This panel will consider the implication of environmental changes to ice and snow in the Tongass National Forest and the related implications for salmon and water (quantity, quality and location) management in the region. The primary focus will be on management implications relating to freshwater resources, however given the implications of the interaction of marine and freshwater phases of salmon ecology on the fish, there will be some reflection on marine conditions despite the lack of management authority by the Forest Service. The panel will consider the implications of climate change for the various management decisions within each subtopic and how to reduce the vulnerabilities that challenge effective management outcomes salmon and water resources.

## Topics to be considered include:

- Inland salmon harvest
- Stream restoration
- Infrastructure, including road maintenance
- Hatcheries
- Fish passes
- Hydroelectric development
- Other dams and water diversion
- Water quality for communities
- Tourism and recreation
- Flood control

## Agenda

Tuesda	٧	, January	<b>1</b> 4	₊th

9:00 am Introduction to the process and each other

(Greg Killinger and Greg Hayward, USFS; Lara Hansen, EcoAdapt)

9:30 am Overview of vulnerability and adaptation: what it means, how it works

and how you can do it (Lara Hansen, EcoAdapt)

10:00 am Regional implications of climate change for snow, ice and water in a

nutshell. What scenarios should be considered in assessment and planning? (12 minutes each)

- Jeremy Littell (Alaska Climate Science Center): Snowpack and Climate into the Future
- Michael Goldstein (USFS): Climate Implications for Precipitation,
  Water Temperature and Discharge From Yakutat to Haida Gwaii
- Gordon Reeves (USFS): What Does It All Mean for Fish

10:40 am Break

10:50 am Exercise 1: Exposure, Sensitivity and Adaptive Capacity of ice, snow and

water in the Tongass (Small Groups)

Lunch On site

1:00 pm Exercise 2: Exposure, Sensitivity and Adaptive Capacity of core

resources (fish and riparian vegetation, including trees) in the Tongass

(Small Groups)

3:00 pm Exercise 3: Management Action Vulnerability

(Full group, Action by Action)

5:00 pm Adjourn

Wednesday, January 15th

9:00 am Recap of where we are. What are the key management

actions/activities and how are they vulnerable?

9:30 am Exercise 3: Continued. Additional ideas? (Full group, Action by Action)

Lunch On site

1:00 pm Exercise 4: What can you do to reduce vulnerability?

3:15 pm Break

3:30pm Reconvene as a group to plan steps to implementation

4:00pm Explain how this can be applied to other resources

• What other resources are prioritized in the region?

5:00 pm Adjourn

Product: Synopsis of VA process, plus literature review findings

To be reviewed by some participants