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Executive Summary

During the past three-months, the focus of the university’s efforts has included the following highlights:

- Hired Forever Earth/WOW Project Manager Daphne Sewing
- Hired Environmental Education Strategy Project Manager Allison Brody
- Completed five WOW curriculum modules
- Formed a partnership with Clark County Parks and Community Services to pilot WOW events in Spring 2005
- Scheduled first WOW event during the week of March 21, 2005
- Completed Forever Earth orientation trip on February 25, 2005
- Finalized Forever Earth legal documents and insurance requirements

Hiring

On January 18, 2005, Dr. Allison Brody was hired as project manager for the Education in the Environment Strategy. Dr. Brody has an extensive background in informal science and conservation education. Having most recently worked as Director of Educational Programs at the Oklahoma City Zoo, Dr. Brody also worked as a Teacher Trainer and Secondary Instructor for the Bronx Zoo/Wildlife Conservation Society.

Effective February 1, 2005, Daphne Sewing was hired as the project manager for the Forever Earth and WOW on the Water programs. Ms. Sewing brings a blend of formal and informal education program management experience to the position. In previous positions with the U.S. Forest Service, she managed the environmental education and interpretive services program at Land Between The Lakes National Recreation Area in western Kentucky and the Tongass Marine Highway Shipboard Interpretive Program in southeast Alaska. Prior to working for the Forest Service, Ms. Sewing coordinated the Project WILD program for Utah Division of Wildlife Resources for five years. She also taught math and science in Missouri and Idaho public schools for 11 years.

FOREVER EARTH PROGRAM

In late November 2004, a draft cooperative agreement governing the use and operation of the Forever Earth vessel was forwarded to John Schoppmann of Fun Country Marine Industries
(FCMI). A copy of this agreement was provided with our November 30, 2004, quarterly report. In the intervening months, the draft agreement has been reviewed by the company’s lawyers and insurance agents as well as company employees. This agreement is critical to the commencement of the program and must be carefully drafted to adequately address the interests of both parties. There are complexities addressed in the agreement that relate to a public university operating a vessel on an interstate waterway that will have children of all ages, adults, and employees on board. A meeting has been scheduled with Mr. Schoppmann and his staff for March 1, 2005, to discuss the draft cooperative agreement as well as the draft standard operating procedures. We anticipate being able to settle any remaining issues related to these documents during the month of March.

A major delay to the implementation of the Forever Earth program has been the lack of insurance coverage for the Forever Earth vessel. Ms. Sewing has been working with Jon Hansen, Risk Manager for the University and Community College System of Nevada (UCCSN), to provide the detailed information needed to obtain an accurate insurance quote. An outline was created to determine the type of information needed by insurance brokers, and then details were added to the outline (see attached). Estimations were made regarding the number of trips, average number of UNLV employees on board per trip, and average number of passengers per trip. A commercial vessel insurance application was completed and returned to Mr. Hansen on February 28, 2005. This will assist us in determining what costs are involved for obtaining appropriate insurance coverage.

Additionally, work is continuing with UCCSN staff attorney Brooke Nielsen to draft a contract addendum for UNLV employees working on the Forever Earth vessel. These employees are affected by the federal Jones Act and must be covered for special worker compensation rights that are afforded to employees on waterways. Because the university’s standard employment contract does not fully address the liabilities and responsibilities inherent to work conducted on an interstate waterway, our attorneys have recommended that a special contract addendum be drafted and executed for these employees. A meeting was held with Ms. Nielson on February 15, 2005, to urge priority action on this document, and we anticipate receiving a draft in March 2005.

**Forever Earth Outreach**

On February 25, 2005, an orientation trip for 30 people was conducted on board Forever Earth at Lake Mead National Recreation Area. In attendance were members of the Public Lands Initiative (PLI) staff, National Park Service interpretive staff, and members of the Outside Las Vegas Environmental Education Committee, which is composed of educational and interpretive staff from a variety of public museums, parks, and other venues. The purpose of the trip was to familiarize participants with the Forever Earth program and to facilitate team-building among the groups. Among the participants was Dr. Vineyard, a Nevada Department of Education Science Coordinator. The trip provided a great opportunity to highlight the educational potential of the program for Clark County School District students.

**Forever Earth Website**

Dr. Jennell Miller completed a draft template for a Forever Earth website to be hosted on the UNLV Public Lands Initiative homepage (see attached). The draft includes content and organization ideas for students, teachers, and researchers. However, until the specifics of the Forever Earth program become clearer, the university has elected to keep the site under construction. We anticipate that during the next quarter a preliminary website will go live to provide information about Forever Earth to the public, schoolteachers, and parents.
Forever Earth Fund-Raising

The Outside Las Vegas Foundation submitted a successful grant request in the amount of $7,500 on behalf of the Forever Earth program. The grant was awarded by the Nevada Community Foundation and will cover costs associated with providing six field trips aboard the Forever Earth vessel on Lake Mead. Approximately 120 economically disadvantaged middle and/or high school students will benefit from the grant and be able to participate in a variety of hands-on math and science related activities on board. These field trips are to take place before December 2005.

WOW on the Water Program

A meeting with Clark County Parks and Community Services was held February 18, 2005, to discuss partnership possibilities that would facilitate scheduling WOW on the Water activities during Spring 2005. Clark County Parks Department is very supportive and interested in establishing a collaborative relationship that augments their program as well as assists the university in fulfilling its target of hosting 10 WOW events before May 31. The county offered UNLV access to participants in its RecMobile program, which targets economically disadvantaged neighborhoods and provides structured recreational activities for children. The target age of 8-12 year olds as well as the small group size fits well with the planned WOW program. This opportunity was explored further on February 24, 2005, when Ms. Sewing met with Kelly Woods and Sharon Steele, managers of the RecMobile program. They were very enthusiastic about the types of non-traditional recreational activities that WOW on the Water can provide for local children. Opportunities for scheduling after-school activities and Saturday events were explored. The first WOW event will be a half-day event scheduled for the week of March 21, during spring break for Clark County schools. At least four more events will be scheduled during April and May. Clark County Parks Department will assist in promoting the activities, registering participants, and providing transportation and at least one staff person for each event. Another meeting is scheduled for March 3, 2005, to finalize a schedule and the logistics.

Similarly, the university has also been pursuing partnership opportunities with Paradise Elementary School, which is located on the UNLV campus and has a highly diverse student body. We anticipate being able to provide WOW events to children in the school’s SafeKey program this Spring. Both of these efforts will allow us to quickly pilot a number of WOW events in the next few months with appropriate ethnic and age groups.

WOW Curriculum Development

Work on five WOW on the Water modules or events was documented in the previous quarterly progress report. Additional progress has been made on these modules (see attached) by Dr. Jeanne Klockow, Educational Curriculum Specialist, Dr. Jennell Miller, and Kay Rohde, Chief of Interpretation for the National Park Service.

Each WOW module is divided into three shells: 1) Awareness Session – overview of activity, safety briefing, and pre-activity assessment; 2) Activity – participation; 3) Debriefing – closure and post-activity assessment. Potential activity sites have been identified as well as a materials list for each activity and additional information and technology websites. A list of participant groups, contacts, and suggested materials was also developed (see attached).
In addition, Dr. Klockow has been working with Dr. Greg Schraw and Dr. Lori Olafson, of UNLV’s Center for Evaluation and Assessment to develop an assessment strategy for the WOW events (see attached scope of work). We want to ensure from the start that WOW events produce the outcomes anticipated when the Round 4 nomination was approved. Survey instruments are being developed to measure two factors – knowledge and attitude – for student participants; in addition, knowledge and logistical factors will be measured among facilitators to ensure quality instruction and preparation. Pre- and post-activity assessment will occur and will consist of both quantitative and qualitative methods. The survey instruments will be administered at each of the Spring 2005 WOW events.

ENVIRONMENTAL EDUCATION STRATEGY

The Outside Las Vegas Environmental Education Committee (OLVEE) – composed of a wide array of educational and interpretive staff from the federal agencies, county government, local municipalities, and educational institutions – has been meeting for several years to begin the groundwork for an environmental education strategic plan. The intent of the Round 4 nomination is to complete the work needed to develop a fully realized strategic plan and to devise a work plan to ensure that the strategic plan is employed throughout Southern Nevada. Dr. Brody is now chairing this committee in her role as project manager for the Environmental Education Strategy. The OLVEE Committee had previously completed a Desired Future Program Overview matrix (see attached) detailing the types of programs that it believes will need to take place to meet overall program goals and fulfill the committee’s shared vision. This overview matrix includes general themes that programs should meet, specific program ideas, and the desired audiences for programs to reach.

Dr. Brody has taken the first step in developing the strategic plan, which is to complete an assessment of existing outdoor education programs in southern Nevada. This assessment can then be compared to the overview matrix to identify gaps and areas of overlap in existing programs. Throughout January and February 2005, Dr. Brody met with the four federal agencies and observed educational programs, talked about processes, and discussed challenges. Based on these conversations and an examination of the committee’s matrix, Dr. Brody developed a program analysis sheet to collect information on all place-based environmental education programs that are currently (Spring 2005) taking place in Clark County. This document (see attached) was presented to both the Interagency Environmental Education Committee and the OLVEE committee on February 9, 2005, and it was agreed that Dr. Brody will coordinate the collection of information from the four federal agencies as well as other outdoor education venues. For example, Dr. Brody has already made initial contact with education personnel at the Las Vegas Springs Preserve, the Clark County Wetlands Park, Mandalay Bay Aquarium, the Clark County Desert Conservation Program, and others. OLVEE committee members will help identify programs/venues that should be included. Within the next quarter, a database will be constructed and analyzed to compare the data about current programs to the desired programs detailed in the overview matrix.

To assess the delivery of environmental programs, we need to first understand what constitutes an effective environmental education program. Although the Desired Future Program Overview matrix details specific program ideas, these may not be the most effective approach. For example, three proposed methods to deliver messages that will foster people making personal connections to the environment include a celebrity spokesperson; a TV program; and coloring placemats at restaurants. However, each of these methods make several assumptions about environmental education, including 1) that people will be receptive to messages delivered in these ways; and 2) that we know precisely what messages will result (in this example) in people
making personal connections with the environment. These assumptions are being addressed in several ways.

First, to take into consideration the latest research in how people learn, especially in "free-choice" environments, Dr. Brody is applying to attend the Institute for Learning Innovation’s “Free Choice Learning and the Environment” conference in June 2005. The purpose of the conference is to develop frameworks for improving practice, evaluation, and future research efforts of the free-choice learning environmental education community.

Second, to develop a better understanding of Clark County residents, we are pursuing several options for audience questionnaires. Following a literature review of environmental education surveys and free-choice learning methodologies, Dr. Brody submitted suggestions to Connie Moen, Outdoor Recreation Planner for the Spring Mountains National Recreation Area. Ms. Moen is on the Interagency Recreation Team, which is spearheading the delivery of an Interagency Social Survey through a contract with Argonne National Laboratory (Round 4, FS Agreement No. 03-SU-11132420-040). Suggested questions that may assist the development of the environmental education strategic plan (see attached) have been passed along to Argonne for possible inclusion in the final survey. As well, Dr. Brody is pursuing other survey opportunities, such as partnering with UNLV’s Department of Environmental Studies, that might contribute to our understanding of best practices for delivering environmental messages.

Additionally, through discussions with the Interagency Environmental Education team on February 9, 2005, it was determined that there is a need to know more about teacher needs in order to deliver effective programs to both students and teachers. On March 1, 2005, Dr. Brody will meet with Loretta Asay, K-12 Science Coordinator for the Clark County School District, to discuss the construction of a survey tool for educators in the Clark County School District.

**Community Outreach**

Nancy Flagg, Director of UNLV’s Public Lands Initiative, made a presentation to the board of the Outdoor Las Vegas Foundation, on January 31, 2005, to give an update on the Education in the Environment initiative and other Round 4 projects currently being managed by the university.

In addition, a memorandum of understanding (MOU) between UNLV and the Outside Las Vegas Foundation was formally signed on January 31, 2005 (see attached). The MOU details the respective roles of each organization to support and carry out SNPLMA-funded projects. Working in accordance with this MOU, the project managers for Forever Earth/WOW Program, Environmental Education Strategy, Cultural Site Stewardship Program, and the Interagency Volunteer Program established dates for a standard monthly meeting with Alan O’Neill, executive director of Outside Las Vegas, and Bobbie Antonich, government technical representative for the National Park Service, to ensure an effective exchange of information. At the first meeting on February 2, 2005, each project manager gave updates and described needs, while Ms. Antonich and Mr. O’Neill were able to provide information and advice and gain an idea of project scopes. Among other benefits, the meeting generated ideas that will help the Outside Las Vegas Foundation create a fund-raising plan for various Round 4 and 5 initiatives.

An important aspect of the Education in the Environment task agreement will be to communicate our work to the general public and to the scientific community. To this end, the project managers submitted a proposal to present a poster session at the 2005 annual meeting of the Arizona-Nevada Academy of Science, to be held at UNLV on April 9, 2005 (see attached abstract). We will document this activity in our next quarterly report.
Maria Ryan, Natural Resources Specialist with the University of Nevada Cooperative Extension, met with a community focus group on February 16, 2005, to help guide her in the development of a two-semester Nevada Naturalist Program. The Interagency Environmental Education team was represented by Kathy August of the Bureau of Land Management and Dr. Brody of UNLV. The focus group recommended that the overall goal of the Nevada Naturalist program be to produce people with the skills and knowledge to deliver programs to children and adults about the natural history of southern Nevada. Such a program could have a direct impact on all four federal agencies, as it has the potential to produce a trained volunteer base for them to draw upon to teach programs. The university will monitor and participate in the development of this program in order to make appropriate connections to current task agreements with the federal agencies.

Submitted by:

Margaret Rees, Principal Investigator

February 28, 2005

Date