





# AGRICULTURE RESILIENCE PLAN FOR SNOHOMISH COUNTY



## THE PLAN

"Resilience" is defined as the ability of something to withstand change or difficulties. Farmers have honed this skill – constantly adapting to changes in markets, regulations, and weather over the

years. Now, climate change has introduced a new set of challenges. We've already experienced increased temperatures and higher intensity rainfall events, and these and other impacts are expected to continue into the future.

Snohomish County needed a plan, and our staff at the Snohomish Conservation District, in partnership with our local farming community, made one.

The Agriculture Resilience Plan is intended to be a roadmap for adapting to future challenges. The goals of this plan are to:

Provide information and project funding for farmers to manage for future risk on their farms

Develop landscape-scale projects to improve agricultural resilience Protect agricultural lands from subdivision or development







## IMPACT ASSESSMENT

## What are the biggest environmental challenges for our agricultural community, and how are they expected to change in the future?

We worked with our partners to develop flood projections, assessments of rising sea level effects on groundwater, and a fusion of climate change impacts on crop growing conditions.



### **Flooding Farmland**

More flooding means more farmland underwater, especially during our ever-increasing storms. Extreme flooding is categorized by years from historical data. For example, a flood that has a two-year recurrence interval is a "two-year" flood. We can expect tens of thousands of additional acres to be swamped by two-year floods by 2050.



READ

#### **Hotter Summers**

Rising temperatures in summer months are expected to negatively affect certain Western Washington crops, while at the same time provide opportunities for new varieties of crops, trees and other types of agricultural production. Temperature models project a decrease in summer precipitation that will impact yields where no irrigation water is available.



#### **Rising Waters**

In the lower floodplains, rising sea levels are expected to delay the time when farmers can start working their fields in the spring by up to four weeks by the 2050's, and five weeks by the 2080's. Delayed planting can impact the farm's harvest and causes farmers to lose money.



### **Crops in Saltwater**

Patches of farmland already have saltwater intrusion above what crops can tolerate in the Lower Stillaguamish River Valley, and it's only expected to get worse over the next 50 years.

For projected changes related to water, visit The Nature Conservancy's Coastal Resilience Tool at https://maps.coastalresilience. org/washington/

**MORE** For projected changes in temperature, growing seasons and precipitation, visit Washington State University's Climate Visualization Tool at http://agclimatetools.cahnrs.wsu.edu/cbcct/

## RESILIENCE NEEDS

"This is not a plan that's going to sit on a shelf somewhere. It's a plan that's going to lead to action to help real farmers with real concerns."

Karen Wolden-Fuentes, Hazel Blue Acres Farm

Our farmers helped us pull together the needs of the farming community for eleven agricultural reaches within the floodplains. These "Reach Summaries" outline current farming techniques, infrastructure and projected challenges for agriculture, and prioritize the most important resilience needs for their area. Some of the major themes are listed below.



#### We need collaboration and partnership.

Putting the plan into action is the best way to protect the future of our farmlands. But no one can do it alone.

With our partners, communities and government bodies, we can work together to manage our land and natural resources in a changing, uncertain time. Through partnerships made with the Sustainable Lands Strategy (SLS), the farming community hopes to find solutions that work for everyone.

A project list is constantly adapting to reflect the changing needs of our agricultural community and the collaborative process facilitated by the SLS to develop innovative, landscape-scale solutions to community resilience.

**How to be engaged:** Visit our website to learn more about this project, access the full Plan, or subscribe to the quarterly e-newsletter: www.snohomishcd.org/ag-resilience.

To learn more about projected impacts to your farm or how you can get involved, contact:

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#### **BROUGHT TO YOU BY:**



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