

Audit Memo 3: Robustness Assessment

CEVE 421/521 Final Project

2026-04-10

Draft Material — This content is under development and subject to change.

1 Overview

Due: Friday of Week 12

This memo examines how your chosen climate plan addresses uncertainty and robustness. You will analyze the Uncertainties (X) acknowledged and evaluate whether the plan's recommendations are robust to deep uncertainty.

2 Learning Objectives

By completing this memo, you will demonstrate your ability to:

1. Identify and categorize uncertainties in climate planning
2. Assess whether a plan adequately addresses deep uncertainty
3. Apply robustness concepts to critique real-world decision-making

3 Requirements

Submit a **1-2 page memo** (PDF) containing:

3.1 1. Uncertainty Mapping

Identify the key uncertainties affecting the plan:

Uncertainty	Type	How Addressed
<i>Climate projections</i>	<i>Deep (epistemic)</i>	<i>Multiple scenarios? Single projection?</i>
<i>Population growth</i>	<i>Parametric</i>	<i>Sensitivity analysis?</i>
<i>Damage functions</i>	<i>Structural</i>	<i>Acknowledged?</i>

Categorize uncertainties as:

- **Parametric:** Known unknowns with estimable ranges
- **Structural:** Model form uncertainty
- **Deep:** Fundamental disagreement or unknown unknowns

3.2 2. Robustness Assessment

Evaluate how the plan handles uncertainty:

Robustness Element	Present?	Description
Multiple scenarios	Yes/No	<i>Which scenarios? How selected?</i>
Sensitivity analysis	Yes/No	<i>What parameters varied?</i>
Adaptive strategies	Yes/No	<i>Trigger points? Decision rules?</i>
Worst-case analysis	Yes/No	<i>Regret minimization?</i>

Address:

- Does the plan optimize for a single “best guess” or consider a range of futures?
- Are there provisions for adapting if conditions differ from expectations?
- What vulnerabilities might emerge under scenarios not considered?

3.3 3. Robustness Critique

In 1-2 paragraphs, provide your overall assessment:

- **Strengths:** What does the plan do well in handling uncertainty?
- **Weaknesses:** Where is the plan most vulnerable to surprise?
- **Recommendations:** What specific improvements would enhance robustness?

4 Submission

Submit your memo as a PDF to Canvas by 11:59 PM on the due date.

5 Grading Rubric

Criterion	Points
Uncertainties clearly identified and categorized	30
Robustness assessment thorough and accurate	30
Constructive critique with specific recommendations	20
Professional writing and formatting	20
Total	100

Bibliography