

**Report as of FY2007 for 2006MT101B: "Student Fellowship:
Settlement, environment, and identity: Understanding processes
of vegetative change along the Wind River"**

Publications

Project 2006MT101B has resulted in no reported publications as of FY2007.

Report Follows

Final Report
2006 Montana Water Center Fellowship
June 21, 2007
Teresa Cohn

In my Water Center Fellowship proposal, I outlined the general goals of my dissertation research, and particularly emphasized that I would use my funds for vegetative sampling, aerial photography work, and preparation for interviews with respect to riparian vegetation along the Wind River. The following objectives remain central to my work:

- 1) to understand the effect of two dams and a series of diversions on Wind River vegetation and hydrology, and particularly their effect on native vegetation
- 2) to reconstruct the cultural landscape of land and water use in the Wind River corridor
- 3) to investigate the “invisible landscape” of perception, traditional ecological knowledge, and place identity
- 4) to study the interaction of social and ecological landscape elements with respect to vegetation along the Wind River.

However, several unanticipated changes have taken place, which have affected both my progress and methods.

The largest change in my work took place in Fall, 2006, at my first committee meeting and extensive review of my research proposal. My committee members unanimously agreed that the scope of my project was too large, straddling the fields of both ecology and historical geography. They strongly encouraged me to choose one discipline from which to work, and build my project around this discipline’s framework. In addition, the ecologist on my committee noted that much of my vegetative sampling work was unnecessary with respect to my overall goals. As a result, I have chosen to work as an historical geographer, augmenting my work with some riparian ecology, and eliminated most of my vegetative sampling from my research.

The following, while slightly modified, is still progressing:

- 1) I have taken 25 sets of repeat photographs of the Wind River, depicting change over time
- 2) I will rely heavily on orthorectified aerial photographs to analyze vegetative change
- 3) Interview preparation is underway, and is scheduled to begin in August, as planned.

In addition, I have conducted the following research that was not outlined in my Water Center report:

- 1) I have reviewed irrigation and extension records in the Denver National Archives
- 2) I have built a much stronger foundation in historical geography.

I mentioned in my Water Center proposal that I wanted to incorporate community involvement in my work. As a result, I applied for, and received, a National Science Foundation GK-12 Fellowship through the Big Sky Institute for the 2006-2007 school year which was recently renewed for 2007-2008. This work heavily involves me in the community, as I teach science at least a week a month in a reservation school. While richly rewarding, it is well accepted that GK-12 fellows progress more slowly than they otherwise might, as a result of fellowship constraints.

In sum, my overall research objectives remain the same. Some of my research has changed, some is progressing more slowly than anticipated, and I have added substantial archival work to my methods of understanding vegetative change.

My \$1,000 fellowship, at least in part, has contributed to:

- 1) building a much stronger foundation in historical geography
- 2) preparing 25 sets of repeat photographs
- 3) beginning aerial photo analysis
- 4) conducting research in the national archives.

I sincerely appreciate support from the Water Center and look forward to the completion of my degree in Spring, 2009.