FINDING OF NO SIGNIFICANT IMPACT
STANDARD SPRING AND SEEP DEVELOPMENT PROJECTS

Based on my review of the analysis in the Standard Spring and Seep Development Projects Programmatic Environmental Assessment (EA), I have determined that the Proposed Action is in conformance with the approved land use plan and will not have any significant impact on the human, natural, and physical environment. Therefore, an environmental impact statement (EIS) is not required.

The EA shows that adverse impacts to surface ownership/land use and grazing; socioeconomics/environmental justice; cultural resources; soils/watershed; water resources; geology/minerals/paleontology; air quality/noise; vegetation/wetlands/noxious weeds; wildlife/fisheries; threatened, endangered, candidate, and special status species; wild horses; visual resources; and transportation would all be minor, short term, necessary and due impacts.

The Great Divide Resource Area Resource Management Plan (GDRMP) provides for the use of these public lands to enhance livestock grazing while maintaining a balance between economic uses and the enhancement of wildlife habitat, watershed, and riparian areas, and while maintaining or improving range condition over the long term. The Proposed Action would be in conformance with these land uses plans, and no amendments to our RMP would be necessary to implement the Proposed Action.

Patrick Madigan
Rawlins Field Manager:

5-9-08
Date:

Programmatic Environmental Assessment
Spring and Seeps Development
Rawlins Field Office

EA Number: WY-030-04-EA-193

Introduction

The Rawlins Field Office completes a variety of spring and seep developments every year. Project development includes initial project proposal and design, interdisciplinary review, and NEPA analysis. Many of the spring and seep development projects incorporate standard design and construction methods and environmental assessments typically are very similar. The majority of these water development projects would therefore lend themselves to a programmatic environmental assessment. Individual water development projects would be screened using the administrative determination form and process described in BLM H-1790-1-National Environmental Policy Act Handbook, and supplement EAs completed for each action.

The intent of this programmatic EA is to assess the environmental effects associated with spring and seep development projects. A programmatic EA would meet the requirements of the National Environmental Policy Act of 1969 while avoiding the redundancy that results from preparing separate EAs for the same types of projects.

This assessment is written by authority of the National Environmental Policy Act (NEPA); P.L. 91-90, Federal Land Policy and Management Act (FLPMA); P.L. 94-579, Public Rangeland Improvement Act (PRIA); P.L. 95-514, and the Water Resources Planning Act; P.L. 89-90.

The Code of Federal Regulations (CFR's) contains the fundamental regulations and direction that guides the Bureau of Land Management (BLM) in its administration of public rangelands. 43 CFR 4180.1 details four fundamentals of rangeland health. They are:

(a) Watersheds are in or are making progress toward properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.

(b) Ecological processes including the hydrologic cycle, nutrient cycle, and energy flow are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.

(c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving established BLM management objectives such as meeting wildlife needs.

(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

The 1995 Rangeland reform process modified the grazing regulations to address the fundamentals of rangeland health. In August 1997, the "Standards for Healthy Rangelands" (SHR) and Guidelines for Livestock Grazing Management for the Public Lands Administered by the Bureau of Land Management in the State of Wyoming were approved by the Wyoming State Director. The objectives of the rangeland health regulations are to "promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning condition and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands." The fundamentals of rangeland health combine the basic precepts or physical function and biological health with elements of law relating to water quality and plant and animal populations and communities. Initially the standards focused on livestock grazing on BLM-administered lands, but the SHR were developed to apply to all uses and resources. The evaluation process or standards assessment is completed by an ID team of agency personnel and interested publics. The ID team usually consists of personnel with varying expertises (i.e. wildlife biologist, hydrologist, rangeland management specialist, soils specialist, weeds specialist, and interested parties such as landowners and/or grazing operators).

Purpose and Need for Action

The need for the proposed action is to ensure that watersheds within the Rawlins Field Office comply with the Fundamentals of Rangeland Health under the SHR's. In August 1997, the SHR's and Guidelines for Livestock Management (43 CFR 4180.1-2) for Public Lands Administered by the Bureau of Land Management in the State of Wyoming were approved by the Wyoming State Director. The purpose for this action is to analyze and disclose smaller scale actions that may routinely be taken within the Rawlins Field Office to address riparian health opportunities and problems that arise.

Conformance with the Land Use Plan and other Direction

The proposed action is in conformance with the Great Divide Resource Management Plan (RMP) (November 1990). Grazing systems would be designed to achieve the livestock grazing objective, pg. 24 of the RMP. Range improvement projects are designed to facilitate implementation of grazing systems and to protect riparian habitat, Livestock Grazing Appendix, Medicine Bow-Divide Resource Management Plan/Draft EIS, pg. 374.

The proposed action is in conformance with RMP objectives related to the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for Wyoming. The proposed action would contribute to the achievement of the four fundamentals of rangeland health outlined in the grazing regulations (43 CFR 4180.1). Specifically, language in Standards #1 and #4 apply; to enhance livestock grazing while maintaining a balance between economic uses and the enhancement of wildlife habitat, watershed, and riparian areas, while maintaining range condition at, or improving range condition toward, the potential for the ecological site.

The implementation of range improvement projects on non-Federal lands, falls under the California State Office IM No. 87-54 based on Solicitors Opinions concerning the expenditure of Federal funds for wildlife projects on non-Federal lands.

> The Regional Solicitor, Pacific Southwest Region, concluded that the Federal Land Management Policy Act (FLMPA), section 307, 43 U.S.C. 1737, gives the Director authority to carry out projects on (or of benefit to) non-Federal lands so long as the expenditures are made pursuant to a cooperative agreement between the landowner and BLM and the expenditures are intended to benefit BLM programs.

The Proposed Action and Alternatives

Proposed Action

The proposed action is to protect and/or develop springs and seeps that are utilized by livestock and/or wildlife. The implementation of the proposed action would help allotment(s)/watershed(s) move towards meeting national directive (43 CFR 4180.1-2) and comply with or exceed the SHR's. Locations addressed by this programmatic NEPA document would include areas that have been identified during a site specific analysis as having negative impacts resulting from livestock, wild horses and/or wildlife use. Impacts from livestock, wild horses or wildlife may include erosion and vegetation damage from hoof action and grazing near the spring or seep source. Newly developed springs and seeps would require applications for permit to appropriate ground water and statements of completion and description filled with the "Wyoming State Engineers Office." Existing spring and seep developments would continue to receive required maintence to maintain their functionality. Diversions located outside of their naturally occurring drainages or the construction of reservoirs with water from these diversions is not considered in this NEPA analysis.

Practices and activities subject to standards and guidelines include the development of range improvement activities such as vegetation manipulation, fence construction and the development of water sources. This may consist of one or more steps as described below.

Characteristics common to all spring and seep developments:

At a minimum, the source(s) of water is(are) generally fenced to prevent animal's impacts, and this may include the use of natural barriers such as rocks, trees, and steep topography. Fencing may vary depending on the size of the source area, type of animal being excluded, and existing terrain at each site. Fence design may consist of BLM Type 3 standards (wood/steel posts with 4 wires-3 of them barbed), wood posts with hog panels, wood/steel posts with mesh fence and barbed wire top, wood posts with a wood rail top and mesh fence below, and all wood fences with wood posts and rails or buck-and-pole construction. Fences are built by hand or with small equipment such as pickups, tractors, backhoes and skid steers. The size of area fenced may vary from a 16 X 16 feet square to approximately 2 to 4 acres. Plantings of desirable species, particularly woody shrubs and trees, may occur within these fenced off areas.

Development of water sources consists of a water collection system, pipeline, and trough(s) outside the fence, downstream from the primary spring or seep source. The water collection system often includes a perforated pipe with gravel around it or septic infiltrators to improve water collection. A small dirt berm with plastic or filter-cloth is usually built below the culvert to help force water flow into it. A poly vinyl chloride (PVC) or polyethylene pipeline (Poly-pipe) carries the water from the collection system to the trough(s). Troughs may consist of tires, fiberglass, plastic or metal tanks with or without concrete bottoms, and wood fencing or cable to keep wildlife and livestock from falling or climbing into water troughs and tanks. Small mammal and bird escapes consisting of metal ramps, rock piles or floating blocks would be installed on all troughs.

The clearing of vegetation (brush or trees) from project sites would be kept to the minimum amount necessary. Valves within the collection system and/or at the trough(s) allow flexibility for controlling when and how much water is diverted from the spring or seep. Most water developments are not run yearlong, and many may only be in use for 1 or 2 months, with no diversions for most of the year. Water developments would be constructed to overflow back into the drainage below the water source to maintain wetland features. Fencing would restrict large animal use of these areas and allow vegetation to re-colonize damaged areas.

If use by recreational use of the water development is anticipated, signing would be added to the project design to allow access and use of the development as a water source. This signing would specify the source as a non-potable water source that would require additional filtering or chemical treatment to make waters potable.

Spring and seep water development projects vary in cost from about $1,000 to $10,000 depending on project size and desired objectives. Maintenance is typically assigned to the grazing permittee if livestock are the principal benefactor, or to a cooperating partner, or kept by the BLM where wildlife or wild horses are the principal users. Cultural and T&E/wildlife clearances/inventories would be conducted prior to any project initiation.

Cultural sites or areas with wildlife concerns would be evaluated and adverse effects would be avoided and/or mitigated during project planning. Construction activities would be in compliance with any recommendations and stipulations. If the spring or seep developments results in changes to the function of the spring or seep to increase water available to livestock (i.e. not just fencing the source, but putting in infrastructure such as a spring box), then a water rights application and notification of depletion (if in the Colorado or Platte drainages) would be reported. Water rights applications are filed with the State Engineer's Office either solely by the BLM or in conjunction with the permittee. Estimated depletions are included in annual reports to the Fish and Wildlife Service according to their requirements.

Changes in Animal Use Alternative

Springs and seeps (except in mountain locations) are usually small point sources of water, that between water and riparian/wetland habitat occupy less than one percent of the landscape. Livestock, wild horses, and wildlife all rely heavily and spend a lot of time in and around these areas, resulting in lower conditions due to trampling and utilization. During drought periods this reliance and impacts become even greater. Changes in livestock grazing management to alleviate impacts from livestock on these point water sources, such as reduced duration of use or stocking levels, often has little effect since livestock use would still occur first around these seeps and springs. Impacts from wild horses and wildlife cannot feasibly be changed through management. Since these populations vary considerably over time, including the potential for excessive numbers of animals, there is little opportunity to improve the condition of water sources or riparian/wetland habitat through changing animal use. Due to the low potential to achieve Standards for Healthy Rangelands (particularly #2- Riparian/Wetland Health) under this alternative, the "Changes in Animal Use Alternative" would be dropped from any further consideration and evaluation within this document.

No Action Alternative

The "no action" alternative would be assessed when an allotment or watershed is meeting SHR's and a desired future condition (DFC) is the goal of the proposed action. When the proposed action is the result of an allotment or watershed not meeting one or more SHR's the no action alternative can legally be considered, but the authorized officer would have to choose it in violation of the law. If an allotment or watershed is identified as failing one or more standards it is national directive (42 CFR 4180.1-2) that management actions be taken to ensure that the allotment or watershed meets or is moving towards meeting SHR's. Under the no action alternative all newly proposed spring and/or seep development would require individual environmental analysis as required under the National Environmental Policy Act (NEPA). Existing spring and/or seep developments within the Rawlins Field Office would receive regular maintenance so as to maintain their existing functionality.

Affected Environment

The Six Wyoming Standards for Healthy Rangelands are:

Standard 1: Within the potential of the ecological site (soil type, landform, climate, and geology), soils are stable and allow for water infiltration to provide for optimal plant growth and minimal surface runoff.

Standard 2: Riparian and wetland vegetation have structural, age, and species diversity characteristics of the state of channel success and is resilient and capable of recovering from natural and human disturbance in order to provide forage and cover, capture sediment, dissipate energy, and provide for ground water recharge.

Standard 3: Upland vegetation on each ecological site consist of plant communities appropriate to the site which are resilient, diverse, and able to recover from natural and human disturbance.

Standard 4: Rangelands are capable of sustaining viable populations and a diversity of native plant and animal species appropriate to the habitat. Habitats that support threatened species, endangered species, species of special concern, or sensitive species would be maintained or enhanced.

Standard 5: Water Quality meets state standards.

Standard 6: Air Quality meets state standards.

The RFO has a variety of existing watersheds, ranging from deserts with low topographic relief and the least amount of plant cover to foothills and mountain with much greater topographic relief as well as moderate to high amounts of plant cover and/or litter. Desert areas have low gradient channels consisting of various soil textures and small woody debris with ephemeral to perennial flows. In contrast, the foothills and mountains have moderate to high gradient channels consisting of loamy soils, often well armored with rock or large woody debris and often support perennial flows. The health of existing watersheds greatly depends on influencing characteristics. Due to the variety of environmental characteristics (soil compaction, erosion, soil micro-organisms, water infiltration, vegetative cover, bare ground and litter layer), soils and watershed health within the RFO management area varies. However, in most areas it is believed to be good or functioning adequately, due to the general lack of indicators such as active rills and gullies which reflect accelerated rates of erosion. Point sources of water or where there is restricted access to streams are locations where higher levels of animal use result in increased trampling and bare ground, as well as more pronounced hummocks in meadows. Trampling at locations with clay soil textures may result in reduced flow rates

from water sources. In addition to local site variables, watershed health is also influenced by wildlife, wild horse, and livestock grazing intensity and pressure, as well as by industrial development, roads, and recreational vehicles.

Vegetation around and along channels below springs and seeps generally consists of riparian-wetland habitat types. Common plant species include Nebraska and beaked sedge, tufted hairgrass, Kentucky bluegrass, redtop, meadow foxtail, Baltic rush, brookgrass, and less common sedges, rushes, grasses and forbs. At some sites there may be willow, cottonwood, waterbirch, hawthorn, rose, currant, dogwood, silverberry, buffaloberry, honeysuckle, chokecherry, aspen and alder. Woody plant species are usually more abundant and diverse at locations where water sources are more reliable. Grazing or browsing intensity has in the past either limited the presence or abundance of some plant species, and/or shifted composition to those species adapted to being used or to undesirable species. Plant species composition and diversity is important for riparian wetland health. Riparian vegetation helps to capture sediments and associated materials, thus enhancing the nutrient cycle by capturing and utilizing nutrients that would otherwise move through the system unused. Vertical and horizontal structure increase greatly when shrubs and trees are present in the plant community. These species also increase site stability with their roots and woody debris.

Upland vegetation on each site consists of plant communities appropriate to the site which are resilient, diverse, and able to recover from natural and human disturbance. Common upland habitats types include sagebrush/grass, short grass praire, saltbush steppe, greasewood flats, playas, mountain shrubland, and aspen and juniper woodland, and conifer forests. Plant species frequenting upland sites within the RFO are: various rhizomatous and bluebunch wheatgrass, little and mutton bluegrass, prairie Junegrass, prairie sandreed, sand dropseed, Indian ricegrass, blue grama, blowout grass, needleandthread grass, Idaho and king spike fescue, green and Columbia needlegrass, bottlebrush squirreltail, basin wildrye, Utah and Rocky Mountain juniper, limber and lodgepole pine, subalpine fir, Douglas' fir, Engelmann spruce pine, ponderosa pine, aspen, Wyoming, basin and mountain big sagebrush, black sagebrush, silver sagebrush, Wyoming three-tip sagebrush, common juniper, rubber and Douglas rabbitbrush, Nuttall's saltbush, birdsfoot sagebrush, shadscale, bud sage, snowberry, bitterbrush, mahogany, serviceberry, buffaloberry, grouse whortleberry, currant, chokecherry, winterfat, prickly-pear cactus, phlox, biscuitroot, mustards, buckwheat, wild onion, lupine, larkspur, yarrow, sandwort, geranium, Oregon grape, balsamroot, shooting star, Indian paintbrush, bitterroot, violet, bluebells, buttercup, groundsel, cinquefoil, columbine, pussy-toes, and various aster family species. This diversity of plant species help to support wildlife, wild horses and livestock by providing thermal and hiding cover, nesting and feeding habitat, and as a source of dietary intake. Plant species within the

Rawlins Field Office are primarily native species. Noxious and non-native invasive species are found in isolated locations and disturbed areas, and are being treated for containment or elimination.

Water and riparian habitats found around springs and seeps are very important in supporting a wide variety of wildlife species. These species include antelope, elk, mule deer, white-tail deer, bighorn sheep, coyote, bear, badger, fox, skunk, small mammals, grouse, turkey, raptors, songbirds, waterfowl, shore birds, fish, snakes, toads, and frogs. In addition there are numerous invertebrate species. In many cases there would only be a few types of wildlife present in desert areas if it were not for the presence of important water sources. Upland habitat types each support fifty or fewer wildlife species on average as compared to the 150 to 200 species found in or adjacent to riparian habitat types.

BLM Wyoming State Sensitive Species

The objective of the sensitive species designation is to ensure that we consider the overall welfare of these species when undertaking actions on public lands, and do not contribute to the need to list the species under the provisions of the Endangered Species Act (ESA). The lack of demographic, distribution, and habitat requirement information compounds the difficulty of taking management actions for many species. While there are specific actions identified at this time, the development of new fences and modification of existing fences are designed to continue improvement of all habitats within the RFO area.

The Bureau's management authority for sensitive species is not as specifically structured as for proposed or listed, threatened or endangered (T/E) species. Our management mandate is less regulatory, and more administrative and generic for sensitive species. It is the intent of the sensitive species policy to emphasize the inventory, planning consideration, management implementation, monitoring, and information exchange for the sensitive species on the list in light of the statutory and administrative priorities mentioned above. In most instances, the following types of actions/activities would be appropriate and expected for sensitive species management: Inventory, Land Use Planning, Conservation Strategies, NEPA Analysis, Best Management Practices (BMP's), Monitoring and Information Interchange.

The following sensitive species, or their habitats, has been identified within the Rawlins Field Office area:

Mammals		
Species Common Name	**Scientific Name**	**Associated Habitat**
Pygmy Rabbit	*Brachy lagus*	Basin-prairie and riparian shrublands
Black-tailed praire dog	*Cynomys ludovicianus*	Grasslands eastern Wyoming
Townsend's Big-eared	*Corynorhinus*	Basin-prairie shrub, grasslands

Bat	*townsendii*	
White-tailed Prairie Dog	*Cynomys leucurus*	Basin-prairie shrub, grasslands
Long-eared myotis	*Myotis evotis*	Conifer and deciduous forests, caves and mines
Fringed myotis	*Myotis thysanodes*	Conifer forests, woodlands, caves and mines
Spotted Bat	*Euderma maculatum*	Cliffs over perennial water, basin-prairie shrubs
Wyoming Pocket Gopher	*Thomomys clusius*	Meadows with loose soil
Swift Fox	*Vulpes velox*	Grasslands

Birds		
Species Common Name	**Scientific Name**	**Associated Habitat**
White-faced Ibis	*Plegadis chihi*	Marshes, wet meadows
Trumpeter Swan	*Cygnus buccinator*	Lakes, ponds, rivers
Ferruginous Hawk	*Buteo regalis*	Basin-prairie shrub, grassland, rock outcrop
Peregrine Falcon	*Falco peregrinus*	Tall cliffs
Greater Sage-grouse	*Centrocercus urophasianus*	Basin-prairie shrub, Mountain-foothill shrub
Columbian Sharp-tailed Grouse	*Tympanuchus phasianellus Columbians*	Grasslands
Long-billed Curlew	*Numenius americanus*	Grasslands, plains, foothills, wet meadows
Burrowing Owl	*Athene cunicularia*	Grasslands, basin-prairie shrub
Sage Thrasher	*Oreoscoptes montanus*	Basin-prairie shrub, mountain-foothill shrub
Loggerhead Shrike	*Lanius ludovicianus*	Basin-prairie shrub, mountain-foothill shrub
Brewer's Sparrow	*Spizella breweri*	Basin-prairie shrub
Sage Sparrow	*Amphispiza billineata*	Basin-prairie shrub, mountain-foothill shrub
Baird's Sparrow	*Ammodramus bairdii*	Grasslands, weedy fields
Northern goshawk	*Accipter gentiles*	Conifer and deciduous forests
Mountain plover	*Charadrius montanus*	Grasslands and prairie dog towns
Bald Eagle	*Habiaeetus leucocephalus*	Found throughout state conifers, cottonwood-riparian river ecosystems

Fish		
Species Common Name	**Scientific Name**	**Associated Habitat**
Roundtail Chub	*Gila robusta*	Colorado River drainage, mostly large rivers, also streams and lakes
Bluehead Sucker	*Catostomus discobolus*	Snake River Drainages
Colorado River Cuthroat Trout	*Oncorhynchus clarki pleuriticus*	Colorado River drainage, clear mountain streams
Flannelmouth Sucker	*Catostomus latipinnis*	Colorado River drainage, mostly large rivers, also streams and lakes

Amphibian		
Species Common Name	**Scientific Name**	**Associated Habitat**
Northern Leopard Frog	*Rana pipiens*	Beaver ponds, permanent water in plains and foothills
Great Basin Spadefoot	*Spea intermontana*	Spring seeps, permanent and temporary waters
Western Boreal Toad	*Bufo boreas boreas*	Riparian areas >7500 feet in elevation

Plants		
Species Common Name	**Scientific Name**	**Associated Habitat**
Nelson's Milkvetch	Astraglus nelsonianus	Alkaline clay flats, shale bluffs and gullies, pebbly slopes, and volcanic cinders in sparsely vegetated sagebrush, juniper, & cushion plant communities at 5200- 7600'
Cedar Rim Thistle	*Cirsium aridum*	Barren, chalky hills, gravely slopes, & fine textured, sandy-shale draws 6,700-7,200'
Gibbens' Beardtongue	*Penstemon gibbensii*	Sparsely vegetated shale or sandy-clay slopes 5,500-7,700'
Laramie Columbine	*Aquilegia laramiensis*	Crevices of granite boulders & cliffs 6400-8,000'
Weber Scarlet Gilia	*Ipomopsis aggregate ssp. weberi*	Openings in coniferous forests 8,500-9,600'
Laramie False Sagebrush	*Sphaeromeria simplex*	Cushion plant communities on rocky limestone ridges and gentle slopes 7,500-8,600'
Persistent Sepal Yellowcress	*Rorippa calycina*	Riverbanks and shorelines, usually on sandy soils near high water line

Endangered, Threatened, Proposed and Candidate Species

There are 17 endangered, threatened, proposed and/or candidate wildlife species and two critical habitat areas that may be found, or have the potential to be found, within the Rawlins Field Office area. Informal consultation with the U.S. Fish and Wildlife Service (Service) in Cheyenne, Wyoming, would conclude the number of species that may be

affected, and the species that should not be affected, by the construction of new seep and/or spring developments.

Mammals	
Species Common Name	**Associated Habitat**
Black-Footed Ferret	Prairie dog colonies with black-tailed prairie dog complex >80 acres and white-tailed prairie dog complex >200 acres
Canada Lynx	Early and late conifers forest >6500 feet in elevation, rangelands
Prebles's Meadow Jumping Mouse	Varying widths (360-394' from stream edge) along portions of the Lodgepole Chugwater, and Cottonwood Creeks (and some tributaries) in Albany, Laramie, and Platte Counties
Critical Habitat for Preble's Meadow Jumping Mouse	Varying widths (360-394' from stream edge) along portions of the Lodgepole Chugwater, and Cottonwood Creeks (and some tributaries) in Albany, Laramie, and Platte Counties

Birds	
Species Common Name	**Associated Habitat**
Yellow-Billed Cuckoo	Cottonwood/Willow riparian habitat west of the Continental Divide

Plants	
Species Common Name	**Associated Habitat**
Blowout Penstemon	Sparsely vegetated shifting sand dunes or wind carved depressions
Ute Ladies' Tresses	Endemic to moist soils in mesic or wet meadows near springs, lakes, seeps, and riparian areas within 100 year flood plain of perennial streams ranging from 4,300-7,00 feet in elevation
Colorado Butterfly Plant	Endemic to moist soils in mesic or wet meadows of floodplain areas in Laramie County, WY
Critical Habitat for Colorado Butterfly Plant	51 stream miles in Platte and Laramie Counties

Fish & Toads	
Species Common Name	**Associated Habitat**
Wyoming Toad	Known distribution is restricted to within 30 miles of Laramie, Wyoming within the

	Mortenson Lake and Hutton Lake National Wildlife Refuges
Colorado River Species: Colorado Pikeminnow, Humpback Chub, Bonytail, Razorback Sucker	Colorado River Basin
North Platte River Species: Pallid Sturgeon, Interior Least Tern, Piping Plover, Western Prairie Fringed orchid, Whooping Crane	North Platte River System

Water from springs and seeps differ in their quantity and quality of water produced. Flows vary from what amounts to a wet spot a few feet in diameter to around 5 gallons per minute (gpm). In the Divide Basin and drier areas of the Rawlins Field Office this water would run from a few feet to a 1/4 mile before drying up, whereas at higher elevations water flows may augment perennial streams. Water quality at the source is generally good, in terms of supporting use by wildlife, livestock, wild horses, and riparian habitat. Depending on the underground source (geologic layer), water quality may or may not be suitable for human use. However, around these sources water quality is often impaired due to animal trampling and defecation.

Air Quality within the RFO is generally very good. The persistent wind common to Wyoming tends to dissipate emissions from industrial developments, highways, and man-made and natural fires but also tends to reduce visibility by adding dust to the air.

The amount of noise common in the RFO is dependent on location within the management area. Noise levels vary from low levels generated entirely by wind to maximum levels damaging to hearing generated by vehicles and industrial equipment.

Recreation, Visual Resources

Recreation in the RFO management area covers a wide range of interests. People enjoy the solitude, scenic beauty, and a variety of non-motorized and motorized activities including hiking, camping, hunting and fishing, rock hounding, bird watching, horseback riding, four-wheeling, biking, sightseeing, and antler collection among others.
Quality of vistas within the RFO are ranked into four visual classes; Class I represents wilderness areas, wilderness study areas, wild and scenic rivers, and natural landscapes where modification activities may be restricted and/or require mitigation. Class II visual resource areas represent locations where landscape modifications should blend with surrounding environmental characteristics so as not to disturb visual quality (i.e. forest boundaries, highly recreated areas, and historical sites). Areas with existing and/or

evident modification to landscape characteristics would be categorized as Class III or IV visually, depending on the original composition and characteristics of the landscape (i.e. industrial areas, mineral activity, transportation routes, and disturbed areas).

Cultural Resources

Cultural resources vary from simple lithographic scatter sites to historic places and trails. The Rawlins Field Office management objectives for cultural resources is to protect, preserve, and avoid damage to them on federal and nonfederal lands.

Environmental Impacts

Proposed Action

The proposed action would have the following effects within the Rawlins Field Office:

Effect of the Proposed Action on Critical Elements of the Human Environment

Wild and Scenic Rivers	None
Hazardous/Solid Wastes	None
Environmental Justice	None
Floodplains	None
Native Americans Religious Concerns	None*
Wilderness	None
Cultural Resources	None*
Prime or Unique Farmlands	None

** Pending site specific cultural inventories. If cultural inventories identify any of these elements site specific mitigations and or stipulations would occur. If disturbance can not be mitigated for the specific action, the action would require a separate environmental assessment (EA).*

The implementation of the proposed action would have positive impacts on soil and watershed health. Development and management of these types of water sources may also improve distribution and timing of use on upland habitats that would improve plant vigor, composition and cover. This in turn increases litter and soil organic matter, reducing runoff and improving water infiltration, leading to healthy watershed and improved functionality.

Development of the proposed action would affect riparian vegetation resources in a short-term manner. The equipment used in construction would disturb and trample vegetation at the water source, pipeline, trough(s), and fencing around the water source. These impacts would be short term in nature. Projects which are only fenced would result in trampled vegetation along the fence line. Projects where water sources are developed and troughs are installed would be temporarily disturbed for up to 1/4 acre at each site. Reseeding is not necessary because of the small area involved and the short length of time in which disturbance would occur. Natural vegetation would quickly revegetate disturbed areas faster than reseeding. Long-term negative impacts to soils and vegetation would result from increased animal use around troughs and/or tanks and the placement of rock around concentration areas, which could eliminate vegetation within 10 to 20 feet around them. Trails would be created to new drinking sources and in some cases around the newly constructed fences or exclosures.

Beneficial impacts of the proposed action are all related to change in animal behavior and trampling. Animals drinking at a trough, tire, or tank would reduce trampling of riparian vegetation outside the fenced exclosure and eliminate or reduce trampling of vegetation inside the fenced exclosure protecting the source. These impacts would in effect be transferred away from the source riparian area to upland locations much larger in extent and less sensitive to such impacts. The reasoning for this is that forage use, during hot summer months, initially occurs in the riparian habitats, expanding outward onto adjacent upland habitats. Animals returning to riparian habitats once or more daily to drink continue to cause trampling and/or bank shear even though primary foraging takes place on upland sites. Development of troughs, pipelines, or other offsite water sources reduces these impacts while improving their functionality. Riparian plant health, vigor, and diversity would improve due to reduced trampling impacts caused by livestock and wildlife.

Plants that are more desirable and those more sensitive to use would benefit from protection or reduced trampling impacts and either maintain or expand their cover and/or composition. This is particularly true for sedges, grasses, willow, other shrubs, aspen and cottonwood. Riparian areas would also benefit from increased water flows that may result from the elimination of trampling. The development of these sites assists in providing seasonal management of livestock and wild horse use, improving upland habitats by reducing soil erosion and increasing water infiltration, improving riparian habitat by reducing turbidity and increasing flows.

Water storage in the uplands would attenuate downstream flows and extend water availability during drier portions of the year. This would likely lead to the indirect impact of expanding riparian areas in either width and/or length downstream. The expansion of riparian areas, where it occurs, would increase wetland health and improve flood plains by increasing ground cover, interception, and decreasing erosion potential caused by bare ground runoff. Protection of springs and seeps would allow increased plant species diversity in terms of woody plant structure such as willows, waterbirch,

dogwood, honeysuckle and other desirable plant species. Range improvements such as spring and seep developments help to prevent disturbances to riparian areas allowing for increased watershed health. Developing these sites helps distribute animal impacts while still providing a much needed water source for wild horses, livestock and wildlife.

Upland vegetation would be impacted under the proposed action. The development of off site water from riparian areas to upland sites would impact site specific vegetation. The location of off site water placement would receive increased trampling and vegetation utilization by grazing animals within approximately thirty feet of all troughs or tanks located away from existing riparian areas. Development of springs and seeps would ultimately help increase animal distribution and grazing more evenly across the landscape. This would occur due to developed sites providing cleaner and more reliable water supplies for grazing animals to use, and result in decreasing animal densities found near existing water sources. This increased distribution would help increase upland plant vigor, density, diversity, and over all health by improving litter and soil cover, increasing water infiltration, soil organic matter and micro biotic function. This is assuming that a grazing strategy is being following which allows for some growing season deferment to promote improvement in healthy plant attributes described above. The development of springs and seeps would also allow livestock and wildlife the opportunity to utilize areas during dry periods of the year due to increased water availability. An increase in water availability would give operators the option to better manage their livestock, because water is a limited resource during dry summer months. Managers would also have the flexibility to control foraging livestock in critical habitats utilized by wildlife (i.e. crucial winter habitat) by managing water availability during summer/fall grazing use periods,

Implementing the proposed action would temporarily displace wildlife during construction activities. These impacts would be short term in nature. Site specific seasonal and mitigation stipulations would protect threatened and endangered and/or candidate species as well as all wildlife so that adverse impacts to them are avoided. Escape ramps, rock piles, and/or other devices would be placed in water troughs to prevent wildlife death loss. Consultation with the service and local BLM wildlife biologist would be completed for all developments under the proposed action to help prevent and mitigate impacts to all wildlife, especially T&E species. A may affect decision that could benefit T&E species would still require consultation. The habitats of existing T&E species within the RFO area varies, so not all species of concern would be affected be these types of developments. Benefits to wildlife would primarily come in the form of improved riparian values, such as water availability and quality, plant cover and structure, and increased plant species diversity. As diversity in vertical structure of plant species composition increases more species of wildlife would benefit. As stated in the affected environment section, three to five times more species of wildlife live in or

adjacent to riparian habitat compared to those species which just occur in shrub and grassland habitats. Improvement in riparian habitat would benefit big game species and small mammals that live in the area. However, the greater benefit would be the enhancement of habitat for songbirds, raptors, insects, and other species that would not occur in an area otherwise. Protection of the water source and vegetation recovery would improve water quality and in some cases water quantity that would also benefit aquatic invertebrates and fishery resources in streams or reservoirs below water developments.

Simply fencing or developing a water source would have no long-lived adverse impacts on water quantity or quality. Further development of a collection system, pipeline, and trough(s), and/or tank(s) would result in increased sedimentation during construction. This impact would be short lived and not significant in nature. Benefits of implementing the proposed action include maintaining or enhancing flows and improved water quality and quantity. Trampling, defecation, and compaction impacts caused by livestock, wild horses and/or wildlife would be eliminated and/or reduced around springs and seeps. The proposed action would result in cleaner water made available for drinking by all users, including humans.

Water development would involve the use of light/heavy motorized equipment that would add short-term combustion engine emissions to the air. Individual projects would not require more than a few vehicles at any one time and construction of individual projects would normally last only a few days to a couple of weeks. Emissions would dissipate rapidly and would not pose a health hazard to anyone in the area including the construction crew.

Engine noise would occur only during construction and during periods of project maintenance. Increased noise levels would only be disturbing to people in close proximity to the construction site. Employees bothered by elevated noise levels would likely wear hearing protection. Visitors to the public land would most likely leave the immediate construction area. Wildlife in the area would be displaced during construction but would likely return to the area soon after construction

Recreation, Visual Resources

The presence of construction equipment would decrease ones sense of solitude and reduce the visual quality of their outdoor experience. Displacement of wildlife due to construction activity may also impact recreation, primarily during hunting season or for those viewing wildlife. These impacts would only last the duration of actual construction or maintenance activities. Rangeland springs or seep developments are fairly unobtrusive

and would not greatly detract from the scenery of an area. Water developments placed in locations qualifying as Class I or II visual resource areas may require mitigation. Developments are rarely placed in Class I visual areas, but if a spring or seep development is proposed, mitigation as to the type and location of the development may be required along with a separate EA. Water developments placed in a Class II landscape may require mitigation to hide and or camouflage its appearance. Proper mitigation of water development projects across Class II landscapes would not require individual EA's for construction, and would be assessed adequately under this programmatic EA. Consultation with the RFO Recreation Specialist would be required for all projects proposed in Class I or II visual resource areas. New developments and their fences would result in additional obstacles for recreationists. The placement of gates at roads to facilitate access (and remove animals if necessary) would help reduce this impact to an acceptable level by reducing access problems. The signing of gates would remind recreationists to leave gates as they are found or of seasonal closure and open periods.

Recreational resource may benefit from the enhancement of riparian habitat and fisheries downstream and the creation of more defined water sources. As these water resources improve, the quantity and quality of recreational opportunities would also likely improve.

Cultural Resources

Cultural inventories would be conducted for all proposed projects prior to implementation to avoid damage to cultural resources and evaluate their significance. Cultural resources often occur near natural water sources. The development of these sites would help to protect them from impacts caused by concentrated livestock and wildlife use.

No Action Alternative

Spring or seep developments proposed on public lands within the RFO would require individual EA's and would not be covered under a programmatic environmental assessment. This would delay implementation of new projects to protect these types of water sources. Current land health trends would continue in areas contributing to deteriorated SHR condition such as reduced water yield, additional impairment of water quality, and reduced acreage of riparian habitat could continue for a prolonged period of time. Existing spring and seep developments would be maintained.

Under the "No Action Alternative" at risk and adversely effected springs and seeps would no longer receive the attention needed in as timely a manner that would help to increase or maintain current soil and watershed health. Water sources would continue to receive trampling, defecation, and use of vegetation by livestock, wild horses, and

wildlife until projects could be implemented. Improvement in channel morphology, including bank building, stability, and reduced channel width would occur at a slower rate. Control of ungulate use around these water sources that would improve distribution and seasonal timing of use would also be delayed. Therefore, it would take longer to increase plant cover and litter needed to improve water infiltration and reduce bare ground and soil erosion. The combined effect would result in additional time needed to achieve objectives for improving soil function and watershed health.

The "No Action Alternative" would extend negative riparian and wetland health trends for a longer period of time. Improvement of riparian and wetland sites would be delayed until protection or development actions to spring and seep sites occurred, eliminating impacts to them. Riparian and wetland sites would continue to receive elevated rates of utilization and trampling, especially during dry periods of the year. Less desirable species that are more resistant to these impacts, such as Kentucky bluegrass, mat muhly, Baltic rush, thistle, dandelion, and iris, would continue to be favored and dominate sites, and bare ground would still be present. Desirable species, such as sedges, taller grasses, forbs, willows, and other trees and shrubs would still not be protected and promoted until individuals projects are evaluated and approved. Achievement of Standard #2-Riparian/Wetland Health, would take longer to meet.

While all addressed alternatives would allow for an increase in upland vegetation, the "No Action Alternative" places an increased timeline on land managers proposing and implementing mitigations for failed standards. Upland sites would continue to be impacted to some extent by livestock and wildlife utilization under all alternatives. Upland sites, which are not utilized by grazing/browsing animals due to their distances from sufficient water, would continue to observe minimal disturbance. Prolonged project assessments, under the No Action Alternative, for the development of off-site water would ultimately continue current trends of decreasing upland plant vigor, plant density, plant diversity, and overall health by reducing vegetative use by wildlife and livestock, resulting in reduced management flexibility.

Animals, under the "No Action Alternative," would continue to utilize springs and/or seeps as they have historically. Continued utilization would result in these species degrading water sources, via hoof impacts and defecation, until individual mitigating projects could be evaluated, designed, and implemented to promote spring and/or seep health. Continued and prolonged hoof impacts caused by animal use to spring and seep sites ultimately results in water sources drying-up because of decreased water tables

caused by soil hummucking. Hummucking results in decreased and/or subsurface flows of existing seeps and springs, thus, decreasing the availability of water for all animal species utilizing these existing riparian habitats. Under this alternative the degradation of existing riparian and adjacent habitat would be continued and prolonged along with available watering for all animals. These prolonged impacts would be severe as they affect important existing riparian shrubs (i.e. willow, dogwood, currant, waterbirch and others) which provide vertical diversity in a low height dominated vegetation community. As these sites are degraded animals would be forced to continue to drink from water sources that are of poor quantity and quality until individual projects can be evaluated and approved. The no action alternative would result in a delayed implementation of off-site water developments, thus reducing the chance that waters would be available during dry months, when water is most important and often of least availability, to wildlife. This alternative would result in the lengthened continuation of riparian areas decreasing in overall size and vertical structure, thus reducing much need thermal and hiding cover for all wildlife species. Riparian areas are known for there abundance of varying species of wildlife, the no action alternative would place these riparian areas in longer periods of jeopardy until individual environmental assessments can be completed on each and every proposed spring and seep development project.

The potential for increased and prolonged impact on water quality would occur under the "No Action Alternative." This alternative would result in delayed mitigation to sources failing this standard. Water sources subject to hoof action, animal defecation, increased erosion and turbidity; resulting in decreased water quality, would be mitigated following individual project environmental assessments. Non protected, standard failing, sources would continue to be subject to these listed impacts until these assessments and reports could be completed. Off-site water sources, producing a much cleaner increased quantity of water, would be allowed under this alternative but would occur less frequently and over a prolonged time line.

Impacts to air resources would continue at current levels. Trucks, heavy equipment, engine operated tools, and all-terrain vehicles would be used to maintain existing developments. Emissions from gas and diesel engines would dissipate quickly and would not pose a health hazard to anyone in the area. Dust raised by vehicle tires during maintenance would create a minor and temporary reduction in visibility.

Recreation, Visual Resources

Under the no action alternative current recreational and visual resource trends would not change.

Cultural Resources

Under the no action alternative current cultural resource trends would not change.

Description of Mitigating Measures and Residual Impacts

There would be no additional mitigation measures required, beyond those required or provided by wildlife and/or cultural specialist. Introduced weeds would be mitigated by their attempted control and or eradication. Residual impacts, other than those previously mentioned in this EA, would not occur. Mitigation would be applied on a case by case basis, depending on the specific condition(s) found at the project site.

Monitoring

Monitoring of construction activities and impacts of the water developments on public BLM lands would be conducted by the Rawlins Field Office resource staff and/or any cooperating partners in a project. Monitoring would be established at or near each development to ensure failed rangeland health standards are being mitigated and achieved. Monitoring procedures and methodologies would be in conformance with BLM technical guides and policies or as otherwise agreed upon.

Cumulative Impacts

There would not be any additional cumulative impacts as a result of implementing the proposed action than those already described previously in this EA and those assessed in the Great Divide Resource Management Plan.

Office Personnel Consulted:

Mike Murry (Author)	Rangeland Management Specialist	BLM Rawlins Field Office (RFO)
Andy Warren	Rangeland Management Spec. Lead	BLM RFO
Susan Foley	Soils/Weeds	BLM RFO
Heath Cline	Wildlife Biologist	BLM RFO
Debbie Johnson	Assistant Field Manager Resources	BLM RFO
Patrick Walker	Archaeologist	BLM RFO
Bob Lange	Hydrologist	BLM RFO
Dave Simons	NEPA Coordinator	BLM RFO

DECISION RECORD
AND
FINDING OF NO SIGNIFICANT IMPACT

EA Number: WY-030-04-EA-193

Recommendation: My recommendation is to approve the spring and seep projects, methods, and types as described in the "Standard Spring and Seep Development" Projects Programmatic Environmental Assessment.

Rationale for Recommendation: This Environmental Assessment drastically reduces the amount of redundancy and repetitive paperwork required for the types of projects evaluated in this document. The proposed action alternative allows managers to utilize spring and seep developments as a tool to help meet "Standards for Healthy Rangelands." This programmatic analysis and decision gives managers the flexibility to utilize different spring and seep developments and construction methods which would promote healthy rangelands via the protection and development existing springs and seeps. The proposed action is in conformance with the Great Divide Resource Management Plan, Record of Decision November 8, 1990. Subsequent proposals for site specific development tiered to this decision would be disclosed and decided with a categorical exclusion, DNA or EA as appropriate.

Compliance and Monitoring: A specific monitoring and compliance plan is not required. All monitoring would follow the Great Divide Resource Area Monitoring Plan.

Rangeland Management Specialist 5-9-2008 **Date**

Decision: It is my decision to authorize the spring and seep development projects as described in the proposed action. Monitoring would follow the Great Divide Resource area Monitoring Plan.

Finding of No Significant Impact: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that impacts are not expected to be significant and an environmental impact statement is not required.

If you wish to protest this proposed decision as provided by Title 43 CFR 4160.2, you are allowed 15 days after receipt of this notice within which to file such protest, either in

person or in writing with the Field Manager, Bureau of Land Management, Rawlins Field Office, P.O. Box 2407 Rawlins, Wyoming 82301.

In the absence of a protest within the time allowed, the above proposed decision shall constitute my final decision as provided by Title 43 CFR 4160.3(a). Should this notice become the final decision you may file an appeal for the purpose of a hearing before an Administrative Law Judge and petition for stay of the decision pending final determination on appeal. In accordance with Title 43 CFR 4.470, you are allowed 30 days after this becomes the final decision within which to file such an appeal and to petition for stay with the Field Manager, Bureau of Land Management, Rawlins Field Office, P.O. Box 2407 Rawlins, Wyoming 82301. The appeal shall state the reasons, clearly and concisely, why you think the final decision is in error. Should you wish to file a petition for stay, you shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied
(2) The likelihood of the appellant's success on the merits
(3) The likelihood of immediate and irreparable harm if the stay is not granted
(4) Whether the public interest favors granting the stay.

If you decide to also submit a petition for stay of the decision, a copy of the notice of appeal, statement of reasons, and petition for stay should be simultaneously filed with the Office of Regional Solicitor, Rocky Mountain Region, U.S. Department of the Interior, 755 Parfet Street, Suite 151, Lakewood, CO 80215.

If you have questions concerning this decision please contact Mike Murry or Andy Warren at the Rawlins Field Office at (307) 328-4200.

Patrick Madigan
Rawlins Field Manager

5-9-03
Date