

**SALT SPRING ISLAND**

**CLIMATE  
ACTION  
PLAN**

**2020  
— TO —  
2030**

**SALT SPRING  
ISLAND CLIMATE  
RISK ASSESSMENT  
MAPS AND DATA**

This section of the Salt Spring Island Climate Action Plan 2.0 is offered as a standalone document for the convenience of our readers. Note that the standalone documents are missing the context for the plan as a whole and any references or other appendices. For a PDF of the whole Plan which includes all references, or for access to any of the appendices and climate risk maps and data go to <http://transitionsaltspring.com/responding-to-climate-change>

**Release date: February 1, 2021**

Copyright © 2021 Transition Salt Spring Society. All rights reserved. Permission is hereby granted to reproduce and distribute these materials in whole or in part for educational, and public interest purposes, provided such copies are disseminated at or below cost, provided that each copy bears this notice, and provided that Transition Salt Spring is credited as the original published source.

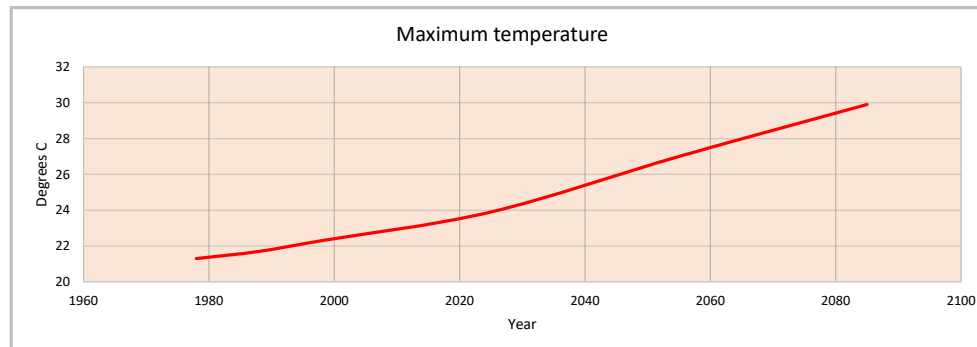
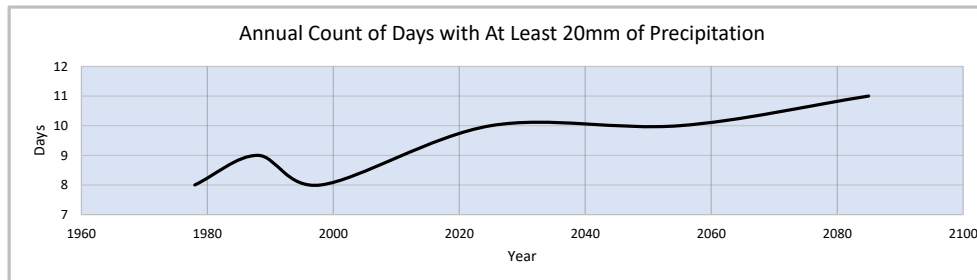
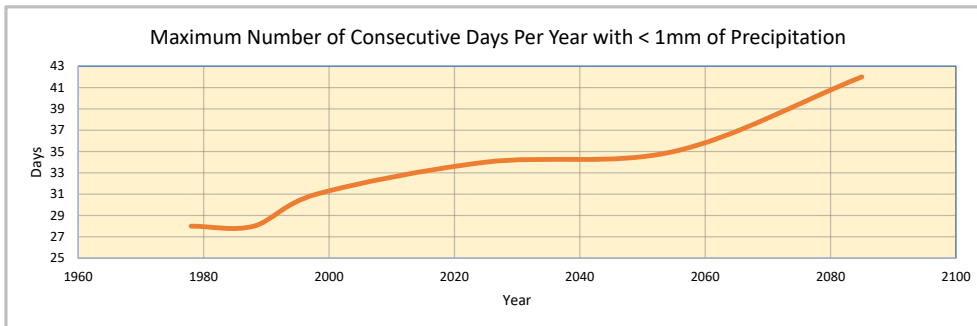
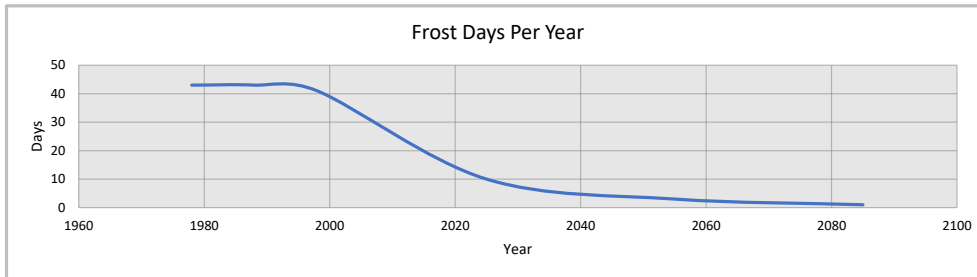
DISCLAIMER: This material is provided for general information as a public and educational resource. This document was developed by a large volunteer team which exercised its best efforts to ensure accuracy. The views expressed herein are solely those of the authors of this Plan which has been presented to the community to foster the social and political consensus we need to tackle the climate crisis. The views expressed herein are in no way intended to reflect the views of the Islands Trust or the Capital Regional District. Transition Salt Spring does not warrant the quality, accuracy or completeness of information in this document.

Special thanks to Driftwood Gulf Islands Media, Ron Watts Photo, Gary McNutt, Bernadette and Peter McAllister, and Pierre Mineau for generously providing photos.

Cover photo © The Gulf Islands Driftwood.

Design by [Erika Rathje](#).

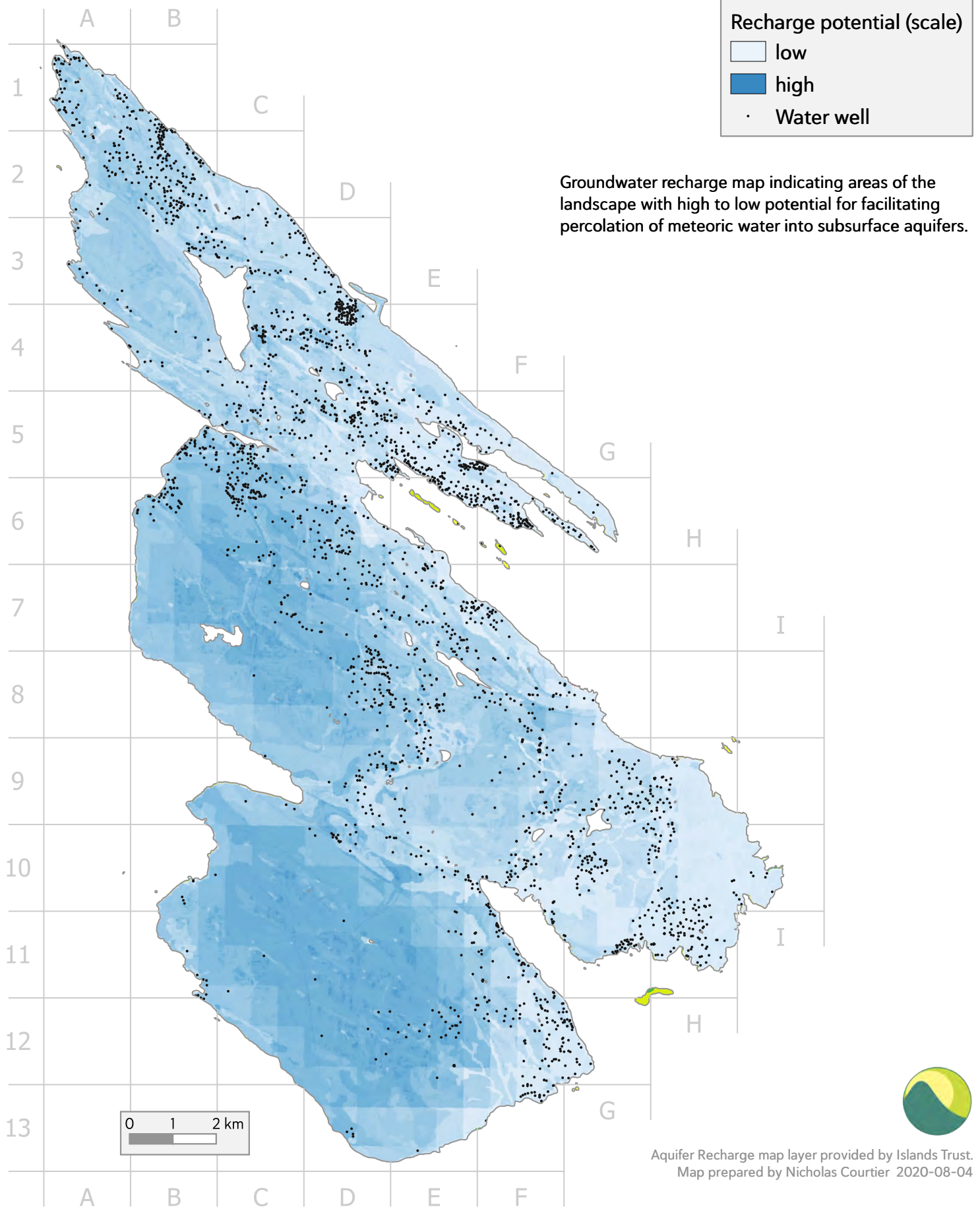
## Salt Spring Island Climate Change Projections



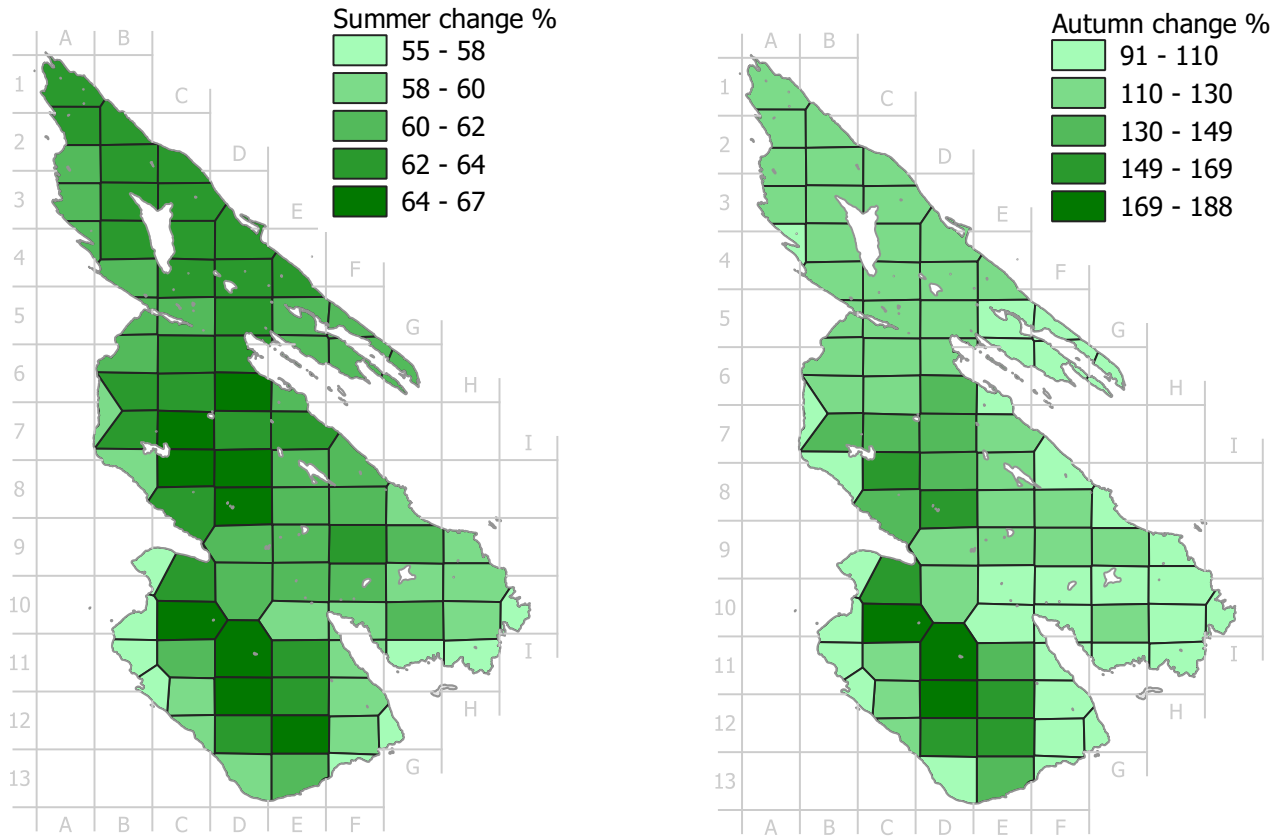
Source: PCIC Climate Explorer, CanESM2, rcp8.5, Salt Spring Island polygon.

The four graphs show how our weather cycles are expected to change over the next 80 years. From top to bottom: winter frost periods will be dramatically reduced, with implications for overwintering pests and extended growing season for some food crops. Although the same annual precipitation is expected, on average, there will be less rain in the summer and droughts will become longer and more severe. However, more rain will come as heavy downpours in the winter months. Most warming will be realized through the winter months as the lack of low temperatures. This is reflected in the final graph, showing the average annual maximum temperature increasing

# Aquifer recharge



# Change in Climatic Moisture Deficit 1995 to 2085

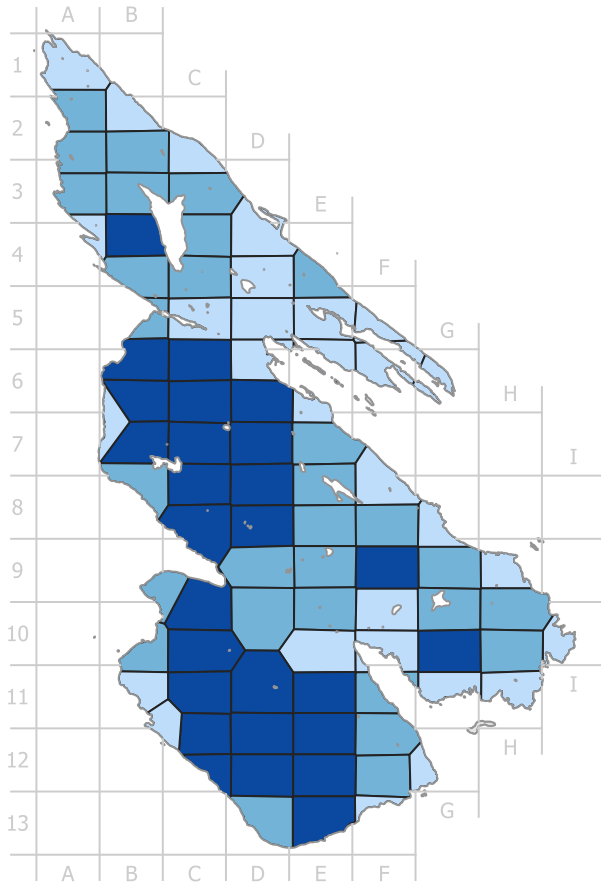


Climatic Moisture deficit (CMD) is a measure of the available moisture (index capturing difference between evaporation and precipitation). Climate models indicate that summer months will become drier than they at present, but also, that the moisture deficit will extend into the Autumn, with implications for plants, salmonids, and on-island water resources.

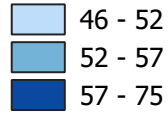
1995 is the 1981-2010 average, 2085 is the 2070-2100 average.

Data source: ClimateBC [www.climatewna.com](http://www.climatewna.com)  
Catherine Griffiths 2020-08-04

# Change in frost free days 1995 to 2085



Number of frost free days difference

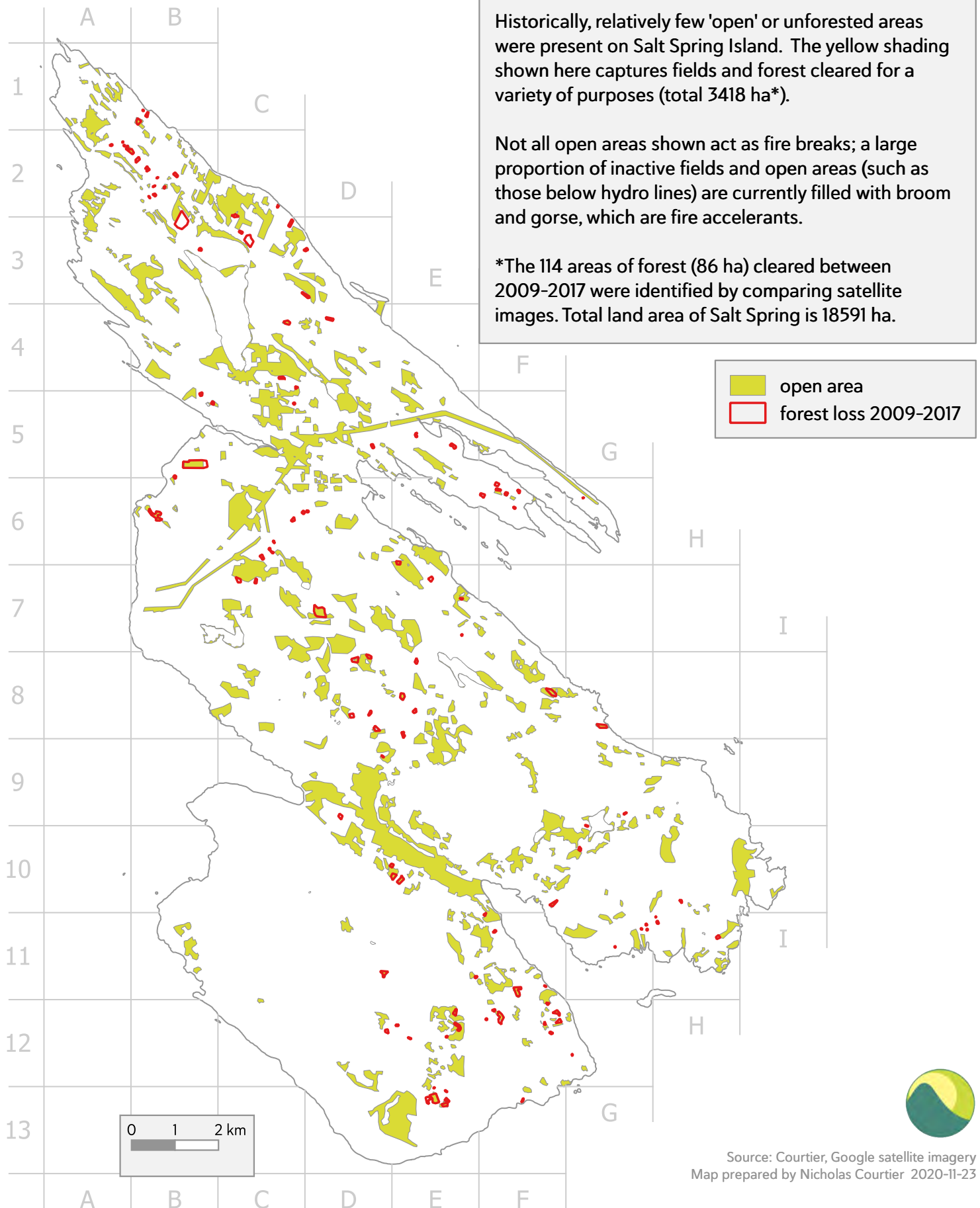


1995 is the 1981-2010 average, 2085 is the 2070-2100 average.

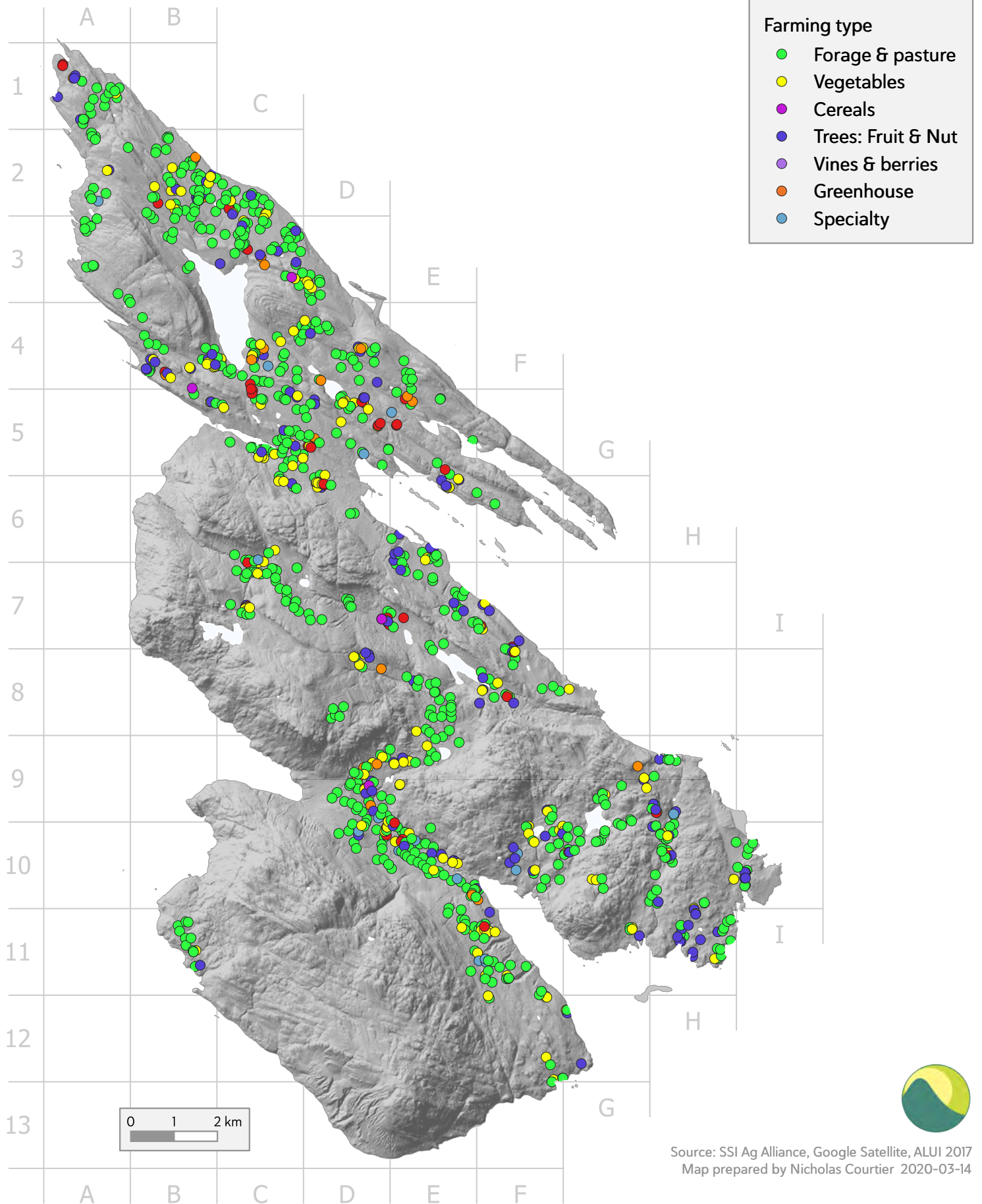


Data source: ClimateBC [www.climatewna.com](http://www.climatewna.com)  
Catherine Griffiths 2020-09-03

# Disappearing forests

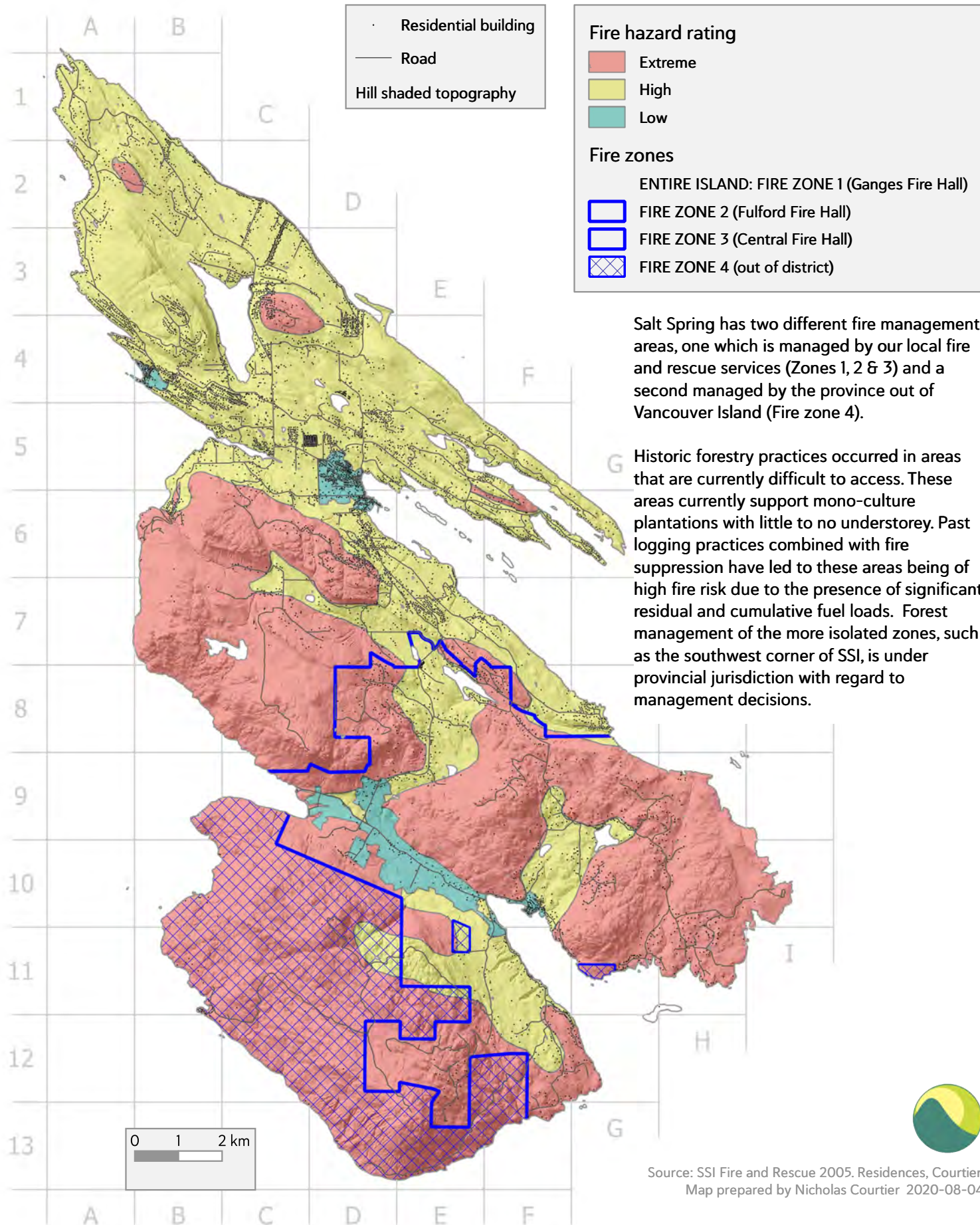


# Farming





# Fire

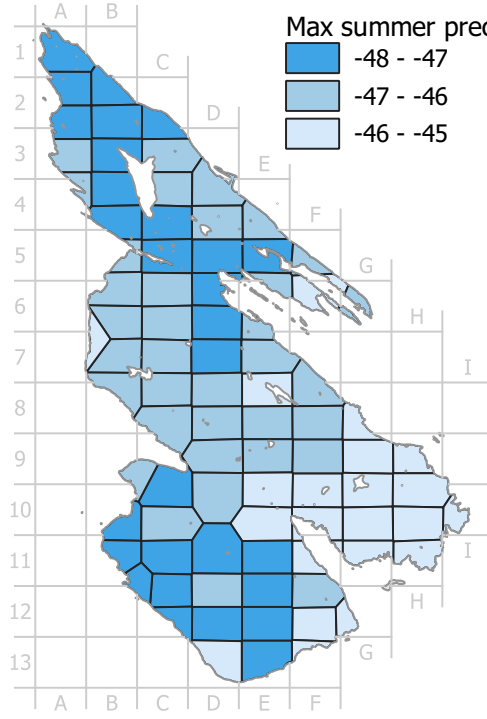
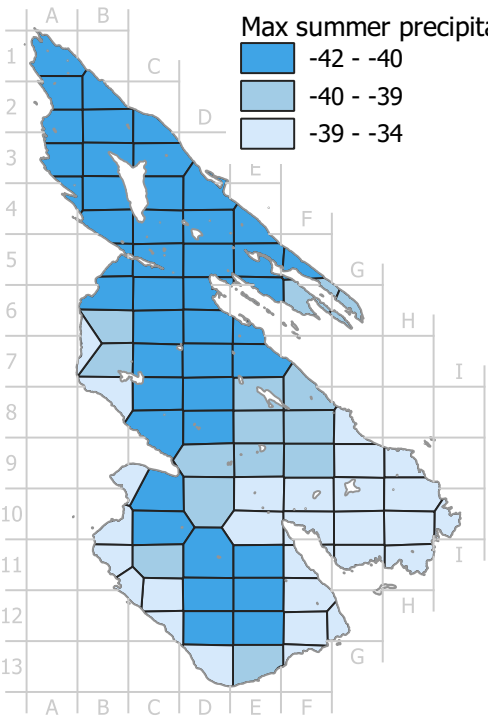
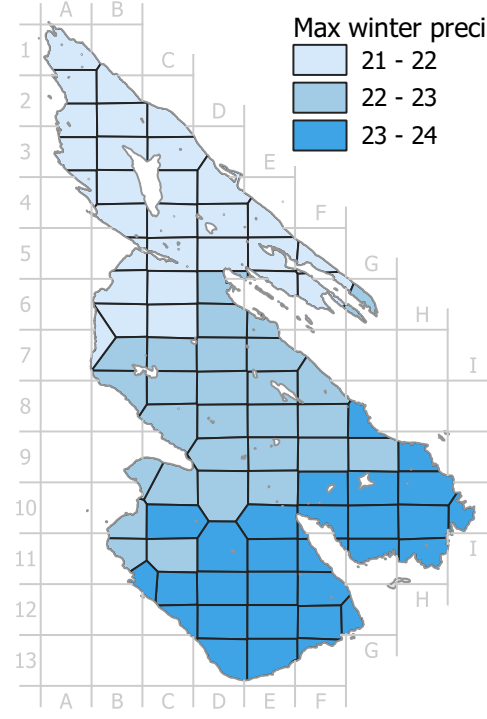
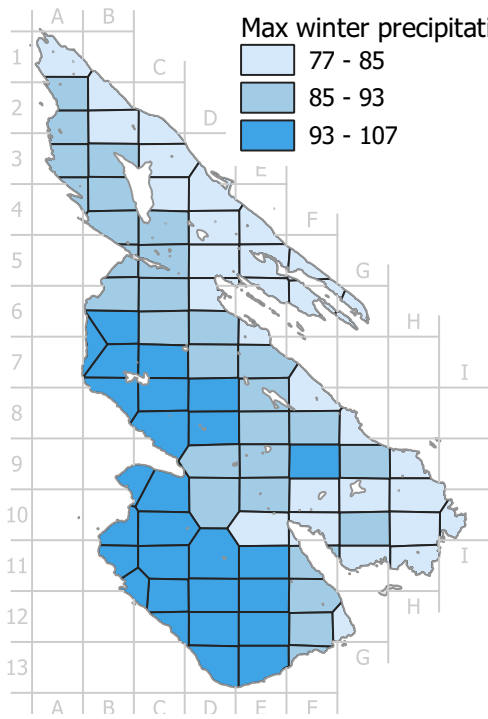


Salt Spring has two different fire management areas, one which is managed by our local fire and rescue services (Zones 1, 2 & 3) and a second managed by the province out of Vancouver Island (Fire zone 4).

Historic forestry practices occurred in areas that are currently difficult to access. These areas currently support mono-culture plantations with little to no understorey. Past logging practices combined with fire suppression have led to these areas being of high fire risk due to the presence of significant residual and cumulative fuel loads. Forest management of the more isolated zones, such as the southwest corner of SSI, is under provincial jurisdiction with regard to management decisions.

# Precipitation change 1995 to 2085

While annual precipitation is projected to remain relatively unchanged, most of this total rainfall will arrive during the winter months as heavy rainfall events. Summers will continue to become dryer, with implications for groundwater recharge, agriculture, erosion and fire risk.

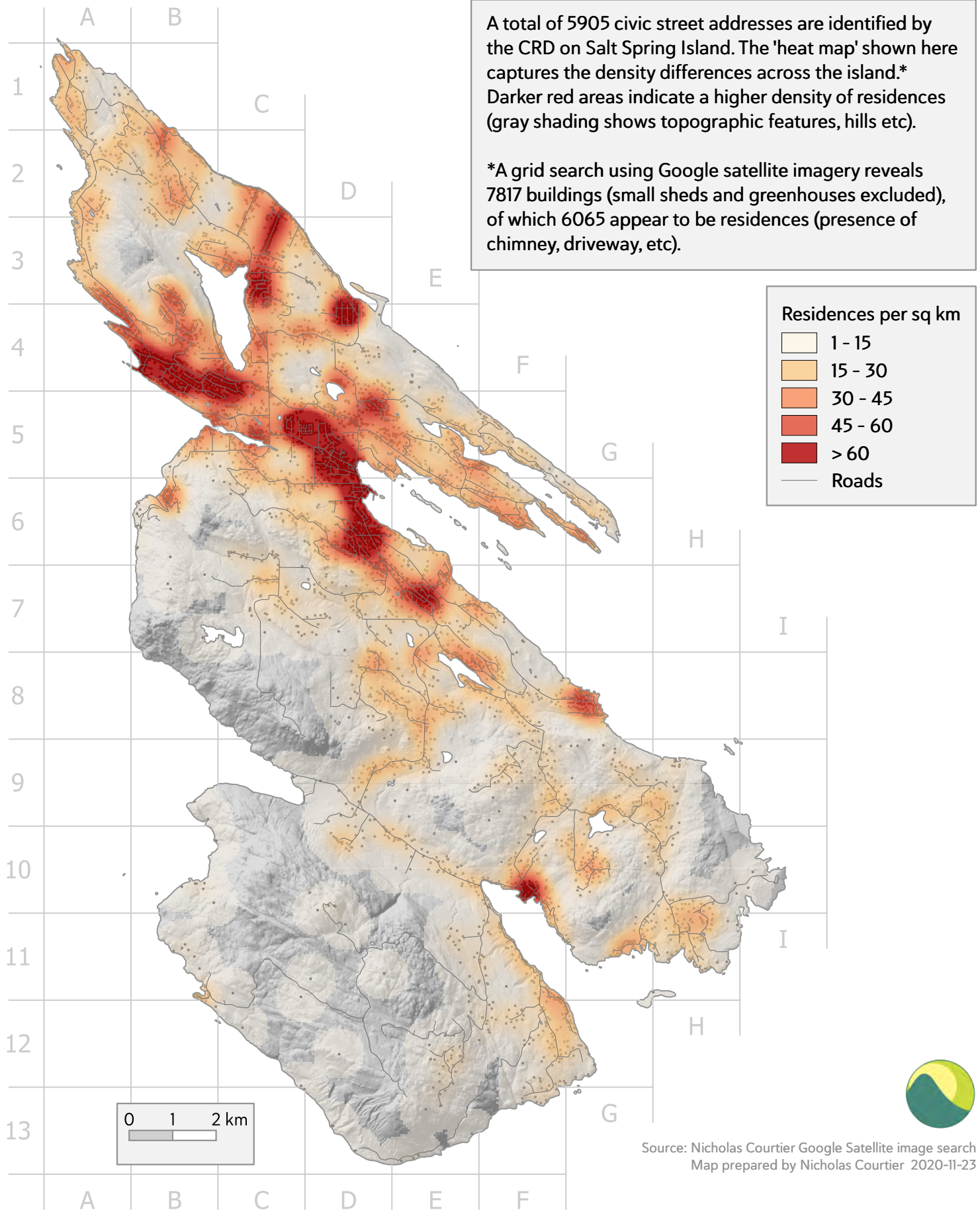


Summer: June, July, August. Winter: December, January, February.  
Data averages: 1995=1981-2010, 2085=2070-2100

Data source: ClimateBC [www.climatewna.com](http://www.climatewna.com)  
Catherine Griffiths 2020-09-12



# Where we live



# Sensitive and protected areas

