Phase II Geospatial Training Report

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Consultant’s Report II

To: Dr. Brent Bowen
From: Dr. Henry R. Lehrer
CC: Michaela Schaaf
Date: May 21, 2006
Re: Phase II of Spring 2006 Project for Nebraska Space Grant (NESG) and EPSCoR

The activities listed below are those that occurred as part of Phase II of the 2006 Project that I was engaged for by Dr. Brent Bowen in early February 2006. Among these activities are project-related travel with dates, evaluation of reports/proposals, and preparation of training sessions that occurred during this part of this consultation. In addition, discussions have begun on Phase III activities should this part of the project be necessary. All travel have been billed to NESG and EPSCoR under separate cover. If more extensive details or any clarifications are needed, they are available.

Preparation and Planning for Geospatial Boot Camp at Little Priest Tribal College (LPTC) on May 6, 2006

For the past 12 weeks, the teaching team consisting of this consultant, Karisa Vlasek of NESG, and Jan Bingen of Little Priest Tribal College (LPTC) has been planning this year’s Geospatial Boot Camp that will be held in early May. This year’s event will follow the format for the very successful even which occurred in April of 2004. Approximately 20 to 30 teacher and school administrators were invited to attend this one-day event on geospatial teaching technology as well as techniques.

Extensive preparation for the workshop has been underway for the last 6 weeks. These preparations included many on-site activities such as the development and printing of the course manual (additional copies available from Jan Bingen at LPTC), loading of Arc Explorer, Multi-spec, and Terraserver software on 14 computers in the LPTC computer lab, as well as initializing 20 Magellan Gold GPS units that would be available for the workshop.

The finalizing concerning the exact number of attendees was very difficult to do. The major hurdle in securing hard commitments from the invitees seemed to be that the date selected (as well as just about any date for this time of year) seemed to quite over-subscribed with graduation events at most schools and family activities for potential attendees. However, as late as the day before the workshop, the active planning was for 15 attendees (confirmed by phone or
There was never any doubt that the workshop would not occur.

**The Bootcamp** (see attached agenda)

The Geospatial Bootcamp for 2006 was a resounding educational success. The activities planned by the instructional team were executed with expertise; all attendees had numerous questions during all phases of the educational event. There was a high level of excitement and intensity present all day long. Several individuals were anxious to return to their work centers to apply their new-found knowledge; all attendees were very supportive of the quality of the curriculum for the workshop. Karisa Vlasek gathered post workshop evaluations from each of the participants.

Using a combination of both classroom instruction and computer lab hands-on activities, everyone was totally immersed in the day-long event. The facilities at LPTC were convenient to use and quite well appointed, but each setting was well equipped so as to provide a wonderful environment for the workshop.

The event was also a political success in that a total for six different Indian Country entities were represented among the attendees. Specifically, the following individuals were at the Bootcamp:

1. Terri Greenleaf: High School Science Teacher-Winnebago Public Schools
2. Frank Sievers: High School Technology Teacher - Omaha Nation Schools.
3. Heather Little Thunder: Diabetes Office – Winnebago Tribe of Nebraska
4. Thelma White Water: Housing Office – Winnebago Tribe of Nebraska
5. Hank Miller: Environmental Teacher - Nebraska Indian Community College (NICC) at Santee
6. Dawn Hare: Faculty Member – NICC at S. Sioux City

One of the highlights for the day’s events was the hands-on GPS Scavenger Hunt. The class divided up into teams of two to find 5 different geospatial locations on the LPTC campus. Although the participants viewed this activity solely as knowledge-based, it was really a team-building exercise as well. All participants enjoyed the hunt.

Another key part of the day’s activities the fellowship that occurred at the welcome section and during lunch. The “breaking the ice” thorough sharing of food is an important part of the Native American culture. Within a very short time, people of diverse backgrounds and interests had become better acquainted and were eager to engage in classroom and team activities.

The model for this workshop has been trialed with Native American educational as well as tribal employees/staff on two different occasions now. Each of the
workshops has been successful from an instructional perspective and the concept can be utilized with other such constituencies and the event could be offered as a two-day workshop with little difficulty. The addition of more hands-on activities would be a natural extension of the curriculum.

**Continued Review of NASA NE EPSCoR 10-year Evaluation**

The external review of this proposal was begun in Phase I of this project and continues in Phase II. Initially, this consultant’s task was to determine the accuracy of any statements, particularly as related to NESG Native American Outreach past and proposed. A complete review of the lengthy proposal was required and corrections in format and continuity were marked as well. The corrected proposal was return NESG for review and final submission. In Phase II a detailed review will be done on the complete document.

The Phase II review is not complete at this time as the final version of the report is being edited by the NESG staff. However, as soon the full and revised report is available, this part of Phase II will be completed. The review will include a SWOT Analysis of the report citing Strengths, Weaknesses, Opportunities, and Threats. Initially, there are several strengths, weaknesses, opportunities, and threats evident. These include:

**Strengths:**

1. Long-term relationship with the NE Native American Community

2. Good relationship with the NASA research Cluster Principal Investigators. The work being done is significant and well accepted in external research circles.

**Weaknesses:**

1. Failure of NESG and EPSCoR personal to be actively engaged with outreach and research activities.

2. Lack of a well-defined point of contact at NESG for external sources to connect. Most communication paths are not clearly defined and the NESG staff seem to be relying solely on email for contact. The personal touch is sorely lacking.

**Opportunities:**

1. The national economy is on the mend and with such a recovery, opportunities for external funding should be improving.
2. The technologies that NESG has been funding and developing through grant awards are viable in both aerospace as well as agriculture arenas.

**Threats:**

1. The lack of stability of external funding sources like government agencies. The NESG has little control over these sources and must always play a reactive role.

2. Politics and internal disputes at both LPTC and NICC as well as at the tribal government level constantly erode the stability for long-term development of any meaningful partnerships.
**“Geospatial Boot Camp”**
Sponsored by Native IMAGE (Institute for Managing Applications in Geospatial Extension) & NASA Nebraska Space Grant

![Native IMAGE Logo](image)

**Little Priest Tribal College**
May 6, 2006
8:30am-9:00am Continental Breakfast 9:00am – 3:30pm Workshop

**Instructors:**
*Jan Bingen, Director of Native IMAGE*
*Dr. Hank Lehrer, Past Director Native of IMAGE*
*Karisa Vlasek, Geospatial Extension & Research Specialist*

**Agenda**

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<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>8:30-9:00</td>
<td>Continental Breakfast</td>
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<tr>
<td>9:00-9:15</td>
<td>Introductions, Overview of Agenda</td>
<td>Karisa, Hank, Jan</td>
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<tr>
<td>9:15-9:45</td>
<td>Overview of Geospatial Technologies</td>
<td>Karisa</td>
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<tr>
<td>9:45-10:15</td>
<td>Latitude and Longitude</td>
<td>Hank</td>
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<td>10:15-10:30</td>
<td>Break</td>
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<tr>
<td>10:30-11:30</td>
<td>GIS TerraServer and ArcExplorer</td>
<td>Hank</td>
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<tr>
<td>11:30-12:00</td>
<td>GPS 101</td>
<td>Jan</td>
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<tr>
<td>12:00-12:45</td>
<td>Working Lunch (catered in)</td>
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<tr>
<td>12:45-1:30</td>
<td>GPS (outside with units)</td>
<td>Jan, Hank, Karisa</td>
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<td>1:30-1:45</td>
<td>Break</td>
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<tr>
<td>1:45-3:15</td>
<td>Remote Sensing 101</td>
<td>Karisa</td>
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<tr>
<td>3:15-3:30</td>
<td>Wrap Up</td>
<td>Hank, Karisa, Jan</td>
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