

STATE OF NEVADA
 PUBLIC UTILITIES COMMISSION OF NEVADA

1150 E. William Street
 Carson City, Nevada 89701-3109

No. 40206

RECEIPT

Received from

Date 6/21/2011

LIONEL SAWYER & COLLINS
 50 W LIBERTY STE 1100
 RENO, NV 89501

AMOUNT \$ 200.00

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How Paid	Cash <input type="checkbox"/>	Check 502421	Money Order	Draft
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Type of Receipt	Filing Fee <input checked="" type="checkbox"/>	TDD <input type="checkbox"/>	Copy Service <input type="checkbox"/>	UEC <input type="checkbox"/>	Mill or CMRS <input type="checkbox"/>	Other <input type="checkbox"/>
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Memo

NEW FILING

Received by CMU



RECEIVED PUBLIC
UTILITIES COMMISSION
OF NEVADA-CARSON CITY

2011 JUN 21 PM 3:55

June 21, 2011

Ms. Breanne Potter
Assistant Commission Secretary
Public Utilities Commission of Nevada
1150 East William Street
Carson City, NV 89701-3109

RE: UEPA Filing - Spring Creek Utilities Co.

Dear Ms. Potter:

Spring Creek Utilities Co. (SCUC) hereby files with the Public Utilities Commission of Nevada the enclosed Application for a permit under the Utility Environmental Protection Act. This permit is being requested in connection with the proposed construction of an arsenic treatment facility at Well 1 in the Tract 200 Subdivision of the SCUC service territory.

If you have any questions regarding this filing, please contact me at 801-523-0100 or kbrown@sunrise-eng.com.

Sincerely,
SUNRISE ENGINEERING, INC.

A handwritten signature in black ink, appearing to read "Kevin W. Brown".

Kevin W. Brown
Principal Engineer

cc: Jennifer Carr, NDEP Bureau of Safe Drinking Water

Enclosures

PUBLIC UTILITIES COMMISSION OF NEVADA
DRAFT NOTICE
(Applications, Tariff Filings, Complaints, and Petitions)

Pursuant to Nevada Administrative Code (“NAC”) 703.162, the Commission requires that a draft notice be included with all applications, tariff filings, complaints and petitions. Please complete and include **ONE COPY** of this form with your filing. (Completion of this form may require the use of more than one page.)

A title that generally describes the relief requested (see NAC 703.160(4)(a)):

Application of Spring Creek Utilities Co. for a permit under the Utility Environmental Protection Act to construct a wellhead coagulation / filtration arsenic treatment facility at Well No. 1 in the 200 Tract.

The name of the applicant, complainant, petitioner or the name of the agent for the applicant, complainant or petitioner (see NAC 703.160(4)(b)):

Applicant: Spring Creek Utilities Co.

Counsel: William J. McKean
Douglas A. Cannon

A brief description of the purpose of the filing or proceeding, including, without limitation, a clear and concise introductory statement that summarizes the relief requested or the type of proceedings scheduled **AND** the effect of the relief or proceeding upon consumers (see NAC 703.160(4)(c)):

Spring Creek Utilities Co. (the “Company”) is submitting, pursuant to the Nevada Utility Environmental Protection Act (“UEPA”), an application to the Public Utilities Commission of Nevada (the “Commission”) for authority to construct a coagulation/filtration arsenic treatment facility which will be housed in one approximately 350 square-foot structure. The structure will house pre-treatment equipment, coagulation / filtration treatment equipment, associated piping, plumbing, and monitoring components. A 15,000 gallon backwash tank and sludge container will be adjacent to the treatment facilities. In addition, the Company will be installing approximately 150 feet of 8-inch piping and associated valves and other plumbing components in order to connect the treatment facility to existing water infrastructure. Security fencing will also be provided. This project is being undertaken to bring the existing water system into compliance with the arsenic maximum contaminant level as established by the U.S. Environmental Protection Agency. The arsenic treatment facility will provide treated water to the Company’s system users in Tract 200 in Spring Creek, Nevada.

A statement indicating whether a consumer session is required to be held pursuant to Nevada Revised Statute (“NRS”) 704.069(1)¹:

A consumer session will not be required

If the draft notice pertains to a tariff filing, please include the tariff number **AND** the section number(s) or schedule number(s) being revised.

N/A

¹ NRS 704.069 states in pertinent part:

1. The Commission shall conduct a consumer session to solicit comments from the public in any matter pending before the Commission pursuant to NRS 704.061 to 704.110 inclusive, in which:
 - (a) A public utility has filed a general rate application, an application to recover the increased cost of purchased fuel, purchased power, or natural gas purchased for resale or an application to clear its deferred accounts; and
 - (b) The changes proposed in the application will result in an increase in annual gross operating revenue, as certified by the applicant, in an amount that will exceed \$50,000 or 10 percent of the applicant’s annual gross operating revenue, whichever is less.



June 21, 2011

Chairperson Alaina Burtenshaw
Public Utilities Commission of Nevada
9075 West Diablo Drive, Suite 250
Las Vegas, NV 89148

Re: Spring Creek Utilities Co. UEPA Filings pertaining to the arsenic remediation project.

Dear Madame Chairperson,

Please find enclosed Spring Creek Utility Company's (SCUC) UEPA filings pertaining to the arsenic remediation project. We would like to take this opportunity to express our appreciation to the PUCN and its Staff for the guidance provided SCUC in its efforts to resolve the water quality issues for the customers residing in Tract 200 in Spring Creek. Since the 2009 IRP proceeding SCUC has had numerous delays and setbacks attempting to implement the approved action plan. Each hurdle appears to have added a degree of complexity in the minds of concerned individuals and observers. However, we strive to stay focused on our goal to provide compliant water quality, as quickly as possible, and at the least cost to the customers.

As we reflect on where we are today in this process, we unexpectedly find ourselves with renewed hope. The setbacks experienced while moving the 2009 IRP action plan forward have created a window of opportunity for SCUC, the PUCN, its Staff, and more importantly our rate payers which will result in a better and more economical solution to obtain improved water quality for the residents of Tract 200. Immediately following the Commission's Order in Docket 10-11033 denying the Oakmont Storage Tank UEPA for reasons stated in the Order (the first of 5 UEPA's submitted for the water supply alternative in the 2009 IRP Action Plan), SCUC began a detailed reevaluation of its alternatives and initiated an Amended 2009 IRP application process for its Action Plan going forward. *The following is a summary of this re-evaluation process.*

On May 3, 2011 SCUC began setting up interviews with experts in the field of arsenic remediate. Meetings and discussions were held with 8 engineering firms and equipment vendors. All of the engineers contacted pointed to the same treatment option except one, and concluded that it is the least costly and most effective alternative available at this time. SCUC also met with representatives from NDEP and the PUCN Staff to evaluate all possible courses of action to ensure a complete and thorough process could be developed to expedite a resolution to the water quality issues. Additionally, SCUC representatives contacted local government agencies to solidify strong lines of two-way, open communication for the remainder of this project. Internal meetings were held with SCUC representatives for reporting and monitoring of the information being shared by consultants and the regulatory agencies. In-house company experts from across the country were called in to evaluate the

a Utilities, Inc. company **Spring Creek Utilities Company**

285 E. Spring Creek Pkwy. • Spring Creek, NV 89815 • P: 775-753-6889 • F: 775-738-6711 • www.uwater.com

June 20, 2011

engineering alternative treatment techniques which were being discussed with SCUC management. Every effort was made to validate the findings and conclusions that were being revealed and formulated.

For what appeared to be a significant setback for the customers in Spring Creek, SCUC is now pleased to report that a viable and economical treatment option has been fully evaluated and is currently before the PUCN as an amendment to the 2009 IRP Action Plan. This amendment's primary focus is to provide for the construction of treatment facilities at each individual well site, instead of new source water wells. SCUC, and its parent corporation Utilities, Inc., are confident that the new remediation alternative will stand up to the necessary vetting that will take place in the IRP proceeding and standby ready to begin construction on the treatment components on the Tract 200 wells as soon as the PUCN grants the required UEPA permits for this project.

Again, SCUC greatly appreciates the regulatory oversight and guidance that you provide and are more than willing to answer any questions regarding this matter. It is our hope that this process can move forward as expeditiously as possible to resolve the arsenic issues and improve water quality to the Spring Creek customers.

Sincerely,



Wendy S.W. Barnett
Regional Director

Cc: Lisa Sparrow, President and CEO, Utilities, Inc.
John Hoy, Vice President and COO, Utilities, Inc.
Rick Durham, Regional Vice President, Utilities, Inc.



**PUBLIC UTILITIES COMMISSION OF NEVADA
UTILITY ENVIRONMENTAL PROTECTION ACT
PERMIT APPLICATION**

**Spring Creek Utilities Co.
Arsenic Removal Facility at Well #1**

Prepared for:

**Spring Creek Utilities Co.
285 Spring Creek Parkway
Spring Creek, Nevada 89815-5840**

Prepared by:

**Sunrise Engineering, Inc.
12227 South Business Park Drive, Suite 220
Draper, Utah 84020**

June 21, 2011

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- Attachment B – Legal Description of the Site
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PUBLIC UTILITIES COMMISSION OF NEVADA

**UTILITY ENVIRONMENTAL PROTECTION ACT
PERMIT APPLICATION**

**Spring Creek Utilities Co.
Arsenic Removal Facility at Well #1**

I INTRODUCTION

I.1 Background

Spring Creek Utilities Co. owns and operates two independent public water systems: Spring Creek Mobile Home Section (Tract 200, NV5027) and Spring Creek Housing Section (Tracts 100, 300, and 400, NV0036) for the community of Spring Creek located approximately 10 miles southeast of Elko, Nevada.

The water system for the Mobile Home Section (Tract 200, NV5027) is serviced by three wells:

Well #1 - 350 gallons per minute (gpm),
Well #3 - 750 gpm, and
Well #11 - 800 gpm.

Each of the wells produces groundwater with arsenic concentrations above 0.02 parts per million (ppm) or milligrams per liter (mg/l).

There are four water storage tanks:

Twin Tank A - 250,000-gallons,
Twin Tank B - 500,000-gallons,
High Zone Tank - 500,000-gallons, and
Karval Tank - 1,000,000-gallons.

The water system for the Housing Section (Tracts 100, 300 and 400, NV0036) is serviced by nine wells:

Well #4 - 730 gpm,
Well #5 - 750 gpm,
Well #7 - 150 to 450 gpm,
Well #8 - 500 gpm,
Well #9 - 600 gpm,
Well #10 - 380 gpm,
Well #12 - 550 gpm,
Well #14 - 230 gpm, and
Well #101 - 1,200 gpm.

There are six water storage tanks and one hydropneumatic tank with a total storage capacity of 3,042,000 gallons. The arsenic concentration of groundwater derived from the nine wells, when mixed, is below 0.01 mg/l and only Wells #4 and #10 at times produces water with arsenic concentrations of 0.012 and 0.013 mg/l, respectively. Spring Creek Utilities Co. has been approved by the Nevada Division of Environmental Protection to blend the well waters and utilize an alternative monitoring program to maintain compliance with the new maximum contaminant level (MCL) of 0.01 mg/l for arsenic.

I.2 Proposed Project

The U.S. Environmental Protection Agency (EPA) has revised the arsenic standard or MCL for drinking water from 0.05 mg/l to 0.01 mg/l to protect consumers served by public water systems from the effects of long-term, chronic exposure to arsenic.

The arsenic concentration in the groundwater from Well #1 is currently above 0.02 mg/l. To be in compliance with the MCL of 0.01 mg/l for arsenic, Spring Creek Utilities Co. has proposed an arsenic removal facility at Well #1, as well as two other wells in the water system, by using the coagulation/filtration (C/F) technology to reduce the arsenic concentration in the water from the well to a level below 0.01 mg/l.

C/F is considered the best technology for the well due to the high silica content, pH value greater than 7 and the moderate to moderately low arsenic level in the water. Moreover, C/F is the most cost-effective technology for the well based on a preliminary engineering report prepared by Sunrise Engineering. C/F involves both chemical and physical stages to remove arsenic. Ferric salts are added to the untreated (raw) water. The metals hydrolyze to form iron hydroxides that subsequently bind to other iron hydroxides to form particulate flocs. During this process, arsenic binds to, or is entrapped in, the growing particulates and is thereby removed from solution. The arsenic-containing particulates are then removed from the water through filtration. Sludge containing arsenic from the filtration process is backwashed to a tank where most of the water is recycled and returned to the start of the treatment process. The sludge with some water is settled to the bottom of the tank and collected in a container, dewatered and trucked once per month to a landfill for disposal. There will be no fluid discharge to the surface or subsurface. The sludge will meet Toxicity Characteristic Leaching Procedure (TCLP) requirements for disposal in a landfill.

A structure with an area of approximately 350 square feet will be constructed at the well site to house pre-treatment equipment, C/F treatment equipment, associated piping, plumbing, and monitoring components. A 15,000-gallon backwash tank and sludge container will be adjacent to the treatment facilities. In addition, approximately 150 feet of 8-inch piping and associated valves and other plumbing components will be installed to connect the treatment facility to existing water infrastructure. Security fencing will also be provided. There will be no office facilities or restroom facilities in the structure.

After construction of the proposed project is completed, the ground surface will be restored to the original surface contour as much as practically possible.

The proposed project will not involve any federal action: no federal land will be needed; no federal funding is involved; and no federal approval is required. Therefore, this permit application document is prepared in accordance with Nevada Administrative Code (NAC) 703.423.

II REQUIREMENT OF NAC 703.423

II.1 Description of Location

1. A description of the location of the proposed utility facility, as required by subsection 1 of NRS 704.870 including:

(a) A general description of the location of the proposed utility facility, including a regional map that identifies the location of the proposed utility facility (NAC 703.423(1)(a)):

The proposed treatment facility will be housed in an approximately 350-square-foot structure adjacent to the existing well house of Well #1 in the 200 Tract. The proposed project site can be described as within the northwestern quarter of the northwestern quarter of Section 3, Township 33 North, Range 56 East of the Mount Diablo Base and Meridian in Elko County, Nevada (see Maps and Drawings in **Attachment A**)

(b) A legal description of the site of the proposed utility facility, with the exception of electric lines, gas transmission lines and water and wastewater lines, for which only a detailed description of the site is required (NAC 703.423(1)(b)):

A legal description of the site is included in **Attachment B** and is summarized below:

All that parcel of land in Elko County, Nevada, lying within Section 3, Township 33 North, Range 56 east of the Mount Diablo Base and Meridian described as follows:

Commencing at the section corner common to Section 33 and 34, Township 34 North, Range 56 East and Sections 3 and 4, Township 33 North, Range 56 East; thence South 53°30'52" East, 529.23 feet to Corner No. 1, the TRUE Point OF BEGINNING; thence South 68°40'00" East, 80 feet to Corner No. 2; thence North 21°20'00" East, 115.00 feet to Corner No. 3; thence North 60°00'00" East, 273.64 feet to Corner No. 4, a point on a nontangent curve to the right having a radius of 8,900.00 feet, a radial line from said point bears South 20°23'49" West; thence along the arc of said curve 77.58 feet through a central angle of 00°29'58" to Corner No. 5; thence on a nonradial line 60°00'00" West, 301.80 feet to Corner No. 6; thence South 21°20'00" West, 93.95 feet to Corner No. 7; thence South 68°40'00" East, 60.00 feet to Corner No. 8; thence South 21°20'00" West, 200.00 feet to Corner No. 9; thence North 68°40'00" West, 200.00 feet to Corner No. 10; thence North 21°20'00" East, 200.00 feet to Corner No. 1, the TRUE POINT OF BEGINNING, containing 1.458 acres, more or less.

- (c) Appropriately scaled site plan drawings of the proposed utility facility, vicinity maps and routing maps (NAC 703.423(1)(c)).

See **Attachment A** (Maps and Drawings).

II.2 General Description of Facility

2. A description of the proposed utility facility including:

- (a) The size and nature of the proposed utility facility (NAC 703.423(2)(a)):

A structure housing treatment equipment with an area of approximately 350 square feet will be erected at the site. A 15,000-gallon backwash tank and sludge container will be installed adjacent to the structure. Additionally, approximately 150 feet of 8-inch diameter piping and associated valves and other plumbing components will be installed to connect the treatment facility to existing water infrastructure. Security fencing will also be provided.

- (b) The natural resources that will be used during the construction and operation of the proposed utility facility (NAC 703.423(2)(b)):

Resources required for construction would be:

Steel to form vessels and tanks
Fuel for vehicles to transport materials to the site and to operate equipment
Paint to coat interior and exterior of vessels and tanks and exterior of building
Chlorine for disinfection of vessels tanks and pipes upon completion
Concrete for concrete pads
Steel pipes
Gravel, road base and structural fill for roads and parking space
PVC pipe to connect structure to water system

The proposed project will not have any significant adverse impact on natural resources (see **Attachment C** – Limited Environmental Statement)

- (c) Layout diagrams of the proposed utility facility and its associated equipment (NAC 703.423(2)(c)): and

See **Attachment A** (Maps and Drawings).

- (d) Scaled diagrams of the structures at the proposed utility facility (NAC 703.423(2)(d)):

See **Attachment A** (Maps and Drawings).

II.3 Environmental Studies

3. A copy and summary of any studies which have been made of the environmental impact of the proposed utility facility as required by subsection 1 of NRS 704.870 (NAC 703.423(3)).

Attachment C is a Limited Environmental Statement for the proposed project and assesses the potential environmental impact of the proposed project on human health and the environment. Based on the analysis in **Attachment C**, the proposed project will not have any significant adverse impact on the following important environmental elements:

- Land use
- Floodplain
- Wetlands
- Biological resources
- Cultural resources
- Water quality
- Socio-economic/environmental justice
- Air quality
- Transportation
- Noise

Attachment D is a Geotechnical Report prepared based on a geotechnical investigation conducted at the proposed project site. The report indicates that the site is suitable for the proposed project construction.

Attachment E is a Preliminary Engineering Report (PER). The report provides a discussion of arsenic mitigation strategies that included both non-treatment and treatment strategies. The report determined that the most feasible mitigation strategies for Tract 200 wells include the treatment strategies of treating the source water at a centralized treatment facility, site-specific treatment facilities, or a combination of centralized and site-specific facilities. Following the discussion on arsenic mitigation strategies is a discussion on treatment technologies. The evaluation of treatment technologies determined that the best technologies for Tract 200 wells would be either C/F or iron based adsorption (IBA). The final portion of the report introduces four separate project alternatives, all of which consider treatment. Each project alternative is evaluated based on non-economic and economic factors. Opinions of probable cost were developed for comparison of alternatives and to provide a present worth analysis. Based on the non-economic and economic factors, the PER provides the recommendation that the Spring Creek Utility, Co. provide three separate site-specific treatment facilities at each of the three wells in Tract 200 that treat the water using C/F.

II.4 Reasonable Alternative Locations

4. A description of any reasonable alternate locations for the proposed utility facility, a description of the comparative merits or detriments of each location submitted and a statement of the reasons why the location is best suited for the proposed utility facility as required by subsection 1 of RS 704.870 (NAC 703.423(4)).

The utility facility proposed in this application, a C/F arsenic removal facility, would be located at Well #1 (in addition, separate C/F arsenic removal facilities would also be located at the other two wells in the water system). Because this facility is to be located at the existing wellhead, there are no other reasonable alternate locations.

In assessing whether to construct a wellhead treatment project as proposed in this application, a centralized treatment plant for the three wells (Wells #1, #3, and #11) was considered as a possible alternative. If a centralized treatment plant were proposed, then it could be constructed in alternate locations. However, a centralized treatment plant alternative was rejected based on several factors, including the need to acquire additional land and easements, and the need to construct additional distribution piping. Based on these factors, the time and cost to construct a centralized treatment plant make it less favorable relative to a wellhead treatment project. While these factors generally apply to any centralized treatment plant, they can be illustrated by the following examples of possible locations where such a plant could be located. One possible location for a centralized treatment plant would be in the property east of Tract 200 near the east end of the paved portion of Valdez Drive. In order for this alternative to be viable, the design and construction of the facilities would likely be phased (so the delivery of treated water could begin as soon as possible). The first phase would include the centralized facility. The facility could be constructed with a capacity to treat well water immediately from Well #3. Well #3 would then become the primary well for the system and operate during the winter while the remainder of the project was being constructed as the second phase. The next priorities would be the transmission line from the centralized facility to the distribution system and providing a transmission line from Well #11 to the centralized treatment plant. The transmission line from the centralized facility to the distribution system would need to be sized for all three wells. The transmission line from Well #11 to the centralized treatment plant would need to be sized for the flows from Well #11 and Well #1. Among the estimated quantities for this alternative are 6,100 linear feet of 12 inch pipe, 5,800 linear feet of 10 inch pipe, and 2,200 linear feet of 8 inch pipe. This alternative requires that approvals be obtained to construct in right-of-ways, easements be acquired, and the land for the treatment plant be purchased. Due to the land and right-of-way acquisition requirements and the amount of distribution pipeline required for this alternative, this alternative is neither time- nor cost-effective.

Another alternative includes combining Wells #3 and #11 into a centralized treatment facility and also providing a site-specific facility for Well #1 at the well site. One possible location for the centralized treatment facility would be in the property east of Tract 200 near the east end of the paved portion of Valdez Drive. This alternative would also likely involve a phased approach in which the combined treatment plant would be constructed first with at

least enough capacity to treat Well #3 during the winter months. This alternative would require additional distribution piping to transport water from Well #11 to the treatment site, and then from the treatment plant to the system. This would require that approval be obtained to construct in right-of-ways, easements would need to be acquired, and the land for the treatment facility would need to be purchased. This option is neither time- nor cost-effective.

II.5 Public Notice

5. A copy of the public notice of the application or amended application and proof of the publication of the public notice as required by subsection 4 of NRS 704.870 (NAC 703.423(5)).

The proof of publication is attached in **Attachment F**.

II.6 State Clearinghouse

6. Proof that a copy of the application or amended application has been submitted to the Nevada State Clearinghouse within the Department of Administration to enable agency review and comment (NAC 703.423(6)).

A copy of the certificate of service can be found in **Attachment G**.

II.7 Probable Effect on Environment

7. An explanation of the nature of the probable effect on the environment, including:

- (a) A reference to any studies, if applicable (NAC 703.423(7)(a)):

See **Attachment C** (Limited Environmental Statement).

- (b) An environmental statement that includes (NAC 703.423(7)(b)):

- (1) The name, qualifications, professions and contact information of each person with primary responsibility for the preparation of the environmental statement (NAC 703.423(7)(b)(1)):

Dow Yang, P.E.
Project Environmental Engineer/Hydrogeologist
Sunrise Engineering, Inc.
12227 South Business Park Drive, Suite 220
Draper, Utah 84020

- (2) The name, qualifications, professions and contact information of each person who has provided comments or input in the preparation of the environmental statement (NAC 703.423(7)(b)(2)):

Dow Yang, P.E.
Project Environmental Engineer/Hydrogeologist
Sunrise Engineering, Inc.
12227 South Business Park Drive, Suite 220
Draper, Utah 84020

Steve Hansen, P.E.
Project Manager
Sunrise Engineering, Inc.
12227 South Business Park Drive, Suite 220
Draper, Utah 84020

Derek Anderson, P.E.
Environmental/Energy Manager
Sunrise Engineering, Inc.
12227 South Business Park Drive, Suite 220
Draper, Utah 84020

Kevin Brown, P.E.
Salt Lake Municipal Service Center Manager
Sunrise Engineering, Inc.
12227 South Business Park Drive, Suite 220
Draper, Utah 84020

- (3) A bibliography of materials used in the preparation of the environmental statement (NAC 703.423(7)(b)(3)):

See Section 4 (References) and Appendices A and B of **Attachment C** (Limited Environmental Statement).

- (4) A description of (NAC 703.423(7)(b)(4)):

- (I) The environmental characteristics of the project area existing at the time of the application or amended application is filed with the Commission:

The proposed arsenic removal facility is located approximately 450 feet south of State Highway 227. Well #1 and the well house are located at the site. The proposed treatment building will be located adjacent to and southwest of the well house. Most of the ground surface at the site is bare of any vegetation due to the surface disturbance that occurred during the construction of the well and the

well house at the site. To the north is a central parking area used by miners to park their vehicles so that they can take buses to the mines. All other surrounding areas, if not bare, are covered primarily with basin wild rye, black greasewood and some scattered sagebrush.

- (II) The environmental impacts of the construction and operation of the proposed utility facility will have on the project area before mitigation: and

The proposed construction activities will temporarily generate a small amount of fugitive dust and vehicle emissions (see Limited Environmental Statement in **Attachment C**).

- (III) The environmental impacts that the construction and operation of the proposed utility facility will have on the project area after mitigation:

No significant adverse environmental impacts are expected (see Limited Environmental Statement in **Attachment C**).

II.8 Reliable Utility Service

8. An explanation of the extent to which the proposed utility facility is needed to ensure reliable utility service to customers in this State, including:

- (a) If the proposed utility facility was approved in a resource plan or an amendment to a resource plan, a reference to the previous approval by the Commission (NAC 703.423(8)(a)):

Spring Creek Utilities Co. is submitting an amendment to the action plan to its Integrated Resource Plan in a separate filing (the action plan was previously approved in Docket No. 09-03003).

- (b) If the proposed utility facility was not approved in a resource plan or an amendment to a resource plan, a description of the extent to which the proposed utility facility will (NAC 703.423(8)(b)):

- (1) Provide utility service to customers in this State (NAC 703.423(8)(b)(1)):

With implementation of the proposed project, the existing water system will provide customers in the Mobile Home Section service area (Tract 200, NV5027) with drinking water that is compliant with the arsenic MCL as required by federal and state law.

- (2) Enhance the reliability of utility service in this State (NAC 703.423(8)(b)(2)):

The project will enhance the reliability of utility service in this State by bringing water supplies into compliance with the arsenic MCL as required by federal and state law.

- (3) Achieve interstate benefits by the proposed construction or modification of transmission facilities in this State, if applicable (NAC 703.423(8)(b)(3)):

Not Applicable.

II.9 Discussion of Need versus Effect on Environment

9. An explanation of how the need for the proposed utility facility as described in subsection eight balances any adverse effects on the environment as described in subsection seven (NAC 703.423(9)):

The proposed project will not cause any significant adverse environmental impact. The proposed project is needed to meet the new drinking water standards for arsenic set forth by the EPA and adopted by the Nevada Division of Environmental Protection.

II.10 Minimum Adverse Impact on Environment

10. An explanation of how the proposed utility facility represents the minimum adverse effect on the environment, including:

- (a) The state of available technology (NAC 703.423(10)(b)):

A number of treatment technologies are available for the removal of arsenic to meet the EPA drinking water standards. The Best Available Technology (BAT) list developed by the EPA includes activated alumina (AA), coagulation/filtration (C/F), coagulation/microfiltration (C/MF) iron based adsorption (IBA), ion exchange (IX), lime softening (LS), reverse osmosis (RO), electrodialysis (ED) and oxidation/filtration (O/F). Additional analysis is contained in the PER (**Attachment E**).

- (b) The nature of various alternatives (NAC 703.423(10)(b)):

All of the technologies listed above use one of three generalized removal approaches including: 1) adsorption by electro-potential charge, 2) precipitation, and 3) membrane technologies. Adsorption processes utilize a charged and stationary media to attract and bind arsenic. Technologies relying upon adsorption include AA, IBA and IX. Precipitation processes involve chemical addition to form suspended or colloidal particulates that can settle out of solution or can be filtered, including LS, O/F, C/F and C/MF. Membrane processes utilize membranes in one of two

manners including RO and ED. Additional analysis is contained in the PER (**Attachment E**).

- (c) The economics of various alternatives (NAC 703.423(10)(c)):

C/F is considered the best technology for the Tract 200 wells due to the pH value greater than 7 and the high silica content in the water. The high silica content in the water reduces the effectiveness of the adsorption technologies. The PER (**Attachment E**) shows C/F to be the best and most cost effective option based on a present worth analysis. In 2005, a pilot test was also completed in Tract 200 showing that C/F is a viable method for the Spring Creek Tract 200 water. Additional analysis is contained in the PER (**Attachment E**).

II.11 Facility Conforms to Local Laws

11. An explanation of how the location of the proposed utility facility conforms to applicable state and local laws and regulations, including a list of all permits, licenses and approvals required by federal, state and local statutes, regulations and ordinances. The explanation must include a list that indicates:

- (a) All permits, licenses and approvals the applicant has obtained, including copies thereof (NAC 703.423(11)(a)):

See table in part 11(b).

- (b) All permits, licenses and approvals the applicant is in the process of obtaining to commence construction of the proposed utility facility. The applicant must provide an estimated timeline for obtaining these permits, licenses and approvals (NAC 703.423(11)(b)):

Permit/Approval Required	Approving Agency and Contact information	Application Submittal Date	Date of Issuance
UEPA Permit to Construct	Nevada Public Utilities Commission 1150 East William St. Carson City, NV 89701-3109 Greg Meinzer Tel: 775-684-6179	To be filed	
Environmental Clearance	State Clearinghouse Nevada Department of Administration Division of Budget and Planning 209 East Musser Street, Room 200 Carson City, NV 89701-4298 Tel: 775-684-0222	To be filed	
Design Approval	Nevada Division of Environmental Protection 901 South Stewart St., Suite 4001 Carson City, NV 89701-5249 Tel: 775-687-4670	To be filed	
Building Permit	Elko County – Building Department 571 Idaho Street Elko, NV 89801 Tel: 775-738-6816	To be filed	

II.12 Public Interest

12. An explanation of how the proposed utility facility will serve the public interest, including:

- (a) The economic benefits that the proposed utility facility will bring to the applicant and this State (NAC 703.423(12)(a)):

The proposed project will benefit the applicant by providing community residents with drinking water compliant with the arsenic MCL. In addition, the installation of the facility will result in a temporary increase in construction activities in Spring Creek with its associated financial benefits to the community.

- (b) The nature of the probable effect on the environment in this State if the proposed utility facility is constructed (NAC 703.423(12)(b)):

The proposed project will have no significant adverse impact on the environment (see **Attachment C**).

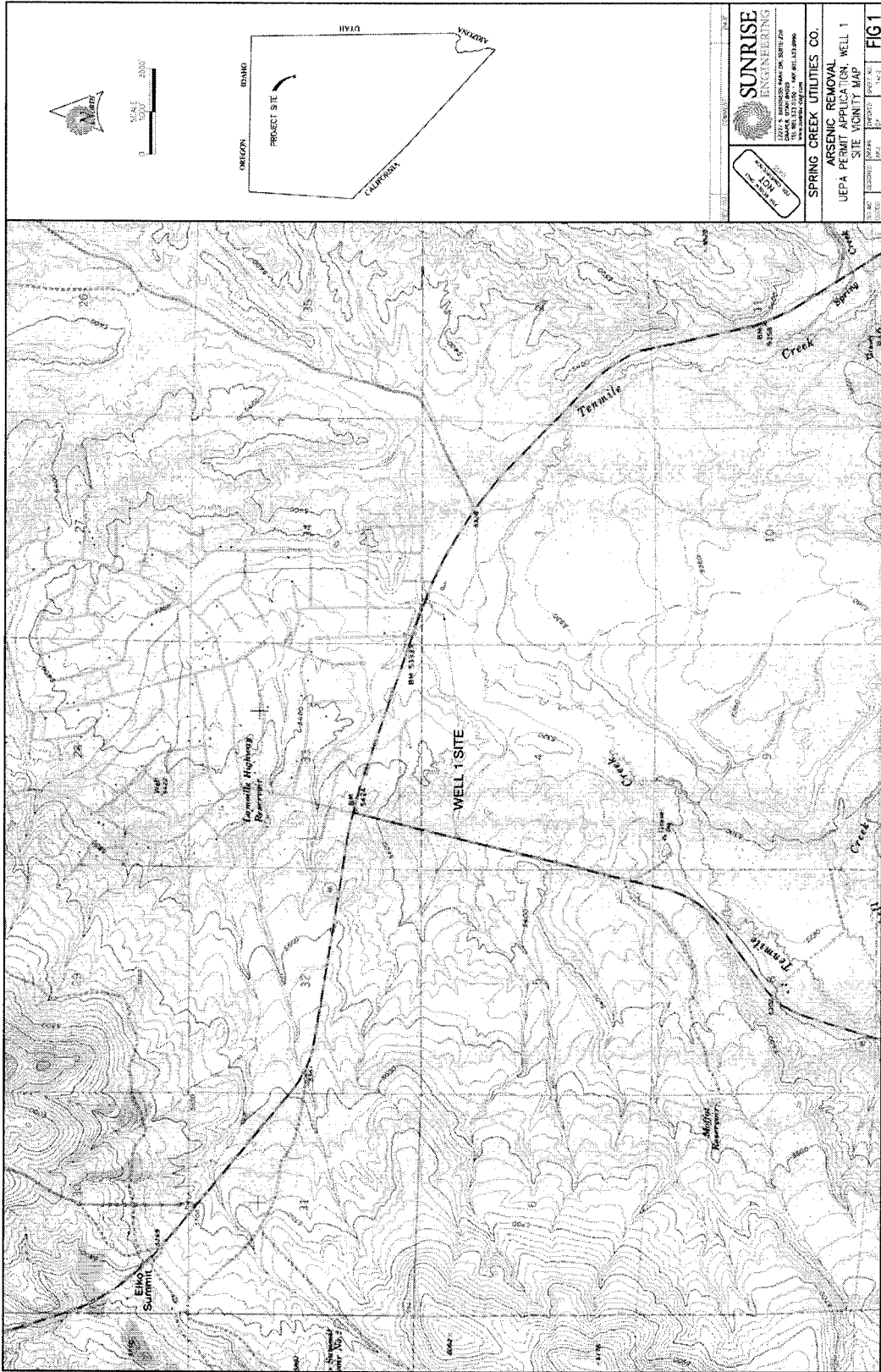
- (c) The nature of the probable effect on the public health, safety and welfare of the residents in this State if the proposed utility facility is constructed (NAC 703.423(12)(c)):

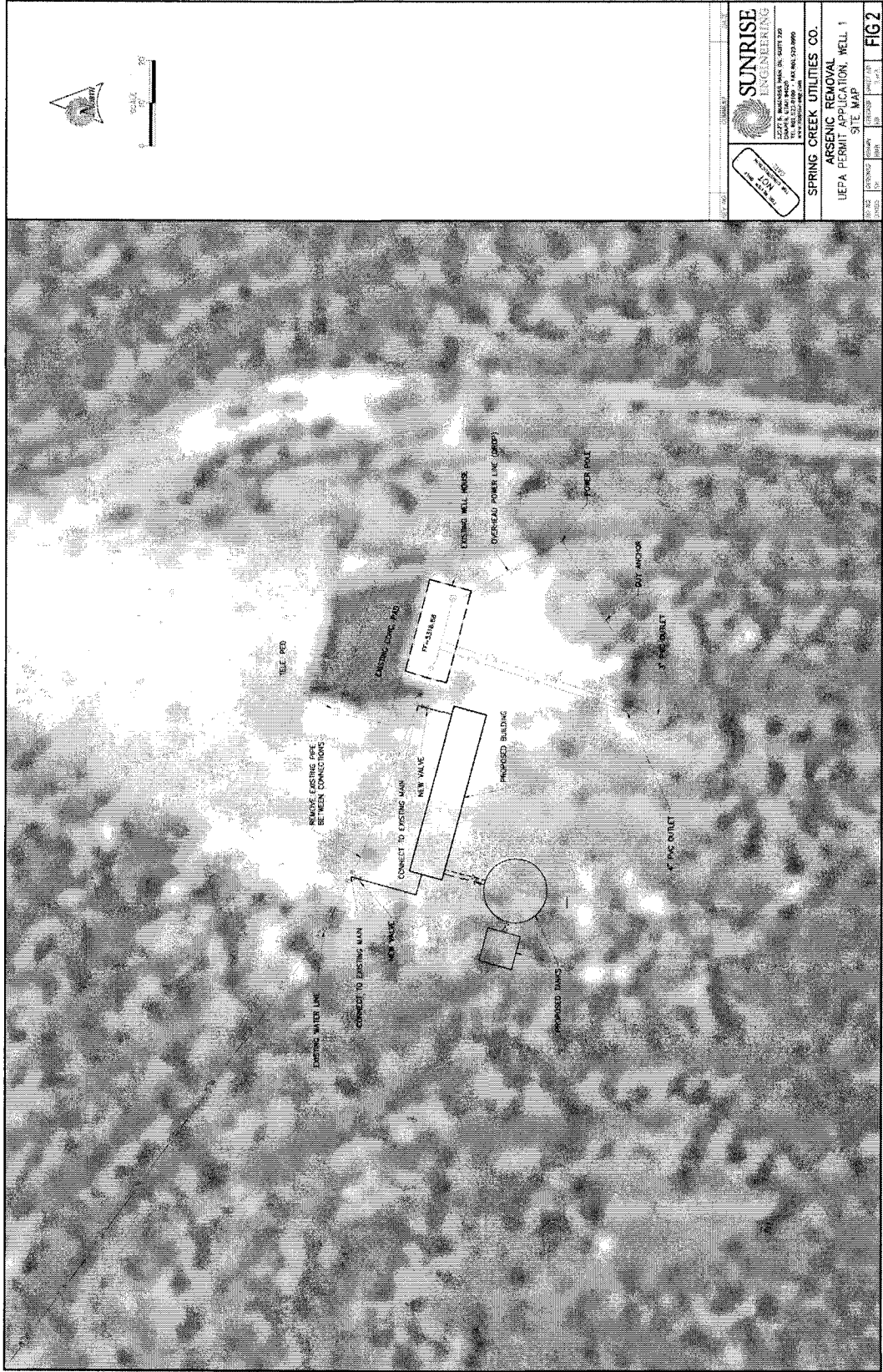
The proposed project will improve public health, safety and welfare of the community residents by providing drinking water that will meet the MCL for arsenic.

- (d) The interstate benefits expected to be achieved by the proposed electric transmission facility in this State, if applicable (NAC 703.423(12)(d)):

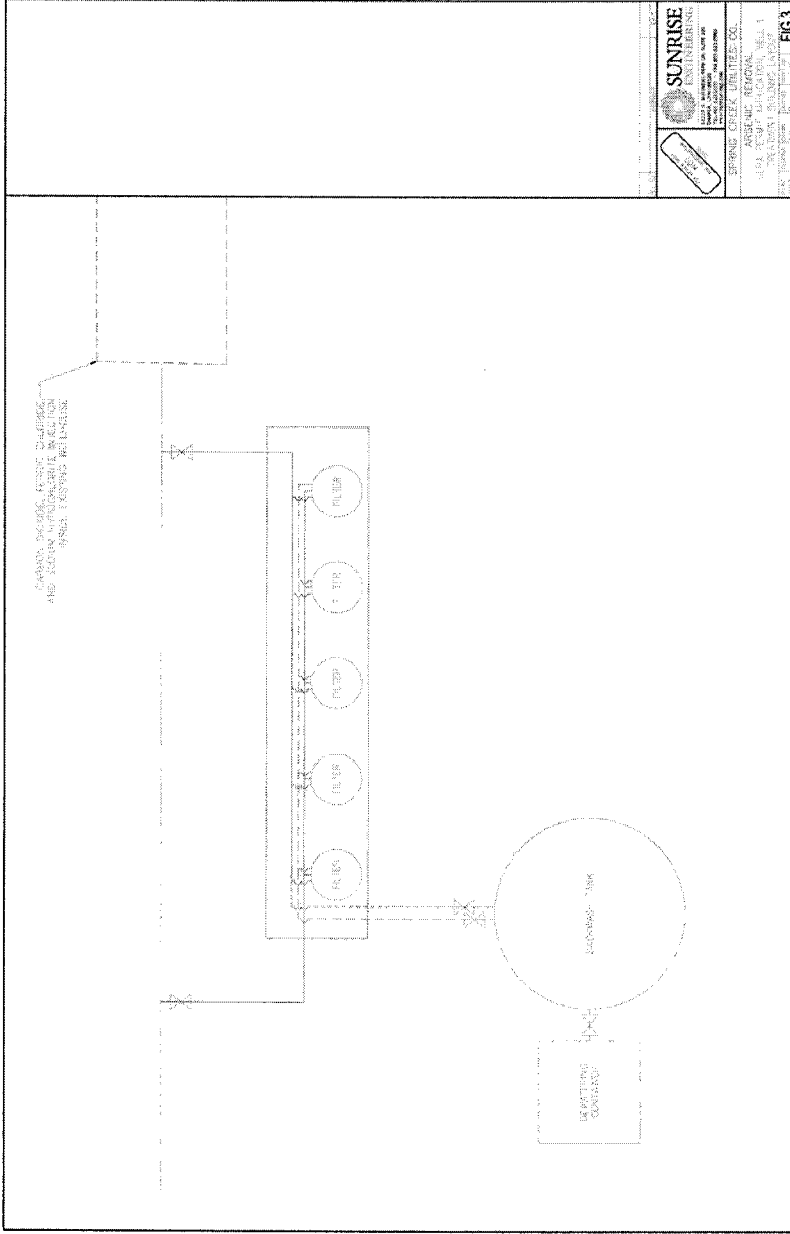
Not Applicable.

**Attachment A
Maps and Drawings**





Page A-3



SUNRISE
 ENGINEERING
 1000 S. WASHINGTON ST. SUITE 100
 SPRING BRIDGE, PA 19081
 TEL: 610-376-1000 FAX: 610-376-1001

SPRING BRIDGE, PA 19081

ARSENIC REMOVAL
 WELLS #1 & #2
 SCUC, 1000 S. WASHINGTON ST., SUITE 100
 SPRING BRIDGE, PA 19081

FIG 3

**Attachment B
Legal Description**

ELKO COUNTY

PARCEL NO. II (Tank Site No. Two)

A parcel of land lying in the SW¼ Section 29, T. 34 N., R. 56 E., M.D.B. & M., being all of Parcel "g" as shown upon the plat of Spring Creek Corporation Tract 202 filed in the office of the County Recorder of Elko County, Nevada, as File No. 68608, excepting therefrom that parcel deeded to Nevada Division of Forestry by Deed recorded in Book 182, page 573 in the office of the Elko County Recorder described as follows:

Beginning at a point being the southwest corner of said Parcel "T" from which the 1/4 section corner common to Sections 28 and 29, T. 34 N., R. 56 E., M.D.B. & M. bears S. 65° 57' 42" E., 647.03 feet.

thence N. 00° 17' 25" E., 170.00 feet along the westerly line of said "Parcel T";

thence S. 59° 17' 15" E., 202.94 feet;

thence S. 00° 17' 25" W., 170.00 feet to the southerly line of said "Parcel T";

thence N. 59° 17' 15" W., 202.94 feet along the southerly line of said "Parcel T" to the point of beginning, the parcel being conveyed containing 5.238 acres, more or less.

PARCEL NO. III (Tank Site No. Three)

All of Lot 33, Block 3, as shown upon the plat of Spring Creek Corporation Tract 103, filed in the office of the County Recorder of Elko County, Nevada, on May 6, 1971, as Document No. 60406, containing 2.135 acres, more or less.

PARCEL NO. IV (Tank Site No. Four)

All of Parcels "A" and "B", as shown upon the plat of Spring Creek Corporation Tract 101-A, filed in the office of the County Recorder of Elko County, Nevada, on August 12, 1971, as Document No. 64996, containing 4.077 acres, more or less.

PARCEL NO. V (Tank Site No. Five)

All of Parcel "EE", as shown upon the plat of Spring Creek Corporation Tract 403, filed in the office of the County Recorder of Elko County, Nevada, on December 7, 1972, as Document No. 72493, containing 4.027 acres, more or less.

PARCEL NO. VI (Well Site No. One)

All that parcel of land in Elko County, Nevada, lying within Section 3, Township 33 North, Range 56 East of the Mount Diablo Base and Meridian described as follows:

Commencing at the section corner common to Sections 33 and 34, Township 34 North, Range 56 East and Sections 3 and 4, Township 33 North, Range 56 East; thence S. 53° 30' 52" E., 529.23 feet to Corner No. 1, the TRUE POINT OF BEGINNING;

thence S. 68° 40' 00" E., 20.00 feet to Corner No. 2;

WUSHAN, HULL, MARFISI & COPEHAYER, LTD.
ATTORNEYS AND COUNSELLORS
330 GARD STREET
ELKO, NEVADA 89601

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ELKO COUNTY

thence N. 21° 20' 00" E., 115.00 feet to Corner No. 3;
thence N. 60° 00' 00" E., 373.84 feet to Corner No. 4,
a point on a non-tangent curve to the right having a
radius of 8,300.00 feet, a radial line from said point
bears S. 20° 21' 49" W.;
thence along the arc of said curve 77.58 feet through a
central angle of 00° 29' 53" to Corner No. 5;
thence on a nonradial line S. 60° 00' 00" W., 301.80
feet to Corner No. 6;
thence S. 21° 20' 00" W., 93.95 feet to Corner No. 7;
thence S. 68° 40' 00" E., 60.00 feet to Corner No. 8;
thence S. 21° 20' 00" W., 200.00 feet to Corner No. 9;
thence N. 68° 40' 00" W., 200.00 feet to Corner No. 10;
thence N. 21° 20' 00" E., 200.00 feet to Corner No. 1,
the TRUE POINT OF BEGINNING, containing 1.458 acres, more
or less.

TOGETHER with an easement 30 feet in width lying within
Sections 1 and 4, Township 33 North, Range 56 East, and
Section 33, Township 34 North, Range 56 East of the Mount
Diablo Base and Meridian, for the operation and maintenance
of existing water transmission lines; said strip of land
being 15.00 feet on either side of the following described
centerline:

Commencing at the northwest section corner of said Section 3,
Township 33 North, Range 56 East; thence S. 37° 48' 29" E.,
595.28 feet to Point No. 1, the TRUE POINT OF BEGINNING:

thence S. 89° 24' 57" W., 43.58 feet to Point No. 2;
thence N. 68° 33' 42" W., 308.16 feet to Point No. 3;
thence N. 68° 36' 18" W., 238.52 feet to Point No. 4;
thence N. 69° 02' 35" W., 220.14 feet to Point No. 5;
thence N. 62° 41' 34" W., 212.61 feet to Point No. 6;
thence N. 32° 08' 10" E., 157.45 feet to Point No. 7;
thence N. 07° 50' 29" W., 275.69 feet to Point No. 8;
thence N. 12° 48' 07" W., 38.73 feet to Point No. 9, the
POINT OF ENDING, from which the northeast corner of Lot 14,
Block 2, as shown upon the plat of Spring Creek Corporation
Tract 201, filed in the office of the County Recorder of
Elko County, Nevada, as Document No. 63718, bears N. 70° 40'
00" W., 1,231.88 feet.

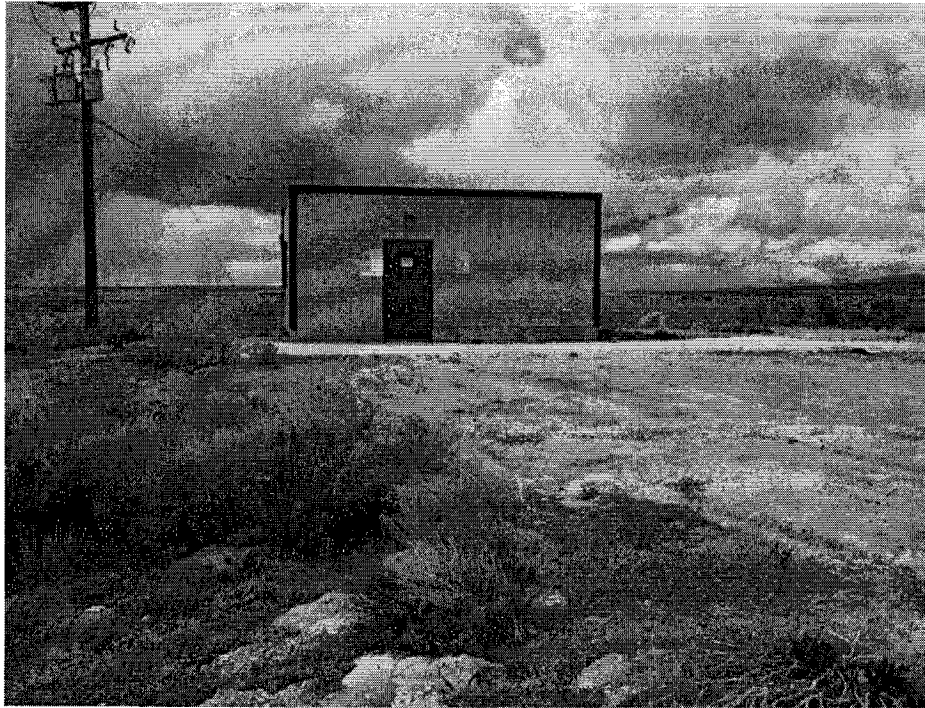
TOGETHER with an easement 10 feet in width lying within
Section 33, Township 34 North, Range 56 East of the Mount
Diablo Base and Meridian, for the operation and maintenance
of existing water transmission lines; said strip of land
being 15.00 feet on either side of the following described
centerline:

VAUSEMAN, HULL, MARSH & COPPINHAVER, LTD.
ATTORNEYS AT LAW
222 BANK STREET
ELKO, NEVADA 89601

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Attachment C
Limited Environmental Statement



LIMITED ENVIRONMENTAL STATEMENT

**Arsenic Removal Facility
Well #1**

Prepared for:

**Spring Creek Utilities Co.
285 Spring Creek Parkway
Spring Creek, NV 89815**

Prepared by:

**Sunrise Engineering, Inc.
12227 South Business Park Drive
Suite 220
Draper, Utah 84020
Tel: 801.523.0100
Fax: 801.523.0990**

June 21, 2011

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LIMITED ENVIRONMENTAL STATEMENT
Spring Creek Utilities Co. Arsenic Removal Facility at Well #1

1 INTRODUCTION

This limited environmental statement is prepared to support the application of a permit from the Nevada Public Utilities Commission under the Utilities Environmental Protection Act (UEPA) for a water treatment facility proposed by Spring Creek Utilities Co. at Well #1. The proposed project will not involve any federal action.

1.1 Background

Spring Creek Utilities Co. owns and operates two independent public water systems: Spring Creek Mobile Home Section (Tract 200, NV5027) and Spring Creek Housing Section (Tracts 100, 300, and 400, NV0036) for the community of Spring Creek located approximately 10 miles southeast of Elko, Nevada.

The water system for the Mobile Home Section (Tract 200, NV5027) is serviced by three wells:

Well #1 - 350 gallons per minute (gpm),
Well #3 - 750 gpm, and
Well #11 - 800 gpm.

Each of the wells produces groundwater with arsenic concentrations above 0.02 parts per million (ppm) or milligrams per liter (mg/l).

There are four water storage tanks:

Twin Tank A - 250,000-gallons,
Twin Tank B - 500,000-gallons,
High Zone Tank - 500,000-gallons, and
Karval Tank - 1,000,000-gallons.

The water system for the Housing Section (Tracts 100, 300 and 400, NV0036) is serviced by nine wells:

Well #4 - 730 gpm,
Well #5 - 750 gpm,
Well #7 - 150 to 450 gpm,
Well #8 - 500 gpm,
Well #9 - 600 gpm,
Well #10 - 380 gpm,
Well #12 - 550 gpm,

Well #14 - 230 gpm, and
Well #101 - 1,200 gpm.

There are six water storage tanks and one hydropneumatic tank with a total storage capacity of 3,042,000 gallons. The arsenic concentration of groundwater derived from the nine wells, when mixed, is below 0.01 mg/l and only Wells #4 and #10 at times produces water with arsenic concentrations of 0.012 and 0.013 mg/l, respectively (Rothberg, Tamburini & Winsor, Inc., 2007). Spring Creek Utilities Co. has been approved by the Nevada Division of Environmental Protection to blend the well waters and utilize an alternative monitoring program to maintain compliance with the new maximum contaminant level (MCL) of 0.01 mg/l for arsenic.

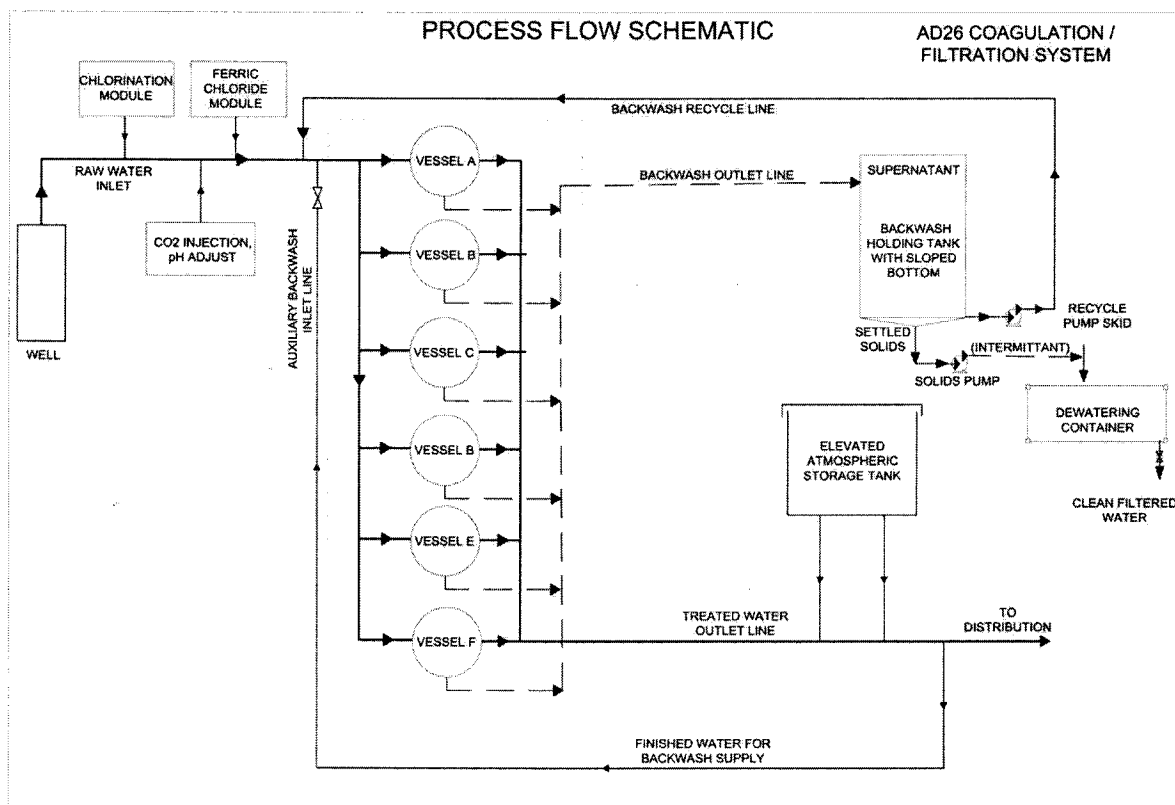
1.2 Purpose of and Need for Project

The U.S. Environmental Protection Agency (EPA) has revised the arsenic standard or MCL for drinking water from 0.05 mg/l to 0.01 mg/l to protect consumers served by public water systems from the effects of long-term, chronic exposure to arsenic (EPA, 2011).

The arsenic concentration in the groundwater from Well #1 is currently above 0.02 mg/l (Rothberg, Tamburini & Winsor, Inc., 2007). To be in compliance with the MCL of 0.01 mg/l for arsenic, Spring Creek Utilities Co. has proposed an arsenic removal facility at Well #1, as well as two other wells in the water system, by using the coagulation/filtration (C/F) technology to reduce the arsenic concentration in the water from the well to a level below 0.01 mg/l.

1.3 Proposed Project

C/F is considered the best technology for the well due to the high silica content, pH value greater than 7 and the moderate to moderately low arsenic level in the water. Moreover, C/F is the most cost-effective technology for the well based on a preliminary engineering report prepared by Sunrise. C/F involves both chemical and physical stages to remove arsenic. Ferric salts are added to the untreated (raw) water. The metals hydrolyze to form iron hydroxides that subsequently bind to other iron hydroxides to form particulate flocs. During this process, arsenic binds to, or is entrapped in, the growing particulates and is thereby removed from solution. The arsenic-containing particulates are then removed from the water through filtration. Sludge containing arsenic from the filtration process is backwashed to a tank where most of the water is recycled and returned to the start of the treatment process. The sludge with some water is settled to the bottom of the tank and collected in a container, dewatered and trucked once per month to a landfill for disposal. There will be no fluid discharge to the surface or subsurface. The sludge will meet Toxicity Characteristic Leaching Procedure (TCLP) requirements for disposal in a landfill. The following schematic chart illustrates the process:



A structure with an area of approximately 350 square feet will be constructed at the well site to house pre-treatment equipment, C/F treatment equipment, associated piping, plumbing, and monitoring components. A 15,000-gallon backwash tank and sludge container will be adjacent to the treatment facilities. In addition, approximately 150 feet of 8-inch piping and associated valves and other plumbing components will be installed to connect the treatment facility to existing water infrastructure. Security fencing will also be provided. There will be no office facilities or restroom facilities in the structure.

After construction of the proposed project is completed, the ground surface will be restored to the original surface contour as much as practically possible.

1.4 Authorizing Actions, Permits and Licenses

Implementation of the proposed project will require a number of authorizations or permits from state agencies and local government as follows:

- UEPA permit from the State of Nevada Public Utilities Commission
- Environmental clearance from the State Clearinghouse
- Approval of system design by the Nevada Division of Environmental Protection
- Building permit from the Elko County Building Department

2 AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

This section is organized by the resource topic, with each resource discussion addressing the existing environmental setting as it relates to the proposed project.

2.1 Land Use

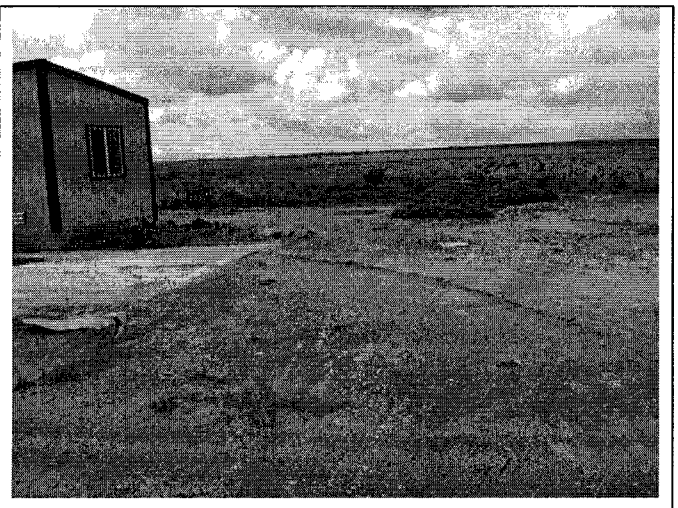
2.1.1 General Land Use

A NEPA Screening Package was obtained from Environmental Data Resources Inc. (**Appendix A**) and a review of the information contained in the package indicates that the land that will be used for the proposed treatment facility consists of vacant land in private holdings. Construction of the proposed project is not in conflict with any land use plan or ordinance of Elko County since there is an onsite well house.

A site visit was conducted on May 24, 2011 and photographs of the proposed construction areas were taken. Photographs 1 and 2 cover the site and the well house.



Photograph 1. View Looking East to Well House & Proposed Treatment Building Location



Photograph 2. View Looking South to Proposed Treatment Building Location

The proposed treatment building will be constructed on land that had previously been disturbed during construction of the well and the associated well house. Thus, construction of the proposed treatment facility will not result in any new surface disturbance.

2.1.2 Important Farmland, Prime Rangeland and Forest Land

Prime farmland is land best suited for producing food, feed, forage, fiber and oilseed crops as delineated by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). An area defined to be prime farmland must be available to produce these crops and have been actively farmed within the previous 5 years and in some instances qualifies only if irrigated.

The proposed treatment facility site has not been used for farming for many years and therefore is not qualified for important farmland.

The definition of Prime Rangeland is found in USDA Departmental Regulation 9500-3. DR 9500-3 is included in Rural Development Instruction 1940-G as Exhibit A. Prime Rangeland is defined as rangeland that, because of its soil, climate, topography, vegetation, and location, has the highest quality or value for grazing animals. The potential natural vegetation is palatable, nutritious, and available to the kinds of herbivores common to the area. Because the site has been disturbed by the construction of the well, it does not qualify as Prime Rangeland.

Since the land is in private holdings and there are no trees on the site, the site is not qualified to be forest land. Additionally, the site is not located in any national forest (see **Appendix A**).

2.1.3 Formally Classified Lands

None of the following Formally Classified Lands will be affected by the proposed project:

- National parks and monuments
- National natural landmarks
- National battlefield park sites
- National historic sites and parks
- Wilderness areas
- Wild, scenic and recreational rivers
- Wildlife refuges
- National seashores, lake shores and trails.
- State Parks

2.2 Floodplains

A floodplain is flat or nearly flat land adjacent to a stream or river that experiences occasional or periodic flooding. It includes the floodway, which consists of the stream channel and adjacent areas that carry flood flows, and the flood fringe, which are areas covered by the flood, but which do not experience a strong current. A 100-year flood is calculated to be the level of flood water expected to be equaled or exceeded every 100 years on average. The 100-year flood is more accurately referred to as the 1% flood, since it is a flood that has a 1% chance of being equaled or exceeded in any single year. Based on the expected flood water level, a predicted area of inundation can be mapped.

The NEPA Screening Package (**Appendix A**) indicates that the proposed treatment facility site is not located within a floodplain.

2.3 Wetlands

Wetlands are defined as areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 Code of Federal

Regulations [CFR] 328.3[b], 40 CFR 230.3). For a wetland to qualify as jurisdictional by the U.S. Army Corps of Engineers (ACOE) and therefore be subject to regulation under Section 404 of the Clean Water Act, the site must support a prevalence of hydrophytic vegetation, hydric soils and wetland hydrology. Other waters of the United States are sites that typically lack one or more of the three indicators.

The NEPA Screening Package (Appendix A) indicates that the proposed treatment facility site is not within a wetland.

2.4 Cultural Resources

An experienced archaeologist from Bighorn Archaeological Consultants, LLC conducted a cultural resources survey at the proposed project site. A record search, preliminary cultural resources assessment, and pedestrian survey were completed. No cultural resources were identified to be located on the project site. A Cultural Resources Inventory Negative Report was prepared and is attached in **Appendix B**.

To avoid any potential significant adverse impact on cultural resources, the following environmental commitment shall be implemented:

During trenching and/or other related earth excavation in the construction phase of the project, it shall be the responsibility of the Contractor and Spring Creek Utilities Co., that in the event of discovery of anything with cultural, historical or archaeological properties, to immediately report such discovery to the Nevada State Historic Preservation Office (SHPO) at 775-684-3448 and Spring Creek Utilities Co. at 775-753-6889. Excavation activities shall be immediately halted temporarily pending the notification process and further directions issued by the SHPO.

2.5 Biological Resources

According to Nevada's Protected Species by County updated by the U.S. Fish and Wildlife Service, or USFWS, (2011) on March 7, 2011, there are seven federally listed species that may occur in Elko County, Nevada, as summarized in the table below:

Species Name	Scientific Name	Status
Amphibian		
Columbia spotted frog	<i>Rana luteiventris</i>	Candidate
Birds		
Greater sage-grouse	<i>Centrocercus urophasianus</i>	Candidate
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Candidate
Fish		
Bull trout (Jarbidge River)	<i>Salvelinus confluentus</i>	Threatened
Clover Valley speckled dace	<i>Rhinichthys osculus oligoporus</i>	Endangered
Independence Valley speckled dace	<i>Rhinichthys osculus lethoporus</i>	Endangered
Lahontan cutthroat trout	<i>Oncorhynchus clarkia henshawi</i>	Threatened
Plants		
Goose Creek Milkvetch	<i>Astragalus Anserinus</i>	Candidate

2.5.1 Columbia Spotted Frog

The Columbia spotted frog, like most other frogs, is highly aquatic and lives in or near permanent bodies of water, including lakes, ponds, slow-moving streams and marshes (Wikipedia, 2011). It prefers areas with thick algae and vegetation for cover, but may also hide under decaying vegetation. It is most often found in non-woody wetland plant communities (species such as sedges, rushes and grasses). The project site and the surrounding area do not have suitable habitat for the Columbia spotted frog and thus the proposed project will not have any impact on this candidate species.

2.5.2 Yellow-billed Cuckoos

Yellow-billed cuckoos prefer mature cottonwood-willow stands but utilize willows and cottonwoods mixed with tall mesquites to a lesser extent (California Partners in Flight, 2011). The project site and the surrounding area do not have suitable habitat for the yellow-billed cuckoo and thus the proposed project will not have any impact on this candidate species.

2.5.3 Greater Sage-grouse

Greater sage-grouse are sagebrush obligates; they require sagebrush ecosystems for each stage of their life (Tetra Tech EC, Inc., 2010). During the site inspection conducted on May 24, 2011, no sagebrush was observed on the proposed project site. Most of the site is bare due to surface disturbance that occurred when the well and well house were constructed (see Photographs 1 and 2). The surrounding areas, if not bare, are covered primarily with basin wild rye, black greasewood and some scattered sagebrush. No Greater sage-grouse were observed on and surrounding the proposed project site. As a result, it is highly unlikely that the proposed project will significantly adversely impact the Greater sage-grouse.

2.5.4 Fishes

All fish species need water. Therefore, due to absence of suitable habitat, it is not likely that the proposed project will have any impact on any fish species.

2.5.5 Goose Creek Milkvetch

A site visit was conducted on May 24, 2011, no Goose Creek Milkvetch was observed to be present at the site and surrounding area.

2.5.6 Summary and Environmental Commitment

Based on the analysis in Sections 2.5.1 through 2.5.5, the proposed project will not have any significant impact on federally listed species. Nonetheless, to avoid potential significant impact on biological resources, the following environmental commitment shall be implemented:

During construction activities, any evidence of the presence of an endangered and/or threatened and/or candidate species or their critical habitat should be brought to the attention of Spring Creek

Utilities Co. Construction shall be temporarily halted pending the notification process and further directions issued by Spring Creek Utilities Co. after consultation with the USFWS.

2.6 Water Quality

The proposed project is to improve drinking water quality by removal of arsenic to reduce the arsenic concentration from above 0.02 mg/l to a level below the current EPA MCL of 0.01 mg/l. The proposed project will not require the modification of the existing water right and therefore the proposed project will not modify existing water usage patterns. Therefore, the proposed treatment facility will have a beneficial impact on water quality.

2.7 Socio-Economic/Environmental Justice

The proposed project will not have any effect of discrimination against anyone based on civil rights. The proposed project will not induce population growth. Instead, the proposed project is to improve the water quality to meet the current EPA water quality requirements. Therefore, the proposed project would not result in any significant adverse impacts associated with socio-economic/environmental justice.

2.8 Air Quality

The proposed construction activities will temporarily generate fugitive dust and vehicle emissions. The quantities generated by the project will be relatively small and will affect only a localized area for a brief period. No violations of air quality standards will occur during construction. Therefore, the impact associated with fugitive dust and vehicle emissions is considered less than significant. During the construction period, watering will be conducted to minimize fugitive dust.

2.9 Transportation

The proposed construction site is in an unincorporated area. Construction activities are not expected to cause any road closure because no construction activity will occur on or near any paved road or highway.

2.10 Noise

Noise is a fundamental component of the human environment. High noise levels can be detrimental to the health and well being of human and wildlife receptors located near the source of an obtrusive noise. While the physical intensity of a sound can be easily measured, the effect of a sound on a receptor is a complex and intangible value that must consider the combination of its intensity, duration and time of the day. Louder noises are perceived as acceptable if they last for short periods of time. Noise, which may be acceptable during the day, can be annoying or intolerable during evening or nighttime periods.

Construction of the proposed project will not generate much noise during the process. The noise impact will not be significant and will disappear after construction is completed. Construction activities for the proposed project will be limited to normal daylight working hours and exclude

weekends and holidays to minimize the effects of construction-related noise levels. Standard noise control devices will be required on all construction equipment.

3 CONCLUSION

Based on the above analysis, it is concluded that the project will not have any significant impact on human health and the environment.

4 REFERENCES

Rothberg, Tamburini & Winsor, Inc. 2007. Preliminary Engineering report – Arsenic Compliance Evaluation.

Tetra Tech EC, Inc. 2010, Draft Greater Sage-Grouse Conservation Plan for the China Mountain Wind Project.

U.S. Environmental Protection Agency. 2011. <http://water.epa.gov/lawsregs/rulesregs/sdwa/arsenic/index.cfm>.

U.S. Fish and Wildlife Service, 2011. http://www.fws.gov/nevada/protected_species/species_by_county.html.

Wikipedia. 2011. http://en.wikipedia.org/wiki/Columbia_Spotted_Frog.

California Partners in Flight. 2011. http://www.prbo.org/calpif/htmldocs/species/riparian/yellow-billed_cuckoo.htm.

Appendix A
NEPA Screening Report

Well #1

SEC 3 TWP 33N RGE 56E MDB&M
Spring Creek, NV 89815

Inquiry Number: 3085575.1s
June 02, 2011

EDR NEPACheck®



440 Wheelers Farms Road
Milford, CT 06451
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
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with any questions or comments.

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EDR NEPACheck® DESCRIPTION

The National Environmental Policy Act of 1969 (NEPA) requires that Federal agencies include in their decision-making processes appropriate and careful consideration of all environmental effects and actions, analyze potential environmental effects of proposed actions and their alternatives for public understanding and scrutiny, avoid or minimize adverse effects of proposed actions, and restore and enhance environmental quality as much as possible.

The EDR NEPACheck provides information which may be used, in conjunction with additional research, to determine whether a proposed site or action will have significant environmental effect.

The report provides maps and data for the following items (where available). Search results are provided in the Map Findings Summary on page 2 of this report.

Section	Regulation
Natural Areas Map	
• Federal Lands Data:	
- Officially designated wilderness areas	47 CFR 1.1307(1)
- Officially designated wildlife preserves, sanctuaries and refuges	47 CFR 1.1307(2)
- Wild and scenic rivers	40 CFR 6.302(e)
- Fish and Wildlife	40 CFR 6.302
• Threatened or Endangered Species, Fish and Wildlife, Critical Habitat Data (where available)	47 CFR 1.1307(3); 40 CFR 6.302
Historic Sites Map	
• National Register of Historic Places	47 CFR 1.1307(4); 40 CFR 6.302
• State Historic Places (where available)	
• Indian Reservations	
Flood Plain Map	
• National Flood Plain Data (where available)	47 CFR 1.1307(6); 40 CFR 6.302
Wetlands Map	
• National Wetlands Inventory Data (where available)	47 CFR 1.1307(7); 40 CFR 6.302
FCC & FAA Map	
• FCC antenna/tower sites, FAA Markings and Obstructions, Airports, Topographic gradient	47 CFR 1.1307(8)
Key Contacts and Government Records Searched	

MAP FINDINGS SUMMARY

The databases searched in this report are listed below. Database descriptions and other agency contact information is contained in the Key Contacts and Government Records Searched section on page 20 of this report.

TARGET PROPERTY ADDRESS

WELL #1
SEC 3 TWP 33N RGE 56E MDB&M
SPRING CREEK, NV 89815

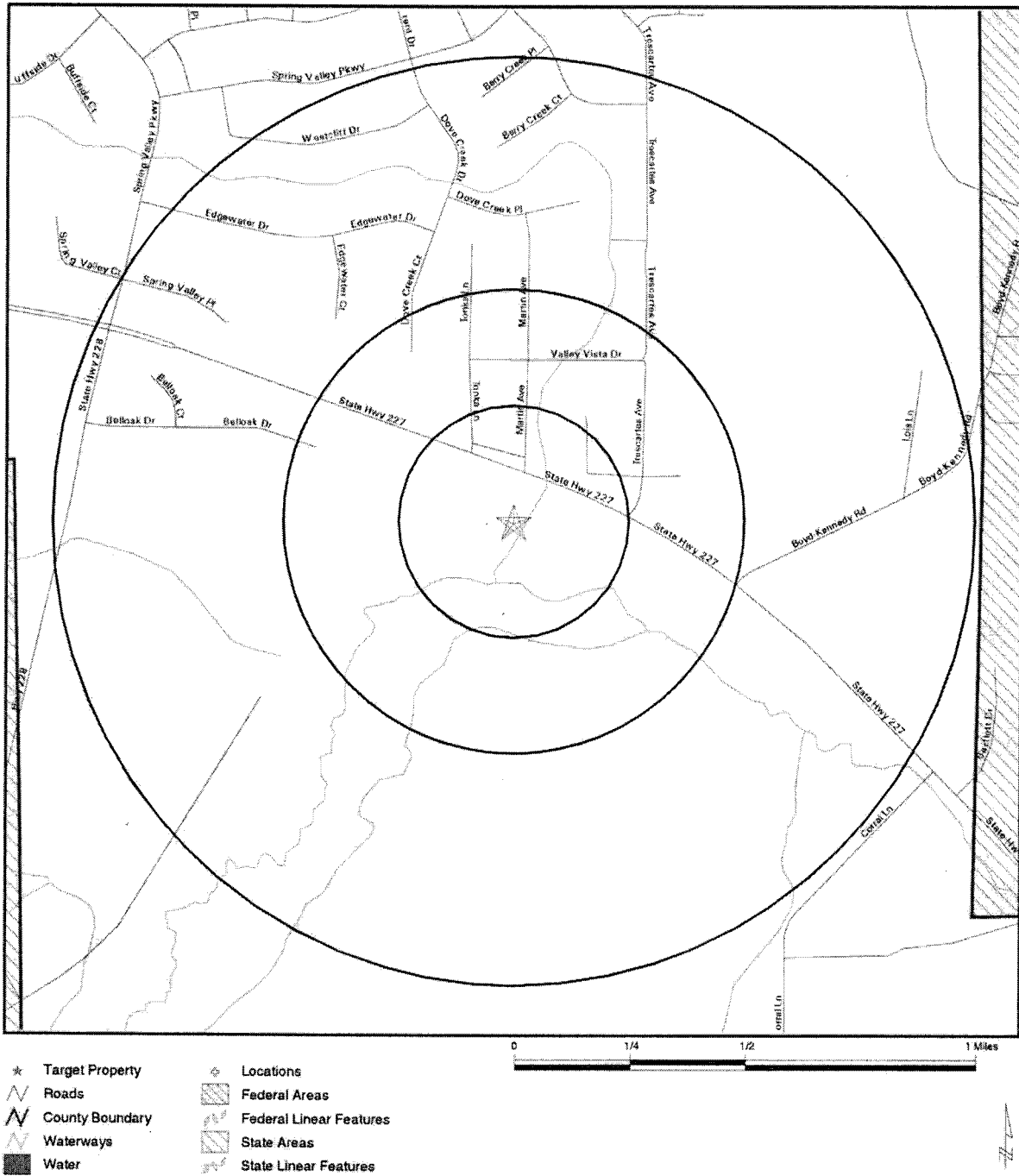
Inquiry #: 3085575.1s
Date: 6/2/11

TARGET PROPERTY COORDINATES

Latitude (North): 40.779499 - 40° 46' 46.2"
Longitude (West): 115.659401 - 115° 39' 33.8"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 613126.0
UTM Y (Meters): 4514933.0

Applicable Regulation from 47 CFR/FCC Checklist	Database	Search Distance (Miles)	Within Search	Within 1/8 Mile
<u>NATURAL AREAS MAP</u>				
1.1307a (1) Officially Designated Wilderness Area	US Federal Lands	1.00	NO	NO
1.1307a (2) Officially Designated Wildlife Preserve	US Federal Lands	1.00	NO	NO
1.1307a (3) Threatened or Endangered Species or Critical Habitat	County Endangered Species	County	YES	N/A
<u>HISTORIC SITES MAP</u>				
1.1307a (4) Listed or eligible for National Register	National Register of Hist. Pla	1.00	NO	NO
1.1307a (4) Listed or eligible for National Register	NV Historic Sites	1.00	NO	NO
	Indian Reservation	1.00	NO	NO
<u>FLOODPLAIN MAP</u>				
1.1307 (6) Located in a Flood Plain	FLOODPLAIN	1.00	NO	NO
<u>WETLANDS MAP</u>				
1.1307 (7) Change in surface features (wetland fill)	NWI	1.00	YES	YES
<u>FCC & FAA SITES MAP</u>				
	Cellular	1.00	NO	NO
	4G Cellular	1.00	NO	NO
	Antenna Structure Registration	1.00	NO	NO
	Towers	1.00	NO	NO
	AM Antenna	1.00	NO	NO
	FM Antenna	1.00	NO	NO
	FAA DOF	1.00	NO	NO
	Airports	1.00	NO	---
	Power Lines	1.00	NO	---

Natural Areas Map



NATURAL AREAS MAP FINDINGS

Endangered Species Listed for: ELKO County, NV.

Source: EPA Endangered Species Protection Program Database

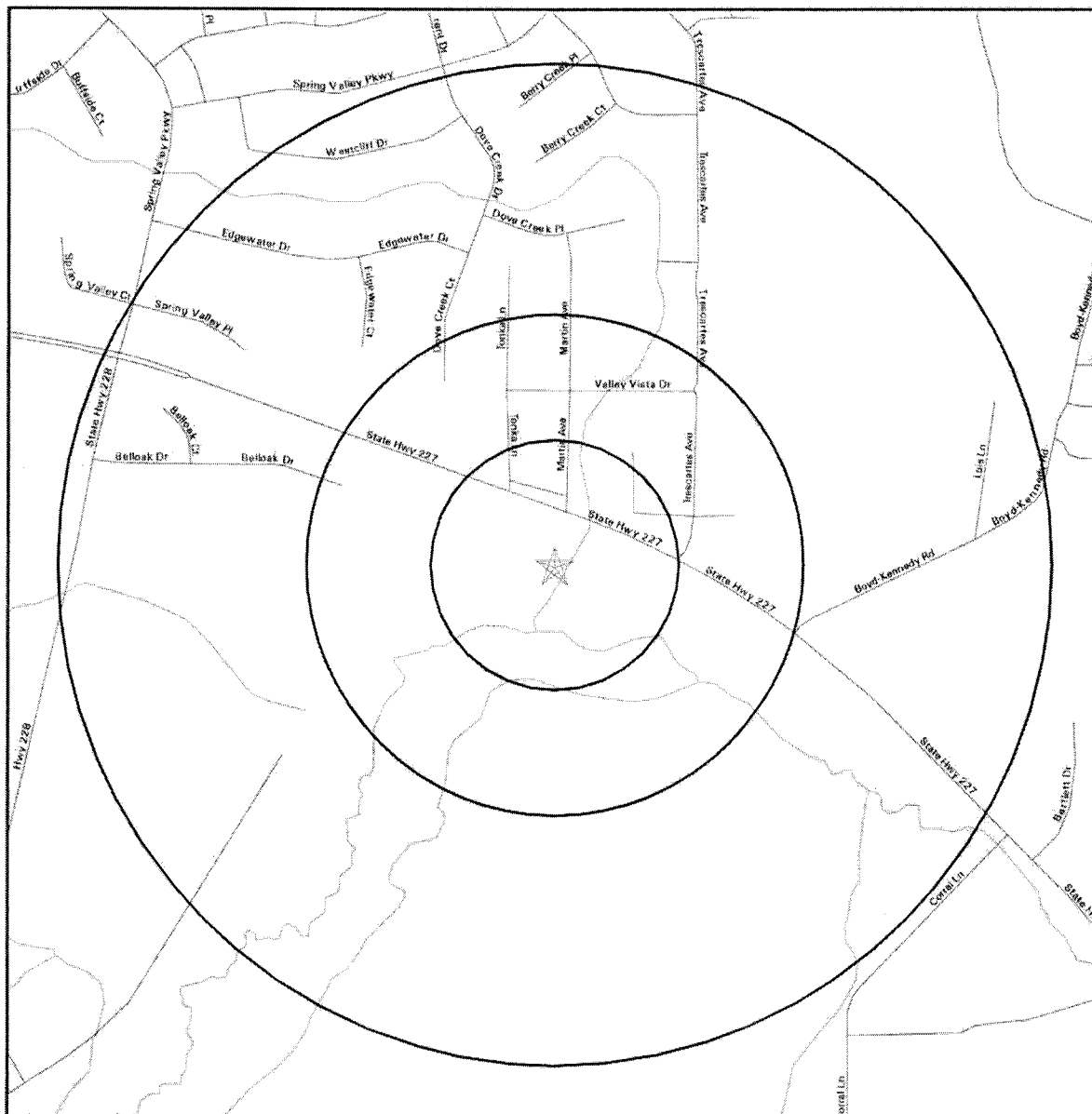
BIRD: EAGLE, BALD
FISH: TROUT, LAHONTAN CUTTHROAT
FISH: DACE, CLOVER VALLEY SPECKLED
FISH: DACE, INDEPENDENCE VALLEY SPECKLED

Map ID
Direction
Distance
Distance (ft.)

EDR ID
Database

No mapped sites were found in EDR's search of available government records within the search radius around the target property.

Historic Sites Map



- ★ Target Property
- Streets
- County Boundary
- Waterways
- Water
- ◆ Historic Sites
- ▨ Federal Historic Areas
- ▨ State Historic Areas
- ▨ US Indian Reservations
- Scenic Trail



HISTORIC SITES MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)

EDR ID
Database

No mapped sites were found in EDR's search of available government records within the search radius around the target property.

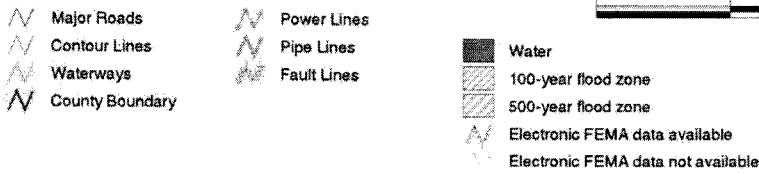
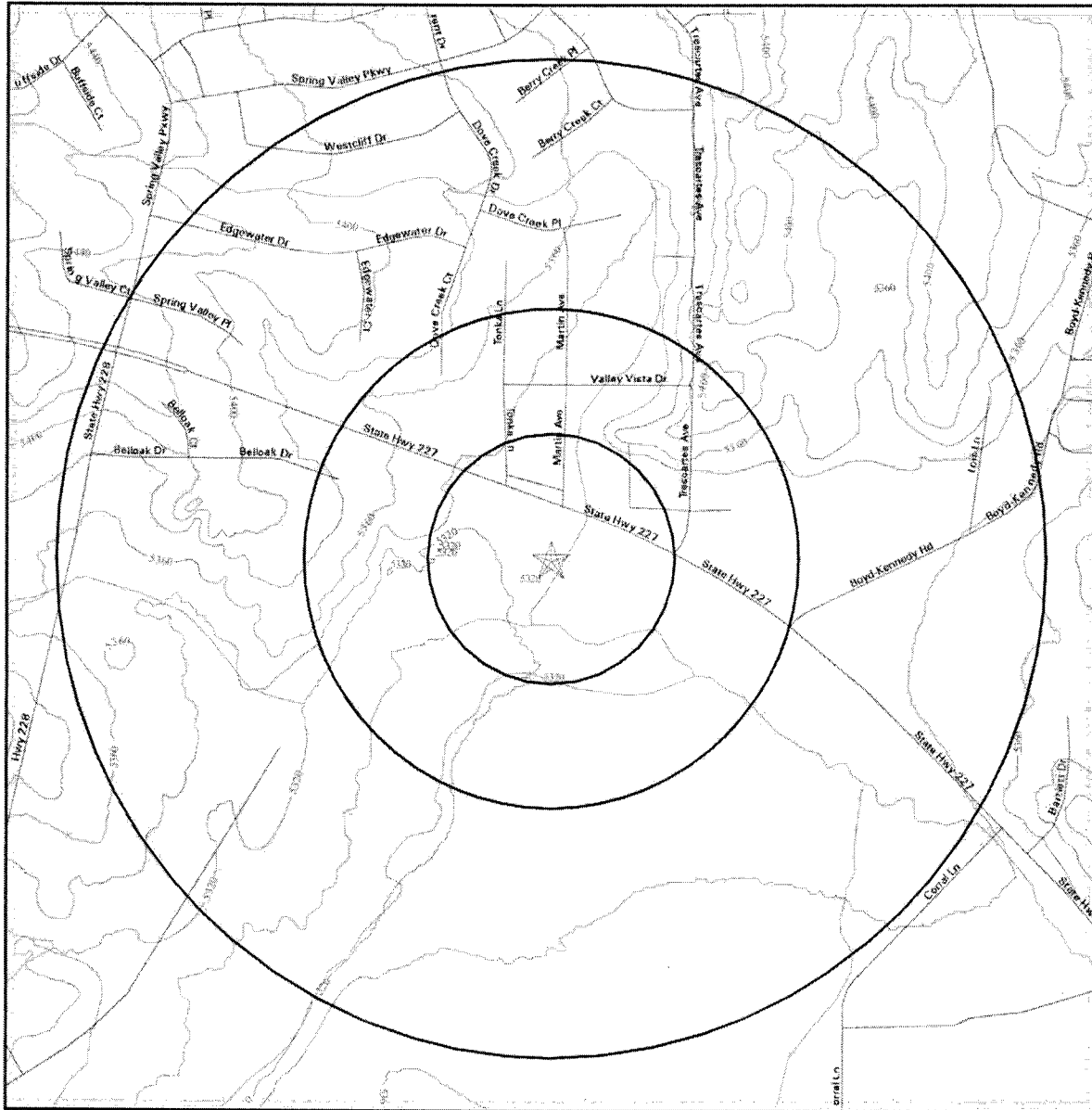
UNMAPPABLE HISTORIC SITES

Due to poor or inadequate address information, the following sites were not mapped:

Status
EDR ID
Database

No unmapped sites were found in EDR's search of available government records.

Flood Plain Map



FLOOD PLAIN MAP FINDINGS

Source: FEMA DFIRM Flood Data, FEMA Q3 Flood Data

County	FEMA flood data electronic coverage
ELKO, NV	NO
Flood Plain panel at target property:	None Reported
Additional Flood Plain panel(s) in search area:	None Reported

National Wetlands Inventory Map



- | | | |
|-----------------|-------------|-----------------------------------|
| Major Roads | Power Lines | Water |
| Contour Lines | Pipe Lines | National Wetland inventory |
| Waterways | Fault Lines | Electronic NWI data available |
| County Boundary | | Electronic NWI data not available |

WETLANDS MAP FINDINGS

Source: Fish and Wildlife Service NWI data

NWI hardcopy map at target property: Elko East

Additional NWI hardcopy map(s) in search area:
Not reported in source data

Map ID	Direction	Distance	Distance (ft.)	Code and Description*	Database
1	South	0-1/8 mi	377	PEM [P] Palustrine, [EM] Emergent Lat/Lon: 40.778473 / -115.659554	NWI

WETLANDS CLASSIFICATION SYSTEM

National Wetland Inventory Maps are produced by the U.S. Fish and Wildlife Service, a sub-department of the U.S. Department of the Interior. In 1974, the U.S. Fish and Wildlife Service developed a criteria for wetland classification with four long range objectives:

- to describe ecological units that have certain homogeneous natural attributes,
- to arrange these units in a system that will aid decisions about resource management,
- to furnish units for inventory and mapping, and
- to provide uniformity in concepts and terminology throughout the U.S.

High altitude infrared photographs, soil maps, topographic maps and site visits are the methods used to gather data for the productions of these maps. In the infrared photos, wetlands appear as different colors and these wetlands are then classified by type. Using a hierarchical classification, the maps identify wetland and deepwater habitats according to:

- system
- subsystem
- class
- subclass
- modifiers

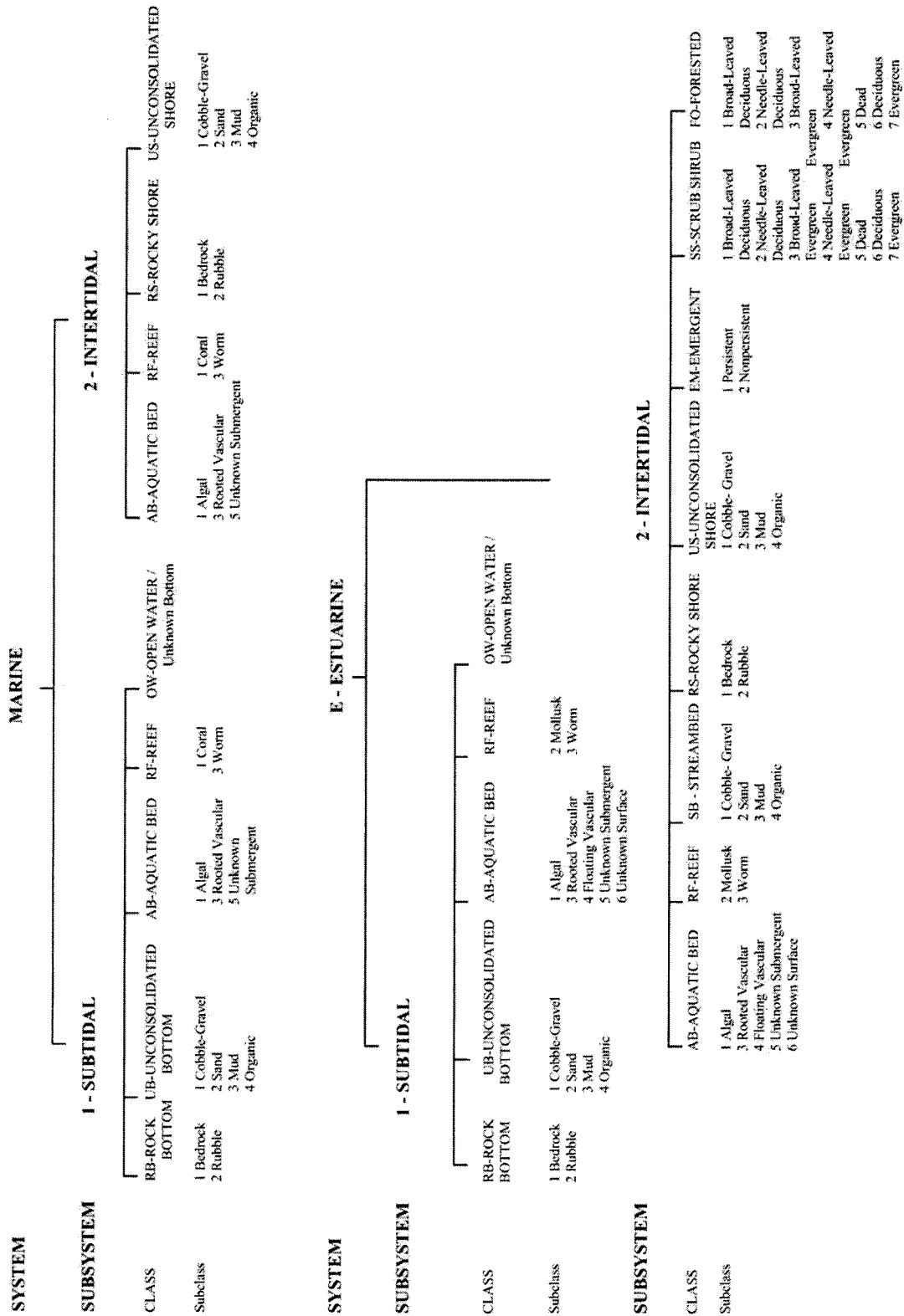
(as defined by Cowardin, et al. U.S. Fish and Wildlife Service FWS/OBS 79/31. 1979.)

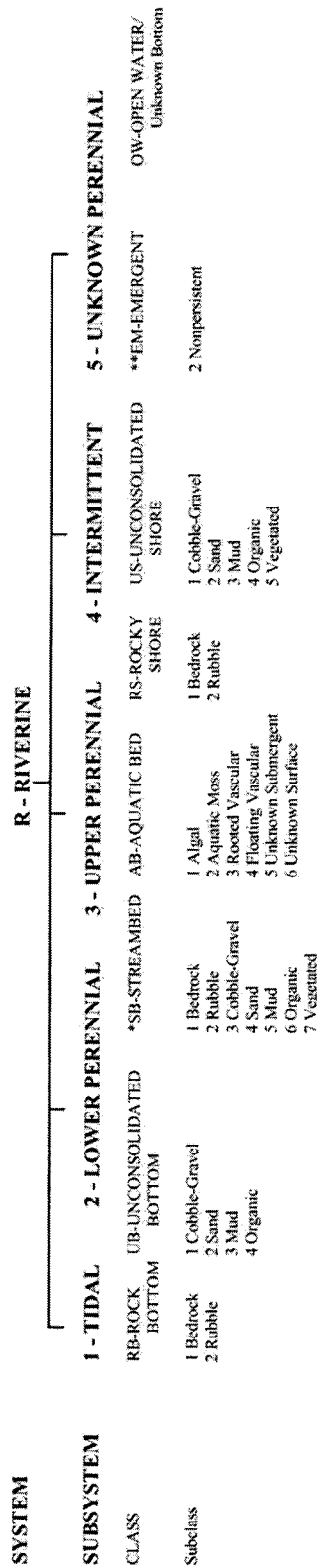
The classification system consists of five systems:

1. marine
2. estuarine
3. riverine
4. lacustrine
5. palustrine

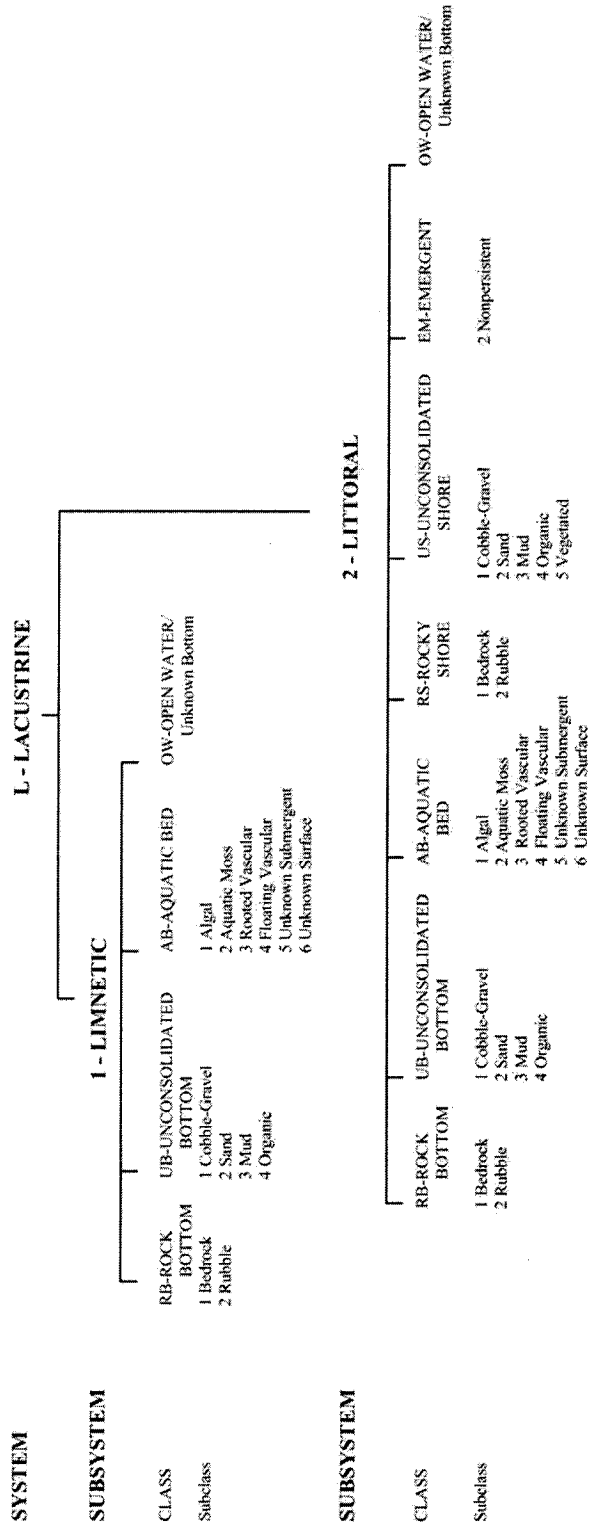
The marine system consists of deep water tidal habitats and adjacent tidal wetlands. The riverine system consists of all wetlands contained within a channel. The lacustrine systems includes all nontidal wetlands related to swamps, bogs & marshes. The estuarine system consists of deepwater tidal habitats and where ocean water is diluted by fresh water. The palustrine system includes nontidal wetlands dominated by trees and shrubs and where salinity is below .5% in tidal areas. All of these systems are divided in subsystems and then further divided into class.

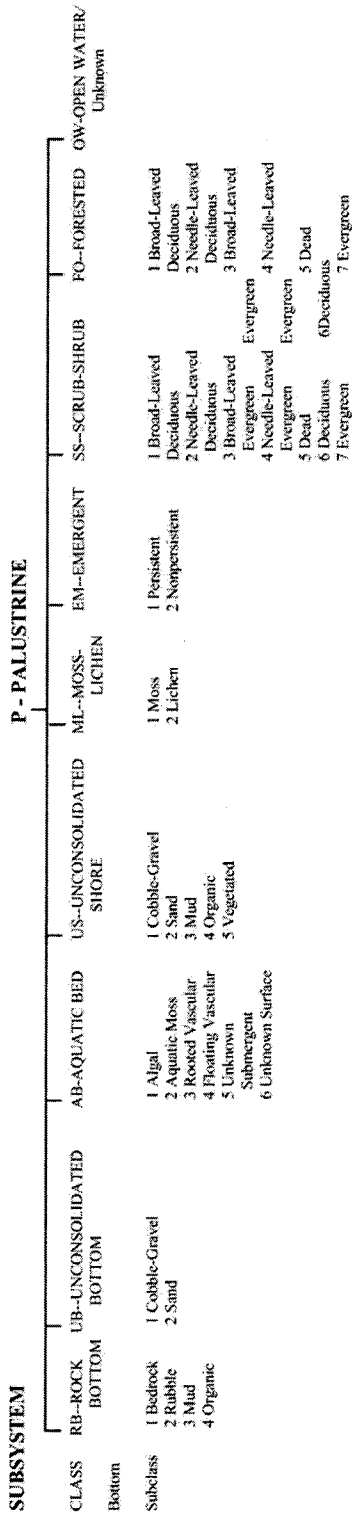
National Wetland Inventory Maps are produced by transferring gathered data on a standard 7.5 minute U.S.G.S. topographic map. Approximately 52 square miles are covered on a National Wetland Inventory map at a scale of 1:24,000. Electronic data is compiled by digitizing these National Wetland Inventory Maps.





* STREAMBED is limited to TIDAL and INTERMITTENT SUBSYSTEMS, and comprises the only CLASS in the INTERMITTENT SUBSYSTEM.
 ** EMERGENT is limited to TIDAL and LOWER PERENNIAL SUBSYSTEMS.

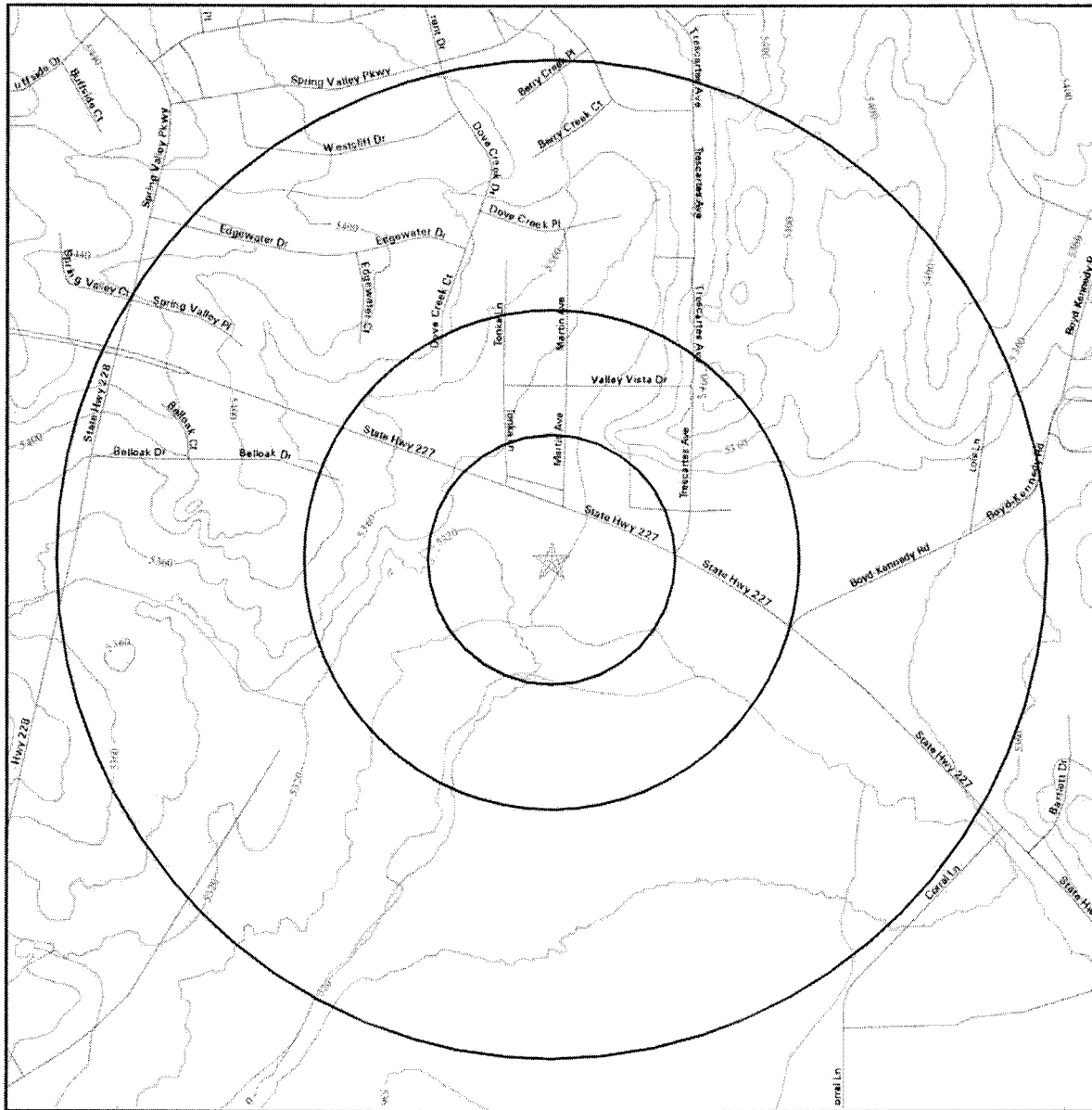











MODIFIERS	
In order to more adequately describe wetland and deepwater habitats one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farm modifier may also be applied to the ecological system.	
WATER REGIME	WATER CHEMISTRY
Non-Tidal A Temporarily Flooded B Saturated C Seasonally Flooded/ Well Drained E Seasonally Flooded/ Saturated F Semipermanently Flooded G Intermittently Exposed	all Fresh Water a Acid 1 Circumneutral 1 Alkaline 7 Hypersaline 8 Eusaline 9 Mixosaline 0 Fresh 1 Hyperhaline 2 Eubaline 3 Mixohaline (Brackish) 4 Polyhaline 5 Mesohaline 6 Oligohaline 0 Fresh
Tidal H Permanently Flooded J Intermittently Flooded K Artificially Flooded L Subtidal M Irregularly Exposed N Regularly Flooded P Irregularly Flooded Y Saturated/Semipermanent/ Seasonal Z Intermittently Exposed/Permanent U Unknown	SOIL g Organic n Mineral b Beaver d Partially Drained/Ditched f Farmed h Diked/Impounded r Artificial Substrate s Spoil x Excavated

Source: U.S. Department of the Interior
 Fish and Wildlife Service
 National Wetlands Inventory

FCC & FAA Sites Map



-  Streets
-  Sites
-  Contour Lines
-  County Boundary
-  Waterways
-  Power Lines
-  Water

**FCC & FAA SITES MAP FINDINGS
TOWERS**

**Map ID
Direction
Distance
Distance (ft.)**

**EDR ID
Database**

No Sites Reported.

**FCC & FAA SITES MAP FINDINGS
AIRPORTS**

**EDR ID
Database**

No Sites Reported.

**FCC & FAA SITES MAP FINDINGS
POWERLINES**

EDR ID
Database

No Sites Reported.

KEY CONTACTS & GOVERNMENT RECORDS SEARCHED

Various Federal laws and executive orders address specific environmental concerns. NEPA requires the responsible offices to integrate to the greatest practical extent the applicable procedures required by these laws and executive orders. EDR provides key contacts at agencies charged with implementing these laws and executive orders to supplement the information contained in this report.

NATURAL AREAS

Officially designated wilderness areas

Government Records Searched in This Report

FED_LAND: Federal Lands

Source: USGS

Telephone: 703-648-5094

Federal data from Bureau of Land Management, National Park Service, Forest Service, and Fish and Wildlife Service.

- National Parks
- Forests
- Monuments
- Wildlife Sanctuaries, Preserves, Refuges
- Federal Wilderness Areas.

Date of Government Version: 12/31/2005

Federal Contacts for Additional Information

National Park Service, Pacific West Region

600 Harrison Street, Suite 600

San Francisco, CA 94107

415-427-1300

USDA Forest Service, Intermountain

Federal Building 324 25th Street

Ogden, UT 84401-2310

801-625-5352

BLM - Nevada State Office

P.O. Box 12000

Reno, NV 89520-0006

775-861-6586

Fish & Wildlife Service, Region 1

Eastside Federal Complex 911 NE 11th Avenue

Portland, OR 97232-4181

503-231-6188

Officially designated wildlife preserves, sanctuaries and refuges

Government Records Searched in This Report

FED_LAND: Federal Lands

Source: USGS

Telephone: 703-648-5094

Federal data from Bureau of Land Management, National Park Service, Forest Service, and Fish and Wildlife Service.

- National Parks
- Forests
- Monuments
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