

Grant Application

Part I - Grant Application Form and Signature Page

Arizona Department of Environmental Quality
Water Quality Improvement Grant Program
Grant Application Form

Project Title - *Please limit the length of the title to one line.*

A Watershed Approach to Improving Water Quality in Red Rock Canyon – Phase 2

Project Description - *The project description should identify the type of project and the name of the waterbody and/or ground water basin that the project will improve.*

The Canelo Hills Coalition is a group of ranches in Santa Cruz County that are working together to improve water quality in Red Rock Canyon, a tributary to Sonoita Creek and the Upper Santa Cruz Watershed. Their goal is to address sediment delivery by improving watershed health through the implementation of best management practices that facilitate a rest-rotation grazing system to maximize vegetation on the watershed. This is a second phase of the Red Rock Watershed Project funded by ADEQ in 2005 (7-008). This phase will include an additional fenceline on the Vaca Ranch and a buried water pipeline on the C6 Ranch. These practices are on the Coronado National Forest and were not included in the previous project due to the time required to obtain Forest Service permission and commitments.

A rest-rotation grazing system has been proven to increase vegetative cover on the watershed, thereby reducing sediment production and delivery to streams. This project is an ideal model of the the watershed approach to dealing with water quality. The original four ranches of the Coalition have been joined by four adjoining ranches that will utilize the same management and monitoring strategies to address watershed issues. The strong technical support from the US Forest Service, U of A Extension and Natural Resources Conservation Service insures quality in BMP design and implementation, and extensive monitoring. The Coalition is committed to improved watershed health in the long term and has developed a long range education-outreach program that can be used to provide information to arid watersheds across the west.

Authorizing Agency - Enter the name of the company, agency, or tribal authority who is applying for the grant.

Name: Coronado Resource Conservation & Development Area, Inc.
Address: 656 North Bisbee Ave.
City: Willcox
State: AZ
Zip Code: 85643

Authorized Agency Contact - Enter the name of the person who will be accepting responsibility for the terms and conditions of the Grant Agreement. This person must sign the signature page.

Name: Roy G. Ard
Title: President
Phone #: 520-384-2229 x 123
Fax #: 520-384-2735
E-mail: _____

Project Manager - Enter the name, title and contact information of the individual who will have the day-to-day knowledge of the project and should be contacted if clarification is required:

Name: Kim Webb **Title:** Project Manager
Address: 656 North Bisbee Ave. **Phone #:** 520-384-2229 x 123
City: Willcox **Fax #:** 520-384-2735
State: AZ **Zip Code:** 85643 **E-mail:** kim.webb@rcdnet.net

Project Period

- 0 - 2 Years (Preferred) Greater than 2 years – (Provide justification in Part IV, Project Milestones)

Project Costs

Funds Requested \$ 52,500
Matching Funds: \$ 35,102_____
Total Project Cost: \$ 87,602_____

Location Information

Latitude T 21S, T 22S
Longitude R 16E, R17E_____
Hydrologic Unit Code 15050301_____
(See Part III – Scope of Work, Section G-5)

Are you or your organization currently debarred, suspended or otherwise lawfully prohibited from any public procurement activity? Yes No

Part II - Executive Summary

The Canelo Hills Coalition is a partnership of ranches in southern Santa Cruz County dedicated to the improvement of water quality by using a watershed approach and addressing erosion generated in the uplands and carried into streams by excessive runoff. Their objective is to reduce runoff by improving watershed health by implementing grazing management systems that maximize the amount of vegetation on areas under their control. To support a rest-rotation grazing system that has been proven to support improved watershed cover, it was determined that the Best Management Practices (BMPs) to be implemented should be additional fencing and water installation to allow for dispersal of cattle in individual pastures to reduce impacts on the lower reaches and enable ranches to rest larger areas during the growing season. An extensive monitoring partnership with the University of Arizona has been implemented that will allow them to track progress in terms of cover, species diversity and overall watershed health.

ADEQ Contract 7-008 was funded in 2005 and is currently in progress, implementing fencing and water systems on the charter ranches of the Canelo Hills Coalition. Practices in this project addressed sediment entering Sonoita Creek a tributary of the Santa Cruz River through Red Rock Canyon. The mountain ranges divide the watersheds in this area, but not the ranches. To implement a rest-rotation grazing system, the entire ranch needs to be managed as a single unit. This project will support that system on the Vaca Ranch through the reconstruction of four miles of fence on a ridge that divides the Babacomari (a TMDL stream) and the headwaters of the Santa Cruz. The existing fence is in very poor condition in extremely rugged country, making maintenance an issue. Cattle from the Vaca and O'Donnell allotments frequently break through the fence, creating rotation management problems for both ranches. The US Forest Service has agreed to provide the materials for the reconstruction and the Becker Ranch, with the O'Donnell allotment recently joined the Canelo Hills Coalition.

The second practice will be to bury 20,000 linear feet of pipeline on the C6 Ranch along ranch roads in the Red Rock Canyon area. The pipeline is crucial to the operation of the rest-rotation grazing system on the C6 Ranch. This area has a significant amount of illegal human foot traffic that continually punctures the pipeline even though there are cattle troughs with available water every $\frac{3}{4}$ mile. Burying the pipelines in these accessible areas will insure their lifespan, and reduce the labor required to implement the grazing system in the Red Rock Canyon pastures. These pastures can then be rested for 10 months each year and the upland pastures every other year.

Rest-rotation grazing systems have been proven over time to increase vegetative cover, which results in reduced runoff and sediment production. These practices provide supporting benefits to an overall system that impacts ~ 51,000 acres (total acreage of the 4 ranches with impacts to the Red Rock Watershed).

The US Forest Service, University of Arizona, Coronado Resource Conservation & Development Area, Santa Cruz Natural Resource Conservation District and the USDA/Natural Resources Conservation Service are committed to providing technical assistance and in implementing an outreach plan that will serve as an illustration to other areas the benefits of using a watershed approach to addressing water quality.

Part III - Scope of Work (A-G)

Section A – Water Quality Problem(s)

A-1 Problem: The problem in Red Rock Watershed is non-point source pollution in the form of sediment. The sediment is generated by soil erosion caused by range grazing where cattle are concentrated year after year in the same few areas where water is available. In addition, soil erosion is increased by grazing plans that leave cattle in the same pastures during the summer growing season year after year. In both situations, soils become compacted and the grass communities lose both vigor and species diversity, thereby producing less plant material. Some key grass species can be extirpated entirely and replaced with shrubs. The result is increased bare soil unprotected by live plants or plant litter from the erosional forces of water and wind. In the watershed, this caused loss of topsoil, poor water retention, and more “flashy” runoff during rains. Under present conditions, the entire Red Rock Watershed is eroding at a rate that is twice the rate that is tolerable for the soil to remain productive enough to produce healthy vegetation and remain stable. Sediment is being produced at the rate of 22,264 tons per acre per year with an estimated 4,500 tons of this being delivered to Red Rock Canyon and Sonoita Creek. (USLE calculations based on US Forest Service data).

This project will support ADEQ funded project 7-008 that is installing waters and fencing in the watershed to improve and protect water quality by implementing deferred rotational grazing plans that restrict grazing in the canyon bottoms to winter only (dormant season for plant growth), and that rotate cattle between upland pastures so that each pasture is rested during the growing season (summer) every other year, or at least every third year.

To fully implement the planned rest-rotation grazing system, a fence reconstruction on the Vaca Ranch and buried pipeline on the C6 will support the current ADEQ funded project. These practices were not included in the previous grant because a) the increase in illegal human traffic that threatens to destroy the C6 pipeline was not a factor at that time and b) an agreement between the Vaca Ranch, Becker Ranch and US Forest Service was not yet in place to reconstruct the fence between the two allotments.

To be successful and reduce erosion and sedimentation, rest-rotation systems require (1) multiple water sources so cattle and grazing impact can be spread out evenly over the pastures, ongoing vandalism of the pipeline prevents this, and without continual vigilance, cattle can be left without water in a pasture or forced to congregate at the reduced number of waters available, and (2) adequate fencing to keep cattle where they should be and on the planned schedule. Reconstruction of the fence between the Vaca Ranch/San Rafael Allotment and Becker Ranch/O'Donnell Allotment will insure that the correct number of cattle are in the pastures at the specified times.

The overall benefit will be improved water quality in Sonoita Creek as a result of reduced soil erosion due to more dense plant communities across the entire watershed. This project will illustrate by example the benefits of using a cooperative watershed approach to improve water quality. It is estimated that sediment production will be reduced by 11,000 tons/year over a ten year period after implementation of a rest-rotation grazing system on the entire watershed. (USLE-US Forest Service data) The two BMPs outlined in this project will support the implementation of that system.

A-2 Pollution sources (primary and secondary):

Primary Pollution Source

| Select a maximum of five (5) from the BOLD selections in Appendix A . | | |
|---|----------------------------------|-------------------|
| # | Name | % of Project Area |
| 1 st - 1000 | Agriculture | 90 % |
| 2 nd -8000 | Other Non point Source Pollution | 10 % |
| 3 rd - | | % |
| 4 th - | | % |
| 5 th - | | % |

Secondary Pollution Source

| Choose all appropriate pollution sources that apply from Appendix A - (Do not include bolded entries from primary category) | | |
|---|-----------------|-------------------|
| # | Name # | % of Project Area |
| 1500 | Range Grazing | |
| 8600 | Natural sources | |
| 8591 | Clean sediments | % |
| | | % |
| | | % |
| | | % |
| | | % |

Section B - Action Plan

B-1 Plan of Action: The goal of this project is to implement two additional Best Management practices that will support the practices being implemented on four ranches in the Red Rock Watershed as part of ADEQ funded project 7-008. The practices applied are 4 miles of fence on the Vaca Ranch and 20,000 linear feet of buried pipeline on the C6. These additional practices will support the implementation of a watershed wide grazing plan that includes an aggressive monitoring program and will rest riparian pastures every growing season and upland pastures every other year or every third year, depending on watershed condition. When implemented, the practices of this project and 7-008 will reduce sediment entering Red Rock Canyon, an ephemeral tributary to Sonoita Creek. All practices will meet standards and specifications outlined by the US Forest Service. The Forest Service is supportive of this project and is providing materials for the fence and granted a clearance for burying the pipeline along the ranch road. None of these practices is required to be in compliance with a Forest Service permit of any type.

B-2 Method(s) of Approach: 11- BMP design and implementation,

B-3 Management Measures

a. Project Site (area 1): Vaca Ranch –San Rafael Allotment

This allotment is rated at 475 aum, is 22,000 acres with 6500 acres in the Red Rock Watershed. The project site on the Vaca is located at the top of the ridge dividing the Babacomari (to the north) and the Santa Cruz (south) watersheds. The San Rafael Allotment of the Vaca Ranch is the headwaters of the Santa Cruz River. (The O'Donnell Allotment of the Becker Ranch on the north east side of the fence flows into the Babacomari). Cattle are rotated between the pastures in the Red Rock Watershed and those in the Santa Cruz Watersheds, allowing for a rest period. This system is designed to maximize vegetative cover on the watershed and reduce sediment carried by runoff. The fencing will allow for efficient rotation of cattle, supporting grazing management in all pastures and providing benefits to all the watersheds on the ranch.

b. BMPs: Fence, Forest Erosion control, pasture management The fence reconstruction will benefit the Red Rock, Santa Cruz and Babacomari watersheds by increasing control on cattle grazing. The area to be fenced is steep, rugged terrain, accessible only on foot or horseback. The US Forest Service is providing fencing materials and will drop them in by helicopter. The terrain presents a management concern because cattle frequently break through the existing poor condition fence, allowing them to over graze either allotment before they can be redirected and the fence repaired.

c. Pollutant Type: 1100-Sedimentation/siltation

d. Load Reduction Estimate: 4,500 tons/ac/yr in Santa Cruz Watershed (USLE, US Forest Service Data) based upon implementation of the rest-rotation grazing system on the entire ranch.

a. Project Site (area 2): C6 Ranch, Red Rock Canyon pastures

b. BMPs: Alternative watering source, pasture management. This project will bury 20,000 feet of livestock pipeline along Forest roads that are subject to heavy human traffic and vandalism of the pipeline. Funds are requested to obtain a contractor to bury the pipeline to insure that it is in place and functional for long term grazing management. Materials will be provided by the rancher/US Forest Service.

c. Pollutant Type: 1100-Sedimentation/siltation

d. Load Reduction Estimate: 5,000 tons/ac/yr in the Red Rock Watershed, (USLE, US Forest Service Data) based upon implementation of the rest-rotation grazing system on the entire ranch.

Section C - Expected Outcomes

C-1 Goals: Improve water quality in the Red Rock Canyon/Upper Santa Cruz Watershed by a sediment load reduction of 4500 tons per year through the implementation of practices that support a rest-rotation grazing system to maximize vegetation on the watershed.

C-2 Project Longevity: 30+ years

Partners in this project are lease holders with the US Forest Service who under that agreement, agree to maintain all improvements place upon the allotment. To comply with terms of this project and a grant agreement with ADEQ, an Operation and Maintenance agreement between allottees and Coronado Resource Conservation & Development Area to maintain installed practices for an expected life span of 30 years.

Section D - Project Evaluation

This project will be evaluated by monitoring vegetation in the watershed in collaboration with the University of Arizona Cooperative Extension Service, and US Forest Service rangeland management staff. Upland monitoring takes place annually in the fall on established range sites in each pasture on each ranch. The sites are chose to represent the major ecological sites that are present in the Major Land Resource Area. Ecological sites present in the watershed project area are: Shallow Hills, Shallow Uplands, Limy Slopes, Sandy Bottoms.

At each site, ground cover, plant species frequency, botanical composition by weight, and plant distribution are determined. For soil erosion, data on percent ground cover (%bare ground, gravel, rock, non-persistent litter, litter and live plants) and average distance between live plants is collected. These are key factors because they indicate how much of the soil surface is protected from erosional forces, primarily water and wind, and can be used to estimate tons of sediment lost. The data is compared to previous years to look for trends, and to develop similarity indices which compare the present plant community with the historical climax plant community. Utilization by cattle, per cent of standing grass crop removed by cattle is also estimated. Vegetation data is correlated with the timing and intensity of grazing (timing is grazing period- spring, summer, fall, winter and intensity is the number of animals in the pasture for a specific length of time).

A report is written for each ranch each year and the findings are discussed in a workshop setting where each rancher and other interested parties get to see how the data is used to indicate condition of their rangeland.

Photo monitoring will be used to evaluate and track changes in eroded areas in the watershed and over all grass cover. Photos are also taken with each monitoring transect at the time of reading. All vegetative data is correlated with rainfall data gathered from rain gauges installed at transect sites.

Section E - Public Education, Outreach, and Partnerships

E-1 Education and Public Outreach:

1. Two on-site field days will be held highlight the project and its benefits to watershed health, erosion control and water quality.
2. Coronado Resource Conservation & Development Area and the Santa Cruz Natural Resource Conservation District will create a brochure and two fact sheets outlining the project that will be used at the field days and as a handout at the Santa Cruz County Fair.
3. A display outlining project benefits will be developed and used at the Arizona Association of Conservation Districts annual meeting and at the Regional Association of RC&D's annual meeting, the National Association of RC&D's bi-annual conference and the Society for Range Managements winter meeting.
4. A presentation on the project, the benefits of partnerships, the role of ranching in improving water quality and the ADEQ Water Quality Improvement Grant program will be presented at an annual meeting of the Cattle Growers.

E-2 Partnerships: The Canelo Hills Coalition formed in 2001 with a core group of four ranchers interested in improving watershed health within their grazing lands. They developed an action plan that identified areas that needed to be improved, barriers to those changes and strategies to effect the needed changes. The greatest percentage of the approximately 51,000 acres contained in the four ranches is US Forest Service land allotted for grazing.

The Coalition approached the Forest Service with a strategy of working together, identifying Best Management Practices and solicited their support in creating a management plan that would improve the watershed by reducing erosion and sedimentation through improved vegetation management. The Forest Service is a supporting partner of Coalition activities as is the University of Arizona Extension who is implementing the entire monitoring plan for the area and providing training to Coalition and other area ranchers.

The group applied for and was awarded a water quality improvement grant from the Arizona Department of Environmental Quality in 2005 to implement practices that support the watershed grazing system. (7-008). This process brought Coronado Resource Conservation & Development Area, the Santa Cruz Natural Resource Conservation District and the Natural Resources Conservation Service on as partners.

In July of 2005, four more ranches with land adjoining the original four ranches joined the Coalition as partners. This speaks well of the outreach efforts of the group and the results that are already becoming apparent in the watershed.

Section F - Key Personnel

Robert W. Hudson, Manager, Vaca Ranch (1987-Present)

Robert moved to the Vaca Ranch in 1958 with his father who was employed as manager of the Vaca Ranch for 29 years (1971-1987). As a youngster he worked on the Vaca weekends and summers until graduating from Patagonia High School in 1968. He went to college majoring in Livestock Production and Management and returned to

work full time at the Vaca Ranch in 1972, taking over as manager in 1972 upon his father's retirement. The Vaca Ranch under Robert's management has installed and repaired windmills, pipelines, water facilities, including storage and pipelines and fences in addition to managing the livestock and working toward a full rest- rotation grazing system.

Richard West Collins, C6 Ranch LLC

Raised on a farm in Marana, Arizona, attended school in Tucson and graduated from New Mexico State University with a degree in Ag Business and Finance. During summer breaks and holidays, installed over 12 miles of pipeline with water troughs on the C6 Ranch. Full employee and co-owner of C6 Ranch and responsible for upkeep of the pipelines, wells, waters, fences and husbandry of the cow herd.

Richard C. Collins, C6 Ranch LLC, Co-owner

Responsible for livestock sales and purchases, vegetation monitoring, and working with the US Forest Service and the University of Arizona Cooperative Extension Service. Project Manager for ADEQ Grant #4-013 and coordinator for activities of the Canelo Hills Coalition.

Diane D. Collins, C6 Ranch LLC, Co-owner and accountant for the ranch.

Active in the Santa Cruz County Cattlewomen Assoc. and president of the Anne C. Stradling Equine Foundation.

William A. Edwards, Rangeland Management Specialist, Sierra Vista Ranger District, Coronado National Forest.

BS Degree in Range Science from University of Arizona, Over 10 years of field experience with the US Forest Service, Certified Professional in Rangeland Management by the American Society of Range Management.

Stephen L. Gunzel, District Ranger, Sierra Vista Ranger District, Coronado National Forest, 5990 S. Highway 92, Hereford, AZ 85615

George B. Ruyle, Extension Specialist and research scientist in range management for the School of Renewable Resources, University of Arizona.

Directs vegetation monitoring activities and participates in workshops and outreach activities of the Canelo Hills Coalition. Certified Professional in Rangeland Management by the American Society of Range Management

Kim McReynolds, Area Extension Agent for Natural Resources, University of Arizona.

Directs vegetation monitoring activities and participates in workshops and outreach activities of the Canelo Hills Coalition. Certified Professional in Rangeland Management

by the American Society of Range Management.

Donna Matthews, NRCS/Coordinator, Coronado RC&D Area, Inc.

BS Biology and Chemistry, MS Agriculture Employed by USDA/Natural Resources Conservation Service (NRCS) 17 years with 10 years experience with Coronado RC&D in southern Arizona. Extensive experience in working with partnerships that involve ranches and state and federal agencies and the public working together to improve watershed health utilizing grant funds to meet goals.

Kim Webb, Coronado RC&D Program Manager

AA Business/graphic arts- Eight years of experience with Coronado RC&D providing administrative and outreach assistance to grant funded projects.

Section G - Location & Site Plan

G-1 Map: See Attached

G-2 Site Plan: See Attached

G-3 County: Santa Cruz

G-4 Watershed Name(s): Red Rock/Upper Santa Cruz

G-5 HUC Code (USGS): 15050301

G-6 Land Ownership: US Forest Service

G-7 Current Land Use: Grazing

G-8 Size and Total of Project Site(s): 4 miles fence and 4 miles pipeline (to benefit an overall project area of ~51,000 acres)

G-9 Waterbody Type(s): River

G-10 Affected Waterbody/Stream Name(s): Red Rock Canyon

G-11 Impaired Water: Yes No

G-12 Length of Stream (if applicable): 4 miles

G-13 Miles of Stream Benefited (if applicable): **8 miles**

G-14 Acres of Riparian Habitat (if applicable): 20

Part IV - Project Milestones

| Task Description/Deliverables | Completion Date | Percent Complete |
|---|--------------------------------------|-------------------------|
| Task # 1= Execute Contract w/ADEQ Provide copy of liability insurance | Jan 06 | |
| Task # 2= Obtain all permits/clearances | Jan 06 | 100 |
| Task # 3= Develop O & M agreements with partners | Feb 06 | |
| Task # 4= Develop contracts to install fence and pipeline | Mar 06 | |
| Task # 5= Obtain fence Materials (USFS to provide-not used for match) | Apr 06 | |
| Task # 6= Install Fence | Jan 07 | |
| Task # 7= Bury Pipeline | Jan 07 | |
| Task # 8= Photo monitoring | Jan 07 | |
| Task # 9= Vegetative monitoring | Jan 08 | |
| Task #10= Field Tour Task #11= Education Outreach Task #12= Reports Task #13= Administration | Jan 08 Jan 08 Jan 08 Jan 08 | |

Part V - Water Quality Improvement Plan(s)

1. Please select one of the following (See *Chapter 2* for additional information.):

- Watershed-based plan in development
- Watershed-based plan has been completed
- TMDL implementation plan in development
- TMDL implementation plan has been completed
- Other plan which contains all required elements identified in *Chapter 2*.
- N/A; no plan

Title: US Forest Service Coronado National Forest Management Plan

2. How does your project support the goals and objectives of the plan?

The project will improve vegetative cover, reduce erosion and have a positive impact on water quality, resulting in a healthier forest .

Part VI - Budget

ADEQ Grant Award # _____ **Project Title:** _____
Time Period: From _____ **To** _____

| Grant Expenditures | Original Budget | Prior Expenditures | Current Expenditures | Cumulative Expenditures | Budget Remaining |
|-------------------------------|------------------------|---------------------------|-----------------------------|--------------------------------|-------------------------|
| Admin. Costs (10% max) | | | | | |
| Project Admin. | \$4500.00 | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| Direct Costs | | | | | |
| | | | | \$0.00 | \$0.00 |
| Equipment | | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| Supplies | | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| Other | | | | \$0.00 | \$0.00 |
| Contractual | \$48,000 | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| Personnel | | | | | |
| Salaries | | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| Sub-totals | \$52,500.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |

| Match Expenditures | Original Budget | Prior Expenditures | Current Expenditures | Cumulative Expenditures | Budget Remaining |
|------------------------------------|------------------------|---------------------------|-----------------------------|--------------------------------|-------------------------|
| Admin. Costs | | | | | |
| Project Admin. | | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| Direct Costs | | | | | |
| | | | | \$0.00 | \$0.00 |
| Equipment | \$16,490.00 | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| Supplies | | | | \$0.00 | \$0.00 |
| Outreach/gen | \$2,200.00 | | | \$0.00 | \$0.00 |
| Other | | | | \$0.00 | \$0.00 |
| Travel | \$2,715.00 | | | \$0.00 | \$0.00 |
| Horses | \$400.00 | | | \$0.00 | \$0.00 |
| | | | | \$0.00 | \$0.00 |
| Personnel | | | | | |
| Salaries | | | | \$0.00 | \$0.00 |
| Ranch/RC&D staff @ \$20 | \$13,297.00 | | | \$0.00 | \$0.00 |
| Sub-totals | \$35,102.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |

| | | | | | |
|---------------------------|-------------|--------|--------|--------|--------|
| Total Expenditures | \$87,602.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
|---------------------------|-------------|--------|--------|--------|--------|

Part VII - State Historic Preservation Office (SHPO) Form

Any Arizona Department of Environmental Quality (ADEQ) action, including grant projects paid in-part with ADEQ funds, on state, federal, or private lands that may impact historic properties (i.e., any prehistoric or historic-period district, site, building, structure, or object included in, or eligible for inclusion in the State Register of Historic Places) require consultation with the State Historic Preservation Office (SHPO) pursuant to the State Historic Preservation Act (ARS 41-861 to 864). ADEQ is legally responsible for making determinations and findings. In order to make informed decisions and facilitate consultation with SHPO, ADEQ requires applicants to provide the “project related” information requested below. By working together, we can seek out ways that “the historical and cultural foundations of this state can be preserved as a living part of our community life and development” (State Historic Preservation Act).

Please prepare and answer the following questions pertaining to historic properties and preservation. Add map(s), drawings and pictures where appropriate.

1. Project Location and Area:

- County: Santa Cruz
- Township, Range and Section: T 22S, R 17E, Sections 29,30,32, 33
- T 21S, R 17E, S30, T 21S R16E, S22, 23, 24, 25
- Nearest Town or City: Patagonia
- Describe the conditions of the land in the project area: steep, rocky, brushy, (pipeline will be buried at edge of existing Forest Service Road, no additional areas will be disturbed, fence will replace existing fence, no new areas will be disturbed)

Attach a copy a USGS topographic map (See *Part III – Scope of Work, Section G-1*) with the project area clearly marked. On the map, please specify the area(s) where impacts will occur.

II. Project Description:

- Describe the buildings or structures within project area and their age: N/A
- Describe any ground-disturbing activities: Bury pipeline on existing road
- Generally speaking, can this project impact historical properties, should they be present? Yes No

III. Describe the steps taken to identify historic properties in the project area:

- Has the project area been previously surveyed to determine the presence or absence of historic properties? Yes No US Forest Service (If yes, include report.)
- Are buildings, structures, or objects that are 50 years old or older present in the project area? Yes No (If yes, include description.)
- Are any prehistoric or historic-period archaeological sites present? Yes No (If yes, please list and briefly describe.)

- What does the state or federal land manager, if any, say about historic properties present in the project area?
None present, practices will go on previously disturbed areas. (Attach letter if available.)
- What efforts, if any, would be reasonable to complete in determining the presence or absence of historic properties? Area already has been surveyed for cultural clearance by US Forest Service over 10 years ago with no sites found.

IV. *in the applicant's opinion, which determination listed below is appropriate for this project based on the information presented above:*

- No impacts/ historic properties not present
- No impacts/ historic properties present. Describe how historic properties will be avoided or protected:
- Negative impacts to historic properties. Suggest treatment measures:
- Positive impacts to historic properties. Describe:

For SHPO Use Only - Record of Consultation

SHPO advises ADEQ on the completeness of identification effort, determination of effect, and any proposed treatment measures.

- ___ Concur with determination
- ___ Do not concur with determination
- ___ Request More Information
- ___ Recommend that the project area be surveyed to determine the presence or absence of historic properties by a qualified professional
- ___ Additional comments below:

Signed: _____

Date: _____