Reports (PLI Education)  

5-31-2010


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Executive Summary

Highlights of the university’s focused efforts during the past three months include the following:
- An Evaluation Report was produced for the Families in Nature program.
- The report “Reaching SNAP Audiences: Documenting the number of people reached through environmental education and interpretation programs and activities has been produced.
- Two Families in Nature field trips benefitted 85 people.
- Exhibit IQ, an exhibit design company, has been retained to develop an exhibit design plan, prepare the RV, and fabricate and install exhibits.
- Forever Earth was scheduled on 49 days involving 1639 individuals.
- Discover Mojave Outdoor World conducted 16 events for 333 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 of these educational projects, providing necessary information and guidance. Project identification will be completed by August 31 of each year.

   The project identified and completed this year was Wilderness Awareness.

   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.

   Allison Brody met with Kate Hanson, SNAP Executive Director on April 9, 2010.
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.**

This was accomplished during the third quarter.

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.**

This was accomplished during the second quarter.

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, 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.**

Allison Brody, Sky McClain (SNAP Education), Amy Page, and Sharon Schafer (artist) created two activities to support Sharon Schafer’s *The Art of Nature: Images from the Wildlands of Southern Nevada* presentation. These two activities were tested during the Our Places Tell Stories conference with approximately 30 teachers and informal educators on February 27, 2010.

The two activities tested were the Picture Sort and the Values Quiz.

As a result of participation in these activities, students will be able to define wilderness; gain some knowledge about specific S. NV wilderness areas (names and locations); and develop an understanding of appropriate activities that can occur on Wilderness areas. Students will also feel that wild places nourish human’s mental and physical health and Wilderness areas are important and worth protecting.

Following a wrap-up meeting on March 9, 2010 (see attached meeting notes), the planning team met with Ms. Kerrie Blazek, Middle School Science Coordinator for the CCSD Curriculum and Professional Development Division on March 25 and April 16, 2010. Lori Headrick from the SNAP Wilderness team joined us for this meeting. It was determined that the two educational activities developed and tested, in combination with Sharon Schafer’s wilderness presentation, met the Wilderness Team’s goals of: (1) having more students know what Wilderness is and that Wilderness areas exist in Southern Nevada; and (2) having students demonstrate what behaviors are appropriate in Wilderness areas.

Allison Brody and Sharon Schafer updated the SNAP Wilderness team on April 14, 2010. The Wilderness Team agreed to deliver two educational activities in conjunction with Wilderness Presentation. As the activities depend on Sharon Schafer delivering *The Art of Nature: Images from the Wildlands of Southern Nevada* presentation to various school groups, the Wilderness Education
planning cannot move forward with scheduling the delivery of the educational activities until Sharon Schafer is retained on contract with the SNAP Wilderness Team.

ACCOMPLISHMENTS FOR TASK 1 – YEAR 3

PLI, SNAP Educators, and Sharon Shafer created two activities to provide supporting academic content for *The Art of Nature: Images from the Wildlands of Southern Nevada* presentation to K-12 classrooms in the Clark County School District (where academically appropriate). These activities were tested with 30 teachers at the 2010 Our Places Tell Stories Conference.

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

a. Identify data collection protocols for assessment of CE&I projects in priority focus areas: litter prevention, responsible OHV recreation, wilderness, and/or restoration. This activity for the selected focus area will be completed by November 30, 2007 and November 30, 2010.

The Families in Nature planning team (Virginia Ramos, SNAP; Emily Montoya, SNAP; Laura Brinson, SNAP; Amanda Rowland, SNAP; Richard Covey, USFS; Allyson Butler, PLI; Wilisha Daniels, PLI; Tricia Mynster, PLI; Allison Brody, PLI; and Irma Wynants, Winchester) have identified data collection protocols for assessment of the Families in Nature program, which accomplishes multiple priority focus areas, including litter prevention, responsible recreation, and restoration.

Typically, a short survey is administered to the participants immediately following a field trip to measure satisfaction and help us understand what went well and what we can improve (see attachment: Example of a Families in Nature Field Trip Evaluation). Answers given on such survey during the bus ride home captures immediate feelings and thoughts, but these answers often lack a context and don’t give us an overarching view of the success of the program.

Therefore, it was determined that a more in-depth understanding of the program could be gained by holding a focus group. Specifically, a focus group would give the planning team information about what outcomes the program is achieving; the value of the program to the participants; and specific ideas that can be used for future programming (see attachment: Families in Nature Evaluation Questions).

The planning team identified the protocols for a Families in Nature focus group, relying on the expertise provided by Maria Marinch, President of Language Sources. It was determined that a focus group would be conducted with a minimum of 7 and a maximum 12 adult and teen Families in Nature participants. The focus group was set in the evening to accommodate the schedule of working families, and childcare was provided to make participation convenient for parents.

b. Drawing upon the expertise of university faculty and staff, the PI/Project Manager will write assessment proposals to human-subject standards specified by UNLV’s Internal Review Board. These proposals will be completed by February 28, 2008 and February 2, 2011.

Language Sources conducted the assessment, using standard protocols for conducting focus groups.
c. **Assessment end results will be cooperatively determined with the PLI staff, SNAP Executive Director, SNAP Board and appropriate agency staff.**


d. **Collect and analyze data, using UNLV faculty and research assistants as needed. PI/Project Manager, with assistance from the UNLV graduate student and hourly personnel, will produce a written report by May 31, 2008 and May 31, 2011.**

A total of 10 adults and teens participated in the Focus Group on January 22, 2010. The Focus Group was held at Winchester Cultural Center, with child care provided by Families in Nature staff. Irma Wynants welcomed the participants, then Maria Marinch of Language Sources conducted the focus group in Spanish. The results of the Focus Group are included as an attachment.

**ACCOMPLISHMENTS FOR TASK 2 – YEAR 3**

Evaluation results from the NEEI Certification program were presented at the North American Association for Environmental Education national conference, October 9-10, 2009.

A focus group was conducted as a formative evaluation of the Families in Nature program, and an Evaluation Report was produced.

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

The number of people reached by CE&I programs and services for the 2009 fiscal year have been collected from each of the four agencies, as well as associated partners (Red Rock Canyon Interpretive Association and PLI).

The compiled data are presented in a report posted on Grovesite entitled: “Reaching SNAP Audiences: Documenting the number of people reached through environmental education and interpretation programs and activities.”

**ACCOMPLISHMENTS FOR TASK 3 – YEAR 3**

The report “Reaching SNAP Audiences: Documenting the number of people reached through environmental education and interpretation programs and activities” has been produced.

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**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.

The SNAP Education Team met with Allison Brody on April 7, 2010, and communicated that developing a relationship with the Las Vegas Tour Guides Guild may not be a priority for the SNAP agencies. Allison Brody has suspended work associated with this deliverable pending direction from the SNAP Education Team.

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 2010, respectively).

No progress was made this quarter.

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

No progress was made this quarter.

ACCOMPLISHMENTS FOR TASK 4 – YEAR 3

- The “Story of Gill” graphic novel and supporting curricular materials were produced, tested, and published.
- Additional work associated with this deliverable has been suspended pending direction from the SNAP Education Team.

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.

Two “Families in Nature” events were held this quarter, and PLI staffed booths at four Hispanic community events. In addition, the Families in Nature planning committee created the final draft of a strategic plan (Attachment: Families in Nature Strategic Plan). Also, a final Evaluation Report has been published documenting SNAP and PLI’s participation in the EETAP-funded “Building More Inclusive Organizations Initiative” (posted on Grovesite).

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.
Thirty-eight people participated in “Families in Nature” event at Moapa National Wildlife Refuge on March 20, 2010. Activities included: a scavenger hunt; an obstacle course to understand challenges facing the Moapa Dace; and Tread Lightly activities. Following a pot-luck lunch, the group participated in a restoration planting activity facilitated by FWS staff (see attachment: Moapa Field Trip Evaluation Results).

Fifty people participated in a “Families in Nature” event at Lake Mead National Recreation Area on May 8, 2010. Activities included: “Plumbing the Colorado” to understand the inputs and outputs along the Colorado River watershed (ending in the Gulf of California); water safety; and “Chilling with the Chubs” to understand challenges facing native fishes in Lake Mead. Following a pot-luck lunch, the group enjoyed kayaking and water play in the lake.

PLI, along with Language Sources, communicated SNAP messages at four Hispanic-oriented community events. A Dia Del Nino festival was held at the Las Vegas Springs Preserve on April 11, 2010; Winchester Cultural Center held a Children’s Festival on April 17, 2010; and a Dia Del Nino festival was held at the Winchester Cultural Center on April 24, 2010.

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

PLI and Language Sources are in process of producing three additional Spanish-language Guardian of Nature comic books featuring Super Hector.

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.

PLI and Language Sources are in process of producing three additional Spanish-language Guardian of Nature comic books featuring Super Hector.

e. PI/Project Manager will enlist the services of professional social researchers to create and implement a survey and monitoring program of the Hispanic community. Initial survey will focus on visitors to areas selected by the SNAP Board of Directors. Preliminary survey results will be provided to the SNAP Board of Directors as they become available. The results will be used to guide Hispanic messaging and outreach program development and implementation. The messaging and outreach program will be implemented by PI/Project Manager Allison Brody, with assistance from contracted marketing specialists, the UNLV graduate student, 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. Agency personnel will assist in project development and implementation.

Strategic Solutions is working with Jim Gramman with the NPS Social Science program, to finalize the SNAP Hispanic Outreach OMB proposal. Jason Gray of Strategic Solutions is refining a 2-phase sampling model to minimize non-response bias in this population, which OMB recognizes as hard to
reach. Jim Gramman made it clear that this research project is of significant value to the federal agencies because the goals and outcomes are significantly different than past research projects.

f. A database will be created by contracted personnel, and the results of the survey and monitoring program will be entered into this database. A step-by-step resource guide for connecting with Hispanic communities will be completed based on this research by January 31, 2011.

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

ACCOMPLISHMENTS FOR TASK 5 – YEAR 3

- A total of 7 Families in Nature field trips were held this year, benefitting 275 people.
- SNAP messages were delivered while staffing booths at 6 Hispanic community events.
- A strategic plan was developed, including a logo and communication strategy.
- Marketing tools were developed, including Spanish language comic books, tattoos, Super Hector masks, and activities with anti-litter and responsible use/safety messages.
- An Evaluation Report on the national Building More Inclusive Organizations Initiative, featuring the development of the Families in Nature program, was produced by EETAP.
- Progress continues to be made on the submission of the Hispanic Research proposal to OMB.


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

Postings and associated information can be viewed at http://blog.enviroedexchange.org/ and 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.

Allison Brody attended a CHOLLA meeting on March 9, 2010, providing updates on Professional Development.

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

Amanda Rowland (NPS/SNAP) is facilitating CHOLLA meetings.

d. Implement stated goals (listed below) for Partners for Education about the Environment with assistance from Media Relations, general clerical support, agency personnel, and the UNLV graduate student.
The “Phase 1 GreenPrint: Nevada’s Environmental Literacy Plan” has been posted for review by statewide formal and informal educators.

**ACCOMPLISHMENTS FOR TASK 6 – YEAR 3**
- An EE&I blog has been created and maintained at www.enviroedexchange.org.
- The “Phase 1 GreenPrint: Nevada’s Environmental Literacy Plan” was featured at the 2010 Our Places Tell Stories conference and has been posted for review and input.

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**Project 1 – Task 7. Develop Public Awareness Campaign to inform residents about the benefits of our public lands; encourage residents to learn about the plants, animals, rocks, and the natural and cultural history of Southern Nevada; and motivate people of all ages to responsibly explore outdoor recreational opportunities on public lands.**

PLI has approval from the SNAP EE Team to create a communications plan and public awareness campaign for the Children’s Outdoor Bill of Rights Alliance.

**Time Line – Communications Plan Development**

<table>
<thead>
<tr>
<th>WHEN</th>
<th>WHO</th>
<th>WHAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late May – week of May 17 or 24</td>
<td>Steering Committee Conference Call</td>
<td>Set up subcommittee or work group for Communications Plan</td>
</tr>
<tr>
<td>Early – Mid June</td>
<td>B&amp;P, Subcommittee</td>
<td>Creatives and advertising concepts developed</td>
</tr>
<tr>
<td>Mid – Late June</td>
<td>Steering Committee meeting</td>
<td>Present ideas to Steering Committee for feedback and approval</td>
</tr>
<tr>
<td>June and July</td>
<td>B&amp;P; Subcommittee</td>
<td>Develop Communications Plan</td>
</tr>
<tr>
<td>July</td>
<td>Megan w/subcommittee and B&amp;P</td>
<td>Begin development of website</td>
</tr>
<tr>
<td>Mid – Late August</td>
<td>Steering Committee meeting</td>
<td>Present DRAFT Communications Plan</td>
</tr>
<tr>
<td>September</td>
<td>Alliance Meeting</td>
<td>Present Communications Plan</td>
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<tr>
<td>October 9</td>
<td></td>
<td>Rollout/announcement at National Trails Day event – Henderson</td>
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</tbody>
</table>

To date, a logo has been created and approved by COBRA members, and the Alliance has agreed to roll-out the Nevada Children’s Outdoor Bill of Rights Initiative during the National Trails Day Celebration in Henderson on October 9, 2010. A proposal for $5,000 was submitted to REI to support Alliance member’s in their quest to get more kids to participate in outdoor activities.
ACCOMPLISHMENTS FOR TASK 7 – YEAR 3

- A request for assistance from the NPS Rivers, Trails and Conservation Assistance Program was approved, allowing for the formation of the Nevada Children’s Outdoor Bill of Rights Alliance (COBRA).
- COBRA members have agreed on an COBR Action Plan, Logo, and are in the process of planning a roll-out event for National Trails Day in Henderson.
- A proposal was submitted to REI to support the Alliance and their work.

Project 1 – Task 8. Develop Mobile Exhibit program to deliver SNAP messages.

a. PI/Project Manager will coordinate the development and construction of three-dimensional museum-quality exhibits with graphical elements and supporting educational materials, with assistance from the Curriculum Development Personnel, the UNLV graduate student, and Media Relations. SNAP and agency staff will assist in project development and implementation, message and graphic design development, and with the design of quality assurance protocols to ensure the consistent and effective use of the exhibit program. This will be completed by May 31, 2010.

Final approval from NPS contracting officers was not received until May 7, 2010. Allison Brody and Exhibit IQ are moving forward with the identification and purchase of a used RV suitable for our purposes.

Mobile exhibit planning meetings were held March 15, May 6, and May 18 (planning team members include Kevin Turner, NPS; Wendy Smith, FWS; LaNelda Rolley, PLI; Amy Page, PLI; Allison Brody, PLI; John Good, Exhibit IQ; and Victoria Ribeiro, Exhibit IQ) to develop an initial Exhibit Design plan (see attachment: SNAP Mobile Exhibit Design Plan).

ACCOMPLISHMENTS FOR TASK 8 – YEAR 3

- Progress is being made toward the purchase of an RV for use as a mobile exhibit.
- Exhibit IQ, an exhibit design company, has been retained to develop an exhibit design plan, prepare the RV, and fabricate and install exhibits.
- An initial exhibit design plan has been developed.

Project 1 – Task 9. Investigate potential delivery systems for integrating SNAP messages into the Clark County School District.

This task was completed in Year 2.


a. PI/Project Manager, in cooperation with the Nevada Natural Resource Education Council, will facilitate the implementation of the Nevada State Certification Program for Environmental Education and Interpretation (NEE&I). Certification program components will include: recruitment and registration of Certificate Program participants; four workshops for Certification program participants; mentor-training workshops; and supervised internships for
Certification program participants. SNAP and agency staff will provide review of certificate standards. Curriculum will be developed for the pilot program by May 31, 2008.

Nine people from the third cohort have completed all requirements of the NEEI program and graduated on February 25, 2010.

A fourth cohort has been scheduled for July 21-28, 2010. A concerted effort is being made to ensure that members of this cohort will provide volunteer EE&I services to SNAP agencies.

b. PI/Project Manager will facilitate the planning and implementation Our Places Tell Stories conference. Conference components will include: identification and invitation of speakers, including a keynote; recruitment and registration of participants; creation of conference program; and facility logistics (food, rooms, set-up, etc.). The conference will be held on March 4-6, 2008. If sufficient sponsorships are procured, it will be possible to hold an additional conference before May 2010.

This has been completed. Evaluation (posted on Grovesite) comments include:

“I have found the Our Places Tell Stories Conference to be a forum of excellent quality for learning and sharing all types of information related to natural and heritage-based informal education (with aspects that are also pertinent to formal ed.). In my opinion, this event has raised the bar in creating a setting where both the theoretical/scholarly and the practical within the discipline of environmental education are presented in a way that appeals to practitioners and students from many different agencies and perspectives. The programming was excellent; it's obvious that deep consideration was given to strand content. There is no other means in Nevada (or elsewhere) to showcase, share, document in the form of presentations and abstracts, and learn from the myriad activities that are underway in Nevada. Planners thoughtfully invited and attracted top experts Richard Louv and Kevin Coyle - that fact speaks volumes. Finally, on a side note, this event was expertly delivered and truly above par when compared to other conferences in attention to detail and consideration to attendee needs (from food and beverage service, signage, quality printed materials, ample signage, provision of flash drives, and consideration in ensuring that the function was delivered in an eco-friendly manner).”

“Wonderful, informative, and inspiring! I would be happy to attend another conference next year so keep updated.”

“I thought the OPTS conference was WONDERFUL. I was extremely impressed with the quality of the presentations and the Springs Preserve in general. I had a GREAT time and took a lot away from my experience at this conference.”

The conference received an overall “Excellent” rating (3.83 on a 4-point Likert scale). A total of 91.3% of respondents agreed that the conference met their professional goals. Some of the most popular sessions included those on Service Learning, Planning Programs, and the curriculum extensions developed for the Graphic Novel.

**ACCOMPLISHMENTS FOR TASK 10 – YEAR 3**

- A total of 12 participants completed 48 hours of coursework for the Nevada Certification in Environmental Education & Interpretation program; 9 of these were able to graduate from the program in February 2010.
Nearly 250 people participate in the 2010 Our Places Tell Stories conference, held in February 2010, and featuring Richard Louv, Kevin Coyle, and Richard Vineyard as keynote speakers. The conference included a Teacher Symposium, attracting over 50 formal educators.

### Summary of Year 3 (Round 6) Deliverables – CE&I

<table>
<thead>
<tr>
<th>Year 3 Deliverables (June 2009 – May 2010)</th>
<th>Percent Complete as of May 31, 2010</th>
<th>Plan for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project 1 – Task 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Identify at least one project each year to focus efforts.</td>
<td>100%</td>
<td>Completed: Wilderness Awareness</td>
</tr>
<tr>
<td>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.</td>
<td>100%</td>
<td>SNAP Educators and PLI presented the Wilderness Outreach plan to the Wilderness team December 9. The Wilderness Team has provided this information, and is in contact with the SNAP Board.</td>
</tr>
<tr>
<td>c. Determine the best set of delivery systems for each project.</td>
<td>100%</td>
<td>Education kits provided to teachers at workshops were identified as the best delivery system</td>
</tr>
<tr>
<td>d. Key user groups and best educational methodologies will be identified for each project.</td>
<td>100%</td>
<td>Ninth-grade students are the target audience. Appropriate activities have been identified and are being created.</td>
</tr>
<tr>
<td>e. CE&amp;I products and services for the focus project will be created and implemented.</td>
<td>85%</td>
<td>Activities have been created; implementation hinges on the Wilderness Team contracting with Sharon Schafer.</td>
</tr>
<tr>
<td><strong>Project 1 – Task 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Produce assessment proposals and reports for at least two CE&amp;I products or services.</td>
<td>150%</td>
<td>An Evaluation Report for Families in Nature Program have been produced.</td>
</tr>
<tr>
<td><strong>Project 1 – Task 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document number of people reached by CE&amp;I programs and services of the four federal agencies and cooperating partners.</td>
<td>100%</td>
<td>Report posted on Grovesite.</td>
</tr>
<tr>
<td><strong>Project 1—Task 4</strong></td>
<td>50%</td>
<td>Work associated with this deliverable has been suspended pending direction from the SNAP Education Team</td>
</tr>
<tr>
<td><strong>Project 1 – Task 5</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Identify project for delivering SNAP priority focus area messages to Hispanic community.</td>
<td>100%</td>
<td>Families in Nature program; Super Hector comic books; outreach tools and events.</td>
</tr>
<tr>
<td>b. Create and implement project.</td>
<td>100%</td>
<td>Two Families in Nature events were held this quarter, along with four community outreach events.</td>
</tr>
<tr>
<td><strong>Project 1 – Task 6</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Administer educators’ listserv/blog.</td>
<td>Continuous</td>
<td></td>
</tr>
</tbody>
</table>
b. Facilitate CHOLLA meetings. Continuous

c. Appropriate agency staff will attend CHOLLA meetings. Continuous

d. Implement stated goals (see overview section) for Partners for Education about the Environment. Continuous

**Project 1 – Task 7**

Develop a media plan and budget for the implementation of the public awareness campaign. 30% Logo and Communication Plan time-line has been developed for the Nevada Children’s Outdoor Bill of Rights.

**Project 1 – Task 8**

Coordinate the development and construction of three-dimensional museum-quality exhibits with graphical elements and supporting educational materials 50% In process of purchasing vehicle.

**Project 1 – Task 9**

Investigate potential delivery systems for integrating SNAP messages into the Clark County School District. 100% Completed.

**Project 1 – Task 10**

Develop a Nevada Certificate Program in Environmental Education & Interpretation, and conduct an Our Places Tell Stories Conference. 200% Completed. Three NEEI cohorts have been held; three Our Places Tell Stories conferences have been held.

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**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 task was completed in the first quarter for Year 3.

b. Provide training on revised SOPs for boat captains and deckhands. This activity will be completed by September 30 of each year.
This task was completed in the first quarter for Year 3.

c. Maintain Forever website and update content.

Changes made this quarter to the Forever Earth website included minor updates to the “FAQs.”

### ACCOMPLISHMENTS FOR TASK 1 – YEAR 3

- **Forever Earth Standard Operating Procedures (SOPs).** The Forever Earth SOPs were updated and revised during the first quarter of Year 3. Minor changes reflected new information or safety considerations. A copy of the SOPs is located in the main cabin of Forever Earth.
- **Training for Forever Earth crew and staff.** Training for all boat crew and program facilitators from the Public Lands Institute and the National Park Service was conducted during the first quarter. Man overboard and fire drills were conducted as well as training on the standard operating procedures. The station bill was reviewed by all staff.
- **Website updates.** Minor changes to the website were made and finalized by May 31, 2010.

**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 fourth quarter, 1,625 passengers benefited from educational programming during 47 trips aboard Forever Earth. These are detailed in the following table. Highlights of Forever Earth educational use included:

- Las Vegas Wash Coordinating Committee members facilitated activities for fifth-graders aboard Forever Earth on March 3, 4, 24, and 25.
- Fifth-grade students from Las Vegas Day School (March 10 and 11); Robert Taylor Elementary School (March 15, 17, 18, and 19); Rose Warren Empowerment School (March 26, April 12 and 26); Park Elementary School (April 5, May 3 and 12); Martha P. King Elementary School (April 7, 27, 28, May 6 and 7); Lummis Elementary School (April 13, 14, 15, and 16); Vanderburg Elementary School (April 30); Twitchell Elementary School (May 5); Jeffers Elementary School (May 10); Paradise Professional Development School (May 18 and 19), and Sue Morrow Elementary School (May 21) learned about the suitability of Lake Mead’s habitat for razorback suckers.
- Fourth-grade students from Faith Lutheran Academy (March 23) and Lunt Elementary School (April 6, 8, and 9) learned about Lake Mead’s water use cycle.
- Seventh-grade students from Omar Haikal Academy (March 16) and Garrett Junior High School (April 20, 22, and 23) participated in activities focusing on Lake Mead’s geology and geologic history.
- Fourth- and fifth-grade GATE students from Roundy and Hancock Elementary Schools (March 22); Hollingsworth Elementary School (May 4); Lake Elementary School (May 11); Dearing Elementary School (May 14); and Sheila Tarr Elementary School (May 20) learned about invasive species and the impacts of quagga mussels on Lake Mead’s ecosystem.
- On May 13, the Conservation District of Southern Nevada sponsored a Forever Earth field trip for the class of their poster contest winner. The student was a fifth-grader from Jydstrup Elementary. The class participated in activities that focused on Lake Mead’s water use cycle.
• On May 15, a senior group from Winchester Cultural Center enjoyed educational programming about Lake Mead’s history and the impacts of quagga mussels on Lake Mead’s ecosystem.
• On May 17, fourth- and fifth-grade students from Manch Elementary school learned about the suitability of Lake Mead’s habitat for razorback suckers.

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Group Type</th>
<th>Group</th>
<th>Trip Purpose</th>
<th>Length of Trip</th>
<th># of Adults</th>
<th># of Students</th>
<th>Total Pass.</th>
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<tbody>
<tr>
<td>3-Mar</td>
<td>Education</td>
<td>Las Vegas Wash Coordinating Committee</td>
<td>Student Field Trip</td>
<td>3 hrs.</td>
<td>6</td>
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<td>11-Mar</td>
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<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>14</td>
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<td>15-Mar</td>
<td>Education</td>
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<tr>
<td>16-Mar</td>
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<td>Education</td>
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<td>Student Field Trip</td>
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<td>24</td>
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<td>22-Mar</td>
<td>Education</td>
<td>Roundy/Hancock ES (4th and 5th grade GATE)</td>
<td>Student Field Trip</td>
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<td>4</td>
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<td>3 hrs.</td>
<td>6</td>
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<td>18</td>
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<td>Rose Warren ES (5th grade)</td>
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<td>30</td>
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<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
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<td>Education</td>
<td>Lunt ES (4th grade)</td>
<td>Student Field Trip</td>
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<td>10</td>
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<tr>
<td>7-Apr</td>
<td>Education</td>
<td>Martha P. King ES (5th grade)</td>
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<td>Education</td>
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<td>4</td>
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<tr>
<td>12-Apr</td>
<td>Rose Warren ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>9</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>13-Apr</td>
<td>Lummis ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>13</td>
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<tr>
<td>14-Apr</td>
<td>Lummis ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
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<td>28</td>
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<tr>
<td>15-Apr</td>
<td>Lummis ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>11</td>
<td>28</td>
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<tr>
<td>16-Apr</td>
<td>Lummis ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>8</td>
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<tr>
<td>20-Apr</td>
<td>Garrett JHS (7th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>6</td>
<td>37</td>
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<td>22-Apr</td>
<td>Garrett JHS (7th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
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<td>23-Apr</td>
<td>Garrett JHS (7th grade)</td>
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<td>Student Field Trip</td>
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<td>6</td>
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<tr>
<td>26-Apr</td>
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<td>Student Field Trip</td>
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<td>5</td>
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<td>Martha P. King ES (5th grade)</td>
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<td>4 hrs. (2 trips)</td>
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<tr>
<td>28-Apr</td>
<td>Martha P. King ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
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<td>30-Apr</td>
<td>Vanderburg ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
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<tr>
<td>3-May</td>
<td>Park ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
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<td>30</td>
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<td>Hollingsworth ES (4th and 5th grade GATE)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs.</td>
<td>4</td>
<td>20</td>
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<td>5-May</td>
<td>Twitchell ES (5th grade)</td>
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<td>12</td>
<td>32</td>
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<tr>
<td>6-May</td>
<td>Martha P. King ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>10</td>
<td>26</td>
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<tr>
<td>7-May</td>
<td>Martha P. King ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>10</td>
<td>28</td>
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<tr>
<td>10-May</td>
<td>Jeffers ES (5th grade)</td>
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<td>Student Field Trip</td>
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<td>9</td>
<td>29</td>
<td></td>
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<tr>
<td>11-May</td>
<td>Lake ES (4th and 5th grade GATE)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>6</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>12-May</td>
<td>Park ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>6</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>13-May</td>
<td>Jydstrup ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>10</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>
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 2007-2008 Edition was completed by May 31, 2008.


Revisions to the 2009-2010 Edition have been completed on time (posted at http://grovesite.com).

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

This activity was completed in Year 1.

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.

This activity was completed in Years 1 and 2.

Visual aids and equipment needs were identified and purchased throughout the year. This task has been completed for Year 3.

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.

This activity was not completed due to the low number of high schools scheduling field trips aboard Forever Earth. It was determined by the Curriculum Development Team to re-assign resources to ongoing improvements and additional activities for the seventh grade Forever Earth curriculum.
f. Develop one additional curriculum module for fifth grade students. This will be completed by May 31, 2009.

This activity was completed in Year 2.

g. Develop one additional curriculum module for fourth grade students. This will be completed by May 31, 2010.

An additional activity for the curriculum delivered on the boat was created and included in the 2009/2010 curriculum edition (posted at http://grovesite.com).

h. 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.

The assessment report for Year 2 was completed in the first quarter. The assessment report for Year 3 is on task for completion by August 31, 2010.

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**ACCOMPLISHMENTS FOR TASK 2 – YEAR 3**

- **Scheduled educational trips on Forever Earth.** During Year 3, 117 educational trips were conducted aboard Forever Earth benefiting 3031 students and 1099 adults (4130 total passengers). *(See attached for complete listing of Forever Earth trips).*
- **2009-2010 Forever Earth Curriculum.** A new activity was created and field tested for the 4th grade curriculum. Other minor revisions were made, and the 2009/2010 Curriculum Edition was completed on time.
- **Program supplies and equipment.** Throughout the year, additional supplies, equipment, and visual aids were acquired as needed for delivering the curriculum.
- **Program assessment.** Throughout Year 2, a random sample of students were administered assessment instruments to assist in determining if learning objectives for each grade level were achieved. With the assistance of a UNLV graduate student, data were collected and analyzed. A report was written by Dr. Lori Olafson, Dr. Gregory Schraw, and Michelle Weibel, UNLV College of Education. This was accomplished during the first quarter of Year 3. Modifications and adjustments to program delivery were based on this assessment report.

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*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.

This activity was completed during Year 1.

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.

No trips were scheduled for researchers during Years 1, 2, or 3. Lake Mead scientists and researchers have access to equipment and boats. A need for Forever Earth in a research capacity does not exist.
c. Identify and purchase any needed research supplies and/or equipment. This will be completed by May 31 of each year.

This task was not completed in Years 1, 2, or 3 due to the lack of interest in Forever Earth as a research vessel.

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 task was completed in previous years.

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).

No progress was made on this task during the quarter. Four trips were conducted in the first quarter.

ACCOMPLISHMENTS FOR TASK 4 – YEAR 3

- **Mobile Visitor Center.** The National Park Service used Forever Earth as a mobile visitor center on four occasions during Year 3. During the four scheduled trips, interpreters made over 500 visitor contacts, conducted interpretive programs, and hosted visitors aboard the mobile visitor center.

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.

During this quarter, two trips were scheduled for agency purposes benefitting 14 passengers.

On April 8, 2010, Lake Mead Superintendent Bill Dickinson hosted a meeting on board.

On April 29, 2010, the Las Vegas Wash Coordinating Committee conducted a staff meeting to review their field trip outline and activities that are conducted on Forever Earth for fifth-grade students from various schools.

**Forever Earth Agency Trips – Year 3 (Round 6), 4th Quarter**

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Group Type</th>
<th>Trip Purpose</th>
<th>Length of Trip</th>
<th># of Adults</th>
<th># of Students</th>
<th>Total Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-Apr</td>
<td>National Park Service</td>
<td>Agency Meeting</td>
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<td>5</td>
<td>0</td>
<td>5</td>
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<tr>
<td>29-Apr</td>
<td>Las Vegas Wash Coordinating Committee</td>
<td>Agency Staff Meeting</td>
<td>4 hrs.</td>
<td>9</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

**TOTALS for 4th quarter**

Agency - 2 groups

Agency - 6 hrs.

14

0

14
Project 2 – Task 5. Provide funding for student field trips to public land sites.

Pl/Project Manager Daphne Sewing, with the assistance from UNLV staff, 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 activity was completed during Year 1.

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

This activity was completed during Year 1.

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

This activity was completed during Year 2.

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

In this quarter, funding for bus transportation was provided for 38 field trips.

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

Pl/Project Manager Daphne Sewing, with the assistance from UNLV staff, 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 activity was completed during Year 1.

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

This activity was completed during Year 1.

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

This activity was completed during Year 2.

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

In this quarter, funding for bus transportation was provided for 38 field trips.

Project 2 – Task 7. Implement additional program assistance.

Pl/Project Manager Daphne Sewing, with assistance from Project Planner Allyson Butler, 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.

After reviewing and testing several alternative work force options, a cadre of part-time staff was hired to facilitate both Forever Earth activities and Outdoor World activities. Part-time staff included UNLV
graduate students and others with expertise in environmental education and/or outdoor recreation. Cross-training staff members to facilitate within both programs has provided efficiencies of effort and resources as well as allowing for on-going training and monitoring to insure high quality programs.

**ACCOMPLISHMENTS FOR TASK 7 – YEAR 3**

- **Delivery structure for Forever Earth program.** An effective delivery structure has been developed for the Forever Earth program. A cadre of part-time staff with expertise in environmental education and/or outdoor recreation has been hired to facilitate both Forever Earth and Outdoor World activities.

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**DISCOVER MOJAVE OUTDOOR WORLD**

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


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

This task was completed during the first quarter of Year 3.

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, 16 activities were conducted for 333 participants (see table below).

Through an on-going partnership with Clark County School District, six activities were conducted for physical education students. On March 18, 2010 Woodbury Middle School students hiked the Historic Railroad Tunnel Trail at Lake Mead National Recreation Area. A geocaching course and orienteering activity was created at Sunset Park for students from Gibson Middle School (March 24, 2010). High school students from Veterans Tribute Career and Technical Academy went snow shoeing in Spring Mountains National Recreation Area on April 7, 2010. On April 14, 2010 Faiss Middle School students hiked the Calico Tanks Trail and completed a geocaching course at Red Rock Canyon National Conservation Area. Students from Burkholder Middle School (May 11, 2010) and Basic High School (May 18, 2010) participated in kayaking activities at Lake Mead National Recreation Area.

On April 8, bird watching activities were conducted at Sunset Park for third- and fourth-grade students from Paradise Professional Development School.

Fifth-grade members of the Environmental Science Club, Paradise Professional Development School, participated in bird watching (April 8, 2010), rock climbing (April 15, 2010), geocaching (April 29, 2010), and kayaking (May 6).

On May 8, 2010, 48 people from Winchester Cultural Center participated in a Families in Nature program that introduced them to kayaking and water safety principles. The activities took place at Lake Mead National Recreation Area.
Students participating in the West Prep Leadership Program participated in kayaking (May 15, 2010) and hiking (May 22, 2010) activities.

### Discover Mojave Outdoor World Schedule – 4th Quarter, Year 3 (Round 6)

<table>
<thead>
<tr>
<th>DATE</th>
<th>GROUP</th>
<th># of PARTICIPANTS</th>
<th>ACTIVITY</th>
<th>LOCATION</th>
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<tbody>
<tr>
<td>Thurs., March 18</td>
<td>Woodbury Middle School</td>
<td>23</td>
<td>Hiking</td>
<td>Lake Mead NRA</td>
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<tr>
<td>Wed., March 24</td>
<td>Gibson Middle School</td>
<td>22</td>
<td>Geocaching</td>
<td>Sunset Park</td>
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<tr>
<td>Fri., March 26</td>
<td>Paradise Professional Development School</td>
<td>62</td>
<td>Bird Watching</td>
<td>Sunset Park</td>
</tr>
<tr>
<td>Wed., April 7</td>
<td>Veterans Tribute CTA HS</td>
<td>25</td>
<td>Snow shoe Hike</td>
<td>Spring Mountains NRA</td>
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<tr>
<td>Thurs., April 8</td>
<td>Environmental Science Club, Paradise Elementary</td>
<td>7</td>
<td>Bird Watching</td>
<td>Sunset Park</td>
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<tr>
<td>Wed., April 14</td>
<td>Faiss MS</td>
<td>25 x 2 = 50</td>
<td>Hiking Geocaching</td>
<td>Red Rock Canyon NRA</td>
</tr>
<tr>
<td>Thurs., April 15</td>
<td>Environmental Science Club, Paradise</td>
<td>8</td>
<td>Rock Climbing I</td>
<td>NV Indoor Climbing Center</td>
</tr>
<tr>
<td>Thurs., April 29</td>
<td>Environmental Science Club, Paradise</td>
<td>10</td>
<td>Geocaching</td>
<td>UNLV campus</td>
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<tr>
<td>Thurs., May 6</td>
<td>Environmental Science Club, Paradise</td>
<td>6</td>
<td>Kayaking</td>
<td>Lake Mead NRA</td>
</tr>
<tr>
<td>Sat., May 8</td>
<td>Winchester Cultural Center – Families in Nature</td>
<td>48</td>
<td>Kayaking</td>
<td>Lake Mead NRA</td>
</tr>
<tr>
<td>Tues., May 11</td>
<td>Burkholder Middle School</td>
<td>25</td>
<td>Kayaking</td>
<td>Lake Mead NRA</td>
</tr>
<tr>
<td>Sat., May 15</td>
<td>West Prep Leadership Program</td>
<td>10</td>
<td>Kayaking</td>
<td>Lake Mead NRA</td>
</tr>
<tr>
<td>Tues., May 18</td>
<td>Basic High School</td>
<td>28</td>
<td>Kayaking</td>
<td>Lake Mead NRA</td>
</tr>
<tr>
<td>Sat., May 22</td>
<td>West Prep Leadership Program</td>
<td>9</td>
<td>Geocaching Hiking</td>
<td>Spring Mountains NRA</td>
</tr>
<tr>
<td><strong>TOTALS for 4th Quarter</strong></td>
<td>10 Groups</td>
<td>333 participants</td>
<td>16 Events</td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS for Year 3</strong></td>
<td>27 Groups</td>
<td>1485 participants</td>
<td>52 Events</td>
<td></td>
</tr>
</tbody>
</table>

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 2008.

This task was completed during the first quarter. The assessment report for Year 3 is on track for completion by August 31, 2010.

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.

Updates to the website were made throughout the year and were completed on time.

ACCOMPLISHMENTS FOR TASK 1 – YEAR 3

- **Conducted Events.** During Year 3, 52 events were conducted for 1485 participants. Twenty-seven different groups were targeted for these events. *(See attached for complete listing of events conducted throughout Year 3.)*
- **Program Assessment.** Throughout Year 2, participants were administered assessment instruments to assist in determining if activity objectives were achieved. With the assistance of a UNLV graduate student, data were collected and analyzed. A report was written by Dr. Lori Olafson, Dr. Gregory Schraw, and Michelle Weibel, UNLV College of Education. This was accomplished during the first quarter of Year 3. Modifications and adjustments to program delivery were based on this assessment report.
- **Website Revisions.** Minor revisions were made to the website throughout the 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.

A hiking activity was developed and included in the activities outline.

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.

The outline for a hiking activity has been completed and added to the curriculum (see attached).

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

The hiking activity has been field tested throughout the second and third quarters; modifications were made to the draft activity outline. The activity outline was completed during the fourth quarter.

ACCOMPLISHMENTS FOR TASK 3 – YEAR 3
• **New activity added to program.** A hiking activity outline was added to the program during Year 3. The activity was field tested throughout the first three quarters in a variety of locations including Spring Mountains National Recreation Area, Lake Mead National Recreation Area, and Red Rock Canyon National Conservation Area.

*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.

This activity was completed in the second 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.

This activity was completed in the second quarter.

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

The activity was completed during the first and second quarters.

d. Highlight partner contributions on website. This activity will be completed by May 31 of each year.

This activity was completed in the second quarter.

**ACCOMPLISHMENTS FOR TASK 3 – YEAR 3**

1. **New partnerships.** Three new partnerships were established during Year 2. Activities were conducted for Winchester Cultural Center – Families in Nature; Camp Lee Canyon – Clark County Parks and Recreation Department; and Neighborhood Recreation Center – North Las Vegas Parks and Recreation Department.

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

PI/Project Manager Daphne Sewing, with assistance from Project Planner Allyson Butler, 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.

After reviewing and testing several alternative work force options, a cadre of part-time staff was hired to facilitate both Outdoor World activities and Forever Earth activities. Part-time staff included UNLV graduate students and others with expertise in environmental education and/or outdoor recreation. Cross-
training staff members to facilitate within both programs has provided efficiencies of effort and resources as well as allowing for on-going training and monitoring to insure high quality programs.

ACCOMPLISHMENTS FOR TASK 4 – YEAR 3

- **Delivery structure for Outdoor World program.** An effective delivery structure has been developed for the Outdoor World program. A cadre of part-time staff with expertise in environmental education and/or outdoor recreation has been hired to facilitate both Outdoor World and Forever Earth and Outdoor World activities.

### STATUS OF YEAR 3 (ROUND 6) DELIVERABLES – FOREVER EARTH & OUTDOOR WORLD

<table>
<thead>
<tr>
<th>Year 3 Deliverables (June 2009 – May 2010)</th>
<th>Percent Complete as of May 31, 2010</th>
<th>Plan for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREVER EARTH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project 2 – Task 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Revise SOP</td>
<td>100%</td>
<td>Completed.</td>
</tr>
<tr>
<td>b. Provide training on SOP for boat crew.</td>
<td>100%</td>
<td>Completed.</td>
</tr>
<tr>
<td>c. Update and maintain website.</td>
<td>100%</td>
<td>Completed.</td>
</tr>
<tr>
<td>Project 2 – Task 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Schedule a minimum of 25 educational trips.</td>
<td>472%</td>
<td>Completed.</td>
</tr>
<tr>
<td>c. Develop additional 6th grade curriculum.</td>
<td>100%</td>
<td>Completed.</td>
</tr>
<tr>
<td>d. Purchase program materials, supplies, and visual aids.</td>
<td>100%</td>
<td>Completed.</td>
</tr>
<tr>
<td>e. Develop partnership for integrating data collected by high school students into existing research data base.</td>
<td>0%</td>
<td>This project was determined to be unnecessary.</td>
</tr>
<tr>
<td>f. Develop additional 5th grade curriculum.</td>
<td>100%</td>
<td>Completed.</td>
</tr>
<tr>
<td>g. Develop additional 4th grade curriculum.</td>
<td>100%</td>
<td>Completed.</td>
</tr>
<tr>
<td>h. Produce written assessment report of participants in Forever Earth curricula.</td>
<td>100%</td>
<td>Completed.</td>
</tr>
</tbody>
</table>

### Project 2 – Task 3

<table>
<thead>
<tr>
<th>Project 2 – Task 3</th>
<th>Percent Complete as of May 31, 2010</th>
<th>Plan for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Distribute information about Forever Earth to researchers in regional area.</td>
<td>100%</td>
<td>Completed during Year 1.</td>
</tr>
<tr>
<td>b. Schedule 3 scientific research trips on Forever Earth.</td>
<td>0%</td>
<td>Unable to complete this task due to lack of need for Forever Earth as a research vessel.</td>
</tr>
<tr>
<td>c. Purchase needed research supplies and equipment.</td>
<td>0%</td>
<td>Unable to complete this task due to lack of need for Forever Earth as a research vessel.</td>
</tr>
</tbody>
</table>

### Project 2 – Task 4

<table>
<thead>
<tr>
<th>Project 2 – Task 4</th>
<th>Percent Complete as of May 31, 2010</th>
<th>Plan for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Schedule Forever Earth as a mobile visitor center twice per month during June, July, and August.</td>
<td>67%</td>
<td>NPS scheduled and completed four mobile visitor center dates.</td>
</tr>
</tbody>
</table>

### Project 2 – Task 5

<table>
<thead>
<tr>
<th>Project 2 – Task 5</th>
<th>Percent Complete as of May 31, 2010</th>
<th>Plan for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Project 2 – Task 6

- a. Schedule a minimum of 6 trips for agency purposes.  
  - 167% Completed.

- b. Provide bus transportation funds for 35 student field trips.  
  - 263% Completed.

### Project 2 – Task 7

- a. Determine delivery system.  
  - 100% Completed.

### OUTDOOR WORLD

### Project 3 – Task 1

- a. Develop a schedule of events for the year.  
  - 100% Completed.

- b. Conduct a minimum of 25 events.  
  - 208% Completed.

- c. Produce written assessment report of participants in Outdoor World program.  
  - 100% Completed.

- d. Update and maintain website.  
  - 100% Completed.

### Project 3 – Task 2

- a. Identify a new recreational event to be developed.  
  - 100% Completed.

- b. Develop curriculum for the selected recreational event.  
  - 100% Completed.

- c. Field test new event curriculum.  
  - 100% Completed.

### Project 3 – Task 3

- a. Identify potential new partners.  
  - 100% Completed.

- b. Contact potential partners.  
  - 100% Completed.

- c. Formulate a minimum of one new partnership.  
  - 300% Completed.

- d. Highlight partner contributions on website.  
  - 100% Completed.

### Project 3 – Task 4

- a. Determine delivery system to increase scope of program.  
  - 100% Completed.

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Submitted by:

[Signature]
Margaret N. Rees  
Principal Investigator  
May 31, 2010  
Date
Wilderness Education Planning
Meeting Notes
Wilderness Education Ideas

March 9, 2010
Allison Brody, Sky McClain, Amy Page, Sharon Schafer

In general, this program is about connecting to the wilderness at a personal level.

Curriculum will need introductions, background, rationale, and connections to standards, instructions for activities, ideas for transitions, etc.

OPTS

1. Transition from presentation to activity was a little rough. First I asked: What are you thinking? This was about wilderness – what is the value of these places? How do we benefit from these places? Didn’t get answers needed to begin “values” activity. Better question might be: Who benefits? Does a city benefit? Does a community benefit? How? Do wildlife benefit? How?
2. Did the value activity work? Do we need more than one scenario for each value? Ask Kerrie
   ... 
3. Photo sort: we had to stop at 16 because of time issues. The groups had a lot of discussion. Ellen thought it was a little confusing: did it cover local regulations? Wasn’t the point of the activity: wilderness characteristics. Many people seemed to be surprised at some of the answers. The kit should include powerpoint to help with facilitation.
4. Allison will look at powerpoint and put in order of discussion points

Delivery ideas:

Issue: how do we create kits that teachers will actually use?
Ideas:
1. Have booklet with instructions, but include in kit ready-to-use materials with instructions pasted on so can use right away – clear what to do.
2. Target teacher workshops rather than shot-gun (don’t “spew it out there”) – find teachers that this is a good fit for.
3. Use CPDD to our advantage to help us help the teachers connect it to classroom

Two approaches: teacher workshops/staff days + volunteers deliver program using kits.
1. Need connection: if I do this, I won’t have to do that anymore. Need to know biology syllabi (or physical education) so that we know what this can replace. Or be able to answer for the teacher: this allows me to do this (achieve these curriculum goals)— make it clearly academically relevant for the teacher and the student.
2. Talk to Kerrie Blazek
   a. present to her our goals, objectives, rationale for 9th grade
   b. briefly go over activity ideas
   c. ask Kerrie: what do we need, and what do you suggest we do to get this? How do we make this academically relevant? How do we frame this for the principal/teacher?
3. Intensive pilot with one school – ask deliberate questions about this pilot: how was it used? Who used it? What was the timeline, sequence, extensions? What did it inspire – what were
some consequences? What happened as a result of this curriculum? What were the school’s goals and objectives?

4. In order to sell this pilot, need to frame this as SOMETHING: what? Environmental literacy is one aspect; integrated curriculum might work: Kerrie or someone needs to answer this.

Next steps: talk with Kerrie this afternoon to schedule a meeting. Invite Lori. For map activity: get two maps done so that can visualize activity.

NEXT STEPS
1. Finalize activities
2. Activities will be packaged into a “kit” and will be taught to teachers during workshops. Teachers will then be able to deliver the activities to their students after checking out the “kit” from SNAP.
3. Explore the possibility of creating a cadre of volunteer facilitators for these extensions? Potentially Friends of Nevada Wilderness.
4. Where and how and to whom to market this – science or PE/Health, integrated, arts – look at standards
5. Time line: February 27 for one activity at the Our Places Tell Stories conference

Lori Headrick, Sharon, Kerrie, Amy, Sky, Allison

Lori: Long range goal: kids in school have appreciation for what wilderness is, explore it, and take care of it for themselves and future generations. Get kids outdoors – have good experiences and memories. Impact as many students as possible.
   • What are the appropriate activities in Wilderness; what you can and can’t do – what is appropriate
   • Knowing where locations are

Advantages to PE/health connection vs. science. But the curriculum as it exists right now is about knowledge, not wilderness skills per se – therefore appropriate for science?

Think about middle school – team approach (e.g., Bailey) can accommodate the full richness of this program vs. fractured (if try to insert it into an existing course such as Principles of Science they will take bits and pieces of it).

Principles of Science text drives course syllabi → therefore need to see if our Wilderness objectives match these.
Need to connect with something the students already know – a national treasure like the Liberty Bell. Students will have trouble with abstraction of connecting to a place, rather than a thing.

Kerrie: how long will this program take?

1. Sharon’s presentation: 1 class period
2. Values/picture sort – 1 class period
3. Management and reflection – 1 class period

What do we do next?

What are some common misconceptions held about the environment – can this program address these misconceptions? Science proficiency test. Teaching for conceptual change model is the way “in” to science class.

Why Wilderness Awareness in Southern Nevada? The majority of lands here.

NEXT STEPS:

1. Define success – how will we know that this is successful? Won’t know where it will be most successful if we don’t know what success is.
   a. This program will be successful if more students know what wilderness is and that wilderness exists in southern Nevada
   b. This program will be successful if students can demonstrate what behaviors are appropriate in wilderness
2. Examine activity ideas
3. Wilderness Team
Notes from Wilderness Education Planning Meeting April 16, 2010

Sharon, Amy, Allison, Kerrie, Sky

Need a larger context for this – back out and give something aligned to curriculum about the environment.

Understanding structure and function of living systems and their interactions with their environment = course goal for 9th grade science. Ties into state standards. Tying into a course goal gives the teacher something to work with.

Middle school target 6th grade.

Elementary school -- Can incorporate their language and their science objectives. Focus on standards – broad lens of a scientific context and how it meets their objectives.

Secondary – connect wilderness idea to interactions and their environment. Wilderness ➔ intact ecosystems – preserve interactions.

Prior to Sharon’s presentation – tell stories about favorite outdoor experience – where was that (activate prior knowledge) and give concrete connection.

Suggestion: elementary will yield numbers. But they won’t be able to truly define wilderness – not age appropriate. Therefore, change grade level 6-12. Objectives will be written specifically for Life Science, & Principles of Science (6th and 9th graders will be our primary target, but will be open to grades 7th, 8th, 11th, and 12th grade). Look at course objectives and goals so that we can say where they specifically fit. We market through CPD who says: “this is how it fits into your curriculum.”

Land is managed for different purposes.

Action Items:
1. Write –ups (us and Kerrie)
2. Scheduling protocols
3. Identify, recruit, and train facilitators
Wilderness Education Extension Program

Southern Nevada’s Wilderness can evoke emotions in students, which have the ability to both inspire and motivate.

Connecting to students’ emotions is a powerful way for teachers to meet curricular objectives. Emotional connections allow students to find relevance, become excited about learning, and appreciate the natural world that surrounds them. Utilizing an integrated approach, this Wilderness Program uses the visual arts as a portal to engage your students and lead to a deeper understanding and appreciation of science.

This two-part Wilderness Program includes:
- An introductory activity to put The Wilderness Program in context for students
- A stunning presentation by a local artist that reveals the hidden beauty of Southern Nevada’s wilderness areas;
- An extension activity that connects to academic standards

Who Should Participate?
- 6th grade Life Science students and teachers
- 9th grade Principles of Science students and teachers
- Elementary teachers using the 5th grade Environment FOSS kit
- Other interested teachers (5th-12th grade suggested)

Who is offering the Wilderness Program?
This program is offered through a partnership among the Southern Nevada Agency Partnership, SkyDance Studios, and the Public Lands Institute

Where is the Wilderness Program offered?
In your school or classroom

To Schedule or Learn More:

Curricular Connections

Nevada State Science Content Standards
Life Science: Organisms and Their Environment (6th grade)
- Benchmark: Students will evaluate how changes in environments can be beneficial or harmful. 8.8, 8.9
- Benchmark: Students know interrelated factors affect the number and type of organisms an ecosystem can support. 8.1, 8.5, 8.8, 8.9, 8.11

High School Syllabi Connections
Families in Nature Evaluation Questions
Families in Nature – Planning Team:
Evaluation questions that we want answers to:

Staff Questions – Have the staff members been helpful? What can the staff members do better to help you enjoy/learn more during Families in Nature trips? (Should we ask questions about language preferences; is language a barrier for understanding educational information)?

How Can We Improve? - What sorts of activities have you enjoyed the most? What types of activities would you like to do in the future? What do you think about the locations we have explored during Families in Nature (Spring Mountains, Lake Mead, Red Rock…)? Where would you like to go next for Families in Nature? What mode of transportation can we use for Families in Nature (bus from Winchester, carpool from Winchester, meeting somewhere)? If a bus isn’t provided, will you be able to participate in Families in Nature trips? Can you help contribute to the cost of the bus? What do you think of the communication used so far between the Families in Nature staff and you (phone calls, newsletters, etc)?

About the Participants – What personal connections do you have with nature (family trips, etc.)? What do you enjoy about nature? What cultural connections do you have with nature (cultural stories and history, etc.)? When you go out in nature (parks, public lands, etc), what do you do for fun/to recreate? Where do you go to be outdoors/in nature? Is what we do on our Families in Nature trips different from what you do when you go out in nature on your own with your family? What do you know about how to behave in nature (there has got to be a much better way to ask this question – basically I’m trying to get at Leave No Trace and the behaviors we’ve modeled)?

Conversation with Maria 1/22/10:
What have you done? What has your experience been?
Can you classify your experience -- (then explain and justify)
How can we improve
Example of a Families in Nature Field Trip Evaluation
Families in Nature – May 8, 2010
“From Lake Mead to Mexico: The Story of Water” at Lake Mead NRA

1. What was your favorite part of today’s Families in Nature trip?

2. Tell us about one thing you learned today.

3. How will you use what you learned today in your day-to-day life?

4. Will you come back to Lake Mead National Recreation Area with your family? If yes, what will you do with your family when you come again?

5. How will you use less water in your day-to-day life?

6. What can we do to improve future Families in Nature trips?
Families in Nature Focus Group Report
Families in Nature
Focus Group Report

Language Sources is pleased to present the following report on the results of a single focus group held on Friday, Jan. 22, 2010 at 4:30 p.m. at the Winchester Cultural Center, Las Vegas, to evaluate and gather feedback regarding the Families in Nature program, which was created and is coordinated by the Public Lands Institute (PLI), the Southern Nevada Partnership Agency (SNAP) and the Clark County Department of Parks and Recreation (CCDPR).

Scope of Research
Areas evaluated were staff performance, event location, activities, event logistics, communications, volunteering and overall assessment. A copy of the research tool is attached for reference. Recruitment was conducted by CCDPR Representative Error! Contact not defined. and moderation was conducted by Language Sources President Maria Marinch, consultant retained by the PLI for Hispanic outreach and communications. The focus group was conducted in Spanish.

It is important to keep in mind that while these observations can serve as a guide for decision-making, they should be analyzed in perspective. Users of this report should keep in mind that participants were recruited directly by one of the partners, which may have a direct influence on respondents, and that a single research activity (one focus group) with limited participation may not be considered conclusive. Further research and analysis is recommended to extrapolate results.

After Varela-Wynants welcomed participants, the moderator explained the purpose of the gathering and provided the confidentiality statement. Nine (9) Hispanic/Spanish-dominant community members, eight females and one male, participated in the event. The participants had experienced at least two Families in Nature events in the past ten months.

Summary of Results
Comments were overwhelmingly positive. Participants rated staff as highly effective, knowledgeable, professional and friendly. Activities were rated as “excellent” and specific activities were mentioned by name. Participants constantly connected activities with educational experiences and highly valued the educational component of the events and activities.

Participants stated that they prefer personal invitations via phone or mail. They highlighted the importance of Varela-Wynants’ involvement in their engagement, stating they would have not participated in the program initially if they had not been personally invited by a trusted source (Varela-Wynants or family member/friend). All participants said they would volunteer at these events and would be willing to take leadership roles if trained. Participants would be willing to share costs for transportation, but highlighted that the bus rides were part of the experience and not having organized transportation would represent a barrier for some. All participants felt that language was not a barrier for logistics or for the learning of children. They stated that some people could not understand everything, but would be helped by others in the group.

Detailed Results
Connection to Nature
The words “nature” and “connections” were used repeatedly. When asked about what they valued most about these experiences, participants mentioned the community and family
connection, as well as the exposure to nature and the awareness that is built, especially in children, in regards to conservation and stewardship.

It is apparent that participants are retaining key parts of the educational objectives. They also spoke about how the learning experience that begun at the Families in Nature events has continued outside the program and has incited curiosity in participants to learn more about wildlife, the desert, the environment, etc.

Examples of comments:

“In addition to the fun we had, the children learned. There were a lot of things that surprised us (adults).”

“The most important thing about this program is that the children learn, and so do we (adults).”

“It was excellent, because of the contact we had with nature and our learning experience.”

“One of the best programs I have participated in.”

“It is great to have the children have contact with nature.”

“I hope the program continues.”

“It's really good in many aspects. Children get to learn about recycling and other important things.”

“It is great to see there are people that are interested in families, children and in providing learning opportunities where parents can spend time with their children.”

“I have learned a lot. For example, I did not know why Red Rock has red rocks.”

“I looked at the fossils. I found a lot of them, but I obviously did not remove them because we are not supposed to take anything away from nature.”

“My nephews learn about reading temperature and learned about the different zones going up the mountain. That will be useful when they are older.”

Staff

Participants commended members of staff for their dedication, patience, professionalism, knowledge and organization. Participants felt welcomed, respected and appreciated by staff. All participants rated staff as “excellent.”

Example of comments:

“People are really nice with a lot of patience and respect for the children.”

“You can feel they care for us. They are wonderful.”

“They have tactics, ways to make us learn and participate. For example, on our way back they ask interesting questions. It is not just going and seeing. They make sure we have learned.”

“Very patient.”

“They teach us another way of going/being outdoors. They tell us about nature, birds, plants.”

“I like to help the staff. They are great. I have spent a lot of time with them and they have a way of getting your attention, specially the children’s.”

“Not only do they (staff) spend time with the children, but also with us. It is not only an outing, but also a learning experience. Everyone’s work is great. They don’t have preferences for certain children, they play with all of them.”

Locations

Participants liked the locations visited to date and would like to continue visiting new locations and revisiting the ones they have been to. They had no specific feedback on which locations they would like to visit next.

Example of comments:

“(I like) All of them. The different places have different things to learn.”

Activities
Participants said they have enjoyed all the activities. They said they really liked the fact that these were organized, scheduled and planned. Most of the preferred activities relate to the attainment of new knowledge about nature (fauna, flora and the overall environment), as well as history and being outdoors. Participants mentioned the following activities: learning to use a compass, bird watching, kayaking at Lake Mead, singing in the bus to reaffirm learning, learning about different climate zones at the Mount Charleston, fossil "hunt" at Red Rock, camping at Winchester, sitting around a camp fire and others.

Examples of comments:

“I like when they get the kids without the parents. Like they placed the kids around the fireplace and sang. The children repeated the song.”
“I liked the activity where they taught them how to locate the different kinds of birds in that area. From what I understood, it was very interesting.”
“The best activity was the one on the mountain. I took them a couple of weeks ago to the birds preserve. I think because someone planted the seed about understanding the birds, how they sing, then she is more inclined to learn more about that topic. Very nice.”
“All activities have been different. I have liked them all. They were all different.”

Logistics

Participants said the events were clearly very well organized. They commended staff for keeping with the schedule and they reported feeling safe. Participants preferred weekends for the activities. Eight out of nine participants in the focus group preferred Saturday mornings/early afternoons, but all said they would adjust their schedules if given enough notice.

Participants would be willing to share costs for transportation, but highlighted that the bus rides were part of the experience and not having organized transportation would represent a barrier for some.

Example of comments:

“The organization (of the event) was great.”
“They are very programmed. Activities are done with a schedule. Very organized.”
“It is hard for working parents to take the time to do these types of activities. It is easier to go with an organized group because we are less afraid of going to unknown areas.”
“I like the fact that everything is thoroughly organized. Everything is perfectly set. It is safe and it gives us an opportunity to participate.”
“They do everything with such dedication. They prepare everything with a lot of time.”
“I could not do these trips if the transportation was not provided.”
“It is a benefit for us.”
“There is more safety, better.”
“Having the bus sets the tone. Children feel they are going somewhere special. It is a special activity.”
“It (transportation/bus) is very important. It is convenient.”
“We would pay an amount.”
“If there was no transportation we would go. Like in the lake, but that impedes some from going.”

Communications

Participants felt communication is effective. They said that the current method of calling them on the phone and receiving invitations via mail works great. Three participants stated that receiving mail gets the children excited about the upcoming event. They would not mind receiving information via e-mail, but said they still prefer to get another communication via postal mail. Participants felt the personal “touch” was important.
Language was not considered a barrier to participation by any of the participants. They said all the children speak English and when there is someone that does not understand, someone else helps them out. Language can interfere with learning, but all were very clear that it did not interfere with logistics or with them feeling that the staff cared about them and had their best interest in mind.

Other comments from participants:

“Very happy about this program. I enjoy it a lot.”
“Ms. Irma is a great person for this. She has the right touch. We feel like family, regardless of our nationalities. We spend time with other families and there is a great atmosphere of respect.”
“Great ways to spend time with others and learn about nature.”
“Organization, safety for children, the attention given to children. Children are easily distracted, but they get their attention.”
“It is impressive how we are able to spend time together and get to know each other. We begin as strangers and then we leave singing together as if were family.”
“They keep the energy level up from the beginning to the end.”
“They explain things. Very interesting. Sometimes we don’t teach children about nature. We don’t even have time to look up at the sky and say ‘how beautiful’. This allows us to do so.”
“Everything. We like everything. Can’t choose a specific one. We have had excellent experiences.”
“The learning experience in a fun way.”
“I loved the kayaking activity. I was in a race. It was so much fun. My body hurt later, but I enjoyed it very much.”
“I like how they taught us to use the compass.”
“They awaken curiosity in children. They spend days after talking about the experience. They not only see the photograph of the city, but see things differently. Now they see the mountain, not in the background, but all that is there. They learn a new way of seeing things and they begin to explore. They raise awareness, for example, about water, animals. They learn to focus on taking care of things and animals, not just seeing them.”
“The educational activities are really a motivator for us to go.”
“When they organized the camping here it was great.”
Families in Nature Strategic Plan: Final Draft
Families in Nature

Building relationships between community & nature

Background / Overview

At the end of 2008, the Southern Nevada Agency Partnership, the UNLV Public Lands Institute, the Clark County Winchester Cultural Center, and members of the Las Vegas Hispanic community entered a unique partnership to create the “Families in Nature” program. The Families in Nature program seeks to promote respect and stewardship for the environment through enriching experiences, exploration, and outreach. This program reaches community members where they are with a safe learning experience that provides more than a typical environmental education program. The program strives to connect each participant to our public lands in a deeper, more meaningful way. It allows participants to experience the importance of responsible use, exploration, and enjoyment of our public lands.

The international movement to confront the diminishing relationship between children and nature provided the impetus for the Families in Nature program, as well as the desire to reach out to previously untapped community groups in an innovative way, furthering the reach of organizations tied to the public lands in Southern Nevada. The successes of the Families in Nature program have been amazing, and the participants have been fully engaged. Together, we are discovering that getting out on a trail or park or other natural setting is an amazing way to connect—not only with nature but with friends and family as well.

Vision

Build a relationship between community and nature

Mission

To promote respect and stewardship for the environment through enriching experiences, exploration, and outreach.

Goals

- Establish connections and understanding of nature and public lands among diverse communities

- Identify and develop cultural connections between communities and the land
  
  - **Objective:** Conduct evaluations after each event and conduct focus groups annually to ensure we are accomplishing this goal for specific audiences

- Create welcoming atmosphere for diverse groups in the public lands

- Build meaningful relationships with community members
  
  - **Objective:** Conduct at least 5 Families in Nature experiences per year in Clark County (bimonthly) including each SNAP agency (USDA Forest Service, National Park Service, Bureau of Land Management, and US Fish and Wildlife Service) and Clark County Winchester Cultural Center
  
  - **Objective:** Establish at least 3 communication mechanisms between Families in Nature planning committee and the Las Vegas Valley, with emphasis on culturally diverse communities to include:
- A SNAP-approved 2 page flyer with the Families in Nature logo, that can be duplicated for each event, and will include details regarding the next Families in Nature event, including information regarding the location, what participants should bring, and who to contact to register for the event.
- Once registered, Families in Nature participants will receive phone calls to confirm and communicate about the upcoming event.
- A “Families in Nature” newsletter (in English and Spanish) that will be mailed to participants at least 3 times per year (2 in 2010). The newsletter will include updates on future events, reviews of the previous events (highlighting the people, the natural history stories and cultural connections), and photographs of the previous events and participants. The newsletter will be child-friendly. Also will include tips to care for the local environment (quiz, picture match, etc.), as well as links to COBR for additional events.

- Develop engaged community leadership that can promote stewardship and responsible use of the public lands
  - **Objective:** Develop multimedia slideshows to share with community leaders. These will include photographs and videos of Families in Nature events and participants, participant feedback, music, and video footage
  - **Objective:** Identify and develop 2 community leaders in 2010 to engage others in their communities
  - **Objective:** ask at least two community leaders for transportation and other resources to support Families in Nature trips
  - **Objective:** engage and train leaders within Families in Nature participants to plan and facilitate future events

- Increase understanding of the diverse audiences by the agencies
  - **Objective:** Develop multimedia slideshow to share with agency managers and staff. These will include photographs and videos of Families in Nature events and participants, participant feedback, music, and overarching accomplishments of the program
  - **Objective:** Present slide show at no fewer than two staff or volunteer meetings or trainings. Ensure presentation addresses known assumptions about this audience

- Increase understanding of the agency’s roles by diverse communities
  - Each “Families in Nature” newsletter (described above) will also highlight a particular agency (federal, state or county)
  - Each Families in Nature event will include a fun way to introduce the management agency that the group is visiting that day
Families in Nature Moapa
Field Trip Evaluation Results
Families in Nature

GIVING BACK TO OUR LANDS

Moapa NWR, March 20, 2010

Evaluation Summary
38 participants, 15 evaluations completed (most by adults, a few by children). Evaluation questions were not translated; some answered in Spanish (for most, English is a second language).

**QUESTION 1:** What was your favorite part of today’s Families in Nature trip?

1. Learning about the Nature Preserve with my family and interacting with all the other families. Learning something new. Peaking interest in new things.
2. Planting
3. Planting
4. Planting and eating
5. Everything. It was a very enjoyable and educational experience.
6. The planting
7. Everything
8. Learn. The games, meet new peoples, the food, everything.
9. Planting the trees
10. Planting the plants
11. Scavenger hunt
12. Playing with the water and the scavenger hunt.
13. convivir con todos, plantando y todo lo que realizamos
14. Activities/prizes for kids
15. I like todo

**QUESTION 2:** Tell us about one thing you learned today.

1. The moapa dace has a small contained habitat that depends on the interaction of humans for it survival. It needs warm water, natural (unreadable) spring water
2. How non-native plants affect nature.
3. The importance of keeping animals and plants in their natural setting for the benefit of man, animal, and nature
4. This is the only place Moapa Daces
5. I had no idea this was a wild animal refuge for special species, especially fish conservation.
6. About the Moapa Daces
7. Aprendi que esto es un refugio para concervacion de los Animales y las Plnatas
8. Learned we have to take care our forest.
9. Take care the nature
10. Respect of the nature
11. Planting, losing the pots by stepping on them
12. What Moapa what about the whole trip was great and full of information
13. Ci respetar a nostra naturalesa
14. Fish habitat, how to plant
15. A conocer cada planta y lo zona

**QUESTION 3: How will you use what you learned today in your day-to-day life?**

1. To respect all living creatures, plants and their environment, teach others – especially my grandchild.
2. To be more conscientious about nature
3. Be mind-full of the seven rules of nature
4. Not to put dirty things in rivers.
5. I plan to share this wonderful information with family and friends.
6. Keeping the water and the land clean
7. Si voy a reomender a familiares y amigos.
8. Appreciate this nature.
9. Respect the nature is the most important principle.
10. Respect for others
11. Gardening; do not spoil nature, reserve nature
12. Well I know what to expect from now on when it comes to wildlife refuges.
13. Cuidando todo la que nos rodea
14. How to plant flower to take care of fish
15. Con lo aprendido hoy

**QUESTION 4: Did you enjoy planting the plants for the Moapa Dace fish home habitat?**

1. YES – I would like to revisit and see what our efforts produced, how it has helped the habitat.
2. Yeah!
3. Yes. It was messy but fun.
4. Heck yeah! 😊
5. It was fun and very educational for all and particularly for me.
6. Yes
7. Si
8. Yes
9. Wonderful experience
10. Yes, very funny
11. Yes, we did.
12. Ooo yes! It was very fun but it also felt good to know we were helping out.
13. Si
14. Yes
15. Me (unreadable) plantar las plantas una bonita experiencia

**QUESTION 5: How will the plants you planted help the Moapa Dace fish?**

1. Preserve and protect their habitat. Become part of the natural preserve/environment.
2. They are native plants so they will help a lot.
3. By keeping their habitat “friendly” to their needs for health and life
4. I don't know?
5. It will help to recreate their natural environment
6. For eating or sleeping
7. Ba mejorar so ambiente natural
8. Reservation nature
9. To protect its natural habitat.
10. Plants could be helpful by helping the Moapa Dace by being food.
11. We are building good habitat for Dace fish
12. It will build a better home and help them live (sic) longer
13. Hayudariau mucho al qire, al agua a todo
14. Give them more shade
15. (unreadable)

**QUESTION 6: What can we do to improve future Families in Nature trips?**

1. That's a hard one – it seems this trip was well-planned and organized.
   Remember to have more water available for the bus trip home. Irma → thank you.
   Thank you Allison. Thank you UNLV and Winchester.
2. Continue with the great efforts that are needed to put this together. THANK YOU!
3. Just keep them on-going. Last time I expressed the fun my family had but I neglected to express
   the education value. These trips are very informative and a fun way to learn about our area.
4. We can go horseback riding and camping here.
5. Add more buses so more people can participate in this experience.
6. Do more trips, keeps kids out of streets.
7. Ayadir mas obnibus para conocaneel lugar.
8. Everything it was good, excellent. Introduce peoples.
9. Make a trip monthly and share the photos with other families to come with us next trip.
10. Make a monthly trips this kind of activities improve more join families.
11. Spread these good, fun & healthy activities to more families!
12. Start a a little later like at 10 a.m.
13. (blank)
14. More games, leave on time, make calls to remind people if they cancel. More deserts.
15. Y adon estaba muy bien filientaciesmes a bi Irma por los paseos que nos ____ para pasan esun
   en familia
SNAP Mobile Exhibit Design Plan
SNAP Mobile Exhibit Design Plan
Community reaches beyond the built environment

THEMATIC TITLE: Expand Horizons, Experience Community....Naturally

THEME: This exhibit will portray the connection between the natural world and our community as the pathway to responsible recreation, exploration, and enjoyment of Southern Nevada public lands.

The Mobile Exhibit: With thoughtful planning and careful design this exhibit will deliver messages important to SNAP agencies in an unprecedented way for Southern Nevada. This exhibit will reach audiences where they are with a safe, provocative experience that will provide more than just information. It will connect current users of public lands to public lands in a deeper, more meaningful way. It will allow visitors to EXPERIENCE the importance of responsible use, exploration, and enjoyment of our Public Lands.

Underlying Design Principles: use bold graphics to attract attention, keep it simple, use technology to create interesting exhibits but don’t allow technology to dominate, use green materials, make it appealing to the user with the environmental messages subtly weaved in.
<table>
<thead>
<tr>
<th>Exhibit Section</th>
<th>Exhibit Design Elements</th>
<th>Thematic Components/Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Outside: Introduction/Welcome</td>
<td>1. Wrap – dramatic photographs of recreational use, natural landscapes&lt;br&gt;2. Portable exhibit wall&lt;br&gt;3. ??</td>
<td>Southern Nevada’s natural and cultural environment&lt;br&gt;• Be able to list the ways that the built environment connects with the local natural environment&lt;br&gt;• Understand that a connection to the local natural environment is important to quality of life</td>
</tr>
<tr>
<td>2. Engagement</td>
<td>1. Interactive relief-type map of Southern Nevada highlighting neighborhoods and public lands&lt;br&gt;Computerized touch points highlighting geography and interesting/compelling stories about places and natural, cultural, geologic, etc. history&lt;br&gt;2. Mural</td>
<td>Fostering sense of place&lt;br&gt;• Feel connected to public lands.&lt;br&gt;• Show an interest in the natural and cultural history by seeking out local resources.&lt;br&gt;• Recognize the variety of ways that community members connect with public lands.</td>
</tr>
<tr>
<td>3. Recreation Accordion</td>
<td>An exhibit “wall” for each of the following recreation activities that highlights recreational features and introduces environmental concerns. Includes video segments of people telling personal stories.&lt;br&gt;1. Water recreation&lt;br&gt;2. OHV/motorized&lt;br&gt;3. Hiking/biking&lt;br&gt;4. Climbing&lt;br&gt;5. Camping/picnicking&lt;br&gt;6. Snow play (Infuse “family” and “wilderness” as appropriate.)&lt;br&gt;Include safety messages</td>
<td>Fostering sense of place&lt;br&gt;• Feel connected to public lands.&lt;br&gt;• Show an interest in the natural and cultural history by seeking out local resources.&lt;br&gt;• Recognize the variety of ways that community members connect with public lands.&lt;br&gt;• Gain skills and knowledge for responsible recreation.</td>
</tr>
<tr>
<td>4.</td>
<td>1. A “What If” wall using bold graphics and text. Visitor</td>
<td>The impacts of our actions&lt;br&gt;• Be able to identify an invasive</td>
</tr>
</tbody>
</table>
## Impacts of Our Actions

| has the opportunity to see impacts that human recreation can have on public lands. |
| **What's the Big Deal?** |
| • Invasive species |
| • Stay on trails |
| • Litter |
| • Protect our cultural resources |
| **2. What is being done to mitigate impacts?** |
| **3. How can you help?** |

| species and its consequences. |
| • Understand the aesthetic and health impacts of litter on public lands. |
| • Be able to identify the purpose of designated trails. |
| • Be able to list the consequences of recreating off-trail. |
| • Make decisions that reduce impacts |
| • Learn ways in which they can get involved with local stewardship efforts. |

### Living room in the desert:

- Start where people are
- Connection between built environment, home, and the natural world
- Intriguing
- Inviting
- Provoking to take beyond the normal

### Considerations:

- wind, ease of set-up,

### Potential idea:

Outside exhibits can reflect audience that you are reaching that day: the recreationist de jour.
Forever Earth Trip Schedule
Year 3
### Forever Earth Trips - Year 3 (Round 6)

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Group</th>
<th>Group Type</th>
<th>Trip Purpose</th>
<th>Length of Trip</th>
<th># of Adults</th>
<th># of Students</th>
<th>Total Pass.</th>
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<tbody>
<tr>
<td>1-Jun</td>
<td>Jo Mackey ES (4th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>10</td>
<td>24</td>
<td>34</td>
</tr>
<tr>
<td>2-Jun</td>
<td>Petersen ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>13</td>
<td>28</td>
<td>41</td>
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<tr>
<td>2-Jun</td>
<td>Bryce Canyon Natural History Association</td>
<td>Education</td>
<td>Teacher Workshop</td>
<td>2 hrs.</td>
<td>27</td>
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<tr>
<td>3-Jun</td>
<td>Woolley ES (4th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>10</td>
<td>37</td>
<td>47</td>
</tr>
<tr>
<td>5-Jun</td>
<td>Crestwood ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>3.5 hrs (2 trips)</td>
<td>9</td>
<td>32</td>
<td>41</td>
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<tr>
<td>9-Jun</td>
<td>Woolley ES (4th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>11</td>
<td>38</td>
<td>49</td>
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<tr>
<td>10-Jun</td>
<td>Brookman ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>12</td>
<td>29</td>
<td>41</td>
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<tr>
<td>11-Jun</td>
<td>Petersen ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>3.5 hrs (2 trips)</td>
<td>9</td>
<td>24</td>
<td>33</td>
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<td>12-Jun</td>
<td>Petersen ES (5th grade)</td>
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<td>Student Field Trip</td>
<td>3.5 hrs (2 trips)</td>
<td>7</td>
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<td>18-Jun</td>
<td>Crestwood ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>8</td>
<td>31</td>
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<td>18-Jun</td>
<td>National Park Service</td>
<td>Agency</td>
<td>SNPLMA Exec. Comm. Meeting</td>
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<td>24</td>
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<td>23-Jun</td>
<td>Crestwood ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>11</td>
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<tr>
<td>24-Jun</td>
<td>Petersen ES (5th grade)</td>
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<td>3.5 hrs (2 trips)</td>
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<td>26-Jun</td>
<td>Brookman ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs. (2 trips)</td>
<td>9</td>
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<td>35</td>
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<tr>
<td>27-Jun</td>
<td>National Park Service</td>
<td>Agency</td>
<td>Mobile Visitor Center</td>
<td>5.5 hrs.</td>
<td>2</td>
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<tr>
<td>6-Jul</td>
<td>Alexander Dawson Foundation</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4.5 hrs. (2 hrs.)</td>
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<td>Alexander Dawson Foundation</td>
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<td>Student Field Trip</td>
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<td>Agency</td>
<td>Mobile Visitor Center</td>
<td>5 hrs.</td>
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<td>16-Jul</td>
<td>National Association for Geology Teachers</td>
<td>Education</td>
<td>Conference field trip</td>
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<td>20-Jul</td>
<td>Nevada State College</td>
<td>Education</td>
<td>Teacher Workshop</td>
<td>4 hrs.</td>
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<td>Agency</td>
<td>Education</td>
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<td>25-Jul</td>
<td>National Park Service</td>
<td>Agency</td>
<td>Mobile Visitor Center</td>
<td>5 hrs.</td>
<td>2</td>
<td>2</td>
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<td>22-Aug</td>
<td>National Park Service</td>
<td>Agency</td>
<td>Mobile Visitor Center</td>
<td>1 hr.</td>
<td>2</td>
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<tr>
<td>24-Aug</td>
<td>Public Lands Institute</td>
<td>Agency</td>
<td>Staff Meeting</td>
<td>4 hrs.</td>
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<td>Goldfarb ES (5th grade)</td>
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<td>Student Field Trip</td>
<td>4 hrs.</td>
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<td>9-Sep</td>
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<td>Student Field Trip</td>
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<td>6</td>
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<td>10-Sep</td>
<td>Goldfarb ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
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<td>11-Sep</td>
<td>Goldfarb ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
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<td>17-Sep</td>
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<td>West Prep ES (4th grade)</td>
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<td>24-Sep</td>
<td>West Prep ES (4th grade)</td>
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<td>29-Sep</td>
<td>Public Lands Institute</td>
<td>Education</td>
<td>Emergency Drills</td>
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<td>1-Oct</td>
<td>Burk Horizon HS (High School)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs.</td>
<td>10</td>
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<td>3-Oct</td>
<td>UNLV Educational Outreach</td>
<td>Education</td>
<td>Community Field Trip</td>
<td>4.5 hrs.</td>
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<td>8-Oct</td>
<td>Matt Kelly ES (5th grade)</td>
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<td>9-Oct</td>
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<td>10-Oct</td>
<td>Bob Miller MS (6th-8th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs.</td>
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<td>14-Oct</td>
<td>Bridger MS (7th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
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<td>15-Oct</td>
<td>Bridger MS (7th grade)</td>
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<td>16-Oct</td>
<td>Bridger MS (7th grade)</td>
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<td>20-Oct</td>
<td>CCSD GATE (5th grade)</td>
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<td>Student Field Trip</td>
<td>4 hrs.</td>
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<tr>
<td>Date</td>
<td>Location</td>
<td>Program</td>
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<td>4 hrs.</td>
<td>12</td>
<td>19</td>
<td>31</td>
</tr>
<tr>
<td>15-May</td>
<td>Winchester Cultural Center - Senior Group</td>
<td>Education</td>
<td>Education and Recreation Field Outing</td>
<td>4 hrs.</td>
<td>22</td>
<td>0</td>
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</tr>
<tr>
<td>17-May</td>
<td>Manch ES (4th and 5th grades)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs.</td>
<td>5</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>18-May</td>
<td>Paradise ES (5th grade)</td>
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<td>Student Field Trip</td>
<td>4 hrs.</td>
<td>9</td>
<td>32</td>
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<tr>
<td>19-May</td>
<td>Paradise ES (5th grade)</td>
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<td>9</td>
<td>38</td>
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<tr>
<td>20-May</td>
<td>Sheila Tarr ES (4th and 5th grade GATE)</td>
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<td>11</td>
<td>40</td>
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<tr>
<td>21-May</td>
<td>Sue Morrow ES (5th grade)</td>
<td>Education</td>
<td>Student Field Trip</td>
<td>4 hrs.</td>
<td>5</td>
<td>20</td>
<td>25</td>
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</table>

**TOTALS for Year 3**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Education – 117 groups</th>
<th>Agency – 10 groups</th>
<th>Research – 0 groups</th>
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<tr>
<td></td>
<td>127</td>
<td>462.25 hrs.</td>
<td>30.5 hrs.</td>
<td>4221</td>
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Discover Mojave Activity Schedule
Year 3
# Discover Mojave Outdoor World Schedule

## Year 3, Round 6 (June 1, 2009 - May 31, 2010)

<table>
<thead>
<tr>
<th>DATE</th>
<th>GROUP</th>
<th># of PARTICIPANTS</th>
<th>ACTIVITY</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed., June 10</td>
<td>Troop 143, Boy Scouts</td>
<td>23</td>
<td>Geocaching</td>
<td>Spring Mountains NRA</td>
</tr>
<tr>
<td>Sat., June 13</td>
<td>General Public – Free Fishing Day</td>
<td>307</td>
<td>Fishing Art Adventure</td>
<td>Lake Mead NRA</td>
</tr>
<tr>
<td>Sat., June 13</td>
<td>Troop 143, Boy Scouts</td>
<td>125</td>
<td>Geocaching</td>
<td>Spring Mountains NRA</td>
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<tr>
<td>Fri., June 19</td>
<td>Valley View Recreation Center</td>
<td>47</td>
<td>Geocaching</td>
<td>Spring Mountains NRA</td>
</tr>
<tr>
<td>Sat., June 20</td>
<td>Winchester Cultural Center – Families and Nature</td>
<td>51</td>
<td>Nature activities</td>
<td>Spring Mountains NRA</td>
</tr>
<tr>
<td>Fri., July 10</td>
<td>Valley View Recreation Center</td>
<td>24</td>
<td>Geocaching</td>
<td>Sunset Park</td>
</tr>
<tr>
<td>Wed., July 15</td>
<td>Westcare – Boys</td>
<td>13</td>
<td>Kayaking I</td>
<td>Lake Mead NRA</td>
</tr>
<tr>
<td>Sat., July 18</td>
<td>Winchester Cultural Center – Families and Nature</td>
<td>14</td>
<td>Kayaking I</td>
<td>Lake Mead NRA</td>
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<tr>
<td>Mon., July 20</td>
<td>Camp Lee Canyon, Clark County Parks and Recreation</td>
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<td>Spring Mountains NRA</td>
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<tr>
<td>Wed., July 22</td>
<td>Westcare – Boys</td>
<td>6</td>
<td>Rock Climbing I</td>
<td>Nevada Indoor Climbing Center</td>
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<tr>
<td>Fri., July 24</td>
<td>Valley View Recreation Center</td>
<td>27</td>
<td>Rock Climbing I</td>
<td>Nevada Indoor Climbing Center</td>
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<tr>
<td>Tues., July 28</td>
<td>RecMobile</td>
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<td>Kayaking I</td>
<td>Lake Mead NRA</td>
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<td>Wed., Aug. 5</td>
<td>RecMobile</td>
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<td>Nevada Indoor Climbing Center</td>
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<td>Fri., Aug. 7</td>
<td>Valley View Recreation Center</td>
<td>16</td>
<td>Hiking I</td>
<td>Spring Mountains NRA</td>
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<tr>
<td><strong>TOTALS for 1st Quarter</strong></td>
<td><strong>6 Groups</strong></td>
<td><strong>754 participants</strong></td>
<td><strong>14 Events</strong></td>
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<td>Sat., Sept. 26</td>
<td>Neighborhood Recreation Center, NLV</td>
<td>19</td>
<td>Kayaking I</td>
<td>Lake Mead NRA</td>
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<tr>
<td>Wed., Oct. 7</td>
<td>Environmental Science Club,</td>
<td>12</td>
<td>Kayaking I</td>
<td>Lake Mead NRA</td>
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<tr>
<td>Date</td>
<td>Location/Club</td>
<td>Event(s)</td>
<td>Details</td>
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<td>--------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------------</td>
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<tr>
<td>Wed., Oct. 14</td>
<td>Environmental Science Club, Paradise Elementary</td>
<td>9 Rock Climbing I</td>
<td>Nevada Indoor Climbing Center</td>
<td></td>
</tr>
<tr>
<td>Wed., Oct. 28</td>
<td>Environmental Science Club, Paradise Elementary</td>
<td>10 Geocaching</td>
<td>Sunset Park</td>
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<tr>
<td>Wed., Nov. 4</td>
<td>Keller Middle School</td>
<td>25 Hiking</td>
<td>Lake Mead NRA</td>
<td></td>
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<tr>
<td>Wed., Nov. 4</td>
<td>Environmental Science Club, Paradise Elementary</td>
<td>10 Birdwatching I</td>
<td>Sunset Park</td>
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<tr>
<td>Sat., Nov. 7</td>
<td>Neighborhood Recreation Center, NLV</td>
<td>17 Rock Climbing I</td>
<td>Nevada Indoor Climbing Center</td>
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<tr>
<td>Sat.-Sun., Nov. 7-8</td>
<td>Environmental Science Club, Paradise Elementary</td>
<td>8 Camping I</td>
<td>Red Rock Canyon National Conservation Area</td>
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<tr>
<td>Tues., Nov. 10</td>
<td>Miller Middle School</td>
<td>20 Hiking</td>
<td>Lake Mead NRA</td>
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<td>Tues., Nov. 10</td>
<td>Neighborhood Recreation Center, NLV</td>
<td>20 Geocaching</td>
<td>Hartke City Park</td>
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<tr>
<td>Fri., Nov. 13</td>
<td>Northwest CTA High School</td>
<td>22 Hiking</td>
<td>Red Rock NCA</td>
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<tr>
<td>Mon., Nov. 16</td>
<td>Fertitta MS Outdoor Adventure Club</td>
<td>12 Geocaching</td>
<td>Fertitta MS Campus</td>
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</tr>
<tr>
<td>Sat.-Sun., Nov. 21-22</td>
<td>Winchester Cultural Center - Families in Nature</td>
<td>15 Camping Basics</td>
<td>Winchester Cultural Center</td>
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<td><strong>TOTALS for 2nd Quarter</strong></td>
<td><strong>7 Groups</strong></td>
<td><strong>199</strong></td>
<td><strong>13 Events</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 Groups</td>
<td>199 participants</td>
<td>9 Events</td>
<td></td>
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<tr>
<td>------------------</td>
<td>------------------------</td>
<td>------------------</td>
<td>------------------------</td>
<td>------------------</td>
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<tr>
<td><strong>TOTALS for 3rd Quarter</strong></td>
<td></td>
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<td></td>
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<td>Thurs., March 18</td>
<td>Woodbury Middle School</td>
<td>23</td>
<td>Hiking</td>
<td>Lake Mead NRA</td>
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<tr>
<td>Wed., March 24</td>
<td>Gibson Middle School</td>
<td>22</td>
<td>Geocaching</td>
<td>Sunset Park</td>
</tr>
<tr>
<td>Fri., March 26</td>
<td>Paradise Professional Development School</td>
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<td>Bird Watching</td>
<td>Sunset Park</td>
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<tr>
<td>Wed., April 7</td>
<td>Veterans Tribute CTA HS</td>
<td>25</td>
<td>Snow shoe Hike</td>
<td>Spring Mountains NRA</td>
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<td>Thurs., April 8</td>
<td>Environmental Science Club, Paradise Elementary</td>
<td>7</td>
<td>Bird Watching</td>
<td>Sunset Park</td>
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<tr>
<td>Wed., April 14</td>
<td>Faiss MS</td>
<td>25 x 2 = 50</td>
<td>Hiking Geocaching</td>
<td>Red Rock Canyon NRA</td>
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<td>Thurs., April 15</td>
<td>Environmental Science Club, Paradise</td>
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<td>Rock Climbing I</td>
<td>NV Indoor Climbing Center</td>
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<td>Environmental Science Club, Paradise</td>
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<td>Kayaking</td>
<td>Lake Mead NRA</td>
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<tr>
<td>Sat., May 8</td>
<td>Winchester Cultural Center - Families in Nature</td>
<td>48</td>
<td>Kayaking</td>
<td>Lake Mead NRA</td>
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<tr>
<td>Tues., May 11</td>
<td>Burkholder Middle School</td>
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<td>Kayaking</td>
<td>Lake Mead NRA</td>
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<td>Sat., May 15</td>
<td>West Prep Leadership Program</td>
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<td>Kayaking</td>
<td>Lake Mead NRA</td>
</tr>
<tr>
<td>Tues., May 18</td>
<td>Basic High School</td>
<td>28</td>
<td>Kayaking</td>
<td>Lake Mead NRA</td>
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<tr>
<td>Sat., May 22</td>
<td>West Prep Leadership Program</td>
<td>9</td>
<td>Geocaching Nature Activities</td>
<td>Spring Mountains NRA</td>
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<tr>
<td></td>
<td><strong>TOTALS for 4th Quarter</strong></td>
<td><strong>10 Groups</strong></td>
<td><strong>333 participants</strong></td>
<td><strong>16 Events</strong></td>
</tr>
<tr>
<td><strong>TOTALS for Year 3</strong></td>
<td></td>
<td><strong>27 Groups</strong></td>
<td><strong>1485 participants</strong></td>
<td><strong>52 Events</strong></td>
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</table>
Hiking Activity Outline
TAKE A HIKE!

OVERVIEW

Hiking is a fun physical and healthy activity. It is one of the fundamental outdoor activities on which many others are based. Many beautiful places can only be reached overland by hiking, and enthusiasts regard hiking as the best way to see nature. Hiking can heighten the senses because there are fewer intrusions distractions such as noise, electronics, or vehicles.

Hiking over long distances or over difficult terrain requires both the physical ability to do the hike and the knowledge of the route and its pitfalls. Leave No Trace principles are important to incorporate into a hiker’s behavior on or off a trail. A discussion of additional hiking opportunities and other outdoor recreational opportunities on public lands is also provided.
TAKE A HIKE! UNIT GOAL

Participants will explore a natural setting while safely enjoying a hike on an area trail or location.

OBJECTIVES

Adventurer Level

Participants will:
- Successfully complete a hike.
- Successfully practice Leave No Trace principles.

Explorer Level

To be developed.

Rock Star Level

To be developed.

SNAP CONSERVATION EDUCATION AND INTERPRETATION THEME CORRELATIONS

The Hiking activity unit supports the following guiding themes developed by Clark County educators:

Sub-theme 2. We share the intriguing stories of Southern Nevada’s diverse, interconnected natural world.

POTENTIAL ACTIVITY LOCATIONS

- Mary Jane Falls Trail, Trail Canyon Trail, Cathedral Rock Trail, Spring Mountains National Recreation Area
- Calico Tanks Trail, Red Springs Trail/Rock Scramble, Red Rock Canyon National Conservation Area
- Bluffs Trail, Railroad Tunnel Trail, cross-country routes, Lake Mead National Recreation Area

ACTIVITY OUTLINE

The outline below contains suggestions for unit activities. The actual content of a scheduled event depends upon:

1. Group characteristics (ages, group dynamics, previous experiences, etc.)
2. Event time frame
3. Location
4. Experience of the activity facilitators
5. Environmental factors (weather, season, etc)
ACTIVITY PREPARATION

The preferred trail should be scouted ahead of time for safety and resource considerations.

Adventurer Level

Part 1 – INTRODUCTION
(5-10 minutes)

Activity leaders facilitate introductions, convey enthusiasm, and generate eagerness for the day’s activities. The pre-activity assessment is completed by participants. Nametags are created and distributed. The facilitator sets the stage by describing how the day is structured, explaining what kinds of activities will take place, and clearly stating participant behavioral expectations. Behavioral expectations are pre-determined guidelines set by event leaders. Examples of guidelines include the expectations that everyone stay with the group, that participants do not litter, and that participants respect each other by not pushing or shoving. Any specific park or location rules should be explained at this time. For example, items such as rocks or plants may not be collected in Lake Mead National Recreation Area.

Part 2 – KNOW BEFORE YOU GO!
(15 minutes)

Before beginning the hike, the facilitator may ask the group to consider the reasons why people hike. A trail description is helpful to orient participants about its length, terrain, and difficulty. Any resource issues are discussed, such as damage due to cutting between trail switchbacks, biotic soil issues, or dislodging rocks. Safety cautions are discussed:

- Be aware of your surrounds; know where you are and where you are heading.
- Three points of contact at all times when climbing up or down rocks.
- Take your time; hike at your own pace.
- Drink plenty of water.
- Stay with the group; use the buddy system.

Part 3 – THE HIKE!
(1-2 hours)

Time is allowed for participants to enjoy the hike and explore the surroundings.

Part 4 – CLOSURE
(15 minutes)

The main concepts are reviewed by facilitating discussions about what participants, enjoyed, discovered, and learned. Participants complete a post-activity assessment. Hiking-related educational materials are presented to each participant. Adventurer Level participants also receive a certificate of completion.
Explorer Level

To be developed.

Rock Star Level

To be developed.

RESOURCES

Literature

Hayden’s book

Web sites

http://www.lnt.org/
http://www.localhikes.com/msa/msa_4120.asp

Suggestions for “take home” items for participants:

Discover Mojave Desert Card Set
Photos taken during the hiking activity
Take A Hike! Activity

ACTIVITY CHECKLIST

☐ Original Permission Slips
☐ Vehicle Paperwork
☐ Roster
☐ First Aid Kit
☐ Pre- and Post Activity Assessments
☐ Performance Rubric
☐ Name Tags
☐ Clipboards
☐ Question Sets
☐ GPS Units
☐ Digital Camera
☐ Video Camera
☐ Mojave Desert Card Sets
☐ Bottled Water
☐ Snacks
☐ Pencils
☐ Markers
☐ Certificates
☐ Trash/Recycling Bags
**Take A Hike!**

**Sample Schedule of Activities**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am</td>
<td>Meet at Calico Tanks Trailhead, Red Rock Canyon NCA</td>
</tr>
<tr>
<td></td>
<td>Introductions</td>
</tr>
<tr>
<td></td>
<td>Pre-activity assessment</td>
</tr>
<tr>
<td></td>
<td>Stage-setting</td>
</tr>
<tr>
<td>9:20 am</td>
<td>Know Before You Go!</td>
</tr>
<tr>
<td></td>
<td>• Trail description</td>
</tr>
<tr>
<td></td>
<td>• Resource considerations</td>
</tr>
<tr>
<td></td>
<td>• Safety considerations</td>
</tr>
<tr>
<td>9:45 am</td>
<td>The Hike</td>
</tr>
<tr>
<td>11:15 pm</td>
<td>Post-activity assessment</td>
</tr>
<tr>
<td></td>
<td>Closure</td>
</tr>
<tr>
<td></td>
<td>Certificate awards</td>
</tr>
<tr>
<td>11:45 pm</td>
<td>Depart Red Rock Canyon NCA</td>
</tr>
</tbody>
</table>
What do you know about hiking?

- Nothing
- Leave No Trace
- Know Before You Go
- Explore
- Trail Courtesy
- Trail Head
- Safety
Take A Hike!
Pre-Assessment Part II

1). I would tell my friends to do this hiking program.

Strongly agree  Agree  Disagree  Strongly Disagree

2). Hiking is very interesting to me.

Strongly agree  Agree  Disagree  Strongly Disagree

3). Hiking is fun.

Strongly agree  Agree  Disagree  Strongly Disagree

4). I would like to do another hiking program.

Strongly agree  Agree  Disagree  Strongly Disagree

5). I would like to show my friends how to hike.

Strongly agree  Agree  Disagree  Strongly Disagree
<table>
<thead>
<tr>
<th>Topic</th>
<th>Space for Notes</th>
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</thead>
<tbody>
<tr>
<td>Nothing</td>
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</tr>
<tr>
<td>Leave No Trace</td>
<td></td>
</tr>
<tr>
<td>Know Before You Go</td>
<td></td>
</tr>
<tr>
<td>Explore</td>
<td></td>
</tr>
<tr>
<td>Trail Courtesy</td>
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<tr>
<td>Trail Head</td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td></td>
</tr>
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</table>
Take A Hike!
Post-Assessment Part II

1). I would tell my friends to do this hiking program.

- Strongly agree
- Agree
- Disagree
- Strongly Disagree

2). Hiking was very interesting to me.

- Strongly agree
- Agree
- Disagree
- Strongly Disagree

3). Hiking was fun.

- Strongly agree
- Agree
- Disagree
- Strongly Disagree

4). I would like to do another hiking program.

- Strongly agree
- Agree
- Disagree
- Strongly Disagree

5). I would like to show my friends how to hike.

- Strongly agree
- Agree
- Disagree
- Strongly Disagree
### Take A Hike!

#### Rubric • Adventurer Level

<table>
<thead>
<tr>
<th>Participant Name</th>
<th>Participant successfully completes a hike</th>
<th>Participant successfully practices Leave No Trace principles</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Demonstrates the skill</td>
<td>Does not demonstrate the skill</td>
</tr>
</tbody>
</table>

Group ___________________________________________  Date ______________

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