Contemporary Native American communities across the US are disproportionately impacted by the environmental impacts of historical and current energy development (LaDuke 2005, Smith and Frehner 2010). Governmental and non-governmental Lakota organizations on the Pine Ridge and Rosebud reservations in South Dakota are now attempting to develop renewable energy, especially wind power, to build environmental and social resilience and energy independence (Garry et. al. 2009). The process of claiming renewable energy as environmental justice traverses and reconfigures federal-tribal government relations and is tied to Lakota claims for political sovereignty. Few studies, however, have attended to the ways in which these discourses are reconfigured and ultimately impact whether or not renewable energy projects are built. In this research project, I will develop collaborative dissertation research questions, strategies and returns with Lakota people and institutions to understand how possibilities for renewable energy are mediated through tribal-federal governmental relations. Lakota institutions rework renewable energy and environmental justice discourses to fit their own contexts, and in doing so, challenge federal policies to hold to their environmental justice claims.
The proposal includes a work plan with a specific timeline using months or quarters to identify work to be done and completion dates.

The proposal includes a 1-2 paragraph biography of the applicant and all co-investigators.

The budget form is complete including the funds sought for this project, other pending applications for this project, and the amount/source of matching or other funds.

The applicant’s faculty advisor is copied on the application email. Professional students w/o advisors check NA.

All necessary approvals are pending or received.
Shifting Winds: Claiming Sovereignty and Environmental Justice through Lakota Renewable Energy Development
Kai A. Bosworth

Statement of the Problem
The Lakota Sioux of western South Dakota claim the environmental impacts of uranium and metals mining, weapons testing, large-scale hydropower, and proposed oil pipelines from the Canadian tar sands have contributed to tribal impoverishment, environmental health burdens, and the destruction of sacred spaces. Heating bills soar in the sparsely populated Pine Ridge and Rosebud reservations, and many homes have no electricity. Recently, these tribes have also been at the forefront of wind and solar power development, erecting the first tribally-owned wind turbine in the US in 2003 and establishing pilot programs in solar heating and electricity. Renewable energy, many have argued, fits better with Lakota cultural values, will provide jobs and money for tribal members, and will help achieve energy independence (Garry et. al. 2009). Yet despite financial support from the Department of Energy for pilot projects like the Owl Feather War Bonnet wind farm, disagreements over the role of tribal sovereignty, division of profits, and the definition of environmental justice have mired attempts to develop large-scale renewable energy.

While policymakers and renewable energy advocates alike have argued that high prices of renewable energy are the main reason for the absence of major wind power development in western South Dakota, environmental justice advocates have instead used renewable energy to frame the uneven impacts of historical energy development practices on Native Americans and argue instead that renewable energy should promote tribal sovereignty, health, and sustainability (Powell 2006). With the codification of environmental justice language in the Department of Energy and other federal administrative branches, certain forms of tribal energy development continue to be elicited. But for many Lakota, creating healthy, resilient spaces is a process of constructing collective ownership and control of renewable energy projects and profits – a vision that may be at odds with the federal government’s formulation of environmental justice policy and energy economics. Who can claim environmental justice?

Background
Geographers, political ecologists, and environmental justice scholars have long been interested in understanding the links between state and institutional processes, sustainable development and social and economic marginalization. Recent research in geography and Native American studies has emphasized the oscillation between opportunity and exploitation in the material relationships constituted through sovereignty, indigenous spaces, and environmental politics (Coombes et. al. 2012, Corntassel 2008, LaDuke 2005, Voggesser 2010). While changing meanings of tribal sovereignty or self-determination have gained importance (Biolsi 2005), scholars have not developed a comprehensive understanding of the relationship between competing claims to sovereignty, sustainability, and especially environmental justice (Holifield et. al. 2010). This case thus presents a unique opportunity to deepen our understanding of sovereignty and environmental politics on Native American land, delving into the specific meanings and discourses of sustainability and sovereignty for Lakota people and the shifting terrain that renewable energy development demarks between federal and tribal claims to environmental justice.

Research Questions
My research broadly examines how continuities and breaks between historical environmental injustices and future sustainable development initiatives in Native American communities are increasingly framed by the environmental justice standards of the federal government. Conversely, I
also seek to understand the ways in which diverse Native American understandings of sovereignty and sustainability exceed, challenge or modify federal parameters. Using Lakota initiatives as a case study, I ask:

1) How are Lakota understandings of sovereignty expressed in plans for renewable energy projects?
2) How does the institutionalization of environmental justice language elicit and legitimize differing political and economic claims from both the federal government and Native American tribes?
3) How are disagreements over the role and form of sustainable development plans mediated by tribal-federal intergovernmental relations?

Methodology and Work Plan
While these questions guide my current research, the goal of this pre-dissertation research project will be to rework these questions in collaboration with Lakota people and institutions. The history of academic research with Native American communities has been largely extractive and exploitative, often valuing indigenous knowledge while failing to seek consent, collaboration, or provide any benefit for Native communities (Indigenous Peoples Specialty Group of the Association of American Geographers 2010). Because of these vulnerabilities, the primary goals of pre-dissertation research in summer 2013 are largely collaborative, open and methodological.

A) Ask Lakota people and institutions if they would like to cooperate in shaping an academic research project.
B) Construct collaborative research questions and methodologies for future dissertation research and identify deliverables for the tribe.
C) Apply for research review from the Rosebud and Pine Ridge tribal governments.

These goals are indispensable to the process of producing both ethical and beneficial knowledge and will make my dissertation a thorough, useful and unique contribution to geography and political ecology. I will meet these goals through a series of semi-structured interviews with key informants or collaborators in the Rosebud and Pine Ridge Sioux Tribal Governments, the Red Cloud Renewable Energy Center, Trees, Water & People, Lakota Solar Enterprises, the Intertribal Council on Utility Policy, and Defenders of the Black Hills. Given my amenable research interests, I believe that collaboration will be a fluid and dynamic process, but the goals and focus of this research trip are open ended and will be influenced first and foremost by relationships built with Lakota people.

Importance and contribution
This project will contribute knowledge useful to several fields and is by nature interdisciplinary. First and foremost, I aim to develop knowledge that is meaningful for Lakota people, institutions and advocates. Specific knowledge on the history of federal-tribal interactions may be useful for other tribes as well. Second, the research will contribute directly to interdisciplinary literatures on environmental justice, renewable energy economies, development studies, and political ecology. My work will speak to geographers, anthropologists, environmental historians, and Native American and indigenous studies scholars with both my findings and my unique methodological strategies. Finally, federal policymakers and administrators will likely be interested in learning how to produce more effective environmental justice policies. For each of these audiences, this project could provide new avenues for understanding, cooperation, and alliance building across differences in order to build truly sustainable developments.
## Timeline

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
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<tbody>
<tr>
<td>May-June 2013</td>
<td>Detailed historical and policy research and scheduling of initial discussions. Gain initial research clearance from Rosebud and Pine Ridge tribal governments.</td>
</tr>
<tr>
<td>July 2013</td>
<td>Interviews with key Lakota government officials, leaders, environmental advocates. Volunteer with Lakota organizations. Review research agenda with tribal governments.</td>
</tr>
<tr>
<td>August 2013</td>
<td>Complete draft of collaborative research process. Identify possible deliverables for tribal community. Discussion of methodology. Solicit feedback from contacts. Finalize collaborative research proposal, questions, and methodologies. Prepare report to be submitted to Consortium July 31, 2014.</td>
</tr>
</tbody>
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## Bibliography


Biography
Kai Bosworth is a graduate student in the department of Geography, Society and Environment at the University of Minnesota. He grew up in Spearfish, South Dakota and holds a B.A. in Environmental Studies from Macalester College in St. Paul, Minnesota. As an undergraduate, Kai participated in many independent environmental advocacy organizations as well as working for nonprofits Honor the Earth and Metro Clean Energy Resource Teams (CERTs). With these organizations, Kai researched the historical environmental impacts of the US military on Native American communities as well as current policies to promote community-based energy development. These experiences cultivated a desire to understand more deeply the processes that produce environmental injustices in marginalized North American communities, eventually leading to graduate research at the University of Minnesota. Kai received a University of Minnesota Graduate Student Fellowship in 2010 and was an honorable mention for the National Science Foundation’s Graduate Research Fellowship Program in 2011. His M.A. research focuses on theories of environmental justice, the material production of conditions of poverty, and the history of colonialism. In addition to these research interests, Kai is currently working on papers on race and environmental health, climate change and geologic time, and narratives of extinction and apocalypse in popular culture. Kai is defending his M.A. in the spring of 2013 and will continue on to the Ph.D. program at Minnesota. His Ph.D. will focus on the history and future of energy development and indigenous politics in western South Dakota.
### Budget for Student Proposals

**Project Title:** Shifting Winds: Claiming Sovereignty and Environmental Justice through Lakota Renewable Energy

**Category** | **Description & justification** | **Requested funding** | **Matching/other funding** |
---|---|---|---|
1 | *Your stipend*<br>Salary $4,411 = 240 hours at $18.38/hr (Geography department research assistant wage) | $4,411 |  |
2 | *Other personnel* |  |  |
3 | *Speaker honoraria*<br>___ speakers x $ _____ honorarium |  |  |
4 | *Supplies & Services*<br>Identify and explain use. |  |  |
5 | *Equipment*<br>Identify and explain use. |  |  |
6 | *Travel*<br>Travel to and from Murdo, SD by personal car. 878 miles at $.565 per mile as per [http://travel.umn.edu/](http://travel.umn.edu/). | $496 |  |

**Subtotal research expenses (2-6)** | $496 |  |

**TOTAL BUDGET** | **$4,907** | **$0**

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**Budget Guidelines**

1. **Stipend justification.** You must justify the amount of stipend you are requesting by identifying the number of hours you plan to work on the project and the hourly wage used for research assistants in your department. Include fringe benefits.

2. **Identify all other personnel to be paid from this grant including interpreters, travel guides, etc. and justify their salary by identifying the number of hours they will work and the hourly wage. What is the hourly wage based on?**

3. **For colloquia, identify the number of speakers and the amount of honoraria you will provide.**

4. **Supplies and services. List out all supplies and their estimated costs. Explain in line 7 or in the body of your proposal what the supplies will be used for.**

5. **Equipment costs are allowable only if the justification clearly shows that the equipment is necessary for the project. Include explanation of what will happen to equipment at completion of project.**

6. **Travel costs must include a description of the purpose of the travel, start and stop dates of travel, transportation costs, housing costs, and allowable per diem (use University rates found at [http://travel.umn.edu](http://travel.umn.edu)).**