

Agriculture Resilience Plan for Snohomish County

Prepared by:

Snohomish Conservation District

December 2019



COVER PHOTO CREDIT:

Lorenzo Townsend, Snohomish Conservation District, 2019.

Agriculture Resilience Plan for Snohomish County

Prepared by:

Snohomish Conservation District

528 91st Avenue Northeast

Lake Stevens, WA 98258



December 2019

Table of Contents

Table of Contents	iii
Acknowledgements	v
Executive Summary	vii
Figure E-1. Plan Study Area	ix
Chapter I. Introduction	1
Chapter II. Outreach and Engagement.	5
Chapter III. Farmland Conservation	7
Table III-1. Farmland Prioritization Acreage.	9
Figure III-1. Snohomish County Farmland Conservation Priorities.	11
Chapter IV. Resilience Practices	13
Chapter V. Impacts Assessment	17
Table V-1. Projected Extent of Flooding	18
Table V-2. Projected Days Per Year Stage Thresholds are Exceeded	19
Table V-3. Relative Sea Level Rise Projections	19
Figure V-1. SLR Delay to Spring Crop Cultivation, Snohomish Watershed, Year 2050	27
Figure V-2. SLR Delay to Spring Crop Cultivation, Snohomish Watershed, Year 2100	28
Figure V-3. SLR Delay to Spring Crop Cultivation, Stillaguamish Watershed, Year 2050	29
Figure V-4. SLR Delay to Spring Crop Cultivation, Stillaguamish Watershed, Year 2100	30
Figure V-5. Projected Depth-to-Groundwater Map for Ebey Island and Vicinity	31
Figure V-6. Future Conditions Depth-to-Groundwater Map for Ebey Island and Vicinity	32
Figure V-7. Early Summer Salinity Intrusion to Groundwater.	33
Chapter VI. Priority Needs	37
Chapter VII. Reach Summaries.	41
Figure VII-1. Stillaguamish River floodplain reaches	42
Figure VII-2. Snohomish River floodplain reaches	43
Figure VII-3. Map of Drainage District 7.	44

Figure VII-4. Map of the Stillaguamish Flood Control District. 47

Figure VII-5. Map of Middle Stillaguamish River floodplain. 51

Figure VII-6. Map of North and South Forks of the Stillaguamish River floodplain. 54

Figure VII-7. Map of Diking Districts 2 and 4.. . . . 56

Figure VII-8. Map of Diking District 1 – Ebey Island. 60

Figure VII-9. Map of Drainage Improvement District 13. 64

Figure VII-10. Map of Marshland Flood Control District. 68

Figure VII-11. Map of French Slough Flood Control District. 72

Figure VII-12. Map of the Snohomish River Confluence.. . . . 76

Figure VII-13. Map of Lower Skykomish River floodplain. 79

Chapter VIII. Next Steps. 83

Acknowledgements

STEERING COMMITTEE

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

PROJECT TEAM

Snohomish Conservation District

Cindy Dittbrenner, Project Manager
Carrie Brausieck
Bobbi Lindemulder
Brett DeVries
Ryan Bartelheimer
Kristin Marshall
Eric Schuh
Kari Quaas

CONTRIBUTORS

University of Washington Climate Impacts Group (Guillaume Mauger), Washington State University Center for Sustaining Agriculture and Natural Resources (Kirti Rajagopalan), PCC Farmland Trust (Robin Fay, Hilary Aten), and The Nature Conservancy (Heather Cole, Jamie Robertson).

CONSULTANT TEAM

Cardno (Dan Elefant, Sky Miller), Fathom (Andrew Smith),
ESA (Spencer Easton)

Funding

NOAA Community Based Restoration Program
Stillaguamish River Lead Entity
Estuary and Salmon Restoration Program
EPA National Estuary Program
Floodplains by Design

Recommended Citation

Snohomish Conservation District, 2019. Agriculture Resilience Plan for Snohomish County. Lake Stevens, Washington.



“A bee works its essential magic in the blueberry blossoms, sharing the hope and promise of another summer of organic, antioxidant rich blueberries at Hazel Blue Acres.”

Karen Wolden-Fuentes, Hazel Blue Acres Farm, Photovoice 2017