazard Areas.*

### FEMA Hazard Mitigation Planning

<https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning/create-hazard-plan>

*Standards and guidance for the planning process.*

### Fourth National Climate Assessment

<https://nca2018.globalchange.gov/chapter/10/>

*The effects of climate change on agricultural productivity, the health of people and ecosystems, and the vulnerability of rural communities.*

### U.S. Climate Resilience Toolkit – Tribal Resilience Resource Guide

<https://toolkit.climate.gov/tool/tribal-resilience-resource-guide>

*Provides resources for tribal resilience to aid agencies or organizations who provide tribal and/or resilience support.*

### USDA Climate Hubs

<https://www.climatehubs.usda.gov/actions-and-resources/programs>

*A compilation of all USDA programs and resources that assist with the adaptation and mitigation of climate change.*

### USDA Disaster Resource Center

<https://www.usda.gov/topics/disaster>

*Information about USDA and other assistance for recovering from disasters and building resilience.*

### WaterSMART Data Visualization Tool

<https://www.arcgis.com/apps/MapJournal/index.html?appid=043fe91887ac4ddc92a4c0f427e38ab0>

*An interactive map with information on water conservation projects aimed at mitigating the effects of drought.*

## FUNDING RESOURCES

### Bureau of Reclamation WaterSMART Drought Response Program

<https://www.usbr.gov/drought/>

### FEMA's BRIC Resources

<https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>

### U.S. Climate Resilience Toolkit - Funding Opportunities

<https://toolkit.climate.gov/content/funding-opportunities>

### USDA-Farm Service Agency Disaster Resources

• [https://www.farmers.gov/sites/default/files/2020-04/FSA\\_DisasterAssistance\\_at\\_a\\_glance\\_brochure\\_.pdf?utm\\_source=landing&utm\\_medium=spotlight&utm\\_content=spot8&utm\\_campaign=fsadisastersglance](https://www.farmers.gov/sites/default/files/2020-04/FSA_DisasterAssistance_at_a_glance_brochure_.pdf?utm_source=landing&utm_medium=spotlight&utm_content=spot8&utm_campaign=fsadisastersglance)

• <https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/index>

### USDA Grants & Loans

<https://www.usda.gov/topics/farming/grants-and-loans>

### USDA Natural Resource Conservation Service Funding Opportunities

<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/?&cid=stelprdb1048817>



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