

PROJECT REPORT

TASK AGREEMENT NO.: J8W07110028

COOPERATIVE AGREEMENT NO.: H8W07110001

COOPERATOR: University of Washington

PROJECT TITLE:

A Regional Climate Analysis and Development of Climate Chapters for the Natural Resources Condition Assessments for Mount Rainier National Park and North Cascades National Park

STATEMENT OF WORK:

1. Collaboratively undertake a project titled "A Regional Climate Analysis and Development of Climate Chapters for the Natural Resources Condition Assessments for Mount Rainier National Park and North Cascades National Park Complex" as described in Attachment I and throughout this document.
2. Appoint Jeremy Littell as Principal Investigator (PI).
3. Analyze weather station or snow course data from up to 28 stations (5 weather stations in MORA, 5 in NOCA, 13 SNOTEL/snowcourse in NOCA) and compare them to existing long term stations in the Historical Climate Network and the more dispersed cooperative weather network (including at least 5 stations in NOCA).
4. Prepare the Climate chapters of the NPS NRCAs for MORA and NOCA using information generated for the NCAP project and incorporating the weather station analysis information into the chapters and using the NPS Standard NRCA Report Outline.
5. Collaborate with NPS, USGS, and NCAP staff in the preparation of the NRCA as it pertains to climate and climate change and including format and discussion items that meet NPS Standard NRCA Report Outline, including reviewing other chapters pertaining to climate change effects and attending at least one meeting.
6. Develop the draft climate chapters for MORA and NOCA for review by NPS and USGS.
7. Prepare a draft report describing the project objectives and results in accordance with specifications set out in the project work plan.
8. Incorporate NPS comments and produce a final report.
9. Incorporate NPS and USGS comments and produce the final MORA and NOCA climate chapters for the NRCAs.
10. Cooperate with the Agreement Technical Representative (ATR) to ensure that the conduct of the project complies with the "NPS Interim Guidance Document Governing Code of Conduct, Peer Review, and Information Quality Correction for National Park Service Cultural and Natural Resources Disciplines," and with any and all subsequent guidance issued by the NPS Director to replace this interim document. The ATR is the peer review manager for this project.
11. Fully acknowledge the NPS in any published or formally presented material developed or derived from this Task Agreement.

REPORT:

Per the agreement and project description, the UW Climate Impacts Group has done the following:

1. Worked collaboratively with NPS and USGS personnel to obtain weather station observations, develop the report, and respond to comments/edits.
2. Analyzed weather station and snow course data from a total of 44 stations: 13 in MORA and 31 in NOCA, and incorporated the results of the analysis into the report.
3. Developed draft climate chapters for MORA and NOCA for review by NPS and USGS.
4. Transferred Principal Investigator (PI) responsibility from Jeremy Littell to Guillaume Mauger, following the Dr. Littell's departure from CIG.

5. Incorporated NPS comments to produce final versions of the climate chapters of the NPS NRCAs for MORA and NOCA including the following:
 - a. Detailed information on the data sources and analysis techniques
 - b. An analysis of trends in temperature, precipitation, snowpack, and growing degree days,
 - c. Information on the relationships among stations across each park,
 - d. A discussion of current data limitations and gaps in current knowledge, and
 - e. A summary of climate projections based on the same datasets used to develop the NCAP report.
6. Prepared a draft report describing the project objectives and results.

PRODUCTS:

- Two finalized climate chapters for the NPS NRCAs for MORA and NOCA
- Finalized, high-resolution figures for inclusion in the report
- Project report.