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**CIMARRON WATERSHED ALLIANCE, INC.
CANADIAN DIVISION**

**SUGARITE CANYON STATE PARK EDUCATIONAL
OUTREACH PROJECT PROPOSAL**

**A COLLABORATIVE PROJECT WITH NEW MEXICO
STATE PARKS**

**TO BE PRESENTED TO BOARD OF DIRECTORS
JULY 26, 2006**

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PROJECT NAME: SUGARITE CANYON STATE PARK EDUCATIONAL OUTREACH PROJECT PROPOSAL

GRANT SUBTASK & CORE WORK PLAN TASK:

- **Grant:** Federal Clean Water Act Section 319 (h), FY 03
Cimarron Watershed Alliance, Inc. Project; Contract No. 05-
667-5000-0009.
- **Core Workplan Task III:** Communicate with stakeholders, agencies,
municipalities, and businesses to improve the health of the watershed and
water; **Subtask a:** Include at least one demonstration project per year to
build capacity for additional development of like projects and **Subtask c:**
Educate the public on watershed issues and Best Management Practices
(BMPs); March 18, 2006 Revision.
- **Deliverables:** Procurement, development, and implementation of ecological
monitoring and educational information, materials, and programs for the
headwaters of Chicorica Creek, a sub-watershed the Canadian River as
delimited by Sugarite Canyon State Park.
- **Amendment:** This project will be added as Amendment III.c.3.i.
to the Cimarron Watershed Alliance Core Work Plan, March 18,
2006 Revision.

OBJECTIVE OF PROJECT: The primary objective of this project is to facilitate public understanding of issues and best management practices applications relating to the continued maintenance of native flora and fauna populations to the proper functioning condition of the Upper Canadian Watershed Ecosystem. In addition, this project will assist in efforts to understand the impacts of invasive noxious weeds in Sugarite

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Canyon State Park.

BACKGROUND: The City of Raton owns the land that incorporates Sugarite Canyon State Park (SCSP), which also encompasses the headwaters of Chicorica Creek, a sub-watershed the Canadian River. In addition to land ownership, Raton receives the majority of its municipal water supply from the Chicorica Watershed . This supply is housed in three impoundments; Lake Dorothey, Lake Maloya (the primary source), and Lake Alice. Within SCSP, the City of Raton has initiated a series of forest fuel reduction projects in an effort to prevent the effects of a catastrophic wildfire that could negatively impact the ecology of the Chicorica Watershed and Raton's drinking water supply.

Fuel reduction treatments began on approximately 200 acres on the east side of Lake Maloya in November of 2005. Additional thinning is scheduled to begin in August of 2006 on an additional 200 acres on the west side of Lake Maloya. In light of that, this spring SCSP officials initiated a plan of ecological monitoring in an attempt to establish baseline data before additional thinning occurs. SCSP believes it is critical to have a sense of what species are in the SCSP and whether any of them are at risk. This is the first time any in-depth monitoring has occurred in SCSP. This monitoring is seen as the foundation for a larger educational outreach program that will involve middle school students.

In addition, this monitoring directly relates to water quality in the watershed because it provides information about forest health. Butterflies are one of species being monitored. For example, butterflies get nectar or lay eggs on certain plants that require sunlight. In a healthy ponderosa pine forest, there would be gaps in trees to allow this sunshine into the under-story. In an unhealthy ponderosa forest, the trees may be too crowded to allow sunlight to reach the ground. In such a forest,

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there is an increased risk of a catastrophic fire from the accumulation of ladder fuels and ground tinder that could, as a result of a catastrophic fire, contaminate City of Raton impoundments with ash and sediment. Another indicator to monitor is aquatic insects, which can provide valuable information about water quality and the availability of food for birds, etc. Also, the presence or absence of small mammals can reveal important information about the quality of streamside vegetation and thus provide information on stream health.

SITE AND LOCATION: The monitoring aspect of this project will be

implemented at Sugarite Canyon State Park. The intermediate and long term educational implementation will be realized at the Park as well as in other locations, such as area primary and secondary schools, as determined by the Regional Interpretive Ranger, New Mexico State Parks - Northeast Region.

PROJECT DESCRIPTION: This project focuses on riverine, lake, and wetland areas and the role of wildlife in the proper functioning of these areas as the impact of fuel reduction projects are monitored and assessed. These focal points are critical to the watershed's environment, holding water during times of drought, mitigating the effects of flooding, enhancing sediment and toxin filtration, while providing feeding, staging, and nursery areas for aquatic and terrestrial wildlife.

To this point, monitoring has begun on butterflies, birds, aquatic insects and bats. Some monitoring is being conducted by parks personnel and some is voluntary. However, some monitoring is being contracted out and requires funding. SCSP would like to request \$7,500 to supplement the Park's ability to hire contractors for additional monitoring this summer.

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This professional monitoring is intended to provide a foundation for an educational outreach program. SCSP proposes to train Raton Middle School students over the next two school years to conduct basic monitoring in the park. This would include, but not be limited to, water quality, tree measurements, and wildlife surveys. SCSP believes this would not only benefit the park, but also provide a critical hands-on learning experience for local students concerning their watershed's ecological health. SCSP believes it would cost \$10,000 to purchase supplies and hire part-time staff to conduct teacher workshops and coordinate professional involvement to train the students. As such, SCSP would like to request \$10,000 to launch the two year student monitoring program this fall. An additional objective of this project is to find a way to turn the student monitoring into a long-term, hands-on program for Raton 7th graders, thus leveraging the impact of this project's funding.

This project will be administered by the Regional Interpretive Ranger, New Mexico State Parks - Northeast Region.

COST: (To include Canadian Division Grant and CWA In-Kind Matching)

Grant: Cost to the Canadian Division Grant will be **\$17,500.00** for the purchase of project supplies, and project development and maintenance (see appended A for cost structure).

CWA Match: **\$7,000.00**, which will be generated by in-kind CWA activities.

SCHEDULE AND TIMELINE: The administration of this project will commence upon the approval of the Cimarron Watershed Alliance Board of Directors. The implementation will be administered in the course 18 months from the date of project funding and as deemed appropriate by the Northeast Region Interpretive

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Ranger.

PROJECT EVALUATION & MAINTENANCE PLAN: This project will be evaluated by the monitoring information produced and by stakeholder and public feedback as compiled by the Northeast Region Interpretive Ranger. The Northeast Region Interpretive Ranger will report to the Cimarron Watershed Alliance on project effectiveness as directed by the Cimarron Watershed Alliance’s monitoring committee.

TEAM LEADER AND PARTICIPANTS:

Team Leader: Pat Walsh

Participants: New Mexico State Parks and the Cimarron Watershed Alliance.

PERMISSIONS AND PERMITTING:

Dredge & Fill Clearance Required? __Yes XNo

Is any work proposed within the high water mark of a river, stream or Arroyo
__Yes X No

Cultural Resource Clearance Required? __Yes X No

Does this proposal involve any earth disturbing activity? __Yes X No

LIABILITY: None

ACKNOWLEDGMENTS:

TEAM LEADER

DATE

CWA EXECUTIVE OFFICER

DATE

CIMARRON WATERSHED ALLIANCE, INC
PROJECT ACHIEVEMENT EVALUATION
Date Submitted:

PROJECT NAME: CIMARRON CANYON AND EAGLE NEST STATE PARKS
EDUCATIONAL OUTREACH PROJECT PROPOSAL

SUBTASK GRANT & WORK PLAN TASK: (Did the results address original proposal's
subtask(s), If not explain the variation, to include additional subtasks addressed)

OBJECTIVE EVALUATION: (Compare original objective with the end result)

SITE AND LOCATION: (Was there any variance from project proposal in the treatment
location or size?)

FINAL PROJECT DESCRIPTION: (Were results as expected? Did they meet the objective? If
not, why.)

FINAL COST: (Include Grant, Matching In-Kind. Explain any deviation from original
proposal):

FINAL SCHEDULE AND TIMELINE: (Was the project completed in the expected time frame?
If not, why.)

TEAM LEADER AND PARTICIPANTS: (Restate who. Did this change? If so, why?)

EVALUATION: (Did the evaluation metrics change? If so, why?)

PROJECT MAINTENANCE PLAN: (N/A?)

TEAM LEADER COMMENTS: (Team leader to add any additional comments and
observations here, to include the performance of CWA administration)

CWA COMMENTS:

NMED COMMENTS: (NMED to add any additional comments and observations here, to include the performance of CWA administration)

ACKNOWLEDGMENTS:

TEAM LEADER

DATE

CWA EXECUTIVE OFFICER

DATE

ADDITIONAL STAKEHOLDER COMMENTS TO BE ATTACHED BELOW

Appendix A

In summary, N.M. State Parks is requesting:

- \$7,500 for professional ecological monitoring for the summer of 2006
- \$10,000 to launch a student monitoring program in the 2006-2007 school year

Breakdown of funding requests:

\$7,500 for Professional ecological monitoring:

- \$2,500 for bird monitoring by Rocky Mountain Bird Observatory
- \$2,500 for small mammal monitoring by Jennifer Frey
- \$2,500 for noxious weed survey

Professional ecological monitoring Subtotal: $\$2,500 + \$2,500 + \$2,500 = \mathbf{\$7,500.00}$

\$10,000 for Environmental Education Outreach Program:

Personnel: \$5,016

Park Intern to coordinate and run workshops, prepare final documents, coordinate field trips, and conduct evaluations. 400 hours @ \$10/hour = \$4,000, plus fringe benefits @ 25.4% = \$1,016
Total \$5,016

Travel: \$756

School Bus Fee \$125 a trip X 6 trips = \$756

Equipment: \$3,956

- 8 field microscopes @ \$100 each = \$800
- 6 DBH tapes @ \$35 each = \$210
- 6 50m tapes @ \$28 each = \$168
- 6 100m tapes @ \$77 each = \$462
- pH paper = approx \$23
- Digital camera and supplies = \$500
- 3 Forestry study kits @ \$208 = \$624
- 2 Entomology study kits @ \$209 = \$418
- 2 Soil study kits @ \$263 = \$526
- Flagging and markers = \$75
- 15 prisms @ \$10 each = \$150

Supplies: \$272

Copying, binding and covering 20, 120-page books at \$9.60 a book = \$272

Environmental Education Outreach Program Subtotal: $\$5,016 + \$756 + \$3,956 + \$272 = \mathbf{\$10,000}$

Project Grand Total: $\$7,500.00 + \$10,000 = \mathbf{\$17,500.00}$