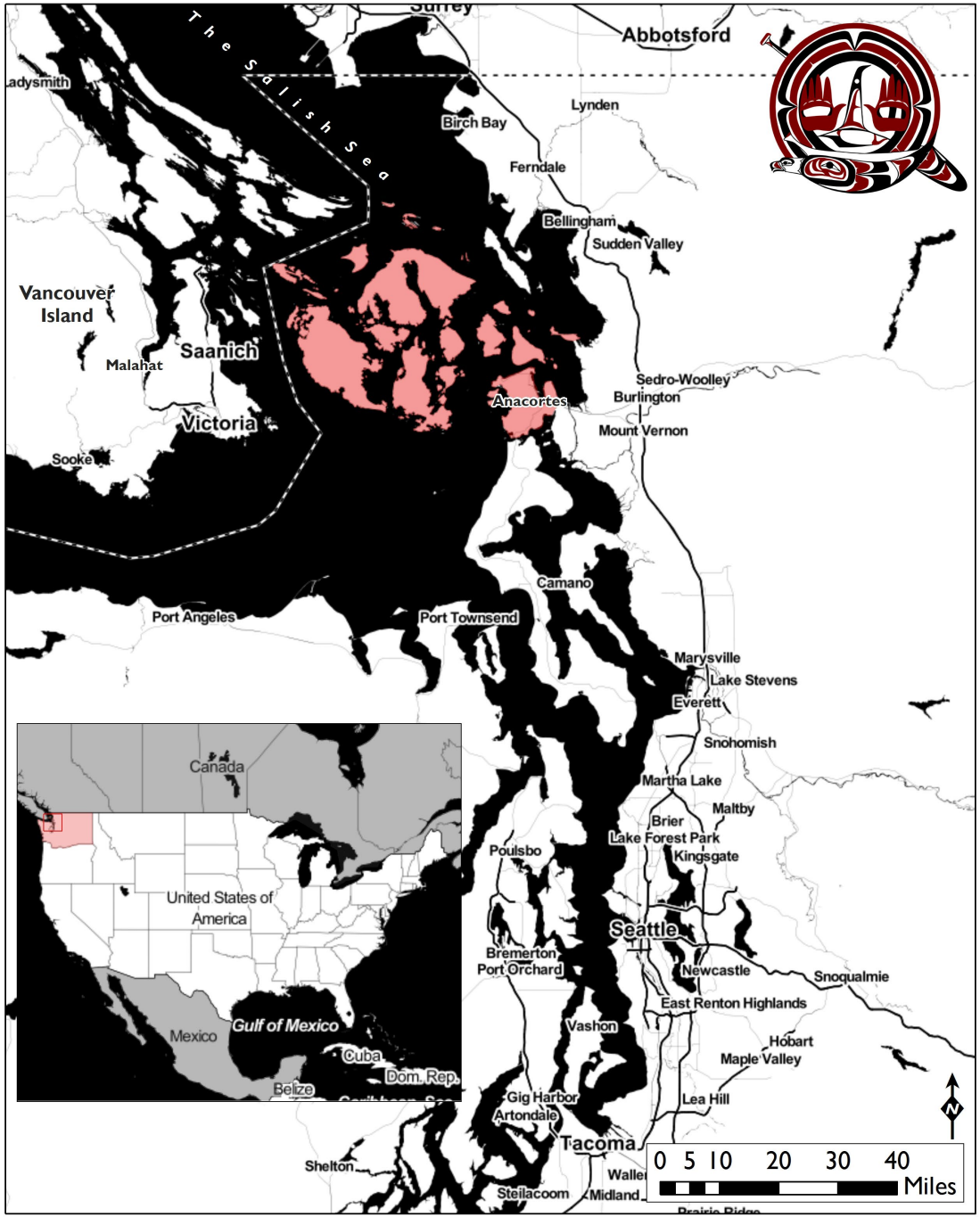
Samish Indian Nation: Climate Resilience Planning

Fletcher Wilkinson, Climate Adaptation Specialist
December 13, 2018

Samish Indian Nation Traditional Territory



Project Objectives

- Build a resilient future
- Protect and enhance resources for 7th generation
- Incorporate community values

Project Framework

- Community based planning process
- RCP 8.5 (business as usual) – Low risk acceptance
- Qualitative assessment

Changing Conditions

- Local sea level rise
  - *+5 ft by 2100*
  - *+10 ft by 2050*
- Avg annual temp
  - *+8.3°F by 2080*
- Extreme heat days
  - *+10.8 days/year by 2080*
- Annual precipitation
  - *+2in (7%) by 2080*
- Summer precipitation
  - *-.7in (8%) by 2080*
- Extreme fire danger days
  - *+13.2 days by 2050*

Project Overview

Phase One: Framework and Planning Priorities

BIA Grant (2017)

Phase Two: Vulnerability Assessment and Resiliency Planning

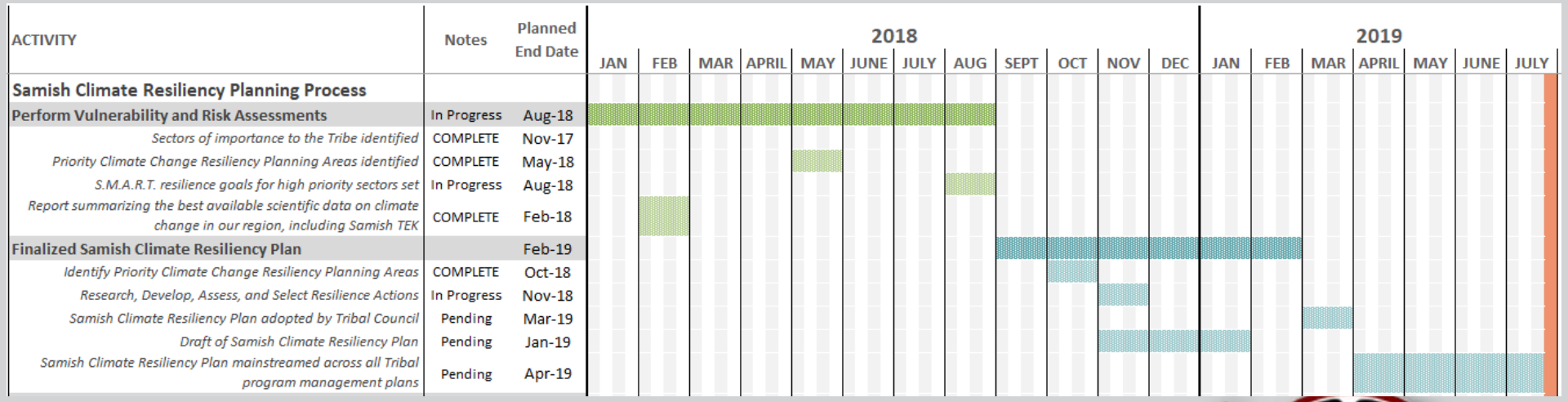
DOE Grant (2018-2019)

Samish Climate Resilience Planning

Project Overview

- Complete Phase 2 (2019)
  - *Evaluate adaptation strategies*
  - *Complete Samish Climate Resilience Plan*
  - *Integrate climate resilience into other Tribal policy*

ACTIVITY	Notes	Planned End Date
Samish Climate Resiliency Planning Process		
Perform Vulnerability and Risk Assessments	In Progress	Aug-18
Sectors of importance to the Tribe identified	COMPLETE	Nov-17
Priority Climate Change Resiliency Planning Areas identified	COMPLETE	May-18
S.M.A.R.T. resilience goals for high priority sectors set	In Progress	Aug-18
Report summarizing the best available scientific data on climate change in our region, including Samish TEK	COMPLETE	Feb-18
Finalized Samish Climate Resiliency Plan		Feb-19
Identify Priority Climate Change Resiliency Planning Areas	COMPLETE	Oct-18
Research, Develop, Assess, and Select Resilience Actions	In Progress	Nov-18
Samish Climate Resiliency Plan adopted by Tribal Council	Pending	Mar-19
Draft of Samish Climate Resiliency Plan	Pending	Jan-19
Samish Climate Resiliency Plan mainstreamed across all Tribal program management plans	Pending	Apr-19



Planning Framework

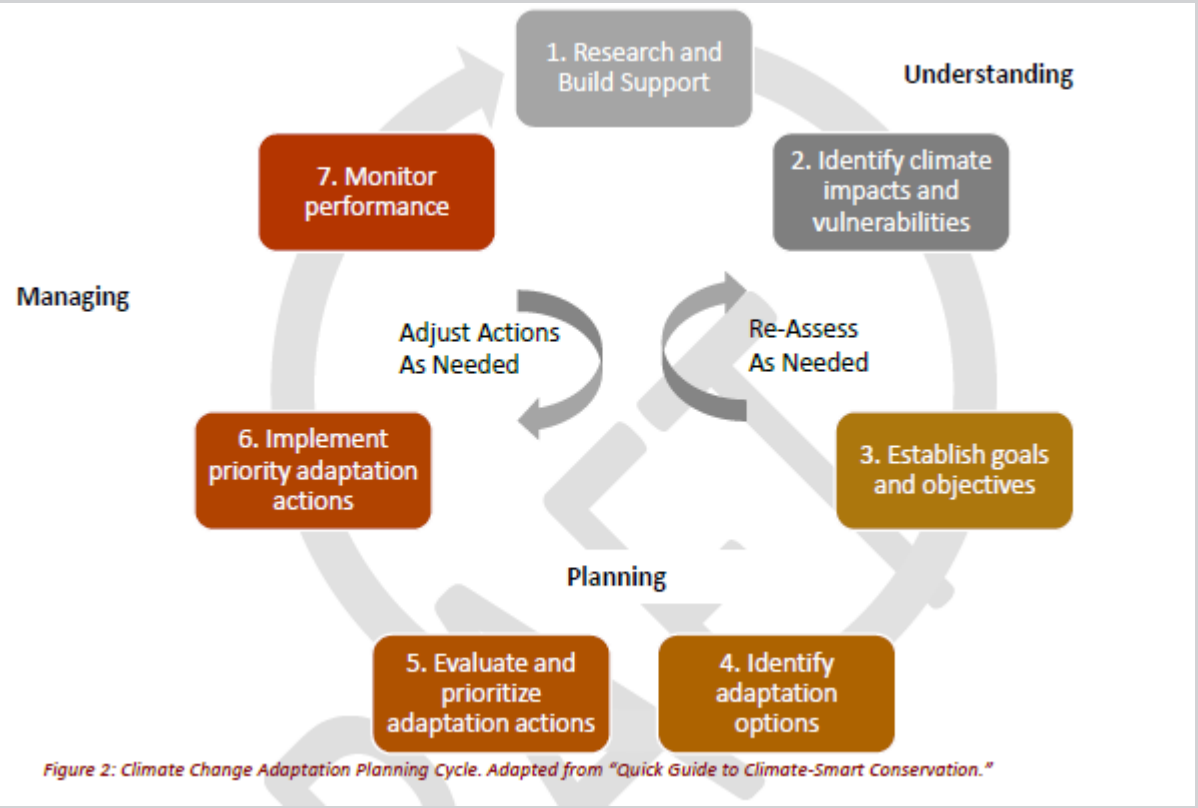


Figure 2: Climate Change Adaptation Planning Cycle. Adapted from "Quick Guide to Climate-Smart Conservation."

Completed

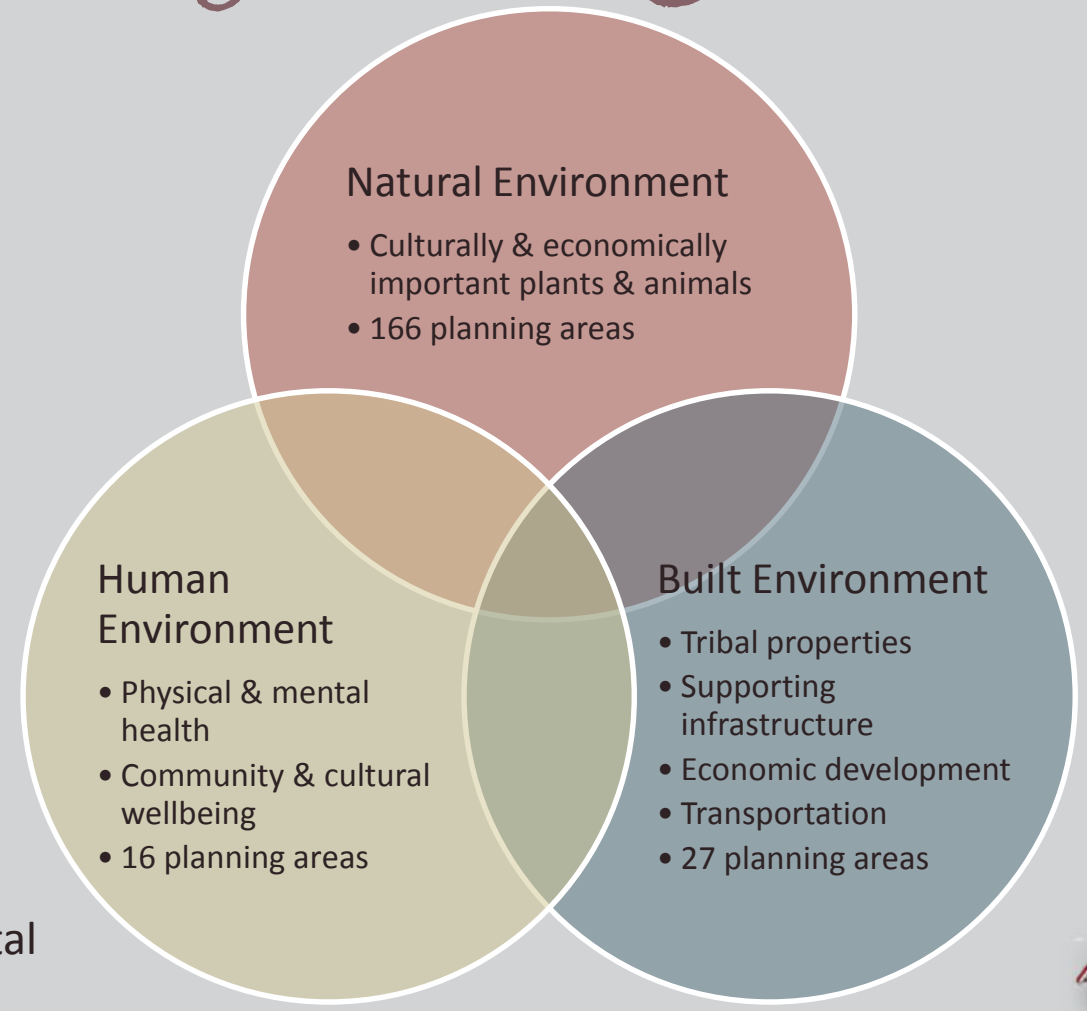
- Resiliency Working Group
- Public outreach
- Climate change lit review
- Vulnerability Assessment

In Progress

- Evaluate adaptation strategies
- Integrate findings to tribal planning processes

Samish Climate Resilience Planning

Key Planning Areas



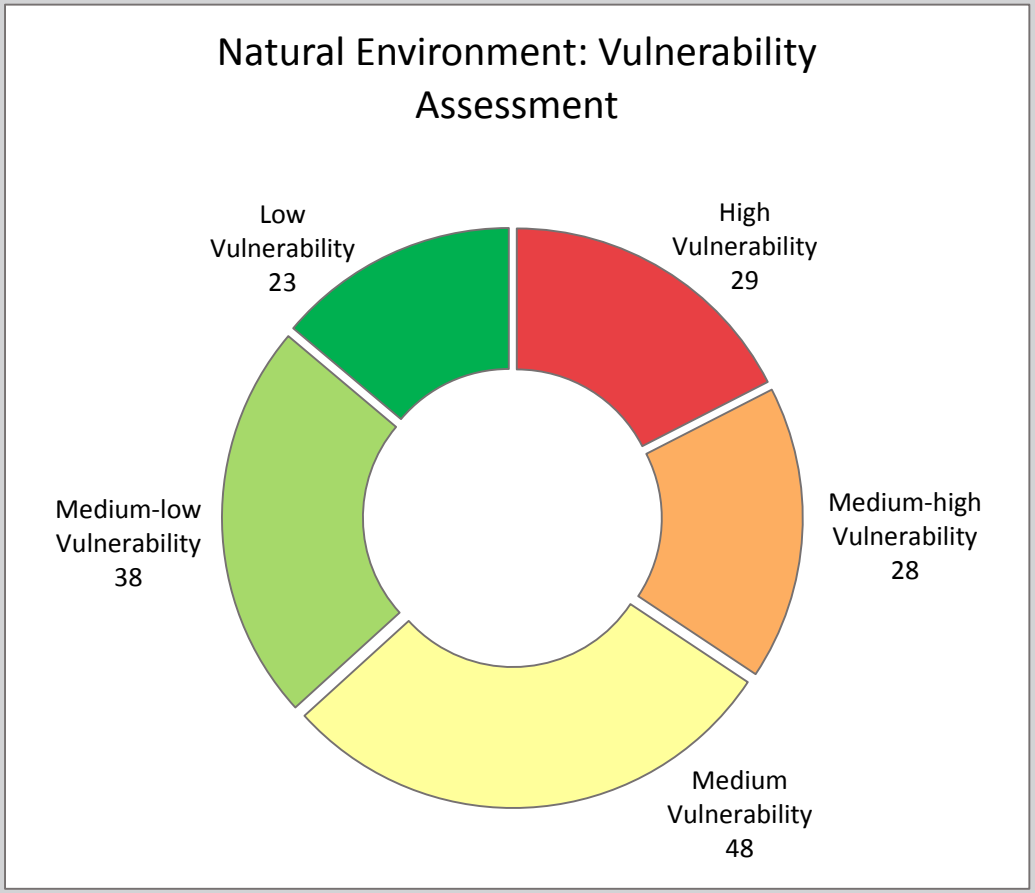
209 total

Qualitative Assessment

VULNERABILITY = SENSATIVITY x ADAPTIVE CAPACITY

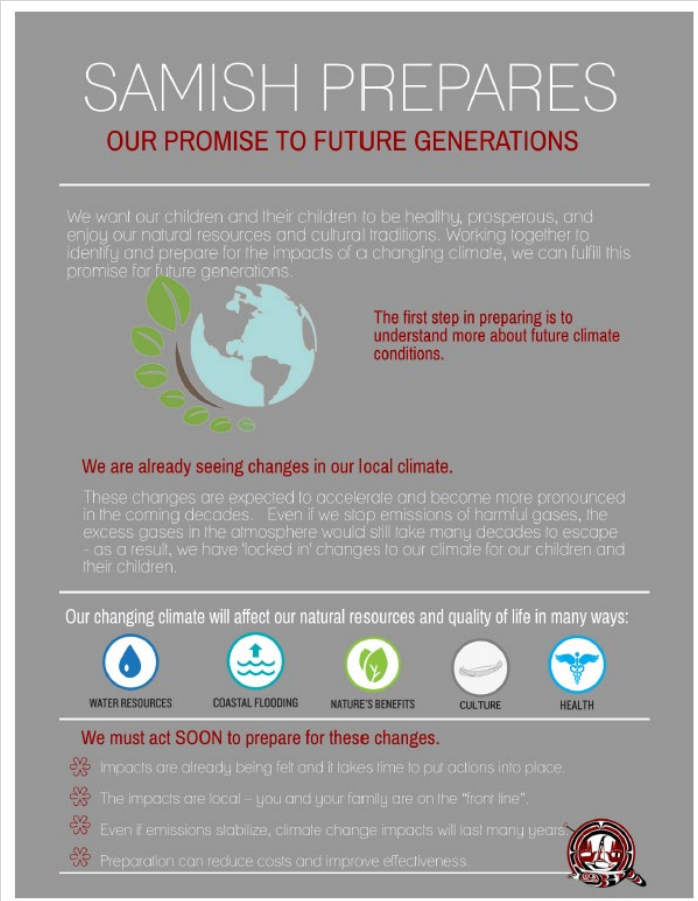
Sensitivity	Adaptive Capacity		
	High	**Medium**	**Low**
High	Medium Vulnerability	Medium-High Vulnerability	High Vulnerability
Medium	Medium-Low Vulnerability	Medium Vulnerability	Medium-High Vulnerability
Low	Low Vulnerability	Medium-Low Vulnerability	Medium Vulnerability

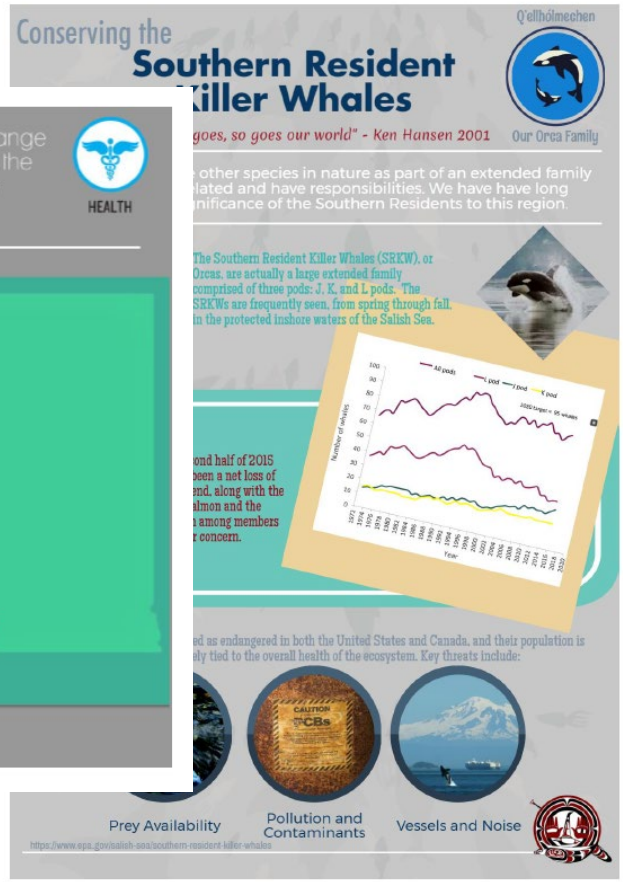
Phase Two Key Findings



- Qualitative assessment
- 209 total planning areas
  - *166 plant & animal species*
  - *27 infrastructure & property areas*
  - *16 health & culture planning areas*

Sample Communication Materials





Samish Climate Resilience Planning

Story Map

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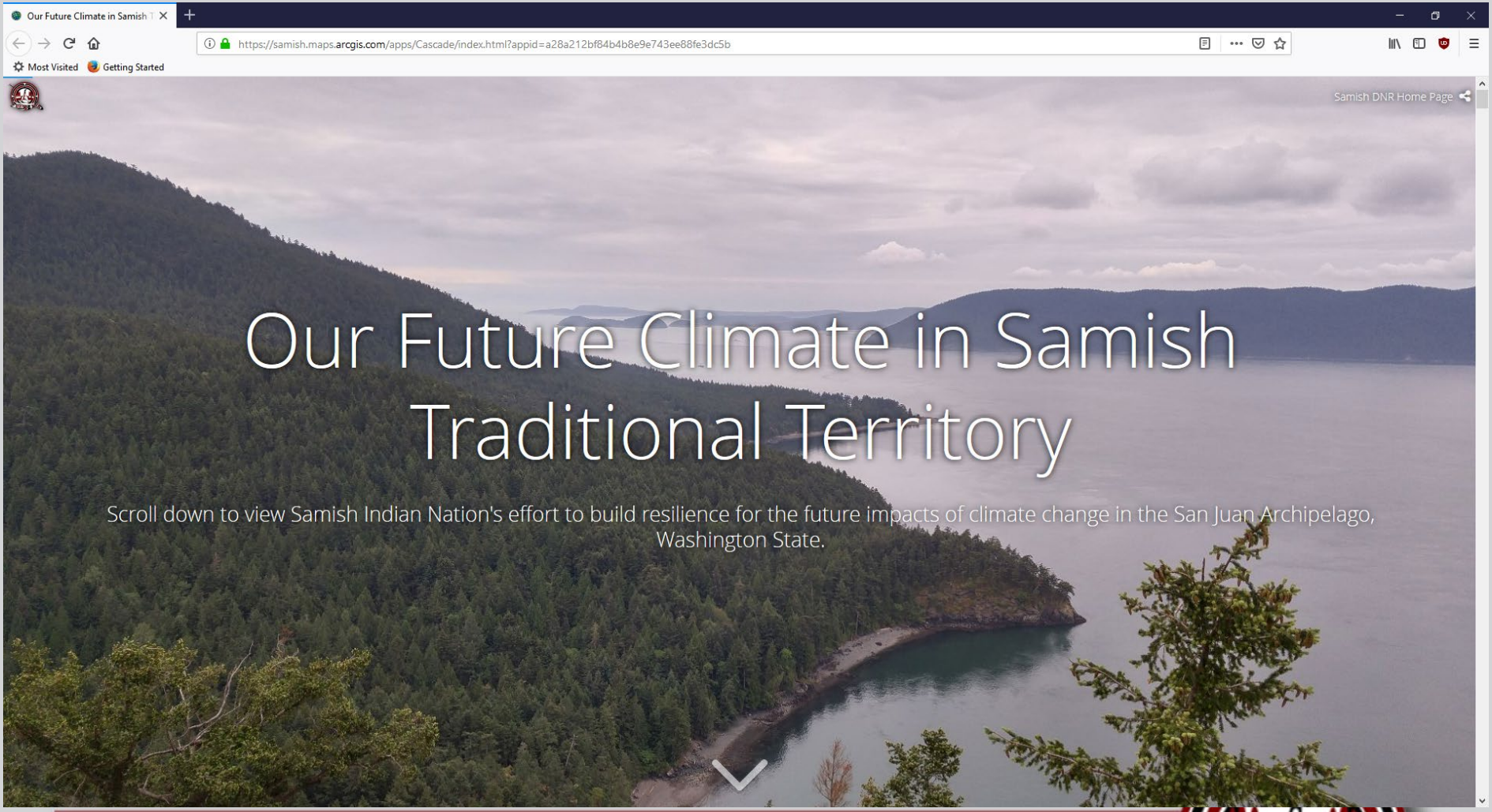

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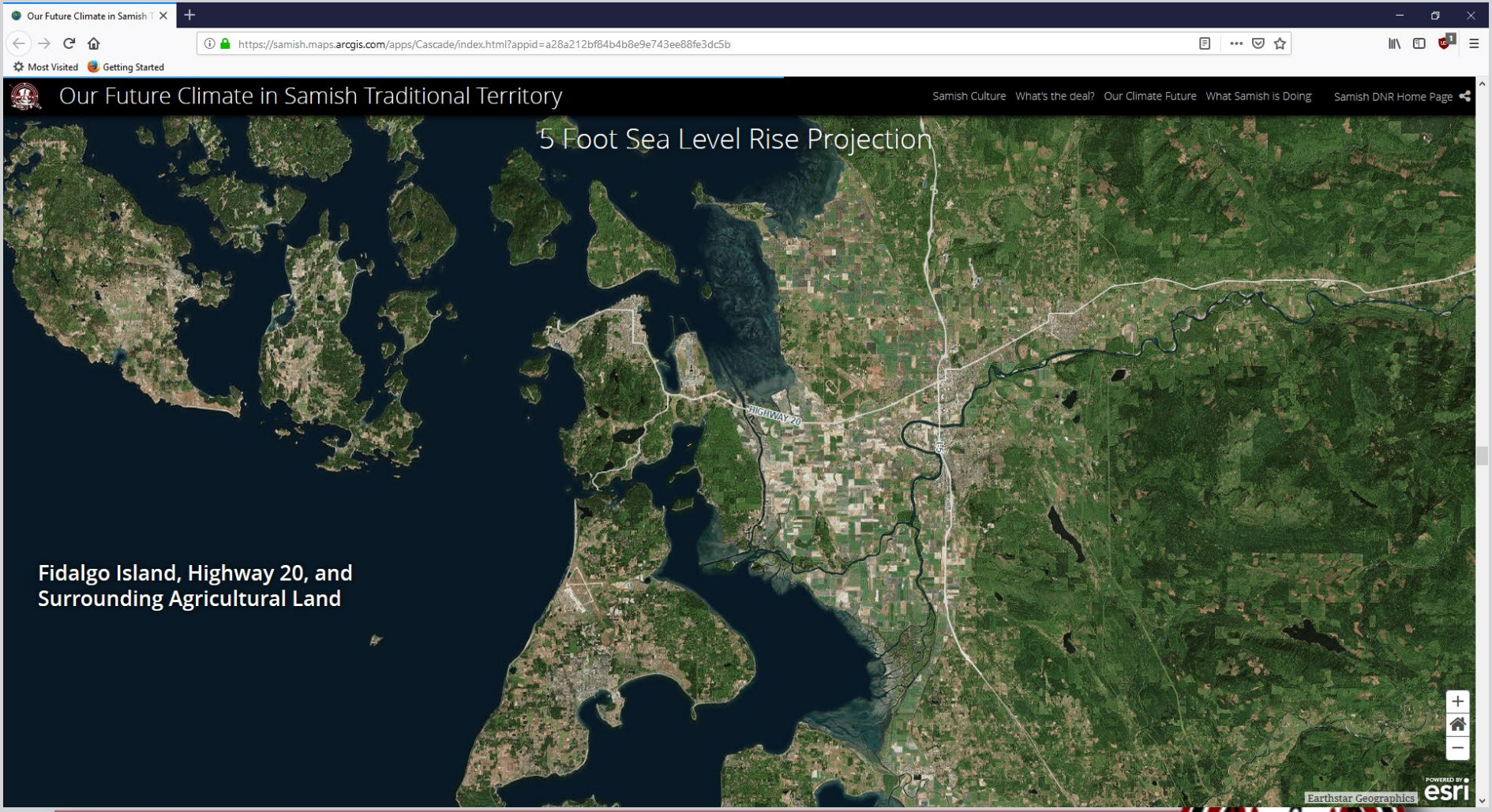

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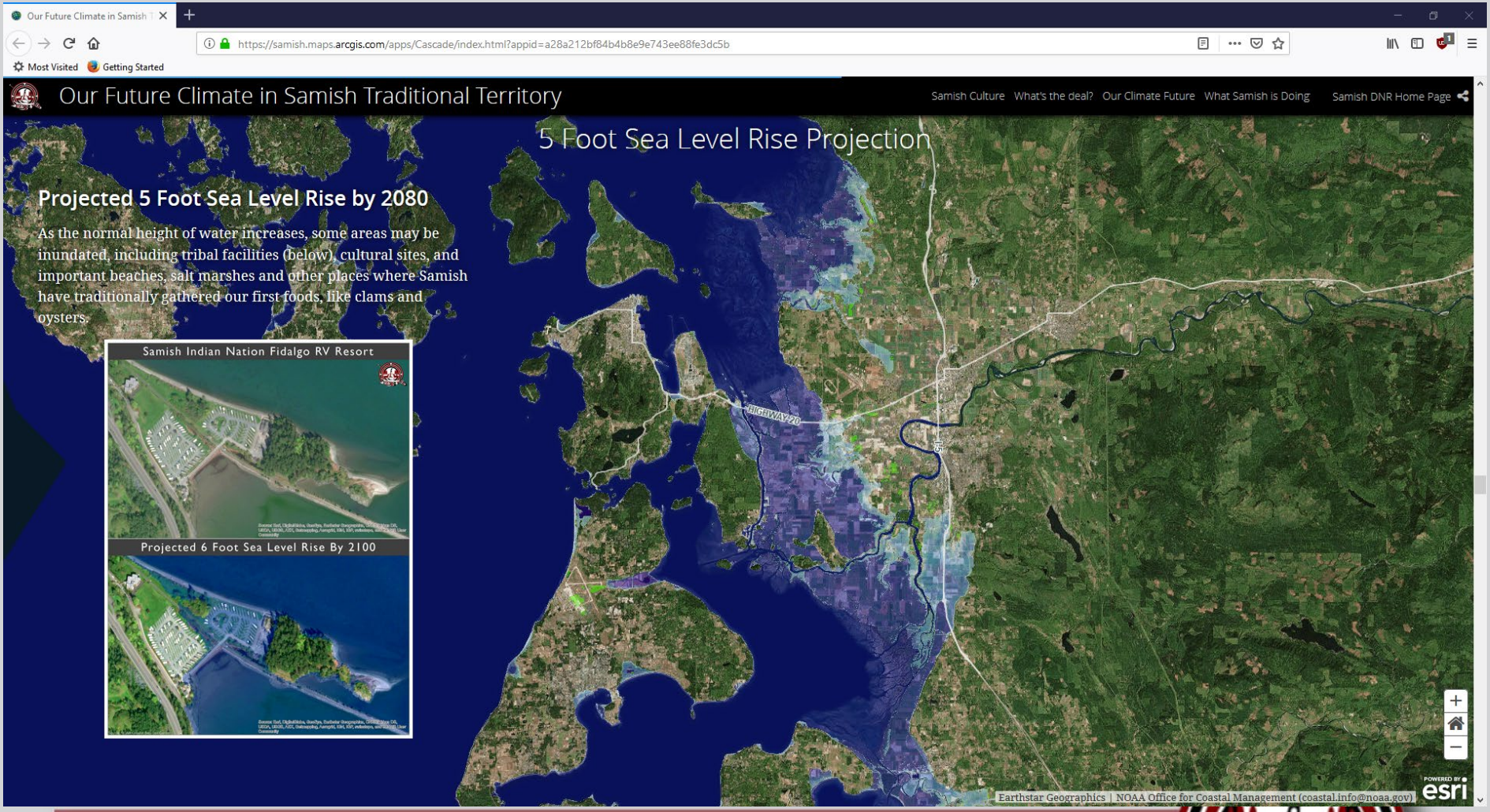

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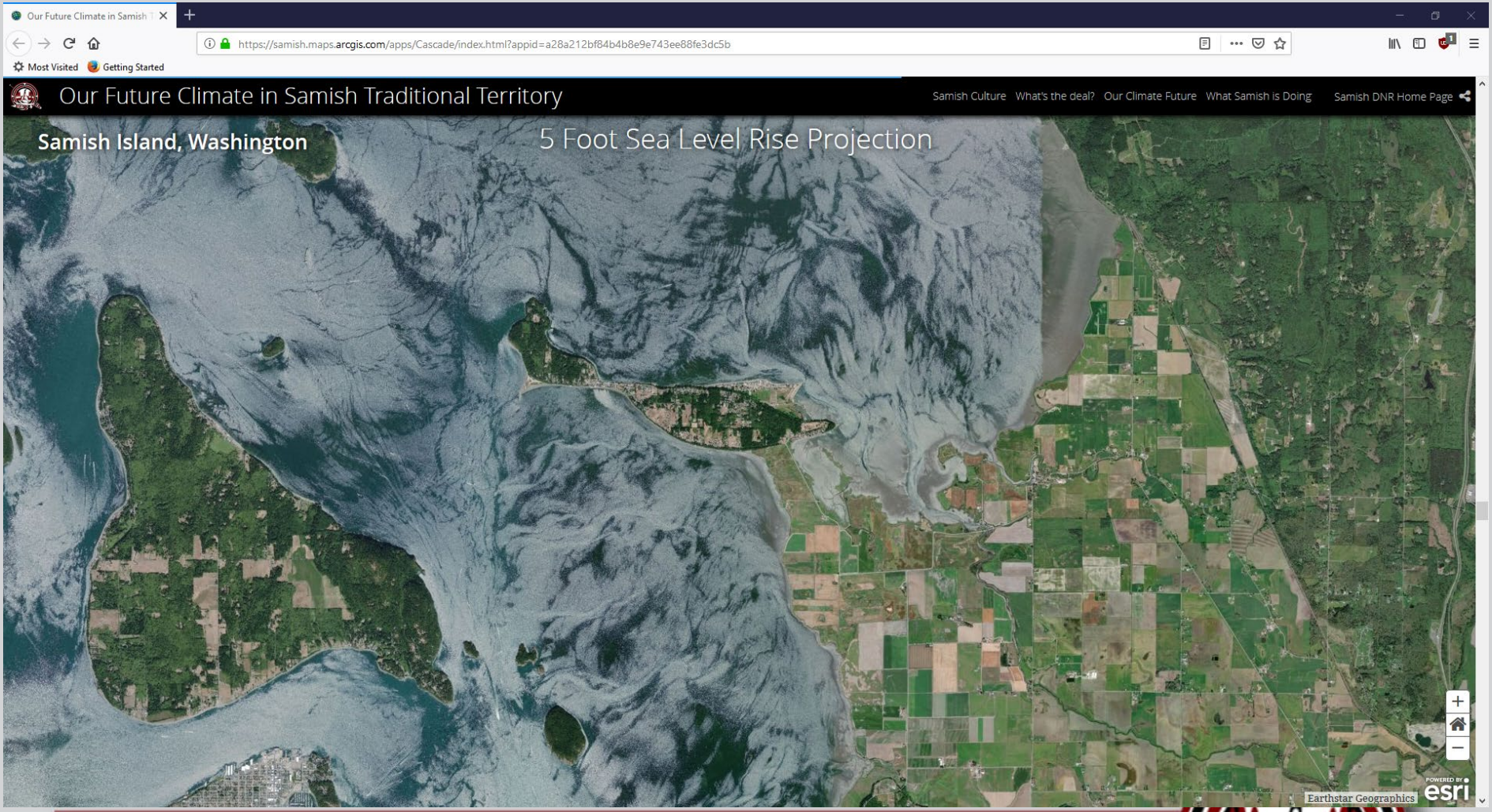

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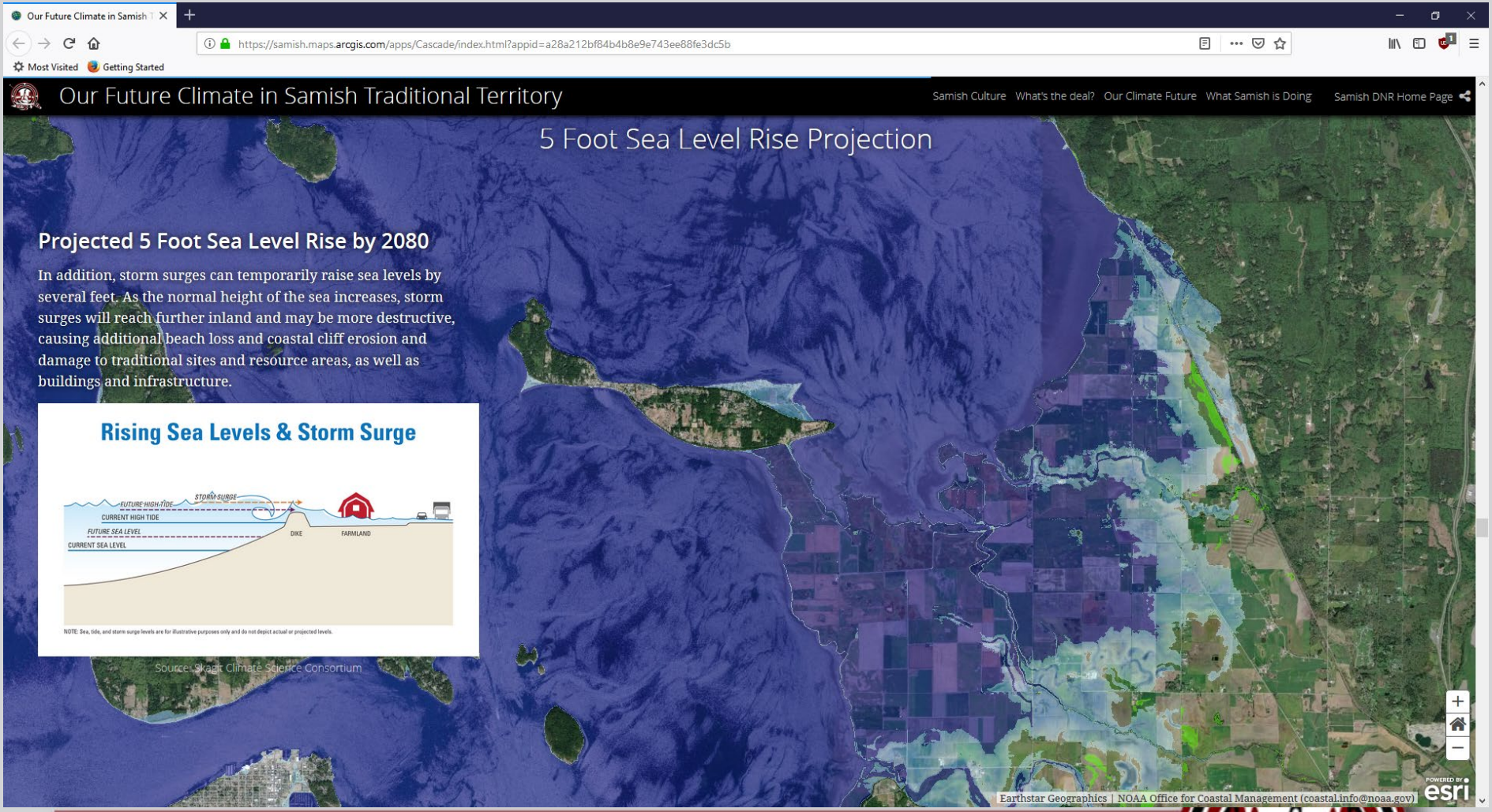

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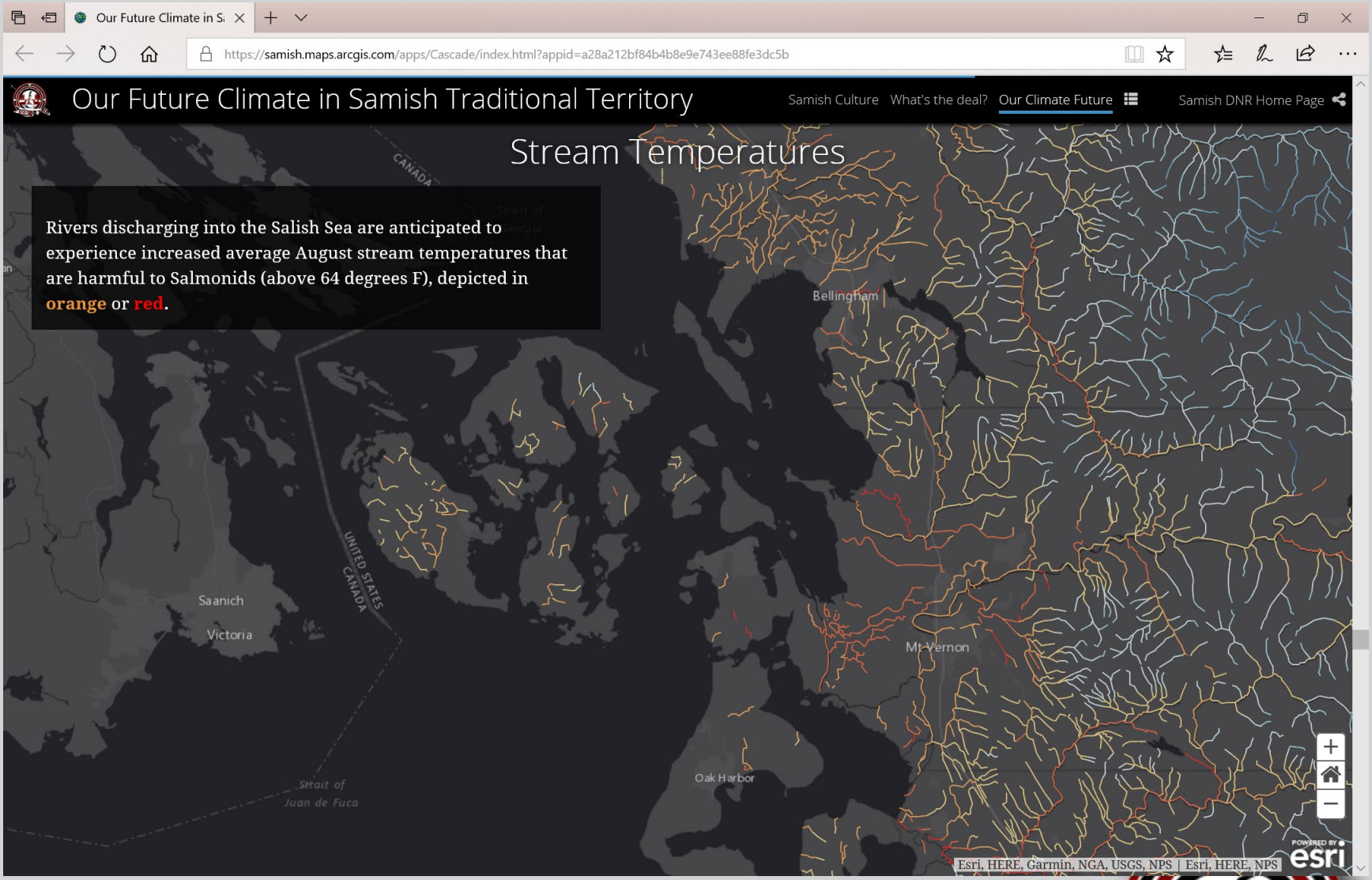

Samish Climate Resilience Planning

Future Plans

- Climate Resiliency Phase 3 (2019-2020)
  - *Update and expand vulnerability assessment*
  - *Prioritize potential resilience projects*
  - *Increase capacity to work with regional partners*
  - *BIA Tribal Resilience Grant*

- SLR/Coastal Management Assessment (2019-2020)
  - *Assess SLR impacts in Samish Traditional Territory*
  - *Evaluate coastal habitat restoration opportunities*
  - *Create GIS-based SLR tool to assess impacts to archeological and cultural sites*

Contact Information

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