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## Education in the Environment: A Strategy for Continued Interagency Outdoor Programming: Quarterly Progress Report, Period Ending August 31, 2007

Environmental Education Strategy for Nevada

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**QUARTERLY PROGRESS REPORT**  
**University of Nevada, Las Vegas**  
**Period Ending August 31, 2007**

**Cooperative Agreement Number H8R07060001**  
**Task Agreement Number J8R07070004**

**Education in the Environment:**  
**A Strategy for Continued Interagency Outdoor Programming**

**Executive Summary**

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

- Three projects have been identified to meet SNAP strategic messaging needs: an anti-litter exhibit; a volunteer restoration program with educational components; and activity stations to tell the story of Lee Meadows restoration efforts.
- Interpretive planning is underway for Mountain's Edge Explorer's Interpretive Trail.
- A Hispanic survey and monitoring program has been identified.
- A six-week Spanish class tailored to meet the communication needs of environmental educators and interpreters will be offered beginning September 20.
- Forever Earth was scheduled for 11 days and benefited 297 individuals.
- The National Park Service used Forever Earth as a mobile visitor center on three dates. During these outings, Park Service interpreters contacted 552 visitors and presented water safety programs and interpretive programs.
- Twelve Discover Mojave Outdoor World events were conducted for 226 participants.

**CONSERVATION EDUCATION AND INTERPRETATION**

The following progress has been made toward CE&I project objectives in this quarter.

***Project 1 - Task 1. Assist CI teams in the implementation of at least three educational projects.***

**a. Identify at least one project each year to focus on from the following areas of strategic importance to SNAP: litter prevention, responsible OHV recreation, wilderness, and/or restoration. Agency personnel, including SNAP CI teams, will assist in the identification these educational projects, providing necessary information and guidance. Project identification will be completed by August 31 of each year.**

Three projects have been identified: one in litter prevention and two in restoration.

1. **Anti-Litter Exhibit.** The Interagency Anti-Litter and Desert Dumping Team approached PI/Project Manager Allison Brody and PLI Project Manager Daphne Sewing to help with the interpretives for an anti-litter exhibit that is being planned for installation in the Las Vegas Natural History Museum. The theme for the exhibit is: Littering affects our environment and you can choose to help.
2. **REV.** The Interagency Volunteer and Restoration Teams are working with Allison Brody to create a program called REV (Restoration, Education, and Volunteers). This program will synergize restoration, volunteerism and education to facilitate meaningful action, understanding, and long-term commitment.
3. **Lee Meadows Interpretive Project.** Allison Brody and Daphne Sewing are working with Forest Service staff to plan a unique interpretive experience at Lee Meadows, an area in the Spring Mountains National Recreation Area that is a popular destination for Las Vegas families. A series of activity stations will not only engage families in a guided discovery of the natural world, but will also lead to an understanding of Forest Service efforts to restore the meadow.

**b. SNAP Executive Director and PLI staff will work with SNAP Board of Directors to determine focus areas and context of delivery of messages for these focus areas.**

1. **Anti-Litter Exhibit.** PI/Project Manager Doug Joslin and the Interagency Anti-Litter and Desert Dumping Team has been responsible for communicating with the SNAP Executive Director and the SNAP Board of Directors about the focus of the Anti-Litter exhibit.
2. **REV.** Following communications with the SNAP Executive Director, a presentation was made to the SNAP Board of Directors on June 15, 2007. at this meeting, the Board approved the REV program focus and delivery.
3. **Lee Meadows Interpretive Project** Following several meetings between Allison Brody and the SNAP Executive Director, a presentation was made to the SNAP Board of Directors on May 18, 2007. The Board approved the focus area and message delivery for the Lee Meadows Interpretive Project.

**c. PLI staff, appropriate agency staff, and other experts will determine the best set of delivery systems for each area of strategic importance. Possible delivery systems include brochures, kiosks, multi-media products, billboards, electronic devices such as MP3 players etc.**

1. **Anti-Litter Exhibit.** The Anti-Litter exhibit will use interpretive signs and a one square yard plexiglass cube filled with litter to communicate that littering has consequences, and everyone can help make a difference. Other exhibit delivery methods will be a humorous video and interactive displays.
2. **REV.** The REV Team examined the delivery system of a similar program at the Golden Gate National Recreation Area (GOGA). Based on the success of GOGA's program, the REV Team designed a program that will provide volunteers the opportunity to participate in restoration projects by "dropping in" on a set day. Each of these drop-in projects will include an educational component. Current Get Outdoors Nevada volunteers will be surveyed at several September 2007 events to determine if a drop-in program format is desired, and the appropriate schedule for such a program.

3. **Lee Meadows Interpretive Project** A literature review of various aspects of learning theory suggests that successful interpretive experiences will be those that find a way for users to be actively engaged in shaping the experience. It was therefore determined that the Lee Meadows interpretive messages will be delivered via five activity stations that will engage families in a guided discovery of the natural world and foster a desire to help care for it. Additional signs located throughout the Meadows will incorporate social norms practices to relay anti-litter messages.

**d. Key user groups and best educational methodologies will be identified for each project, drawing upon the expertise of university faculty and staff. This will be completed by October 31 of each year.**

1. **Anti-Litter Exhibit.** The key audiences will be young children and families. Educational methodologies were determined by an interagency team of PLI educators, museum educators, and members of the Anti-Litter Team.
2. **REV.** The key audience will be adult volunteers interested in engaging in meaningful stewardship projects. Educational methodologies and activities will be constructed following the identification of restoration projects for the REV program (anticipated in September).
3. **Lee Meadows Interpretive Project.** The key audience will be families. Hispanics represent a significant proportion of the recreational user group. The educational methodologies were determined by PLI staff following a literature review and review of similar projects.

**e. CE&I products and services for the focus project will be created and implemented by PI/Project Manager Allison Brody, with assistance from the UNLV graduate student, Curriculum Development Personnel, and Media Relations, and Web Communications. UNLV fiscal and clerical personnel will assist the PI/Project Manager with ordering, tracking, and documenting the purchase and delivery of required materials, supplies, and equipment. Agency personnel will assist in product development, review, and execution within their agency educational programs. Examples of possible projects include brochures, interpretive signs, web site content, multi-media products, curricula, and/or programs delivered by CE&I staff. Each project will be completed by May 31 of each year.**

1. **Anti-Litter Exhibit.** The text for the exhibit will be completed by October 31, 2007.
2. **REV.** The REV program will be piloted by spring 2008.
3. **Lee Meadows Interpretive Project**
  - a) The Interpretive Plan for the Lee Meadows Restoration Project was approved by agency staff in April 2007.
  - b) The Conceptual Design for the Lee Meadows Activity Stations was presented to agency staff on August 28, 2007.
  - c) Activity stations and anti-litter signs will be installed before 2010.

***Project 1 – Task 2. Produce assessment proposals for at least two CE&I products or services.***

Procedures will be proposed for evaluating the effectiveness of the REV program in fostering long-term stewardship of public lands by November 30, 2007.

***Project 1 – Task 3. Document number of people reached by CE&I programs and services of the four federal agencies and cooperating partners.***

This task refers to subsequent years. No progress has been made this quarter.

***Project 1 – Task 4.. Work with at least one private sector group to implement at least two educational projects.***

**a. Identify two or more projects for delivering SNAP priority focus area messages to at least one private sector group. Examples of private sector groups interfacing with public lands include tour companies, concierge associations, and housing developers. Examples of projects that incorporate SNAP messages could be the development of a training program for a tour company or an interpretive plan for a trail system through a housing development. Agency personnel, including SNAP CI team members, will provide necessary information and guidance. SNAP Executive Director will work with PLI to develop concepts for private sector educational programs. At least one project will be identified by August 31, 2008, and an additional project will be identified by August 31, 2009.**

One project has been identified: Mountain’s Edge Explorer’s Interpretive Trail.

Mountain’s Edge is a Focus Property housing development located at the interface between Las Vegas and Southern Nevada public lands.

**b. CE&I products and services for the focus project will be created and implemented by PI/Project Manager, with assistance from the Curriculum Development Personnel, the UNLV graduate student, and Media Relations. UNLV fiscal and clerical personnel will assist the PI/Project Manager with ordering, tracking, and documenting the purchase and delivery of required materials, supplies, and equipment. Agency personnel will assist in project execution. Each project will be completed by May 31 of each year (2008 and 2009, respectively).**

The Mountain’s Edge development encompasses a natural feature called Explorer’s Peak. In July 2007, Focus Property enlisted the aid of PI/Project Manager Allison Brody to help the Mountain’s Edge Explorer’s Club plan, design, evaluate, and install interpretive signs along three trails leading up Explorer’s Peak.

Tentative timeline for project completion:

- November 2007 – complete interpretive plan
- April 2008 – complete conceptual design
- August 2008 – graphic design, implementation plan
- November 2008 -- implementaton

**c. SNAP Executive Director will provide briefings to the SNAP Board of Directors on proposed private sector educational projects.**

Upon completion, the interpretive plan will be presented to the SNAP Executive Director.

***Project 1 – Task 5. Work with the Hispanic community to implement at least two educational projects.***

**a. PLI staff, in coordination with the appropriate agency staff, will identify at least one project for delivering SNAP priority focus area messages to Hispanic community by convening one or more stakeholder meetings. Examples of potential projects include interpretive projects and educational programs delivered at community events. Project identification will be completed by January 31, 2009.**

Partners for Environmental Cultural Connectedness, facilitated by PI/Project Manager Allison Brody, met twice this quarter, June 21, 2007 and July 19, 2007 (meeting notes can be found on <http://grovesite.com>). The mission of this group is *to foster cross-cultural connections between the Southern Nevada community and their environment through education and outreach*, which can be achieved by working toward the following goals:

- a. Promote respectful inclusion of Hispanic people in the nearby environment;
- b. Create a welcoming and inviting atmosphere; and,
- c. Increase the effectiveness of education and outreach for Hispanic audiences.

To this end, it was agreed that PI/Project Manager Allison Brody would spearhead a survey and monitoring research project to identify who is interested in recreating on or at public lands, museums, and other nature-oriented places; how to train staff to create a welcoming atmosphere at these places; effective outreach activities; and the messages to deliver through these activities (Figure 1).

A modification to Round 6 (J8R07070004-UNLV) has been submitted to fund this effort.



**Figure 1**

**b. CE&I products and services for the focus project will be created and implemented by PI/Project Manager, with assistance from the Curriculum Development Personnel, the UNLV graduate student, and Media Relations. UNLV fiscal and clerical personnel will assist the PI/Project Manager with ordering, tracking, and documenting the purchase and**

**delivery of required materials, supplies, and equipment. Agency personnel will assist in project execution.**

This project will be completed by May 31, 2009.

**c. PLI staff, in collaboration with agency staff, will identify additional potential projects or services suggested by follow-up stakeholder meetings.**

This will be done by May 31, 2009.

**d. PI/Project Manager, with assistance from the Curriculum Development Personnel, the UNLV graduate student, Media Relations, general clerical support, and agency personnel will create and implement one additional program or service for the Hispanic community, evaluating success and documenting milestones in a written report.**

This will be completed by May 31, 2010.

*Project 1 – Task 6. Maintain and participate in area-wide cooperative CE&I effort.*

**a. Administer educators' listserv on a monthly basis, with assistance of Media Relations and Web Communications personnel and input from agency staff.**

Three listserv postings were administered this quarter. Information from these postings can be viewed at [www.enviroedexchange.org](http://www.enviroedexchange.org).

**b. Facilitate bi-monthly meetings for Partners for Education about the Environment, a collaborative group of informal educators from more than 20 informal education organizations in the Las Vegas area, including representatives from each of the four federal agencies.**

One meeting was held this quarter on July 13, 2007 (meeting notes are available on <http://grovesite.com>).

**c. Appropriate agency staff will attend Partners for Education about the Environment meetings and work to collaboratively identify regional education focus and efforts.**

The July 13, 2007 meeting was attended by agency staff from Lake Mead National Recreation Area, Desert National Wildlife Refuge, and Red Rock Interpretive Association.

**d. Implement stated goals (see overview section) for Partners for Education about the Environment with assistance from Media Relations, general clerical support, agency personnel, and the UNLV graduate student.**

Progress was made on several fronts:

1. Best Practices Review – Multiple Intelligences overview was developed (see [www.enviroedexchange.org](http://www.enviroedexchange.org)) and presentation delivered at Partners for Education about the Environment meeting.
2. Our Places Tell Stories Conference 2008 – a planning team has been assembled and has begun meeting on a regular basis. The conference, planned for March 2008, will address the theme: Designing For Our Community (meeting notes available on <http://grovesite.com>).

3. Agency staff and other professionals working on the statewide development team for the Nevada State Certification Program for Environmental Education and Interpretation (facilitated by PI/Project Manager Allison Brody) have developed core competencies; an internship and mentor training program; and a curriculum for one of four courses to be offered (*see attached documents*). This program is on schedule to be piloted in February 2008.
4. PI/Project Manager Allison Brody, working in cooperation with Friends of Red Rock, has organized *¡Bienvenido Amigos! Spanish for Our Environment*, a course that will provide customized language tools to foster effective linguistic and cultural communication in our workplaces, giving course participants skills to be more successful in visitor interactions and have more confidence in the workplace when interacting with Spanish speakers. This course will be appropriate for educators, interpreters, and others working at public lands, nature centers, museums, zoos, aquaria, and all nature- and heritage- rich places. Course instruction will be provided by Language Training Solutions, Inc. This course is scheduled to begin September 20, 2007.

### SUMMARY OF YEAR 4 DELIVERABLES – CE&I

Year Four Deliverables (June 2007 – May 2008)	Percent Complete as of August 31, 2007	Plan for Completion
<b>Project 1 – Task 1</b>		
a. Identify at least one project each year to focus efforts.	100%	3 projects have been identified: Anti-Litter Exhibit, REV, and Lee Meadows Interpretive Project
b. SNAP Executive Director and PLI staff will work with SNAP Board of Directors to determine focus areas and context of delivery of messages for these focus areas.	100%	
c. Determine the best set of delivery systems for each project.	100%	
d. Key user groups and best educational methodologies will be identified for each project.	100%	
e. CE&I products and services for the focus project will be created and implemented.	15%	a. <b><u>Anti-Litter Exhibit</u></b> The text for the exhibit will be completed by October 31, 2007. b. <b><u>REV</u></b> The REV program will be piloted by spring 2008. c. <b><u>Lee Meadows Interpretive Project</u></b> Activity stations and anti-litter signs will be installed before 2010.
<b>Project 1 – Task 2</b>		
a. Produce assessment proposals for at least two CE&I products or services.	0%	Evaluation plan for the REV program will be produced by November 30, 2007.
<b>Project 1—Task 4</b>		
a. Identify projects for delivering SNAP priority focus area messages to at least one private sector group.	100% for Year 4	One project has been identified: The Mountain’s Edge Explorer’s Interpretive Trail



b. Implement project.	15%	Tentative timeline: a. November 2007 – complete interpretive plan b. April 2008 – complete conceptual design c. August 2008 – graphical design, implementation plan d. November 2008 – implementation
c. SNAP Executive Director will provide briefings to the SNAP Board of Directors on proposed private sector educational projects.	0%	This will happen by January 2008
<b>Project 1 – Task 5</b>		
a. PLI staff, in coordination with the appropriate agency staff, will identify at least one project for delivering SNAP priority focus area messages to Hispanic community by convening one or more stakeholder meetings.	100%	A survey and monitoring program has been proposed and approved.
b. CE&I products and services for the focus project will be created and implemented.	0%	Modification has been submitted to fund the creation and implementation of focus project.
<b>Project 1 – Task 6</b>		
a. Administer educators' listserv.	25%	Three listserv postings were completed.
b. Facilitate bi-monthly meetings for Partners for Education about the Environment.	25%	Meeting was held July 13, 2007
c. Appropriate agency staff will attend Partners for Education about the Environment meetings.	25%	Staff attended from USFWS, NPS, and Red Rock Interpretive Association
d. Implement stated goals (see overview section) for Partners for Education about the Environment.	25%	1. Our Places Tell Stories conference being planned for spring 2008. 2. Nevada State Certification Program for Environmental Education and Interpretation scheduled for implementation in February 2008. 3. ¡Bienvenido Amigos! Spanish for Our Environment to be offered beginning September 20, 2007.

## FOREVER EARTH PROGRAM

The following progress has been made toward Forever Earth project objectives in this quarter.

### ***Project 2 – Task 1. Coordinate and schedule Forever Earth uses.***

#### **a. Revise Forever Earth Standard Operating Procedures (SOPs; Sewing et. al., 2006) and produce revised SOP edition.**

This activity is on-schedule to be completed by August 31 of each year, beginning in 2008.

#### **b. Provide training on revised SOPs for boat captains and deckhands. This activity will be completed by September 30 of each year.**

Training is scheduled for September 6, 2007 for all boat crew. Project Manager Daphne Sewing and Graduate Assistant Michelle Weibel will also participate.

#### **c. Maintain Forever website and update content.**

This activity is on-schedule to be completed by May 31 of each year, as needed.

### ***Project 2 – Task 2. Schedule and deliver educational programming for a minimum of 25 trips.***

#### **a. Coordinate with Clark County School District teachers as well as private school teachers and home school educators to schedule a minimum of 25 educational trips on Forever Earth. This will be completed by May 31 of each year.**

In the first quarter, 291 passengers benefited from educational programming during 8 trips aboard Forever Earth. These are detailed in the following table. Highlights of Forever Earth educational use included:

- Forever Earth participated in the Boulder City Cub Scout Day Camp activities, June 21, 2007. Four groups of scouts, accompanied by their leaders, participated in “The Water Cycle! Just Passing Through!” and “Finicky Fish Finish Last!” activities which complemented the week’s CSI camp theme.
- A class sponsored by UNLV’s Education Outreach program explored Lake Mead’s geology and enjoyed recreational activities on July 14, 2007. Dr. Kim Johnson, UNLV Geoscience Department, facilitated the day’s activities. Additional classes are planned during the 2007/2008 academic year.
- On June 7, 2007, fifth-grade students from Moore Elementary learned about invasive species and quagga mussels while participating in the “Alien Invaders” program. Fourth-grade students from Bendorf Elementary (June 14 and June 28, 2007) and Dondero Elementary (July 18, 2007) learned about Lake Mead’s water use cycle during activities aboard Forever Earth as well as participating in shore activities.
- Youth from Valley View Recreation Center in Henderson and from Silver Mesa Recreation Center in North Las Vegas participated in Art Adventures, Discover Mojave Outdoor World events, aboard Forever Earth.

*(NOTE: See attached for a listing of all Forever Earth trips conducted during the 1<sup>st</sup> Quarter.)*

**Forever Earth Education Trips – Year 4, 1st Quarter**

Date(s)	Group	Group Type	Trip Purpose	Length of Trip	# of Adults	# of Students	Total Pass.
June 7	Moore Elementary 5 <sup>th</sup> grade GATE	Education	Student Field Trip	4.5 hrs.	4	20	24
June 14	Bendorf Elementary (4 <sup>th</sup> grade)	Education	Student Field Trip	4 hrs.	6	19	25
June 21	Boulder City Cub Scout Day Camp	Education	Day Camp Station	10.5 hrs. (4 trips)	28	54	82
June 28	Bendorf Elementary (4 <sup>th</sup> grade)	Education	Student Field Trip	4 hrs. (2 trips)	19	26	45
July 14	UNLV Education Outreach	Education	Class Offering	7.25 hrs.	20	0	20
July 18	Dondero Elementary (4 <sup>th</sup> grade)	Education	Student Field Trip	3 hrs. (2 trips)	15	32	47
July 27	Valley View Recreation Center	Education	Outdoor World Event	4 hrs.	7	18	25
August 7	Silver Mesa Recreation Center	Education	Outdoor World Event	4 hrs.	6	17	23
<b>TOTALS for 1<sup>st</sup> quarter</b>		<b>Education -- 8 groups</b>		<b>Education - 41.25 hrs.</b>	<b>105</b>	<b>186</b>	<b>291</b>
<b>TOTALS for Year 4</b>		<b>Education -- 8 groups</b>		<b>Education - 41.25 hrs.</b>	<b>105</b>	<b>186</b>	<b>291</b>

**b. Review and revise existing Forever Earth curricula (Sewing et. al, 2006) and produce 2007-2008 Edition. This will be completed by May 31 of each year, beginning in 2008.**

The Forever Earth Curriculum Team met on July 26 and July 29, 2007 to review and revise shore activities for each grade level. The goal was to reflect more appropriately the learning objectives for the boat activities. Project Manager Daphne Sewing will take the lead on revising the shore activities; the revisions will be incorporated into the 2007/2008 edition.

**c. Drawing upon the expertise of university faculty and staff, develop and produce one additional curriculum module for sixth-grade students.**

This activity will be completed by February 28, 2008.

**d. Identify and purchase any needed program materials, supplies, equipment, and/or visual aids required for delivering the curriculum. This will be completed by May 31, 2008.**

During its meetings on July 26 and July 29, 2007, the Forever Earth Curriculum Team developed a list of visual aid needs for each grade level. Project Manager Daphne Sewing will prioritize the list and facilitate development of the highest items.

**e. Develop a partnership with one of the agencies responsible for water quality monitoring for integrating data collection performed by high school students into an ongoing research database.**

This will be completed by May 31, 2008.

**f. Develop one additional curriculum module for fifth grade students.**

This will be completed by February 28, 2009.

**g. Identify and purchase any needed program materials, supplies, equipment, and/or visual aids required for delivering the curriculum.**

This will be completed by May 31, 2009.

**h. Develop one additional curriculum module for fourth grade students.**

This will be completed by February 28, 2010.

**i. Identify and purchase any needed program materials, supplies, equipment, and/or visual aids required for delivering the curriculum.**

This will be completed May 31, 2010.

**j. Working with agency personnel and drawing upon the expertise of university faculty and staff, produce a written assessment report that summarizes changes in student and teacher knowledge, attitudes, and performance and includes recommendations for program improvement. Utilize UNLV research assistants and faculty as needed to collect and analyze data.**

This will be completed by August 31 of each year.

***Project 2 – Task 3. Schedule a minimum of three trips per year for research purposes.***

**a. Develop and distribute a letter of introduction and a program brochure to university, state, and federal researchers in Nevada, Arizona, and Utah to inform them of Forever Earth and its purpose. This will be completed by August 31, 2007.**

A letter/email was drafted to provide an introduction to the Forever Earth program (*see attached*). A more complete listing of those involved in regional research efforts related to Lake Mead is needed before the letter and accompanying brochure is distributed. Project Manager Daphne Sewing is developing the mailing list. It is anticipated that the distribution will occur by October 31, 2007.

**b. Coordinate with university, state, and federal researchers to schedule Forever Earth for a minimum of three scientific research trips.**

This will be completed by May 31 of each year.

**c. Identify and purchase any needed research supplies and/or equipment.**

This will be completed by May 31 of each year.

**d. Revise Forever Earth program brochure (Sewing and Miller, 2006) as necessary. Distribute a letter of introduction and program brochure to university, state, and federal researchers in Nevada, Arizona, and Utah to inform them of Forever Earth and its purpose.**

This will be completed by August 31, 2008 and 2009.

**Project 2 – Task 4. Schedule Forever Earth as a mobile visitor center.**

**a. Coordinate with the Interpretive Division at Lake Mead National Recreation Area on a continuous basis to schedule Forever Earth at least twice per month during peak visitation (June, July, August of each year).**

The National Park Service used Forever Earth as a mobile visitor center on three occasions this quarter (see table below). Two scheduled trips were canceled, one due to lack of available interpretive staff and one due to high winds. During the three scheduled trips, interpreters made over 550 visitor contacts, conducted interpretive programs for 42 youth, and hosted 28 people aboard the mobile visitor center.

*(NOTE: See attached for a listing of all Forever Earth trips conducted during the 1<sup>st</sup> Quarter.)*

**Forever Earth NPS Mobile Visitor Center Trips – Year 4, 1<sup>st</sup> Quarter**

Date(s)	Group	Group Type	Trip Purpose	Length of Trip	# of NPS Staff	# of Contacts
June 30	NPS	Agency	Mobile visitor center	7.5 hrs.	2	249
July 21	NPS	Agency	Mobile visitor center	8 hrs.	3	227
July 29	NPS	Agency	Mobile visitor center	7.5 hrs.	1	76
<b>TOTALS for 1<sup>st</sup> quarter</b>		<b>Agency – 3 groups</b>	<b>3 uses of Forever Earth as mobile visitor center</b>	<b>Agency – 23 hrs.</b>	<b>6</b>	<b>552</b>
<b>TOTALS for Year 4</b>		<b>Agency – 3 groups</b>	<b>3 uses of Forever Earth as mobile visitor center</b>	<b>Agency – 23 hrs.</b>	<b>6</b>	<b>552</b>

**Project 2 – Task 5. Provide Forever Earth for agency purposes for a minimum of six trips per year.**

**a. Coordinate on a continuous basis with local, state, and federal agencies to schedule Forever Earth for a minimum of six trips per year. This will be completed by May 31 of each year.**

The National Park Service is coordinating a trip aboard Forever Earth, September 13, 2007, for all the agencies involved in water quality monitoring at Lake Mead. The purpose of the trip is to

standardize monitoring equipment so that data collected can be reliably shared between the agencies.

***Project 2 – Task 6. Provide funding for student field trips to public land sites.***

PI/Project Manager Daphne Sewing, with the assistance from the UNLV graduate student, will coordinate and disburse transportation funding for field trips to public lands by Clark County School District students.

**a. Produce a written report on Transporting Students to Public Land Sites for Field Trips. The report will include recommendations for future implementation.**

This will be done by May 31, 2008.

**b. During the 2007-2008 school year, provide transportation funding for a minimum of 15 field trips to public lands.**

This will be done by May 31, 2008.

**c. During the 2008-2009 school year, provide transportation funding for a minimum of 35 field trips to public lands.**

This will be done by May 31, 2009.

**d. During the 2009-2010 school year, provide transportation funding for a minimum of 35 field trips to public lands.**

This will be done by May 31, 2010.

***Project 2 – Task 7. Implement additional program assistance.***

PI/Project Manager Daphne Swing, with assistance from the UNLV graduate student, will evaluate and, to the extent possible, implement a volunteer or other workforce structure to increase the scope of delivery and impact of the program.

**a. Determine and, to the extent possible, implement the most efficient, high quality delivery structure for the Forever Earth program.**

This will be done by May 31, 2010..

**ADDITIONAL WORK ACCOMPLISHED FOR THIS PROJECT**

Forever Earth participated in National Marina Day activities sponsored by Forever Resorts on August 11, 2007. Forever Earth Senior Captain Larry Mund and National Park Service interpreters, Kirsten Jordan and Michelle Riter, hosted 52 visitors aboard the Forever Earth vessel at the Callville Bay dock.

Dr. Allison Brody and Allyson Butler, Public Lands Institute, participated in the Educator Appreciation Day sponsored by the The Mirage Hotel, August 15, 2007. Information about the Forever Earth program was shared with over 600 new Clark County School District teachers attending the event.

## DISCOVER MOJAVE OUTDOOR WORLD

The following progress has been made toward Outdoor World project objectives in this quarter.

***Project 3 – Task 1. Conduct a minimum of 25 Outdoor World events annually.***

**a. Coordinate and develop a schedule of events for the year. This will be completed by September 30 of each year.**

A draft schedule of activities for Year 4 has been developed (*see attached*). Interest from recreational and community centers to schedule additional activities will be reflected in subsequent revisions of this schedule.

**b. Utilize UNLV students and staff, volunteers, and federal agency personnel to conduct a minimum of 25 events. This will be completed by May 31 of each year.**

In this quarter, 12 events were conducted for 226 participants (see table below). Eight events were scheduled for a summer teen program sponsored by Valley View Recreation Center, Henderson Parks and Recreation Department. In addition to the scheduled activities, Sky McClain, National Park Service interpreter, presented a water safety program on June 13, 2007, to approximately 25 participants. This session was conducted prior to the introductory kayak activity held on June 15, 2007 at a Henderson city pool.

Four events were scheduled for a summer youth program sponsored by Silver Mesa Recreation Center, North Las Vegas Parks and Recreation Department. This program targeted youth aged 10-14.

Michelle Weibel, UNLV graduate assistant, and Ms. McClain assisted with the events throughout the summer. Student staff from UNLV's Outdoor Adventures provided kayaking instruction and assisted with the kayaking activities.

### Discover Mojave Outdoor World Schedule – 1<sup>st</sup> Quarter, Year 4

DATE	GROUP	# of PARTICIPANTS	ACTIVITY	LOCATION
Fri., June 15	Valley View Recreation Center, Henderson City Parks and Recreation	23	Kayaking – Introduction	Wells Pool, Henderson
Fri., June 22	Valley View Recreation Center, Henderson City Parks and Recreation	20	Kayaking	Lake Mead National Recreation Area
Mon., June 25	Valley View Recreation Center, Henderson City Parks and Recreation	21	Outdoor Photography	Valley View Recreation Center, Henderson
Wed., June 27	Valley View Recreation Center, Henderson City Parks and Recreation	23	Fishing I	Valley View Recreation Center, Henderson
Fri., June 29	Valley View Recreation Center, Henderson City Parks and Recreation	20 x 2 = 40	Birding I Fishing II	Floyd Lamb State Park
Tues., July 17	NLV Parks and Recreation	13	Kayaking	Lake Mead National Recreation Area

Fri., July 20	Valley View Recreation Center, Henderson City Parks and Recreation	22	Rock Climbing I	Nevada Climbing Center
Tues., July 24	NLV Parks and Recreation	12	Kayaking	Forever Earth – Lake Mead
Fri., July 27	Valley View Recreation Center, Henderson City Parks and Recreation	18	Science and Art Adventure	Forever Earth – Lake Mead
Tues., July 31	NLV Parks and Recreation	17	Rock Climbing I	Red Rock Climbing Center
Tues., Aug. 7	NLV Parks and Recreation	17	Art Adventure	Forever Earth – Lake Mead
<b>TOTALS for 1<sup>st</sup> Quarter</b>	<b>12 Events</b>	<b>226</b>		
<b>TOTALS for Year 4</b>	<b>12 Events</b>	<b>226</b>		

**c. Draw upon the expertise of university faculty and staff to produce a written assessment report that summarizes changes in participant knowledge, attitudes, and performance and includes recommendations for program improvement. Utilize UNLV research assistants as needed to collect and analyze data.**

This will be completed by August 31 of each year, beginning in 2008.

**d. Maintain website to highlight program activities and partner contributions and update content as necessary. Website content will be evaluated regularly by agency staff.**

This will be completed by May 31 of each year.

***Project 3 – Task 2. Develop a minimum of one new Outdoor World activity each year.***

**a. UNLV and agency staff will work together to identify the type of recreational activity to develop into an additional event for targeted youth audience. This will be completed by August 31 of each year.**

In 2006, Project Manager Daphne Sewing worked with members of the SNAP Conservation Education and Interpretation Team to identify recreational activities that should be developed as Outdoor World activities. Camping, with emphasis on Leave No Trace skills and ethics, was identified as one of their top preferences. Sky McClain, National Park Service interpreter, assisted Ms. Sewing in researching camping activities offered by the national WOW (Wonderful Outdoor World) program. It was decided to pursue development of a camping event during Year 4. Ms. Sewing and Ms. McClain has contacted administrators with Lee Meadows Group Camp, a Clark County Parks and Recreation Department facility, and Foxtail Girl Scout Camp to explore the possibility of using one of these camps in the fall. The strategy is to provide youth with a “soft” introduction to camping by utilizing a developed facility, developing a comfort level with an overnight experience and a few introductory skills, and then later providing a more primitive experience to these campers.

**b. Develop curriculum (goals, objectives, programs, activities, locations, etc.) for the selected recreational activity.**

This activity will be completed by January 31 of each year.



**c. Field test new event curriculum, make changes, and finalize curriculum. This will be completed by May 31 of each year.**

This activity will be completed by May 31 of each year.

***Project 3 – Task 3. Develop a minimum of two partnerships that increase the impact of the program each year to assist in conducting Outdoor World events, providing financial assistance, or supplying the desired target audience of economically disadvantaged youth, ages 8-12.***

**a. UNLV, SNAP Executive Director, and SNAP Board of Directors work together to identify potential new partners.**

No work was completed on this task during the first quarter.

**b. UNLV and appropriate agency staff, including the SNAP Board of Directors, will contact potential partners for intended purposes. This will be completed by October 31 of each year.**

Project Manager Daphne Sewing worked with two new partners during the quarter: 1) Valley View Recreation Center, Henderson Parks and Recreation Department; and, 2) Silver Mesa Recreation Center, North Las Vegas Parks and Recreation Department. Meetings were held with administrators from both centers to schedule activities and confirm logistics.

**c. Formulate a minimum of one partnership. This will be completed by January 31 of each year.**

Two partnerships were developed this quarter. Valley View Recreation Center, Henderson Parks and Recreation Department, and Silver Mesa Recreation Center, North Las Vegas Parks and Recreation Department, participated in 12 Outdoor World activities. Both centers expressed interest in scheduling future events.

**d. Highlight partner contributions on website.**

This activity will be completed by May 31 of each year.

***Project 3 – Task 4. Implement additional program assistance.***

PI/Project Manager Daphne Swing, with assistance from the UNLV graduate student, will evaluate and, to the extent possible, implement a volunteer or other workforce structure to increase the scope of delivery and impact of the program.

**a. Determine and, to the extent possible, implement the most efficient, high quality delivery structure for the Outdoor World program.**

This will be done by May 31, 2010.

#### **ADDITIONAL WORK ACCOMPLISHED FOR THIS PROJECT**

Two presentation proposals focusing on the Outdoor World assessment tools and results were developed and accepted at professional conferences. Dr. Lori Olafson and Michelle Weibel will co-present “School District: Adding Teacher and Parent Assessment Measures” at the 2007 National Conference for the American Evaluation Association, November 8, 2007, in Baltimore,

Maryland. Dr. Gregg Schraw and Daphne Sewing will co-present a session titled “The Effect of Discover Mojave Outdoor World on Learning, Performance, and Attitudes” at the Research Symposium for the 2007 National Conference for the North American Association for Environmental Education, November 14, 2007, Virginia Beach, Virginia.

**STATUS OF YEAR 4 DELIVERABLES – FOREVER EARTH & OUTDOOR WORLD**

<b>Year Four Deliverables (June 2007 – May 2008)</b>	<b>Percent Complete as of August 31, 2007</b>	<b>Plan for Completion</b>
<b>FOREVER EARTH</b>		
<b>Project 2 – Task 1</b>		
a. Revise SOP.	0%	Operational changes will be identified during scheduled boat training and facilitators training and incorporated into the SOP.
b. Provide training on SOP for boat crew.	10%	Training is scheduled for September 6, 2007.
c. Update and maintain website.	0%	Upon completion of 4 <sup>th</sup> grade pre- and post-trip activities, all grade level pre- and post-trip activities will be posted on the Forever Earth website. This is anticipated to occur during the 2 <sup>nd</sup> quarter.
<b>Project 2 – Task 2</b>		
a. Schedule a minimum of 25 educational trips.	32%	Additional reservations will occur throughout the school year.
b. Produce 2007/2008 edition of FE curriculum.	20%	Plans for revising shore activities have been made; 6 <sup>th</sup> grade curriculum is being re-written to reflect quagga mussel discovery. The curriculum will be completed during the 2 <sup>nd</sup> quarter.
c. Develop additional 6 <sup>th</sup> grade curriculum.	0%	This is to be completed during the 3 <sup>rd</sup> quarter.
d. Purchase program materials, supplies, and visual aids.	10%	Visual aid and equipment needs have been identified for the 2007/2008 school year.
e. Develop partnership for integrating data collected by high school students into existing research data base.	0%	Craig Palmer and others will be working with the project manager to develop plan for this element.
<b>Project 2 – Task 3</b>		
a. Distribute information about Forever Earth to researchers in regional area.	75%	Program assistant is collecting email addresses and/or mail addresses for regional researchers.
b. Schedule 3 scientific research trips on Forever Earth.	0%	These will be scheduled throughout the year.
c. Purchase needed research supplies and equipment.	0%	Purchases will be made dependent on needs identified by researchers.
<b>Project 2 – Task 4</b>		
a. Schedule Forever Earth as a mobile visitor center twice per month during June, July, and August.	50%	NPS could only schedule three trips this summer.
<b>Project 2 – Task 5</b>		
a. Schedule a minimum of 6 trips for agency purposes.	17%	More trips will be scheduled throughout the year.
<b>Project 2 – Task 6</b>		
a. Produce report “Transporting Students to Public Lands for Field Trips.	0%	Graduate assistant and other Public Lands Institute personnel have started gathering information about transportation options.
b. Provide bus transportation funds for 15 student field trips.	0%	This will occur as the school year progresses.
<b>Project 2 – Task 7</b>		
a. Determine delivery system.	0%	Currently working with Allyson Butler, Vista Volunteer, to analyze potential delivery systems.
<b>OUTDOOR WORLD</b>		
<b>Project 3 – Task 1</b>		

a. Develop a schedule of events for the year.	60%	Draft schedule will be modified as more events are scheduled by partners.
b. Conduct a minimum of 25 events.	44%	Current partners indicate they will schedule more events throughout the year.
d. Update and maintain website.	0%	New partners will be highlighted on website. This is expected to occur during the second quarter.
<b>Project 3 – Task 2</b>		
a. Identify a new recreational event to be developed.	100%	Completed. A camping experience will be developed.
b. Develop curriculum for the selected recreational event.	0%	This is expected to occur during the second quarter.
c. Field test new event curriculum.	0%	This is expected to occur during the second with the Paradise Elementary after-school club.
<b>Project 3 – Task 3</b>		
a. Identify potential new partners.	100%	Completed.
b. Contact potential partners.	100%	Completed.
c. Formulate a minimum of one new partnership.	200%	Two new partnerships were established in the first quarter.
d. Highlight partner contributions on website.	0%	New partners will be highlighted on website. This is expected to occur during the second quarter.
<b>Project 3 – Task 4</b>		
a. Determine delivery system to increase scope of program.	0%	Will work with Allyson Butler, Vista Volunteer, to analyze potential delivery systems.

Submitted by:

  
Margaret N. Rees  
Principal Investigator

August 31, 2006  
Date

**Nevada State EE&I Certification  
Core Competencies**

<b>THEME 1 – ENVIRONMENTAL LITERACY</b>	
<b>Guideline</b>	<b>Synopsis of Indicators -- NEEIC Participants will:</b>
1.1 How we learn	A – Develop questioning and analysis skills B – Learn through effective methods
1.2 Understanding of ecological systems, social systems, and their influences	A – Understand interrelationships of human societies and ecosystems
1.3 Understanding and addressing environmental issues	A – Identify and analyze environmental issues B – Understand environmental justice philosophy
1.4 Personal and civic responsibility	A – Identify actions, roles, and influences that make a difference
<b>THEME 2 – FOUNDATIONS OF EE&amp;I</b>	
<b>Guideline</b>	<b>Synopsis of Indicators -- NEEIC Participants will:</b>
2.1 Compare and contrast different methods of education about the environment	A – Understand definitions, terms, and outlook of EE&I B – Integrate knowledge across disciplines C – Know EE&I creates environmental literacy
2.2 Understanding of goals, theory and practice of EE&I	A – Understand the philosophy, conceptual foundations, and goals of EE&I B – Define environmental literacy C – Describe the variety of EE&I programs and applications D – Appreciate how programs can be enhanced through partnerships
2.3 Historical and current perspectives of EE&I	A – Describe influences of educational movements B – Describe influences of a variety of organizations/entities C – Discuss research findings D – Describe current and emerging issues

<b>THEME 3 – RESPONSIBILITIES OF AN EE&amp;I PROFESSIONAL</b>	
<b>Guideline</b>	<b>Synopsis of Indicators -- NEEIC Participants will:</b>
3.1 Expectations of an EE&I professional	<ul style="list-style-type: none"> <li>A – Apply EE&amp;I to education reform and curriculum standards</li> <li>B – Identify role of community partners</li> <li>C – Use responsible, respectful, and sensitive instruction</li> <li>D – Integrate inquiry and environmental investigations into programming</li> <li>E – Get audience to connect, even with complex issues</li> </ul>
3.2 Distinguish between factual accuracy and multiple points of view	<ul style="list-style-type: none"> <li>A – Use strategies to allow exploration of different perspectives</li> <li>B – Assess resource materials for accuracy and validity</li> </ul>
3.3 Ongoing learning and professional development	<ul style="list-style-type: none"> <li>A – Identify ways to keep abreast of EE&amp;I research, materials, methods, issues as well as environmental issues</li> <li>B – Build relationships that challenge knowledge and skills</li> <li>C – Learn to reflect as part of practice</li> <li>D – Embrace life-long learning in real-world settings</li> </ul>
<b>THEME 4 – PLANNING, IMPLEMENTING AND FOSTERING LEARNING</b>	
<b>Guideline</b>	<b>Synopsis of Indicators -- NEEIC Participants will:</b>
4.1 Knowledge of audience	<ul style="list-style-type: none"> <li>A – Present in developmentally appropriate and ways; take learning styles into consideration</li> <li>B – Tailor approaches to respond to diverse audiences</li> <li>C – Respond to different perspectives</li> </ul>
4.2 Planning and delivery of EE&I programs and services	<ul style="list-style-type: none"> <li>A – Be able to link programs to educational standards</li> <li>B – Create safe learning environments</li> </ul>
4.3 Understanding of materials, resources and technology	<ul style="list-style-type: none"> <li>A – Evaluate resources and materials</li> <li>B – Identify useful organizations and institutions</li> <li>C – Identify professional development opportunities</li> <li>D – Demonstrate how to use technologies and tools for measurement and observation</li> </ul>

	E – Demonstrate how to communicate environmental information
4.4 Create the learning environment	<p>A – Present relevant topics in engaging ways</p> <p>B -- Use a variety of appropriate teaching methods and strategies</p> <p>C -- Promote lifelong learning</p> <p>D – Use learner-centered techniques that allow exploration and discovery</p> <p>E – Use techniques that promote environmental literacy</p> <p>F – Promote questioning and investigation</p> <p>G – Take into account preconceptions and assumptions</p> <p>H – Allow for cooperative learning (when appropriate)</p> <p>I -- Use instruction that is flexible, responsive, and that exploits current affairs</p> <p>J – Collaborate effectively with others</p> <p>K-- Make complex issues understandable and establish relativity to audience</p>

<b>THEME 5 – ASSESSMENT AND EVALUATION</b>	
<b>Guideline</b>	<b>Synopsis of Indicators -- Participants will:</b>
5.1 Learner outcomes	<p>A – Link goals and objectives to learner outcomes</p> <p>B –Link learner outcomes to relevant education standards</p> <p>C – Involve learners in setting expectations and outcomes</p>
5.2 Assessment as part of the experience	<p>A – Relate outcomes to learners</p> <p>B – Assess what learners already know</p> <p>C – Assess what learners come to know</p> <p>D – Understand variety of assessment tools, techniques, and uses</p>
5.3 Improving programs or instruction	A – Use assessment to modify and improve



**Nevada State EE&I Certification  
Fundamentals Syllabus**

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## **Environmental Education and Interpretation: History, Issues and Methods**

Nevada State Certification in Environmental Education and Interpretation

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### **I. Course Description**

This foundational course introduces the history and practice of environmental education and interpretation. Having knowledge of the goals, theory, practice, and history of the fields of Environmental Education and Interpretation (EE&I) provides a solid foundation for developing a philosophy for individual practice. This course also provides an understanding of the standards for instruction and professional conduct related to the practice of EE&I, including exemplary instructional practice, practice that does not advocate a particular point of view, and practice that reflects an ethic of lifelong learning. The workshop format of this course emphasizes student-centered learning experiences.

### **II. Course Objectives**

Upon completion of the course, the student should:

#### KNOWLEDGE:

*Be able to:*

- Define environmental education, interpretation, and other terms and practices used to describe education about the environment.
- Understand the broad outlook that EE&I takes of the “environment,” incorporating concepts such as systems, interdependence, and interactions among humans, other living organisms, the physical environment, and the built or designed environment.
- Identify the philosophy, conceptual foundations, and goals of EE&I by examining founding documents of the field.
- Understand how different entities and educational movements have contributed to the development of EE&I practices.
- Understand current and emerging issues in the fields of EE&I.

#### Skills:

*Demonstrate the ability to:*

- Identify major components of environmental literacy and the relationship to the practices of EE&I.
- Identify deliberate strategies and techniques that encourage participants to explore and discover different perspectives, form their own opinions, and explain their beliefs.
- Differentiate among resource materials on the basis of factual accuracy, including primary and secondary sources.
- Describe a variety of national, regional, state and local EE&I programs and support services, including funding sources and resources.
- Describe specific findings from EE&I research and discuss their effect on how EE&I is perceived, defined, or practiced.

- ☑ Identify ways in which EE&I can be used as a tool for meeting curriculum standards and addressing education reform goals.
- ☑ Cite examples and evaluate role of partnerships among community members, organizations, agencies, businesses, and educational systems.

**Dispositions:**

*Have made progress toward acquiring the following:*

- ☑ The impetus to link and enhance programs through partnerships and other collaborations.
- ☑ The disposition to practice responsible, respectful, and sensitive behavior during instruction.
- ☑ The disposition to utilize the process of inquiry, experiential learning, and the application of environmental investigations in EE&I programming.
- ☑ The disposition to use deliberate techniques for presenting differing viewpoints and theories in a balanced manner.
- ☑ The disposition to reflect on and learn from personal practice as an EE&I professional, both individually and with other professionals and colleagues.
- ☑ The disposition to expand existing knowledge about the environment, related issues, EE&I, and instructional methods.
- ☑ The aspiration to build relationships with mentors, advisors, and others who will challenge NEE&I professionals to continually expand and upgrade their knowledge and skills.
- ☑ The impetus to strive to make complex issues understandable and establish relativity to the audience.

**III. Required Materials**

- Nevada State EE&I Certification Notebook
- Prepared materials (readings and handouts)

**IV. Course Requirements**

Course completion will be based on the following requirements:

- Final exam (100 points)
- Completion of background reading with accompanying learning log (50 points)
- Participation in class discussions, role plays, and other activities (100 points)
- Short essays (200 points)
- In-class assignments (50 points)

**Final exam:** students will be expected to complete the exam in the appointed time frame. A make-up exam will be given only in extreme situations and, if approved, must be taken within one week of the original exam date.

**Learning Log:** students are expected to complete background reading before the first workshop date. As readings are completed, the student will record notes in their learning log consisting of:

- a) One or more pertinent questions for discussion;

- b) Concepts/issues that stood out or that were not understood;
- c) Brief discussion of how the reading relates to current/future career.

The **Learning Log** will be assessed using the following rubric:

<b>CRITERIA</b>	<b>Exemplary</b>	<b>Acceptable</b>	<b>Needs Work</b>
a) question for discussion	Entry contains a relevant, thought-provoking discussion question	Entry includes a relevant discussion question	Entry includes a definition question
b) concepts/issues	Entry includes a thoroughly detailed description of concepts that stood out or were not understood	Your entry includes a description of concepts that stood out or were not understood	Entry includes a vague description of concepts that stood out or were not understood
c) relate to current/future career	Entry includes meaningful discussion and a specific example relating to career	Entry includes meaningful discussion and a vague example relating to career	Entry includes vague discussion and no example given

**Class Participation** will be assessed using the following rubric:

<b>CRITERIA</b>	<b>Exemplary</b>	<b>Acceptable</b>	<b>Needs Work</b>
a) Participation in discussion	Provide relevant, thought-provoking dialogue. Consistently makes connections, asks questions, and provokes debate or discussion on topics being discussed. Draws other into discussion.	Provide relevant dialogue	Dialogue off-track, distracting, inappropriate to topic;
b) Use of facts, reference to supporting materials and experiences	Points made are well-supported with relevant facts, references, and/or examples	Points made are somewhat supported with relevant facts, references, and/or examples	Points made with little support
c) Demonstrate and apply knowledge gained	Easily and correctly relate several facts, issues, and ideas about the topic	Correctly relate 1-2 facts, issues, and ideas about the topic	Rarely able to relate facts, issues, and ideas about the topic

## V. Tentative Schedule

<i>Time (hours)</i>	<i>Topic</i>	<i>Activity</i>
1	Define EE&I	Distribute manipulatives across a spectrum; apply definitions to a variety of examples (audiences, personal and non-personal experiences, facilities); discussion
1.5	Conceptual foundations and contributions of different entities	Presentation; small groups evaluate and present scenarios; discussion
1.5	Current issues, research findings, emerging issues	Case studies; evaluate an issue from perspective of different sources; discussion
1.5	Environmental literacy	Presentation; role play
1	EE&I programs and support services, including funding sources and resources.	Create giant map of programs, showing relationships, collaboratives, partnerships, and resources; discussion
1.5	EE&I with respect to current issues of curriculum-based audience (NCLB, accessibility, barriers, solutions)	Presentation; create and evaluate model for "Designing EE&I for Our Community;" discussion
1	Assessment	In-class completion of assignments (including open-response questions)
6-9 hours total		



**Nevada State EE&I Certification  
Internship Program**

## **The Internship Plan**

Mentors are responsible to the EE&I Program Committee to provide accountability for the internship experience.

The internship will consist of a supervised experience at an approved EE&I site. The experience will be supervised by a mentor assigned by the Mentorship Committee.

The internship will be at least 40 contact hours within a three month time frame. The intern will be evaluated on instructional experiences, projects, and/or programs, to include:

1. presenting 3 experiences;
2. Participating in the operations of the venue (for example, planning a program, exhibit, or have involvement in the other aspects of designing exhibits and programs); the internship should be flexible enough to take advantage of opportunities as they emerge.

Some interns will be new to the profession, while others may be currently employed at an EE&I site. The Program Committee will be responsible for obtaining feedback on a regular basis from the interns about the internship experience. This communication will be especially important for those interns for whom their mentor is also their manager.

### **New to the profession**

The intent is for the intern to gain experience using EE&I approaches appropriate for audiences, including adults and children, recreation-based, and curriculum-based. The intern and mentor should plan the internship based on (1) professional goals of the intern; (2) available internship sites; (3) available experiences.

### **Employed in the profession**

The intern may choose to spend their internship at their current job site.

- Front-line internship: the mentor is likely to be the intern's manager. To ensure an in-depth, meaningful experience, at least part of the internship will take place off site for an approved project. Approved projects might include: evaluating a program, exhibit, or brochure; assessing a completely different type of experience, or in-depth involvement with a project (e.g., designing an interpretive trail).
- Manager-level internship: to ensure the intern gains experience using learned EE&I instructional approaches, the intern will assigned a peer mentor, who will approve and evaluate the 40 hour internship. Past projects and experiences will not be applied toward these 40 hours.

### **Planning the Internship**

The EE&I Program Committee will place the intern based on professional objectives and the variety of instructional experiences available.

The mentor and intern will together develop an internship plan. This plan will contain the following components:

1. Length and general timing of internship.



2. Delivering EE&I experiences.
  - a. The intern will be expected to develop and conduct at least 1 new presentation. This will include creating a plan with theme, goals and objectives; learning background information; the presentation; and evaluating success.
  - b. Some of the programs will already be developed. The intern will deliver these presentations following established protocols and meeting stated goals and objectives.

### **Evaluating the Internship**

1. The intern will be expected to meet the Internship Core Competencies. In addition to these competencies, the mentor and intern can agree on which additional skills will be evaluated; how these skills will be evaluated. The mentor and internship will also discuss a plan for improvement.
2. At the discretion of the mentor, the intern, and the EE&I Program Committee, if the intern needs additional experiences to reach competency level, an internship may last longer than 40 hours.

## **The Mentor Training Program**

The Mentor Training Program will be a workshop that will contain the following three units.

### **Unit 1: Expectations**

#### Outcomes

Mentor will agree to the standards outlined in the mentor manual.

#### Methods

- 1) PowerPoint presentation
- 2) Mentor manual

#### Objectives: Mentor will

- 1) Be able to relate the goals and objectives of the EE&I Certification Program
- 2) Agree to time commitments involved with being a mentor
- 3) Be able to relate the expected knowledge, skills and obligations of the mentor

### **Unit 2: Background**

#### Outcomes

Mentor will know the skills that interns should possess and demonstrate.

#### Methods

- 1) PowerPoint presentation
- 2) Activities
- 3) Mentor manual

#### Objectives: Mentor will

- 1) Participate in several activities related to the Certification program themes and guidelines
- 2) Conduct readings

## Unit 3: Coaching and Evaluation

### Outcomes

Mentor will be skilled at coaching and evaluating. The mentor will have the knowledge and skills to provide feedback in ways that foster professional development, motivate the intern, and help produce a skilled, competent educator/interpreter.

### Methods

- 1) PowerPoint presentation
- 2) Activities
- 3) Mentor manual

### Objectives: Mentor will

- 1) Demonstrate coaching skills and techniques by providing constructive feedback in several activities, including role play situations
- 2) Be able to relate the role of the mentor in developing the interns' presentation skills.
- 3) Demonstrate use of appropriate evaluation tools, including construction of rubrics.

## Internship Site Analysis

The EE&I Program Committee is responsible for recruiting mentors and internship sites. The internship site will generally be the same location that the mentor works.

Representatives of the EE&I Program Committee will be able to fully explain the procedure to potential sites with a document for site review showing what skills and experiences we are asking of our interns, and the responsibilities and time commitment of mentors. The potential site can will complete the form, explaining which skills and experiences they can provide and will take responsibility for.

### **Site Characteristic Form – for each Department that will be involved**

#### Audience

- Outreach
- On-site EE
- Interpretation

#### Facility

- Museum
- Inside setting
- Outdoor setting
- Trails
- Aquaria
- 

#### Experiences offered

- Tours
- School-based programs
- Non-personal services
-

**Forever Earth Trips  
Year 4, 1<sup>st</sup> Quarter**

**Forever Earth Trips – Year 4, 1st Quarter**

<b>Date(s)</b>	<b>Group</b>	<b>Group Type</b>	<b>Trip Purpose</b>	<b>Length of Trip</b>	<b># of Adults</b>	<b># of Students</b>	<b>Total Pass.</b>
June 7	Moore Elementary 5 <sup>th</sup> grade GATE	Education	Student Field Trip	4.5 hrs.	4	20	24
June 14	Bendorf Elementary (4 <sup>th</sup> grade)	Education	Student Field Trip	4 hrs.	6	19	25
June 21	Boulder City Cub Scout Day Camp	Education	Day Camp Station	10.5 hrs. (4 trips)	28	54	82
June 28	Bendorf Elementary (4 <sup>th</sup> grade)	Education	Student Field Trip	4 hrs. (2 trips)	19	26	45
June 30	NPS	Agency	Mobile Visitor Center	7.5 hrs.	2	0	2
July 14	UNLV Education Outreach	Education	Class Offering	7.25 hrs.	20	0	20
July 18	Dondero Elementary (4 <sup>th</sup> grade)	Education	Student Field Trip	3 hrs. (2 trips)	15	32	47
July 21	NPS	Agency	Mobile Visitor Center	8 hrs.	3	0	3
July 27	Valley View Recreation Center	Education	Outdoor World Event	4 hrs.	7	18	25
July 29	NPS	Agency	Mobile Visitor Center	7.5 hrs.	1	0	1
August 7	Silver Mesa Recreation Center	Education	Outdoor World Event	4 hrs.	6	17	23
August 11	Forever Resorts	Education	National Marina Day activity	4 hrs.	0	0	0
<b>TOTALS for 1<sup>st</sup> quarter</b>		<b>Education -- 8 groups</b>		<b>Education - 41.25 hrs.</b>	<b>111</b>	<b>186</b>	<b>297</b>
<b>TOTALS for Year 4</b>		<b>Education -- 8 groups</b>		<b>Education - 41.25 hrs.</b>	<b>111</b>	<b>186</b>	<b>297</b>

***DRAFT***  
**Forever Earth Information Letter  
to Area Researchers**

(Draft Email/Letter to Area Researchers)

Date:

Dear (insert name):

Since its formal dedication in 2002, Forever Earth, a floating classroom and research laboratory, has been involved in numerous activities on Lake Mead. The 70-foot vessel has been used as a base of operations for conducting underwater cultural resource surveys by the National Park Service; mapping the lake bottom by Golder Associates on behalf of the Southern Nevada Water Authority; performing bird and wildlife surveys by various agencies; and much more.

As you plan your research, monitoring, or other scientific activities, please keep in mind the potential use of Forever Earth to accomplish your objectives. Funded by the Southern Nevada Public Land Management Act, the main purposes outlined for the vessel are research and education. The project is managed by the Public Lands Institute, University of Nevada, Las Vegas on behalf of the National Park Service. The fuel expenses are the only cost to your agency or organization for the use of this unique resource. Additional information can be found in the accompanying flyer.

To schedule or find out more about Forever Earth, visit our website at [www.discovermojave.org/forever\\_earth/](http://www.discovermojave.org/forever_earth/) or contact Daphne Sewing, Project Manager, at 702-895-5098. Thank you!

Sincerely,

Daphne Sewing  
Forever Earth Project Manager

**Discover Mojave Outdoor World  
Year 4 Schedule**

## Discover Mojave Outdoor World Schedule - Year 4

DATE	GROUP	# of PARTICIPANTS	ACTIVITY	LOCATION
Fri., June 15	Valley View Recreation Center, Henderson City Parks and Recreation	23	Kayaking - Introduction	Wells Pool, Henderson
Fri., June 22	Valley View Recreation Center, Henderson City Parks and Recreation	20	Kayaking	Lake Mead
Mon., June 25	Valley View Recreation Center, Henderson City Parks and Recreation	21	Outdoor Photography	Valley View Recreation Center, Henderson
Wed., June 27	Valley View Recreation Center, Henderson City Parks and Recreation	23	Fishing I	Valley View Recreation Center, Henderson
Fri., June 29	Valley View Recreation Center, Henderson City Parks and Recreation	20 x 2 = 40	Birding I Fishing II	Floyd Lamb State Park
Tues., July 17	NLV Parks and Recreation	13	Kayaking	Forever Earth – Lake Mead
Fri., July 20	Valley View Recreation Center, Henderson City Parks and Recreation	22	Rock Climbing I	Nevada Climbing Center
Tues., July 24	NLV Parks and Recreation	12	Kayaking	Forever Earth – Lake Mead
Fri., July 27	Valley View Recreation Center, Henderson City Parks and Recreation	18	Science and Art Adventure	Forever Earth – Lake Mead
Tues., July 31	NLV Parks and Recreation	17	Rock Climbing I	Red Rock Climbing Center
Tues., Aug. 7	NLV Parks and Recreation	20	Art Adventure	Forever Earth – Lake Mead
Wed., Sept. 26	Environmental Science Club, Paradise Elementary		Canoeing	Sunset Park
Wed., Oct. 3	Environmental Science Club, Paradise Elementary		Fishing I	Nevada Indoor Climbing Center
Fri.-Sat., Oct. 5-6	Environmental Science Club, Paradise Elementary		Camping	TBD
Wed., Oct 10	Environmental Science Club, Paradise Elementary		Fishing II Art Adventure	Sunset Park
Wed., Oct. 17	Environmental Science Club, Paradise Elementary		Canoeing	Sunset Park
Wed., Oct. 24	Environmental Science Club, Paradise Elementary		Bird Watching I	Sunset Park
Wed., Oct. 31	Environmental Science Club, Paradise Elementary		Bird Watching II	Wetlands Park
Sat., Nov. 3	Environmental Science		Science and Art	Forever Earth/Lake



	Club, Paradise Elementary		Adventure	Mead
TBD	Silver Mesa, NLV Parks and Recreation Department		TBD	TBD
TBD	Walnut Recreation Center		TBD	TBD
TBD	Whitney Recreation Center		TBD	TBD