“The Agriculture Resilience Plan is an effort to help all of us farmers weather the changes that are coming in the future. It’s a way for farmers to raise their voices together and create change to benefit agriculture.”

- Libby Reed
Sustainable Lands Strategy
Changes Are Coming - Strengthening the resilience of the local farming community in Snohomish County

https://snohomishcd.org/ag-resilience
Steering Committee

- Brian Bookey, Cherry Lane Farms
- Libby Reed, Orange Star Farms
- Jeff Ellingsen, SCD Board and farmer
- Nick Pate, Raising Cane Ranch
- Dan Bartelheimer, Sno Valley Farm
- Jeremy Visser, dairy farmer
- Darren Carleton, Carleton Farms
- Spencer Fuentes, Hazel Blue Acres
- Andrew Albert, Andrew’s Hay
Outreach

- Quarterly Steering Committee meetings
- Photovoice
- Numerous presentations
- 8 community meetings
- Over 75 farmers provided input

RESILIENCE

Climate change in this region has brought early floods and late floods, drought and most recently, the highest spring rainfall in recorded history. As farmers, we take note of these and other changes in the natural world because it’s part of our job. Our livelihoods are born of these natural processes (growing plants, raising livestock) and they are constantly in flux in small and large ways.

It is humbling to work amidst the call and response of nature.

Libby Reed, Orange Star Farm
Farmland Conservation

15,000 acre 10 year goal
On-farm Resilience Practices

- Waterbreaks
- Agroforestry
- Silvopasture
- Biochar
- Conservation Agriculture
- Regenerative Agriculture
- Integrated Pest Management
- Managed Grazing
- Rainwater Harvesting
Impacts Assessment

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

Cardno
https://maps.coastalresilience.org/washington/

UW Climate Impacts Group and Fathom
Reach Summaries

- Drainage Improvement District 7
- North and South Forks Stillaguamish River
- Stillaguamish Flood Control District
- Middle Stillaguamish
Reach Summaries
Diking District 1 – Ebey Island

• **Tier I Needs**
  - Drainage infrastructure repair
  - Levee improvements
  - Additional groundwater data analyzed
  - Protect levee from Hwy 2 trestle

• **Tier II Needs**
  - Financial assistance for ditch and waterway cleaning
Middle Snohomish – Tualco Valley and vicinity

- **Tier I Needs**
  - Access to water for irrigation
  - Financial assistance for drainage system maintenance
  - Drainage infrastructure improvements
  - Funding for drought resilience BMPs

- **Tier II Needs**
  - Flood risk training for new landowners
  - Improve flood warning system
  - Research into on-farm drainage infrastructure improvements
  - Reduce upland runoff
Lower Skykomish River

- **Tier I Needs**
  - Protect farmland from riverbank erosion
Diking Districts 2 and 4

- **Tier I Needs**
  - Financial assistance for ditch and waterway cleaning
  - Drainage infrastructure improvements
  - Conserve existing farmland
  - Funding for drought resilience BMPs

- **Tier II Needs**
  - Access to water for irrigation
  - Reduce upland runoff
  - Assistance with beaver management
Drainage District 13

• **Tier I Needs**
  - Drainage infrastructure improvements
  - Financial assistance for drainage system maintenance
  - Reduce upland runoff
  - Permitting assistance
  - Funding for drought resilience BMPs

• **Tier II Needs**
  - Conserve existing farmland
  - Manage impact of nutria on levee integrity
Marshland Flood Control District

- **Tier I Needs**
  - Access to water for irrigation
  - Reduce upland runoff
  - Reduce subsidence
  - Funding for drought resilience BMPs

- **Tier II Needs**
  - Financial assistance for drainage maintenance
  - Flood risk training for new landowners
  - Improve flood warning system
  - Conserve existing farmland
French Slough Flood Control District

- **Tier I Needs**
  - Financial assistance for drainage system maintenance
  - Funding for larger levee and infrastructure projects
  - Access to irrigation water
  - Flood risk training for new landowners
  - Improve flood warning system
  - Reduce subsidence
  - Funding for drought resilience BMPs

- **Tier II Needs**
  - Conserve existing farmland
  - Reduce upland runoff
  - Research into on-farm drainage infrastructure improvements
  - Assistance with permitting for drainage maintenance
County-wide priorities

- Protection from floods
- Access to irrigation water
- Improvements to drainage infrastructure
- Assistance building resilience to drought
- Conservation of farmland
Next Steps

- Collaboration and partnership
- Sustainable Lands Strategy
- Project implementation and farmland protection

- PROJECT LIST
Cindy Dittbrenner
Natural Resources Program Manager
Snohomish Conservation District
cindy@snohomishcd.org
snohomishcd.org/ag-resilience

Funders:
➢ NOAA
➢ Stillaguamish Lead Entity
➢ Floodplains by Design
➢ ESRP Learning Program
➢ EPA National Estuary Program
➢ King CD
Drainage District 7 – Skagit Flats

**Tier I Needs**
- Access to water for irrigation
- Sea dike improvements
- Increase capacity of existing drainage infrastructure
- Funding for drought resilience BMPs

**Tier II Needs**
- Financial assistance for ditch and waterway cleaning
- Additional groundwater well data collected and analyzed
- Reduce upland runoff
- Research new crop varieties
Lower Stillaguamish River

**Tier I Needs**
- Access to water for irrigation
- Additional groundwater data collected
- Increase capacity of existing drainage infrastructure
- Reduction in flood damages
- Financial assistance for ditch and waterway cleaning
- Increased funding available for larger levee and drainage projects
- Research new crop varieties
- Funding for drought resilience BMPs

**Tier II Needs**
- Protect existing farmland
Middle Stillaguamish

- **Tier I Needs**
  - Access to water for irrigation
  - Reduction in flood damages
  - Conserve existing farmland
  - Funding for drought resilience BMPs
  - Improve flood warning

- **Tier II Needs**
  - Financial assistance to repair shoreline armoring
  - Financial assistance for ditch and waterway cleaning
  - Drainage system maintenance
  - Reduce upland runoff
  - Farm pads
N. and S. Forks Stillaguamish

- **Tier I Needs**
  - Reduction of flood damages
  - Protect from bank erosion
  - Protect farmland from flood debris
  - Access to irrigation water