

GRSG Newsletter

May 2025

## Looking Back at GRSG - Spring 2025 Recap

By Mahdis Borhani, Hollis Belnap, and Sarah Khan



## A Semester of Conversations and Community

As Summer kicks off, we're taking a moment to reflect on the progress made by the Grid Resilience Student Group (GRSG). From impactful newsletters to meaningful conversations and community-building meetings, this season marked a strong step forward in advancing grid resilience at the University of Utah.

## Newsletter Highlights

## **b** Exploring the LA Wildfires

In this edition, we examined the widespread destruction caused by the 2025 LA wildfires, which devastated communities across Southern California earlier this year. We explored the intersection of utility infrastructure, climate change, and policy in shaping wildfire risk, especially in Wildland-Urban Interface (WUI) areas. Our discussion highlighted key ignition hazards, emerging detection and mitigation strategies, and the role of resilient energy systems in reducing the impact of fire-related disasters. Group members were invited to reflect on critical questions, such as: Should we continue building neighborhoods WUI in regions? What interventions might have lessened the damage we witnessed?

## 🗱 Winter Olympics & Water in SLC

As Salt Lake City prepares to host the 2034 Winter Olympics, we looked ahead to the sustainability challenges facing our region. From snowmaking and water conservation to clean energy infrastructure, this issue focused on what it will take to power the Games—and the future with resilience and equity in mind. We summarized Utah's current sustainability plans, and challenged group members to consider what innovative solutions they could think of to make the Olympics a beneficial event for Utah residents, resources, energy, and transportation infrastructure.

## Group Meetings at a Glance

## February – Kickoff & Climate Goals

February's meeting centered around communitybased learning and resilience. Kicking things off, Sarah Sami Khan presented her electrical engineering research, making complex technology accessible with visuals and plainlanguage explanations. She then invited participants to respond anonymously to questions about climate education, anxiety, and action. A rich discussion followed, highlighting the importance of multi-platform education, shared climate concerns across disciplines, and the need for respectful community engagement.



We also heard from members who participated in a recent hydropower hackathon. Presenters emphasized how collaboration (not just technology) was the biggest challenge in such fast-paced settings and pointed to political mechanisms as powerful tools for advancing resilience. They shared key lessons from their experience, including how simplicity often makes solutions more impactful.



As always, the meeting wrapped up with announcements and casual conversation, giving members a chance to connect more informally and, of course, enjoy more coffee.

#### April – Water & Community Building

We started the April meeting with a visit from Dr. Libby Blanchard (Wilkes Center for Climate Science and Policy), who gave a talk on carbon credits, offsets, and the environmental impacts of international events like the Winter Olympics. Dr. Blanchard encouraged us to think critically about whether global offset projects are as effective as local interventions, pointing to the Great Salt Lake as a more impactful investment opportunity.



Later, Communications PhD student Jessica Chaplain shared insights from her dissertation on "just transitions." She emphasized the tension between local equity concerns and the global nature of climate challenges. This sparked an open exchange about public climate denial, policy backlash, and how researchers might address competing values in their work.



The session also included updates on our group's evolving identity -Hollis announced our official name change to the *Grid Resilience Student Group*, and an interactive survey led by Sarah on Olympic-related resilience strategies initiated conversation around members' top concerns.

### Spotlight: Voices That Shaped Our Spring

We were inspired this semester by a series of powerful talks from student presenters and guest speaker Dr. Libby Blanchard. Sarah Sami Khan brought an electrical engineering lens to the challenges of grid resilience, while Jessica Chaplain explored pathways to a just energy transition through her social science graduate research. Dana Reulein and Ali Tasavvori shared their innovative experiences from the Wilkes Climate Center Hackathon, where they tackled water resource challenges in real time. Rounding out the semester, Dr. Libby Blanchard presented critical research on climate offset credits and water resources associated with the SLC winter Olympics, reminding us that not all offsets are created equal, the Olympics require strategic and targeted solutions to protect communities and resources, and that scrutiny is essential in the pursuit of meaningful climate solutions.

## What's Next?

As we look ahead, we're excited to continue growing our community and deepening our collective exploration of grid resilience and sustainability. We'll keep inviting guest speakers to CRSG meetings to share timely, interdisciplinary research—from engineering solutions to social science insights—and will feature more presentations from our own graduate student members on climate and grid resilience in their respective fields.

We're also building momentum around student research: we'll highlight recent publications, share opportunities like conferences, symposiums, and hackathons, and help connect members to ongoing research projects. Expect more events—including lab tours on campus and don't miss the 2025 WIRED Grid Resilience Symposium in Calgary this summer, a major event for students interested in resilience, energy, and innovation!

### *tearn more about the WIRED Symposium*

We'll continue publishing newsletters throughout the year, and anyone is welcome to propose a topic—whether it's something you're researching, reading, or just curious about.

Stay connected over the summer on Discord! Also, keep reading! Below is an interview essay by our very own GRSG officer, Mahdis Borhani!

## Learning Through Each Other: What I Learned About Grid and Climate Resilience from Listening Closely

By Mahdis Borhani

What does climate resilience mean to students from different fields -and how does that understanding grow when they come together? As part of a class project on qualitative methods, I spent the past semester observing and interviewing members of our climate resilience student group. My aim wasn't to conduct a full research study, but to practice fieldwork and understand whether -and how- interdisciplinary collaboration changes how we think about climate resilience. As someone who's always found this group inspiring, I was curious to learn whether our shared space does more than bring different perspectives into the room. Does it actually help us grow new ones? Findings of this miniethnography revealed how members from a range of disciplines construct, expand, and apply their understanding of climate resilience through peer interaction, collaboration, and reflection.

#### Grid and Climate Resilience Means Different Things to Different Fields

Early on, it was clear that disciplinary background influenced how people initially thought about climate resilience. My observations showed that engineering students, for example, often asked more technical questions, while planning or communication students were more focused on process, equity, or stakeholder engagement.

But interviews revealed that academic training wasn't the only factor shaping those early ideas. For some students, personal experience, news, or conversations outside school played just as strong a role. One participant described feeling "in a little bit of a research bubble," immersed in power systems and infrastructure work, and said exploring policy or social science had been "really... eye-opening." Others, like a computer science student, noted that climate resilience didn't even come up in their field: "Your studies are exclusively related [to your specialized field]. I never really got to apply them in a climate resilience context."

This told me that people arrive with different kinds of background knowledge -and different gaps. And while academic discipline matters, it doesn't work the same way for everyone.

# Interdisciplinary Learning Isn't Just About Exposure

One of the clearest themes to emerge was how much people appreciated learning from each other. Students regularly mentioned group presentations and discussions as moments where their thinking shifted. These events were described as "eye-opening," not just because of the content, but because of how ideas were presented-in simple, accessible ways.

As one informant put it: "I know that this knowledge is out there. I could have looked it up and read it, but I never did... But when someone makes a presentation... and explains it to me in simple terms, then I understand."

But there was more going on than passive learning. Being asked to explain your own work to people from other fields pushed students to reflect on what they were doing and why. As one presenter told me, it made them "really think about [their] work and what it came down to." So the learning was happening on both sides -both when listening and when teaching.

# Growth Requires Motivation -Not Just Environment

One unexpected finding was how often people talked about their own sense of agency. It wasn't just that the group exposed them to new ideas -it's that they were actively looking for them. One student said:

"The group has affected my understanding, but I feel like a lot of people who joined the group had it in themselves, you know?... That's why they decided to join."

This led me to think differently about what learning looks like in groups like ours. Yes, people change. But that change doesn't always start *because* of the group -it may already be in motion when they arrive. What the group offers is a supportive space where that growth can deepen.

#### More Than Just Conceptual Change

Although I focused on how perceptions of resilience shift, participants often brought up other effects of group membership: increased confidence, stronger collaboration skills, and even a deeper sense of connection to others. Many spoke about how the group helped them communicate across disciplines, tackle interdisciplinary projects, or think more critically about their own field.

One student shared how, after visiting several companies, she no longer just admired their work but started asking tougher questions: "How much of your manufacturing runs on clean energy? And how much should it?"

Others emphasized the social and emotional dimensions of group membership. Getting to know people -beyond names and majors -shifted how they saw climate resilience, making it feel more human and connected.

# Why This Works -And Why It Might Not Always

One of the most interesting takeaways for me was how often people linked the group's openness and collaboration to the fact that we're all students. As one interviewee said, "Since we have no financial stakes, it is easy to listen to each other." Without competition for funding or professional status, people seemed more willing to be vulnerable, curious, and generous in how they engaged.

That insight stayed with me. It suggests that what we're doing works not just because it's interdisciplinary, but because it's student-led. That may be part of why conversations here feel more genuine and less guarded than in some academic settings.

#### **Final Thoughts**

This experience reminded me that research doesn't always have to generate big, definitive answers. Sometimes, it helps us notice the small but powerful ways people grow and change. Our group brings people from very different places into the same space. But what makes it valuable is not just the mix -it's what we do with it.

This study captures something we already know but may rarely say: we're learning from each other in ways that shape how we think, how we work, and who we become. The findings suggest that student-led, interdisciplinary spaces like ours do more than expand knowledge -they build skills, relationships, and a deeper sense of purpose.

And maybe most importantly, they remind us that climate resilience is not just a topic -it's something we're actively learning how to practice, together.