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Oliver Ranch Science School Complex & Wild Horse and Burro Facility: Quarterly Progress Report, Period Ending March 31, 2006

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QUARTERLY PROGRESS REPORT

University of Nevada, Las Vegas
Period Ending March 31, 2006

Assistance Agreement Number FAA010017
Task Order Number FAF040019
Oliver Ranch Science School Complex & Wild Horse and Burro Facility

Executive Summary

Activity highlights during the third quarter of Year Two include the following actions toward task agreement deliverables:

- Agenda and minutes prepared and distributed for Core Group meetings on January 17 and March 21, 2006.
- Cultural curriculum 100% completed.
- Night Sky curriculum 100% completed.
- Green Building curriculum 75% completed.
- Native American Correlations 75% completed.
- Teacher piloting workshops held on February 23, March 18, and March 25, 2006 at Spring Mountain Ranch State Park and the Oliver Ranch site.
- RRDLC newsletter completed.
- Website content, navigation, and graphics updated and improved.

Task 1: Project Coordination

Deliverables: *The project coordinator will meet regularly with the Oliver Ranch committees, the Line and Space design team and NEPA team to assure modifications in design or curriculum that are necessary and appropriate are incorporated throughout the process of developing the facility. These activities will be recorded and provided to BLM in quarterly reports*.

PROGRESS AS OF MARCH 31, 2006

Over the past quarter, the Red Rock Desert Learning Center Core Group has met two times: January 17 and March 21, 2006 (the February 21 meeting was cancelled by BLM). For each of these meetings, the university assembled and distributed the agenda, handouts, and minutes (*see attached*). (NOTE: The minutes for the March meeting have not yet been approved and will be included with the next quarterly report). For those persons who are unable to attend the Core Group meetings, electronic copies of the minutes and handouts are provided via e-mail.

In addition to the Core Group meetings, Public Lands Institute Director Nancy Flagg also attends the monthly meetings of the RRDLC Committee Chairs. At these meetings, which are typically held 5 days' prior to the Core Group, the participants share new information and prepare for the

Core Group meeting. The Committee Chairs met on January 12, 2006, but did not meet in February or March.

The majority of the core group committees – with the exception of the Building Committee – are not actively meeting at this time while design development continues. The Building Committee has been active during this period and met for the value analysis in late January and again on March 21, 2006, to review substantial changes to the design and footprint of the facilities.

Task 2: Educational Curriculum Coordination

Deliverables: *The Educational Curricular Coordinator will provide educational themes and activities for 5th grade outdoor environmental curriculum appropriate for the School in quarterly progress reports. The coordinator will collate the curricular contributions of the stakeholders identified for this subtask and attempt to synthesize these into an overall curriculum for 5th grade environmental sciences to be based at the school. Visitation to other similar outdoor schools will be included and their curriculum incorporated into the reports as appropriate.*

PROGRESS AS OF MARCH 31, 2006

Core Curriculum: Cultural

In our last quarterly report we noted that Curriculum Coordinator Jeanne Klockow had formed a small working group, composed of agency personnel and community members, to begin developing the Cultural Curriculum. That group began meeting September 14, 2005, to brainstorm essential questions. Five "essential questions" that form the basis of the proposed curriculum were shared with the Core Group and from those questions lesson shells with correlated activities were developed. The working group has completed the lesson plans, or strands, for each essential question (*see attached)*. The work on the cultural curriculum is 100% complete and was presented to the Educational Programs Committee and to the Core Group on January 24, 2006.

Core Curriculum: Night Sky

During the past quarter, Dr. Klockow also began assembling another working group to develop the Night Sky Curriculum. That group began meeting in December 2005 to brainstorm essential questions. Five essential questions that form the basis of the proposed curriculum were shared with the Core Group and from those questions lesson shells with correlated activities were developed. The working group has completed lesson plans for each essential question (*see attached)*. The work on the Night Sky curriculum is 100% complete and was presented to the Educational Programs Committee and to the Core Group on March 21, 2006.

Core Curriculum: Green Building Technology

A work group composed of agency personnel and community members has begun developing Green Building Technology Curriculum strands. Five essential questions that form the basis of the proposed curriculum were agreed upon in January 2006. From those questions, lesson shells are currently being developed by the group (*see attached)*. Overall, the work on the Green Building curriculum is 75% complete to date, and the lessons will be presented to the Educational Programs Committee and to the Core Group when completed, currently targeted for May 2006.

Core Curriculum: Native American Correlations

A meeting with agency personnel and a Paiute Native American tribal leader was held to formulate a strategy to best integrate the Native American perspective throughout the curriculum

as a whole. Based on that meeting, Dr. Klockow formed a workgroup comprised of Native American teachers from the Clark County School District, which is currently meeting to correlate the Native American perspective within the developed curricular strands. Projected completion of this work is April 1, 2006.

Teacher Training and Curriculum Piloting

During this quarter Dr. Klockow coordinated with UNLV's Division of Educational Outreach and a team of CCSD teachers and other University personnel to create and conduct piloting workshops of the Science and Historical curricula for pre-service and novice CCSD teachers. There will be a total of five pilots conducted at Spring Mountain Ranch State Park and the Oliver Ranch site. This quarter, workshops were held on February 23, March 18, and March 25, 2006 (*see attached syllabi)*. Remaining workshops will be held during the next quarter. Dr. Klockow also met with the UNLV Center for Assessment and Evaluation to develop assessment instrumentation for these workshops in order to measure the validity of the curriculum. Analysis will take place during the next quarter to write and finalize a report summarizing the curricular strands.

The university has submitted a request to the BLM for a no-cost extension of the current task agreement (currently set to expire on June 30, 2006) so that additional teacher workshops can be held from June through October 2006. If the extension is approved, the additional piloting workshops will test additional segments of the core curriculum, such as Night Sky and Cultural.

Task 3: Operational Analysis

Deliverables: *The tasked coordination will be developed as the curriculum and design evolves. These plans will include estimated operational and maintenance costs and projected revenues. Progress on these business plans will be submitted in quarterly reports to BLM and will be prepared at least in part by university faculty, staff and graduate and undergraduate students.*

PROGRESS AS OF MARCH 31, 2006

In December 2005, the Las Vegas Field Office approved a modification to the task agreement to transfer all funding from Task 3 over to Task 2. The transferred funding is being used to support the piloting of the RRDLC curriculum with local pre-service and novice schoolteachers.

Task 4: Community Coordination

Deliverables: *Community outreach activities will be recorded and reported quarterly. These may include over the two years public Web page development, printed brochures, public forums, radio and television spots, school visitations, and establishing a mechanism for accepting donations.*

PROGRESS AS OF MARCH 31, 2006

Public Relations and Outreach

The university has generally been stymied in its attempts to assist the agency with public relations and outreach for the Red Rock Desert Learning Center, especially during the past quarter. The project remains in a great state of flux, with many unanswered questions about the project's

viability as well as the agency's commitment to the RRDLC at the local, state, and national levels. These questions have led to a number of false starts and stops with respect to public outreach. However, during the past quarter we can report on the following activities:

Website

After being offline for a majority of calendar year 2005, the BLM's Las Vegas Field Office website for the Red Rock Desert Learning Center was finally made available again for public viewing in January 2006. At that time, the university extensively reviewed and revised the RRDLC website content to bring it up-to-date with the latest information and timelines available. The updated files have been submitted to the BLM project coordinator and, once approved through agency channels, will go live on the BLM website. The BLM project coordinator could provide no estimated timeline for the revised content to be uploaded. The university also improved the navigation elements of the site, and new pages were created to accommodate additional information such as:

- A description of the 6 curricular strands created for the school and the "essential questions" each part of the curriculum will address
- A sample daily schedule summarizing a typical visit to RRDLC
- Information on the Wild Horse and Burro Facility
- A photo gallery of architectural sketches provided by Line and Space
- A photo gallery of CCSD schoolchildren's proposed models for the school

Further modifications to the RRDLC website content and graphics will be necessary in the next quarter as an result of extensive changes to the design and site plan that were shared with the Core Group at its March 21, 2006, meeting.

Informational Newsletter

In our last report, we detailed the extensive timeline that occurred between July and December 2005 as the university attempted to design and publish the first outreach publication for the Red Rock Desert Learning Center. The State BLM Office reviewed the draft RRDLC newsletter and provided the necessary changes/corrections to the local office on December 22, 2005. However, the State Office then determined the newsletter should be printed through its quick copy contract or the General Printing Office. The local office delayed printing until further research could be conducted on the parameters allowed under subtask 4 of the agency's task agreement with the university. On January 3, 2006, the local office approved allowing the university to print the newsletter. The final approval to print 500 copies was received on January 6, and the newsletter was delivered on January 20, 2006. On January 24, BLM Public Affairs Specialist Kirsten Cannon advised the Public Lands Institute not to distribute any copies until BLM developed a distribution plan, which was to be completed by January 27, 2006. To date, a distribution plan has not been received.

Public Presentations

Public Lands Institute Director Nancy Flagg delivered presentations to the Outside Las Vegas Foundation Board on January 23, 2006, and to the Green Valley Rotary Club on March 16, 2006. She provided an overview of the Institute's various SNPLMA-related activities, including the Red Rock Desert Learning Center.

Community Outreach

At the direction of the BLM project coordinator, the Public Lands Institute began enacting plans

for a public open house on January 26, 2006, to introduce the community to the project. The university developed the program outline and poster session, arranged for speakers and materials, and secured the multipurpose room at William Lummis Elementary School for the event. We designed a print ad to run in the *Las Vegas Review-Journal* and a flyer for distribution by mail and at selected locations (*see attached*). On January 19, 2006, BLM informed us the open house would be postponed until February. We again began arrangements for securing a location, but BLM subsequently cancelled the new date as well. On January 27, 2006, the agency informed the university that the environmental analysis (EA) for the project was being changed to an Environmental Impact Study (EIS). This will require at least two public scoping meetings, which were initially targeted by the agency to occur between March 15 and May 15, 2006. Despite follow-up phone calls and emails by the university, BLM has not pursued planning for these meetings to date, but we anticipate some activity in this regard during the next quarter.

Submitted by: _ [redacted]
Margaret Rees, Ph.D., Project Manager

Meeting Agendas

RED ROCK DESERT LEARNING CENTER MEETING

Tuesday, January 17, 2006
10:30 a.m.
Bureau of Land Management, 4701 N. Torrey Pines

"The mission of the Red Rock Desert Learning Center is to instill stewardship and respect by increasing knowledge and understanding of the Mojave Desert ecosystems and cultures through a unique experiential discovery program."

AGENDA

1. Introductions & Announcements *(5 min.)*

2. Approval of Minutes from December 6, 2005 Meeting *(5 min.)*

3. Update on Project Schedule – Michael Reiland *(10 min.)*
   A. Utilities
   B. Parking
   C. Construction Estimates/Inflation

4. Statement of Work/Request for Information Update – Michael Reiland *(10 min.)*

5. Update on Water Line – Michael Reiland/Las Vegas Valley Water District *(10 min.)*

6. Update on Environmental Assessment – Michael Reiland *(10 min.)*

7. Update on Curriculum Development – Jeanne Klockow *(5 min.)*

8. Standing Reports *(10 min.)*
   A. Line and Space Architects
   B. BLM Capital Improvements – Michael Reiland
   C. Community Outreach – LaNelda Rolley
      --RRDLC Open House, January 26, 6:00-8:00 p.m.

9. Committee Reports *(5 min.)*
   A. Building Committee
   B. Design Oversight
   C. Educational Programs
   D. Fund-raising and Partnerships
   E. NEPA
   F. Operations
   G. Other Uses
   H. Wild Horse & Burro

10. New Business *(5 min.)*

RED ROCK DESERT LEARNING CENTER MEETING

Tuesday, March 21, 2006
10:30 a.m.
Bureau of Land Management
4701 N. Torrey Pines Drive

"The mission of the Red Rock Desert Learning Center is to instill stewardship and respect by increasing knowledge and understanding of the Mojave Desert ecosystems and cultures through a unique experiential discovery program."

AGENDA

1. Introductions & Announcements *(5 min.)*

2. Approval of Minutes from January 17, 2006 Meeting *(5 min.)*

3. Update on Project Schedule – Michael Reiland *(10 min.)*
   A. Utilities
   B. Water Line
   C. Operator RFP
   D. NEPA

4. Report on Value Analysis Workshops – Michael Reiland / Line & Space *(10 min.)*
   A. Cost Estimates/Inflation

5. Curriculum Update – Jeanne Klockow *(10 min.)*

6. Standing Reports *(10 min.)*
   A. Line and Space – Les Wallach
   B. BLM Capital Improvements – Michael Reiland

7. Committee Reports *(5 min.)*
   A. Building Committee
   B. Design Oversight
   C. Educational Programs
   D. Fund-raising and Partnerships
   E. NEPA
   F. Operations
   G. Other Uses
   H. Wild Horse & Burro

8. New Business *(5 min.)*

Meeting Minutes

Meeting Minutes

RED ROCK DESERT LEARNING CENTER CORE GROUP
Bureau of Land Management
Tuesday, January 17, 2006

The meeting commenced at 10:35 a.m. with the following persons in attendance:
Loretta Asay, Kathy August, Christine Brehm Nancy Flagg, Jeanne Klockow, Richard Leifreid, Alan O'Neill, Michael Reiland, LaNelda Rolley, Mark Rehskynskyj, Frank Tepper, Blaine Benedict, Richard Cutbirth, and Billie Young.

1. Introductions and Announcements
The group welcomed Ron Marlow--UNR department of Biology, and Beth Domowicz--BLM. Christine Brehm reported that she has developed a presentation to the Wild Horse Commission with good results and plans to include a possible letter on the March 31, 2006 agenda.

2. Approval of Minutes
The minutes of the December 6, 2005 meeting were unanimously approved.

3. Update on Project Schedule
Michael Reiland provided an update on several key project issues.

Utilities
Michael reported that the agency is still working with the Las Vegas Valley Water District regarding a well vs. water line options, but issues with state agencies over water rights must be settled before moving forward. A water line running from the campground and Visitor Center, separate from the school, has been proposed. Michael included an update on a potential net metering agreement, stating that Line & Space had suggested that the photovoltaic system won't require a special metering agreement. The issue can be revisited at a later date upon verification of power needs.

Parking
Michael reported that there is still no resolution with Bonnie Springs regarding a proposed parking agreement. Parking at the Visitor Center with the use of a shuttle is an option. A potential agreement with Spring Mountain Ranch is another alternative and is closer than the Visitor Center. Michael confirmed that small buses are included in the project budget.

Construction Estimates/Inflation
Michael reported that he had just received inflation estimate figures, but there are no other updates available as yet.

4. Update on Statement of Work/Request for Information
Michael Reiland distributed an updated project schedule, which included a revised 3-month timeline with an additional 30-day evaluation period for completion of the operator RFP. Construction documents would be available pending the completion of the RFP. The environmental assessment is rescheduled for completion at a date later than the proposed March date in order to include a 30-day comment period, although no delays are anticipated. Alan O'Neill asked if there have been inquiries on operator bids. Michael said there have been people interested in submitting bids and asking specific questions about the school, but official comments on the draft RFP are being accepted until January 31, allowing time for comments and

requests. Nancy Flagg asked what would happen if no bids were received. Michael offered that BLM would review comments and determine the next steps, but potentially the agency could consider operating the facility itself.

5. Update on Water Line

Michael Reiland announced that there was no representative from the water district present, as had been expected. He reiterated that the agency is still working with the water district on the option of a water line or well. No updates are available at this time. Alan O'Neill asked if an analysis is being done. Michael noted that the BLM preferred alternative is to install a well, as this is seen as the best fit for the project, and they should proceed with working with the state to buy water rights. Michael concluded that settling on one or the other option will continue to be a priority. The water district is willing to help.

6. Update on Environmental Assessment

Michael Reiland reported that final draft EA documents are being prepared, due January 23, 2006, allowing a week and a half for a full draft to become available to BLM for review and comment. March 31 is the final deadline on the EA report, followed by a 30-day comment period in April. Revisions and the final report will be due by May 15, 2006. This allows until mid-May for the water issues to be settled.

7. Curriculum Update-Jeanne Klockow

Jeanne Klockow provided an update on the development of RRDLC core curriculum. There is to be a Night Sky meeting held January 19, 2006, to complete the work on lesson plans. January 30 will be the initial brainstorming session for the Green Building curriculum. Piloting will start in the spring for the Science and Historical strands. An assessment of the curriculum from the teacher's perspective will then be provided to BLM. The curriculum has been sent to Native American representatives for input on incorporating their traditions into the curriculum. Jeanne also reported that she had received a call from Lynn Manning with the Clark County School District regarding the formation of a teacher's group interested in reviewing the curriculum. Alan O'Neill suggested a secondary site, Torino Ranch, could be used to test the curriculum with students and teachers. Alan said meeting with the private landowner is to be held next week to collaborate and develop a timeline and concepts that could be used to test design strategies. He congratulated Jeanne on her hard work developing a proposal for the Torino Ranch Foundation. Jeanne also thanked Michael for his support of the Torino pilot idea. Loretta noted she has some concerns with the Torino Ranch site, from the perspective of the school district, particularly as it concerns the teacher training and transportation of children to the location. Jeanne reiterated that small pilots are necessary to see if the curriculum is on track with teacher needs.

8. Standing Reports

A. Line & Space Architects

Michael Reiland reported that Line and Space representatives were not present but would meet the following week to conduct the second value analysis for the project.

B. *BLM Capital Improvements*

Michael Reiland reported that the Red Spring opening was going well. The Visitor Center project is now in schematic design phase and is progressing well, and the Campground utilities project is on schedule. Michael added that there is preliminary talk regarding resurfacing the scenic loop drive, along with the Pine Creek and Willow Springs parking areas, as well as fencing along State Route 159. Nancy Flagg asked for an update on speed limit discussions concerning the roadway through the conservation area. Michael said that the Nevada Department of Transportation

(NDOT) is the lead agency on this, but BLM is handling the right-of-way issues and safety points would be key in determining speed limits; however, this is NDOT's jurisdiction and, with public input, that agency will determine speed limits. Mark Rehskynskyj noted that NDOT has installed a speed limit monitor to aid drivers in managing their speed. Billie Young added that one suggestion calls for clearer definition between biking and driving lanes. It was noted that NDOT public hearings would be helpful in resolving these issues.

C. *Community Outreach*

LaNelda Rolley reported that BLM is holding an RRDLC open house on January 26, 2006. (NOTE: the open house was subsequently cancelled.) She distributed a map and directions for the meeting and said public service announcements are in process. Loretta Asay noted there is a conflict with a School Board meeting that night.

9. Committee Reports

No new reports at this time.

10. New Business

No new business to report.

The meeting adjourned at 11:20 p.m. The next meeting will be held Tuesday, February 21, 2006, at UNLV's Center for Academic Enrichment and Outreach *(NOTE: February 2006 meeting was subsequently cancelled).*

Core Curriculum: Cultural

Cultural Curriculum	
Key Question #1: How has the use of Southern Nevada land changed over time?	
Goal:	Students will explore immigration to Southern Nevada and various land usage among cultures over time
Objective:	Students will understand why people chose to come to Southern Nevada Students will explore various early cultures and view their relationship with the land Students will understand how the land is used and regarded today Students will discuss and explore the development of trails. Students will understand how trail development fostered connections
CEF Correlation	(5)4.2 record and interpret events on a graphic organizer, such as a calendar or time line, (5)4.3 ask a historical question and identify resources to be used in research, (5)4.5 define hunter-gatherer, (5)4.7 describe Native North American life prior to European contact (e.g., clothing, communication, family, food, shelter, transportation, tools), (5)3.18 identify the parts of different ecosystems, including soil, climate, plant life, and animal life (5)4.9 identify and describe the reasons for early exploration of the New World (5)3.35 describe how the physical setting influenced an event in the past
Pre-requisite Classroom Experiences;	Experience with timelines, history of Southern Nevada region.

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will have a grab bag of different artifacts inside it. The artifacts will be the things that drew people to Nevada. Students will draw them out and discuss what they see. Students discuss what the artifacts mean to them. Students will then discuss what the artifacts mean when brought together. Artifacts will be representative of what brought people to Nevada (i.e. gold/silver/lead /RR…) and will be presented in an "artifact timeline"	Dining hall	Various artifacts representative of Nevada	

Students will explore the land usage for food. Students will be asked "If you did not have a grocery store where would you get your food? Students will go outside and make a plant key so they can discover and identify plants and plant usage. Students will have a fact sheet on the different plants. Students will explore plants that are edible. Students will explore how plants were used. Students will present their plant information to the whole group.	Dining hall RRDLC trails	Plant key journals Plant fact sheet	
Students will explore other important aspects of the land. Students will tour the site and explore various geological and hydrological resources as well as open land/grasses and climate. Students will hike to various trails and sketch their findings that are representative of the various resources and landscapes. Students will display their drawings in a mock "museum."	Dining hall RRDLC trails	Sketch pad	
Notebook:	Vocabulary: artifact, calendar, timeline		
Presentation of findings	Artifact timeline, plant exploration, sketches in the student museum		
Follow Up Suggestions:	3.14 Describe how the community and Nevada have changed over time [NS 2.5.6]		
Resources			
Multicultural/historical/social connections			
Suggestions/Improvements			
GLOBE protocols			

Cultural Curriculum	
Key Question #2: How has the use of Southern Nevada's natural resources changed over time? How do we take care of the land and its resources?	
Goal:	Students explore the use and care of Southern Nevada's natural resources and land
Objective:	Students discover the ways food, shelter, and clothing were provided for the various cultures of Southern Nevada Students will discuss materials used to build shelters and what those shelters looked like Students will compare building materials of the past to building materials uses today Students will explore the use of natural resources and how these resources were viewed by various cultures Students will explore the source and distribution of water over time
CEF Correlation	(5)3.4 construct maps, charts, tables, and graphs to display information about human and physical features in the United States, (5 2.17 identify the resources needed for production in households, schools, and community groups, (5)3.14 describe how the community and Nevada have changed over time, (5)3.30 describe ways in which changes in the physical environment affect humans, (5)3.32 explore the impact of human modification of the physical environment on the people who live in that location (5)3.35 describe how the physical setting influenced an event in the past
Pre-requisite Classroom Experiences;	

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will be introduced to a comparative chart exploring the use of the land. Students will "build/complete" the chart by collecting "data cards" representing land resources and land usage and plotting these cards on the chart. The student chart will be representative of use of resources and the timeline of this usage. Students will be asked to discuss the chart and draw conclusions about the use of resources based on the chart information.	Student dorms		

Students will be asked where water comes from. Students will walk the site and explore the water usage at RRDLC and asked to map where the water comes from and how the water is stored. Students will present their findings.	Dining hall RRDLC trails		
Students will explore various shelters. Students will visit the interpretive ranch house on site and explore the "living space" of the ranchers. Students will then be given materials used at that time and asked to create a model of the ideal shelter. Students will take into consideration materials available, shelter size, climate and conditions. Students will display their models in the museum.	RRDLC interpretive ranch site Dining hall		
As a culminating activity to the building of the models, students will hike to the campground by the springs. Students will utilize materials there to build a shelter for an overnight camp experience	Springs-camp area RRDLC trails		
Notebook:	Vocabulary: natural resources, environment, shelter, model		
Presentation of findings			
Follow Up Suggestions:			
Resources			
Multicultural/historical/social connections			
Suggestions/Improvements			
GLOBE protocols			

Cultural Curriculum	
Key Question #3: How do we document and capture what happened in the past?	
Goal:	Students explore documentation of past events
Objective:	Students will discuss artifacts and what artifacts tell about a culture Students will be able to detect where artifacts belong in history Students will explore the idea of preservation Students will explore the ways sites of cultural significance are documented Students will discuss the idea of farming versus gardening Students will discuss the idea of stock raising and mining
CEF Correlation	(5)4.4 organize historical information from a variety of sources (5)3.42 investigate and interpret information from a variety of geographic resources, (5)3.43 draw a conclusion by presenting geographic information in an oral or written report accompanied by maps or graphics (5)4.2 record and interpret events on a graphic organizer, such as a calendar or time line
Pre-requisite Classroom Experiences;	Experience with background history of Southern Nevada region.

Activity(ies)	Site(s)	Equipment	Time
Students will be asked who studies things made by people in the past. Students will then be asked what objects of the past are called. Students will explore the RRDLC trails and be asked to participate in a simulated “archeological dig” The “dig” will consist of posing archeological remains as the clues to a mystery. Students will walk through the set of clues and solve the mystery by describing how a site was formed and what was left behind that survives in the archeological record. The topics addressed would include differential preservation, natural forces of erosion, etc. The artifacts or “clues” will tell a story of how the elements of the site came to exist as the students see them today. Students will also be asked to interpret clues if the artifact had not been in existence or the artifact was at a higher stratigraphic level. Concepts addressed would include spatial context, stratigraphy, etc. Laws protecting cultural resources will also be addressed.	RRDLC trails Simulated dig sites Flex labs		
Students will conduct a little archaeological "survey", of the “planted” artifacts/clues Students will conduct a mock excavation and cleaning of the artifacts. Students take photos, see and use an ID of "artifacts/clues" which exist at SMRSP then work backwards to see what these were used for and what this tells of the site and times. Students will explore "artifacts or reproductions" at the Ranch house remnant and/or photographs. Students will examine recent “mock” digs as a key for determining when and where items such as bottles were made to determine age of the RRDLC site and how/what folks did there.	Dining hall RRDLC trails Simulated dig sites Flex labs		

Students will correlate their artifacts to a timeline of events. Students will examine the use of artifacts and explain why the artifact may have been created. Students will compare and contrast the artifact to its use today.	Flex labs		
Students will identify the culture and map the area where the artifacts were found. Students will formulate a hypotheses about the culture that was representative of the artifacts they discovered and why-students will present their artifact findings to the whole group	RRDLC trails Simulated dig site Dining hall		
Notebook:	Vocabulary artifact, resources, dig, culture, evacuation, archeology, history, survey, mock, simulation, timeline, preservation		
Presentation of findings			
Follow Up Suggestions:			
Resources			
Multicultural/historical/social connections			
Suggestions/Improvements			
GLOBE protocols			

Cultural Curriculum	
Key Question #4: Throughout history what was community life like for the various cultures?	
Goal:	Students explore community life of various cultures
Objective:	Students will examine the social structure of various cultures Students will discuss what communication in the past was like and explore different forms of communication Students will examine the influences of communication Students will explore family life and compare and contrast their lives with the lives of children from the past Students will discuss the idea of customs and explore various customs
CEF Correlation	(5)4.3 ask a historical question and identify resources to be used in research, (5)4.2 record and interpret events on a graphic organizer, such as a calendar or time line, (5)4.4 organize historical information from a variety of sources (5)4.7 describe Native North American life prior to European contact
Pre-requisite Classroom Experiences;	Research and gather "family tree" information. Experience with timelines, history of Southern Nevada region.

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will be asked to diagram their own "family tree". Students will analyze their family structure and present that structure to the group. Family characters will be "role played" by the students and be representative of the various family structures that existed historically in Southern Nevada. Student groups or "families" will visit with the whole student group and students will be able to ask the "family" questions about their lives. Students will utilize journals and diaries for documentation. Students will examine Fremont diaries from Wheeler Camp spring encampment, other written material, newspapers, oral history journals, etc…	Friendship circle RRDLC trails		
Students will be given communication artifacts from the past. Students will discuss communication overtime and develop a culminating timeline of how communication has changed and advanced.	RRDLC trails Simulated dig sites Student dorms		

Students will be given old catalogs of clothing/shoes and other household items of the past. Students will also examine the advertisement of these items including price, timeframe and the form of advertising used. Students will create an advertisement of a product from the past-explaining the timeframe, price and use of the product.	Art pavilion RRDLC trails		
Students will research the various customs of the cultures of the past in Southern Nevada. Students will create a display representing a particular custom.	Dining hall		
Notebook:	Vocabulary: artifacts, diaries, timelines, customs, cultures, role play		
Presentation of findings			
Follow Up Suggestions:			
Resources			
Multicultural/historical/social connections			
Suggestions/Improvements			
GLOBE protocols			

Cultural Curriculum	
Key Question #5: What does Red Rock mean to people? How has that meaning changed over time?	
Goal:	Students will explore the meanings of Red Rock Canyon
Objective:	Students will discuss what Red Rock means to people Students will examine how the meaning of Red Rock has changed over time
CEF Correlation	(5)3.35 describe how the physical setting influenced an event in the past, (5)3.36 use current events to ask and answer geographic questions, (5)3.37 discuss a geographic issue from more than one point of view, (5)3.40 locate and gather geographic information from a variety of sources, (5)3.26 investigate an economic issue by asking and answering geographic questions about location (5)3.29 describe issues of cooperation and conflict within the United States (5)3.35 describe how the physical setting influenced an event in the past
Pre-requisite Classroom Experiences;	Experience with historical information of the Southern Nevada region.

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will walk the ranch site and discuss development over time. Students will view the interpretive areas and compare how the site has changed and developed	RRDLC trails Interpretive ranch site		
Students will explore the various trails at RRDLC. Students will discuss possible uses of the trails and various forms of transportation. Students will compare the terrain around the trails with areas that are undisturbed. Preservation and protection will be discussed.	RRDLC trails		
Students will conduct a debate. One group of students will defend preservation. One group of students will defend development of the land.	Student dorms		
Notebook:	Vocabulary: preservation, terrain, debate, development		
Presentation of findings			
Follow Up Suggestions:			

Resources	Relevant cultural resources management laws the BLM cites in its management plans Including the Antiquities Act of 1906, the National Historic Preservation Act of 1966, the National Environmental Policy Act of 1969, Executive Order 11593 of 1971, the Archaeological and Historical Preservation Act of 1974, the Federal Land Policy Management Act of 1976, the Archaeological Resources Preservation Act of 1979 and the Red Rock Canyon National Conservation Area Establishment Act of 1990. References to these laws may be found in the *2005 Resource Management Plan for Red Rock Canyon National Conservation Area* or, in lieu of that document (effective as of September 21, 2005), in the 2000 *Proposed General Management Plan/Final Environmental Impact Statement for Red Rock Canyon National Conservation Area* (December 2000).
Multicultural/historical/social connections	
Suggestions/Improvements	
GLOBE protocols	

Core Curriculum: Night Sky

Night Sky Curriculum	
Key Question #1: What do you see in the sky? What were people looking for?	
Goal:	Students will be able to observe the sky and make and record observations.
Objective:	Students will be introduced to tools used to make observations. Students will be introduced to different ways of observing the sky. Students will observe the sky. Students will record their observations in their science journals. Students will discuss their observations.
CEF Correlation	(5) 3.14 investigate and describe the basic components of solar system (5) 3.15 describe the apparent motion of celestial objects across the sky
Pre-requisite Classroom Experiences;	

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will participate in an early morning hike to record the direction of the sunrise. Students will place a pole to record the shadow of light periodically during the day. Students will present their findings to the group	RRDLC trails Friendship Circle	Recording-poles Science journals	1 hr.
Students will record and compare the temperature at the following times: right before the sun comes up, when the sun is just coming over the horizon, 10 minutes after the sun has risen, and when the students come check the location of the pole. Students will discuss the variety of temperatures and record one temperature at the rising of the sun on paper. Daily temperature is typically lowest just before sunrise.	Site-markers-RRDLC trails	Site-markers Science journals	1 hr.
Students will visit the site of site markers positioned by earlier groups. Students will examine prior data recordings and compare with the current data they recorded.	Site-markers-RRDLC trails	Site-markers Science journals	1 hr.

Students will chart where the sun comes up across the horizon over a year period. Once a week groups go out and chart where they see the sun on a recording sheet. Students record where the sun is coming up on the horizon with a date. Each week a different group goes out and charts where they see the sun come up and records with a date. Within a year there will be a complete chart of the location of the sun. Charts will be displayed on-site.	Site-markers-RRDLC trails	Site-markers Science journals	30 min.
Students will take digital photos to create a "visual history" of the sky. Students will compare the photos overtime. Photos will consist of the same setting.	RRDLC trails	Digital camera Science journals	1 hr.
Students will make some simple observation tools to conduct observations of the sky. Students will construct simple versions of tools and as scientists students will explore the tools they made and provide a rationale as to why the tool they created would help them with their observations of the sky.	Art pavilion	Supplies to construct "observation tools"	1 hr.
Notebook:	revolution recession relative motion rotate horizon		
Presentation of findings	Students will share their science journal entries. Students will write a poem or story to describe what the sun means to them at a particular time of day.		
Follow up suggestions:	Students can monitor light (flag pole) at their own school.		
Resources	Guest speakers Websites Literary connections		

Multicultural/historical/social connections	Correlations can be made from charting the sun to the farming culture and the Native American culture. Students can discover that Native Americans and farmers kept a very careful watch on the sun because placement helped them understand what time of year it was and what should be planted and what should be harvested. Discussions can correlate what the sun means to different cultural groups. In observing the sky, students can explore various perspectives including that of the Native Americans, historical Nevadans, and current astronomers.
GLOBE protocols	

Night Sky Curriculum			
Key Question #2: What moves in the sky and why? What are the motions of the earth? How is this related to days/seasons/years?			
Goal:	Students will understand the motions in the sky.		
Objective:	Students will be able to describe motions in the sky. Students will able to discuss the earth's motion. Students will be able to relate the motion of the earth to days/seasons/years.		
CEF Correlation	(5) 3.14 investigate and describe the basic components of solar system (5) 3.15 describe the apparent motion of celestial objects across the sky		
Pre-requisite Classroom Experiences;			
Activity(ies)	**Site(s)**	**Equipment**	**Time**
Staff role-play "astronomers of the past". "Students will be introduced to "astronomers of the past" who will present to students about the earth's motion and the past theories they had. Students will interview these "astronomers of the past" and explore what different people have thought about the motion of the earth idea throughout time. Students will discuss what they think of these theories. Students will compare and contrast how many of these ideas are still used in our understanding of the earth today.	Friendship Circle	Staff "actors"	1 hr.
Students will be introduced to the earth's motion by role playing. Students will be asked to role play being the earth, sun and star. Students will move to comprehend the motions of the earth and the effects of motion.	Dining hall	Role-playing props	1.5 hrs.
Students will construct models of the motions. Students will be asked to present and explain their models.	Dorms	Art supplies	1 hrs
Notebook:	Astronomers astronomy		
Presentation of findings	Sharing science journal entries		

Follow up suggestions:	
Resources	Guest speakers Literary connections Websites
Multicultural/historical/social connections	Native American star legends African American star legends/patterns South American star legends/patterns
GLOBE protocols	

Night Sky Curriculum	
Key Question #3: What observations and information can be found from viewing the daytime sky?	
Goal:	Students will understand what observations and information can be found from viewing the sky.
Objective:	Students will explain the use of the sundial. When viewing the daytime sky students will describe some of the things to observe. Students will discuss observation of the sun. Students will discuss the importance of the sun. Students will identify the relationship of Red Rock Canyon to the daytime sky. Students will describe the role of the sky in navigation .
CEF Correlation	(5) 3.14 investigate and describe the basic components of solar system (5) 3.15 describe the apparent motion of celestial objects across the sky
Pre-requisite Classroom Experiences;	

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will be introduced to the sundial. Students will examine how the sundial is used as a measuring device to measure seasons/time of day/date/shadows. Students will record observations based on the sundial. Students will present their findings.	RRDLC observatory area	Sundial Science journals	2 hrs.
Students will design their own sundial in small working groups. Students will present their sundials to the group and discuss how they are used.	Art pavilion Dining hall	Sundial materials Science journals	1.5 hr.
Notebook:	Vocabulary from workgroup Sundial		
Presentation of findings	Sharing science journal entries		

Follow up suggestions:	
Resources	Guest speakers Websites Literary connections
Multicultural/historical/social connections	Identify cultural groups which used sundials
GLOBE protocols	

Night Sky Curriculum	
Key Question #4: Why do different people see different things in the daytime/nighttime sky? What are the cultural aspects to astronomy and the daytime/nighttime sky?	
Goal:	Students will understand the varying cultural aspects to viewing both the daytime and nighttime sky.
Objective:	Students will be able to define a calendar. Students will be able to identify the purpose of a calendar. Students will be able to discuss how various cultures used star gazing. Students will be able to explain how the sky was used in navigation. Students will be able to identify how viewing the sky was used in religious/spiritual practices by various cultures.
CEF Correlation	(5) 3.14 investigate and describe the basic components of solar system (5) 3.15 describe the apparent motion of celestial objects across the sky
Pre-requisite Classroom Experiences;	

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will be asked to examine different calendars from different cultures. Students will be asked how they think the calendars were used and why. Students will then compare them to the calendar we use today.	Dining hall	Calendars	1 hr.
Students will design a twelve month calendar. Students will discuss what changes they would make to the calendar. Students will examine the names and holidays they would put on a 12 month calendar if they were in charge to make changes. Students present their calendars. Students will then have a debate. Student groups debate changing the calendar from a 12 month year to a 9 month year and why? (Or more months or less months than 12) Comparisons will be made between lunar-solar calendars.	Dining hall	Calendars	1 hr.

Students will be introduced to different constellations. Students will explore the different names that have been used for different constellations (through time and today) by different ethnic groups throughout the world (i.e. the "Big Dipper" also known as the "Drinking gourd"). Students will create their own "constellation" and create their own names for different constellations. Students will present their projects.	Art pavilion RRDLC trails	Telescopes Art supplies	1.5 hr.
Students will observe the moon. Students will record their observations. Students will present their findings. Students will explore the meaning of the moon through different cultures.	RRDLC trails Student dorms	Telescopes Science journals	1 hr.
Notebook:	Vocabulary provided by workgroup		
Presentation of findings	Sharing science journals		
Follow up suggestions:			
Resources	Guest speakers Websites Literary connections Moon Observation Guide-baseline of knowledge		
Multicultural/historical/social connections	Invite Alfreda Mitre-speaker to conduct star gazing curriculum regarding the Native American culture African American star gazing Mayan culture South American star gazing Australian Aboriginal culture South African culture		
GLOBE protocols			

Night Sky Curriculum	
Key Question #5: Who studies the sky and why? What equipment is used?	
Goal:	Students will understand who, both past and present, studies the sky. Students will understand the equipment associated with the study of the sky.
Objective:	Students will be able to identify different careers associated with the study of the sky. Students will discuss historical figures who studied the sky and what they discovered. Students will understand the use of telescopes. Students will be able to discuss the use of the solar telescope. Students will be able to identify satellites and how they are used.
CEF Correlation	(5)5.3 describe key scientists, classical experiments in science, and technological inventions that lead to a better understanding of the impact of science on society
Pre-requisite Classroom Experiences;	

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will examine and explore the use of a telescope. Students will discuss the use of telescopes. Parts of the telescope will be examined. Students will be asked to construct their own telescope in teams.	Art pavilion	Telescopes	1.5 hrs.
Students will participate in a night hike. Students will bring their telescopes with them. In teams, students will be asked to identify the night sky and record what they observe.	RRDLC trails/observatory area	Telescopes Science journals	1.5 hrs.
Students will hold a career night. Students will role play present day or historical figures associated with the study of the sky. Students will be interviewed about their career.	Dining hall	Props Costumes	1 hr.
Students will observe the sky to explore and document the location of satellites. Students will use data collected online in order to chart the appearance of various satellites. Students will use printouts of the data to chart satellites.	Flex-lab	Computer	1 hr.

Notebook:	Telescope Satellite
Presentation of findings	
Follow up suggestions:	Science journals Poster presentation
Resources	Guest speakers Websites Literary connections
Multicultural/historical/social connections	
GLOBE protocols	

Night Sky Curriculum			
Key Question #6: How does population growth in Las Vegas affect the daytime/nighttime sky?			
Goal:	Students will understand how population growth affects daytime and nighttime sky viewing		
Objective:	Students will be able to define light pollution. Students will be able to identify light pollution. Students will be able to discuss how the view of the sky in Red Rock has changed over time.		
CEF Correlation	(5)4.11 explain that changes in environments can be natural events or influenced by human activities, including technology		
Pre-requisite Classroom Experiences;	Students will be asked to take a picture of the night sky by their teacher, prior to going to RRDLC. Students will bring this photo with them. Pictures will be taken at the "star party" given at the school. Students will also be asked to journal what they see in the night sky. Journals will also be brought to the site.		
Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will hike to an open area. Students will be given a paper towel tube and bubble wrap. Using just the paper towel tube students will be asked to observe 3 things around them and record how they see them through the tube in their journals. Students will then be asked to tape the end of their tube with bubble wrap. Students will be asked to observe the same 3 things and record how they see them through the tube in their journals. Students will be introduced to the concept of "light pollution". Students will also be given different colored plastic wrap to represent different types of pollution. Students will compare and contrast the different effects of pollution.	RRDLC trails	Paper towel tube Bubble wrap Science journals Wax paper Sheet of different colored plastic wrap	2 hrs.
Students will printout various star constellations. Students will observe the stars and while looking at the stars identify one constellation from their chart. Students will identify what can be observed at different magnitudes versus what can be observed by the "unaided eye"			

Students will be given their journals. Students will be asked to draw the night sky at the RRDLC site in their journals. Students will then be given their drawings they did at their school. Students will present their drawings, comparing and contrasting the ones they brought from school with the ones they drew at RRDLC.	Dorms	Science journals School science journals Art supplies	1.5 hrs.
Students will be given a digital camera. Students will be asked to take pictures of nighttime sky. Students will compare the photo taken at their school to the photo taken at the site. Students will discuss the differences. Students will also examine other photos of the sky. Students will examine how light pollution can be seen from space. Photos will consist of the same setting.	RRDLC trails/observatory area Dorms	Digital camera Computer	2 hrs.
Notebook:	Light pollution Digital wrap		
Presentation of findings	Photo poster presentations		
Follow up suggestions:			
Resources	Guest speakers Websites Literary connections		
Multicultural/historical/social connections			
GLOBE protocols			

Night Sky Curriculum	
Key Question #7: What is the purpose and use of an observatory?	
Goal:	Students will know the purpose and use of an observatory
Objective:	Students will be able to describe observations make with the "unaided eye." Students will be able to discuss constellations. Students will be able to explain how weather is related to astronomy. Students will be able to discuss stars and their characteristics. Students will be able to discuss the moon and its various phases.
CEF Correlation	NEED CORRELATIONS
Pre-requisite Classroom Experiences;	"Star Parties"

Activity(ies)	**Site(s)**	**Equipment**	**Time**
Students will participate in a night hike. Students will make observations of the night sky with the "unaided eye". Students will record their observations in their journals.	RRDLC trails/observatory area	Science journals	1 hr.
Students will be given a star chart. Students will identify the different constellations on the chart. Students will participate in a nighttime hike. Students will be asked to identify a constellation.	Observatory RRDLC trails	Star charts	2 hrs.
Students will be given a blank and adjustable star wheel/chart. Students will create their own constellations from existing stars on their wheel/charts. Students will describe and present one constellation on their chart to the group.	Art pavilion	Star charts Science journals Art supplies	1 hr.
Students will be given the opportunity to interview astronomers. Students will be introduced to the different chemical make-up of the stars and how astronomers learned this using spectrographs.	Friendship Circle		30 min.

Students will make observations of the moon. Students will be introduced to the phases of the moon and also the lunar eclipse and what it means when it occurs and how often it occurs. Students will explore the idea that there are times we do not see the moon at all in the evening sky.	RRDLC trails Observatory	Science journals Telescopes Solar System Model (Orrery)	1 hr.
Notebook:	Stars Observatory Lowell Spectrograph Hubbell Kit Peak Gemini		
Presentation of findings	Science journals Presentation of star charts		
Follow up suggestions:			
Resources	Guest speakers Websites Literary connections		
Multicultural/historical/social connections			
GLOBE protocols			

Core Curriculum:
Green Building Technology

Essential Questions
RRDLC Green Building Strands

Key Question #1: What is meant by "ecological footprint"? What is meant by "green building"?

- **How can we reduce our "ecological footprint"?**
- **Why is our "ecological footprint" important?**
- **Why would a building be called green?**
- **What are some of the characteristics of a green building?**
- **How is green building and "ecological footprint" related?**

Key Question #2: What is water conservation? Why is the conservation of water important? What are some ways to conserve water?

- **What is meant by waterless bathrooms? Discuss the idea of waterless bathrooms.**
- **What is meant by low flow toilets?**
- **What is meant by grey water? Discuss grey water usage**
- **How is water purified? What is waste water treatment?**
- **What is meant by the "living machine"?**
- **Compare the water consumption of animals to**
- **How can water be conserved? How can you conserve water?**
- **What are some basic water conservation messages?**

Key Question #3: What is meant by indoor air quality? Why is indoor air quality important?

- **How can we measure air quality?**
- **What happens when something is burned?**
- **How does air quality effect daylight?**
- **Why is it important to understand the difference in building materials when discussing air quality?**

Key Question #4: What is meant by "reduce"? What are some of the ways you can "reduce"?

- **Define food waste. How can food waste be reduced?**
- **What is light pollution? What are some ways to reduce light pollution?**
- **Why is it important to reduce the usage of cleaning supplies? How do cleaning supplies effect the environment?**
- **How can we reduce in our own home? In our community?**

Key Question #5: What is meant by "reuse"? What are some of the ways you can "reuse"?

- **How can materials be reused to make things?**
- **Why is it important to reuse?**
- **What are some of the things you can reuse in your home everyday?**
- **What are some of the things you have in your home that can be reused by your community?**

Key Question #6: What is meant by "recycle"? What are some of the ways you can "recycle"?

- **Discuss the idea of food waste**
- **Discuss the idea of composting. How is composting related to food waste?**
- **How is composting related to flora and fauna**
- **How can energy be recycled?**
- **How can the use of wind contribute to the recycling of energy?**
- **What is photovoltaics? How do photovoltaics contribute to the recycling of energy?**
- **What is meant by a "digester"? How does a "digester" contribute to the recycling of energy?**
- **Discuss the idea of recycled products and materials. What are some of the products that are recycled and used in housing?**
- **How can we recycle in our own home? In our community?**

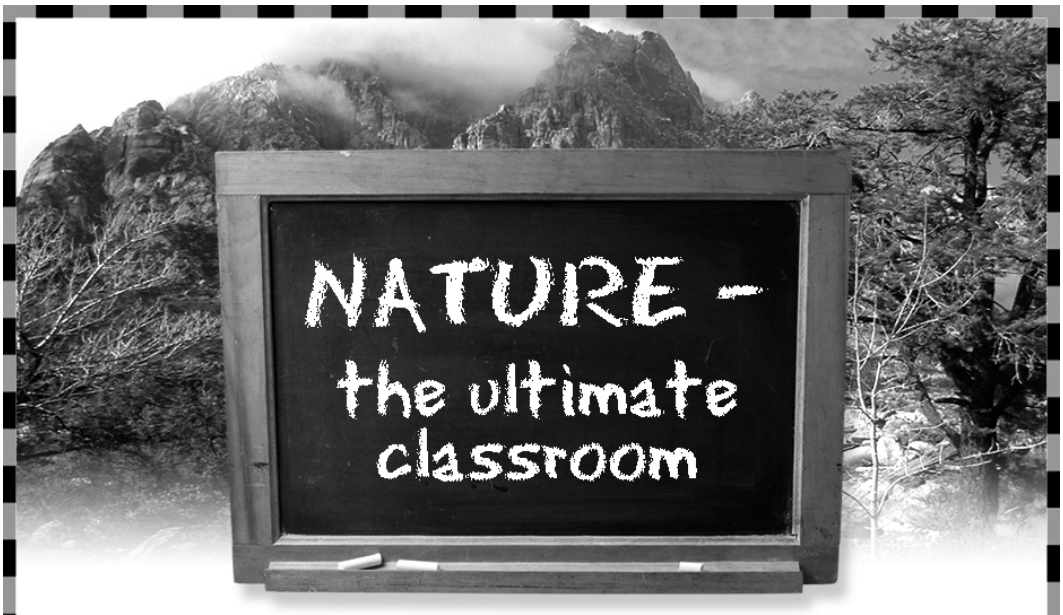
Teacher Workshops

RRDLC Pilot Session 1 2-23-06 Mary Sowder-Instructor RRVC/RRDLC		
Time	**Procedure**	**Materials**
8:45- 9:20 **RRVC**	Overview of RRDLC/presentation	Presenters: Michael Reiland/BLM Billie Young/BLM PowerPoint
   9:20- 9:30 9:30- 9:50 9:50-10:30 **RRVC**	Understanding and Sustaining Healthy Ecosystems: Wild Horse and Burro *How do the wild horse/burro populations affect their environment?* **Introduction**: - describe (view?) planned wild horse/burro habitat - pose essential question **Exploration:** focused discourse on WHB question - Divide class into 5 groups - Give position statements to each group - Read background info to class; each group should prepare its arguments for its position (use literature and/or web, if available) **Concept Development:** presentation of positions - each group presents their position (5 min.) - members of other groups ask questions; present challenge the class to act as public land officials and think of a solution to please all	Instructor: Mary Sowder Guest speaker Copies of position statements Literature for preparing presentations Chart paper, markers, tape
  10:30- 11:20 11:20- 11:30 **RRDLC**	**Application:** field experience - Divide class in half - Half hike to undisturbed area, half to area disturbed by WHB - given a length of string (hula hoop, PVC square), participants observe and record variety and number of plant and animal life inside the area - Re-meet and compare results; revisit earlier conversations about WHB question	Instructor: Mary Sowder String, hula hoops, or PVC sq. Colored pencils Notebooks Hand lenses Plant guides
11:30- 12:00 **RRDLC**	**Classroom Connections** - Discuss/debrief content and strategies of activities - Gather suggestions for improvement - Participants work in grade level groups to make classroom connections - Preview of next session - Evaluations	Instructor: Mary Sowder

RRDLC Pilot Session 2 3-18-06 Mary Weisenmiller-Instructor Spring Mountain Ranch (SMR)/RRDLC		
Time	**Procedure**	**Materials**
8:30- 8:45 **SMR**	**Introductions/agenda**	Instructor: Mary Weisenmiller
8:45-noon **SMR**	**Geological tour** Spring Mountain Ranch Site	Presenter: Steve Rollins
Noon-12:45 **SMR**	**Lunch**	Participants
12:45-1:15 **SMR**	**Overview of RRDLC/presentation**	Presenters: Michael Reiland/BLM Billie Young/BLM PowerPoint
1:15- 3:30 **RRDLC**	**RRDLC Science Lesson Plans**	Instructor: Mary Weisenmiller

RRDLC Pilot Session 3 3-25-06 Mary Banbury-Instructor Spring Mountain Ranch (SMR)		
Time	**Procedure**	**Materials**
8:30- 9:45 **SMR**	**Video overview of Spring Mountain Ranch** Tour of site	Presenter: Scott Egy
9:45-11:00 **SMR**	**Historical Hike**	Presenter: Scott Egy
11:00- 12:00 **SMR**	**Lunch**	Participants
12:00- 12:30 **SMR**	**Overview of RRDLC/presentation**	Presenters: Michael Reiland/BLM Billie Young/BLM PowerPoint
12:30-3:30 **SMR**	**RRDLC Historical Lesson Plans**	Instructor: Mary Banbury

Open House Ad/Mailer/Flyer



RED ROCK DESERT LEARNING CENTER PUBLIC MEETING

DATE: THURSDAY, JANUARY 26, 2006 TIME: 6-8 P.M.
LOCATION: WILLIAM LUMMIS ELEMENTARY SCHOOL
9000 HILLPOINTE RD., LAS VEGAS

A public meeting will be held to introduce the Red Rock Learning Center, the first outdoor education center for local fifth-grade children in Southern Nevada.

Designed to enhance math and science skills, the school will be built in the Red Rock Canyon National Conservation Area. It will feature a curriculum that teaches children about conservation and the natural world by increasing their knowledge and understanding of the Mojave Desert ecosystems.

CALL 515-5026 FOR MORE INFORMATION.