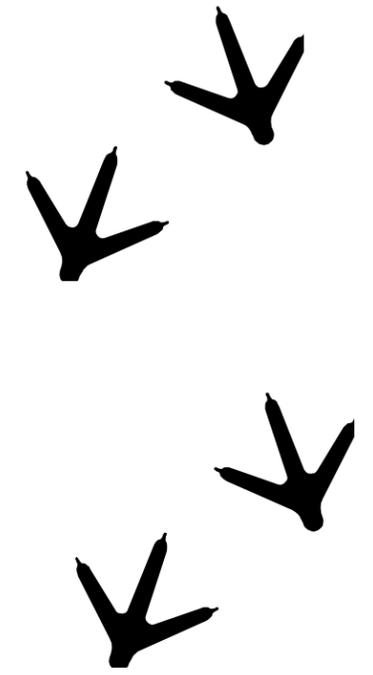


West Box Elder Coordinated Resource Management Plan

Planning Priorities Table
June 19, 2012
Working Document



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Rangeland and Agriculture Resources

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Possible Implementation Strategies
<p>1. WINTER FORAGE BOTTLENECK: Winter forage bottleneck is reduced and profitability of ranch operations is maximized. <i>(Ranch operations could be more profitable if additional winter forage could be secured. Potential sources include increased forage crop production and increased opportunities for winter grazing on public lands. Note: increased hay production depends primarily on increasing the water available for irrigation late in the summer, and this concern is addressed under Water Resources. Discussion here focuses on aspects of forage crop production other than irrigation and on increased winter grazing.)</i></p>	<ul style="list-style-type: none"> • Climatic conditions limit the types of forage crops produced and the practices employed to produce them. • Winter grazing is limited to those public and private rangelands low enough in elevation that forage is not covered by snow during the winter months. • All available low-elevation rangelands may already be allocated to winter grazing. • Available low-elevation rangelands may have low production potential as a result of water availability. 	<ul style="list-style-type: none"> • Analysis of whether the forage crops being produced are most productive for given conditions. • Number of summer vs. winter grazing allotments and the permitted AUMs in each. • Potential to increase the acreage of low-elevation rangelands used for winter grazing. • Potential to increase forage production and utilization on low-elevation rangelands. 	<ul style="list-style-type: none"> • Identify and transition to those forage crop species most likely to have the highest productivity. • Adjust seasons of use to better balance winter and summer forage demand. • Conduct a forage productivity analysis on low-elevation (BLM-administered) allotments using ESI data to see if there is more forage being produced than was originally adjudicated/currently permitted. • Conduct vegetation treatments to increase forage on low-elevation rangelands (e.g., water spreading, control of less desirable shrub species, inter-seeding desirable species). • Conduct vegetation treatments to increase forage production on privately-owned summer pastures so that there is less demand on privately-owned winter pastures. • Use grazing associations to optimize use of summer and winter forage resources among individual ranches.
<p>2. LIMITATIONS ON AGENCY MANAGEMENT ACTIONS: Agency management action limitations are minimized by identifying ways to coordinate CRM and others to assist in the process. <i>(The BLM and USFS manage the majority of the land in west Box Elder County. The ability of these agencies to manage this land is limited by internal and external forces.)</i></p>	<ul style="list-style-type: none"> • Proposed improvements are subjected to a lengthy and expensive approval process. • Agencies lack the budget and personnel to complete NEPA analysis on proposed projects. • Cost of NEPA analysis and permitting has increased due to scrutiny from outside environmental groups. • Because of the limitations imposed on the agencies, proposed projects are subjected to a prioritization process and agencies lack the budget to fund all proposed and worthwhile projects. • Time demands on agency personnel limit the interaction between range conservationists and permittees, resulting in decreased understanding of requests, expectations, and decisions. 	<ul style="list-style-type: none"> • Need to know if the agencies think there are services that can be provided by CRM that would allow for management actions to be implemented in less time. • Need to know how much the CRM can or wants to invest in providing those services. • Need to know if there are outside grants/funding available to pay third party to provide services. • We do have access to information from UGIP and WRI on past and proposed projects. 	<ul style="list-style-type: none"> • Develop programmatic arrangements or memorandums of understanding to facilitate and speed up the approval process of proposed projects. • Pursue cooperative projects with the UGIP and WRI. • Pursue option of having permittees, CRM, or a third party collect, store, and analyze monitoring data. Use this non-agency data to support proposed projects. • Consider decreasing scrutiny of proposed projects by focusing on benefits to wildlife or other resources with the realization that livestock would also benefit (e.g., increasing vegetation cover to reduce soil erosion, decreasing pinyon/juniper cover to increase sage-grouse summer range). • Utilize third party contractors to assist government agencies in completing defensible NEPA review and process.
<p>3. INFLEXIBILITY IN GRAZING PERMITTING: Flexibility in grazing permitting adjusts for changing climatic and biologic conditions. <i>(Terms of grazing permits limit agencies and permittees from adjusting grazing</i></p>	<ul style="list-style-type: none"> • BLM is constrained by five mandatory terms and conditions of grazing permits (place, time, kind of livestock, number of livestock, number of AUMs). These constraints limit flexibility in administering the permits to adjust for climatic and biologic conditions. 	<ul style="list-style-type: none"> • Need to know which areas have been identified as having an imbalance between the amount of forage and the permitted AUMs. • Need to know which of the permittees are collecting 	<ul style="list-style-type: none"> • Work with agencies to identify which data to collect so that any permittee proposed change in permit terms is supported by data. • Coordinate with range conservationist to review allotment

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<i>management to meet current conditions.)</i>	<ul style="list-style-type: none"> BLM Field Office Manager has discretion to make adjustments within the established bounds of the permit, but if BLM operates outside of the terms of the permit or outside of the bounds established in NEPA process, then they are likely to have that decision over-turned. USFS is also constrained by terms of the permit. On/Off dates established during NEPA processes or earlier and require NEPA in order to change. On/Off dates not set to long term maximum, so permittees typically using entire period almost every year rather than setting wide limits and expecting agencies to adjust dates depending on conditions. Increases in permitted AUMs following changes in range condition (e.g., following a conversion of plant cover such as after a fire) must first be subjected to NEPA process. 	<p>monitoring data from their allotments and how often those data indicate that there is an imbalance in permitted AUMs or the on/off dates.</p> <ul style="list-style-type: none"> Need to know how to expand regulatory flexibility—look for other districts that might offer an example. 	<p>conditions whenever possible (i.e.; on/off dates, move dates, following wildfires or other changes to vegetation community, drought years, or wet years).</p> <ul style="list-style-type: none"> Rewrite permits to allow for adaptive management, including wider range of permit conditions and more specific guidance about establishing limits specific to each year.
<p>4. COLLABORATIVE EFFORTS WITH GRAZING ASSOCIATIONS: Grazing associations effectively pool resources to resolve grazing concerns . <i>(The problems faced by individual ranch operators may be limiting across the industry. Often the problems faced individually by ranching and agriculture can be resolved by working together.)</i></p>	<ul style="list-style-type: none"> Practicality of operating grazing associations is constrained by distribution of both private and public grazing areas – not all operators are on adjacent land. Not all operators are interested in forming or joining grazing associations. 	<ul style="list-style-type: none"> Need to know where and how the grazing associations are operating. Need to know if other ranchers are interested in forming or joining grazing associations. Need to know why some ranchers are reluctant to form or join a grazing association. 	<ul style="list-style-type: none"> Where appropriate, consider grazing in common with time-controlled, rotational grazing system. Organize together to better qualify for grants/funding.
<p>5. PINYON/JUNIPER ENCROACHMENT: Grazing and agriculture capacity are recovered in areas where pinyon/juniper encroachment is occurring. <i>(The encroachment of pinyon/juniper trees has decreased the capacity of the landscape to support grazing and agriculture.)</i></p>	<ul style="list-style-type: none"> Pinyon/juniper stands are encroaching from historic steep, rocky areas onto alluvial fans and valley floors. Pinyon/juniper stands consume water that would otherwise be available as spring or stream discharge, and as groundwater. Understory vegetation decreases beneath pinyon/juniper stands. The decrease results in less forage production and can increase soil erosion. Loss of soil lowers site potential and may change the type of vegetation that can become established. Treating pinyon/juniper on USFS land has been focused on fuels treatments in the urban interface, and not as much in rural or other areas that are not in the urban interface, such as west Box Elder County. Treating pinyon/juniper mechanically is expensive, time consuming, and only provides a temporary solution (treatments are often effective for only 20 years). Treating pinyon/juniper with fire is risky due to the 	<ul style="list-style-type: none"> Need to know how distribution of pinyon/juniper has changed in the past. ORC says that plant cover data exists and could be used to make such an assessment. Need to know which areas on public and private land have been treated and when treatment occurred. Identify those areas most likely to be successfully treated and returned to sagebrush/forb/grass communities that are or could be incorporated in grazing programs. 	<ul style="list-style-type: none"> Continue with SRI, UGIP, NRCS pinyon/juniper treatments. Incorporate a suite of treatments of varying severity to create a spatial and temporal mosaic of plant communities and seral stages. Where appropriate, re-introduce historic fire regime through prescribed burns. Consider increasing funding pool for treatments by creating spatial and temporal mosaic that provides an array of seral states more in line with current agency policies concerning wildlife habitat.

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Possible Implementation Strategies
	potential for fire to escape.		
<p>6. NOXIOUS WEEDS: Noxious weeds are managed and new infestations contained so that productivity is maintained and desirable vegetation is preserved. <i>(Noxious weeds reduce productivity on public and private lands by out-competing desirable native and non-native vegetation.)</i></p>	<ul style="list-style-type: none"> • Several designated noxious weed species found in Utah are known to exist in Box Elder County and some are spreading. • Difficult to monitor such a large area for noxious weeds. • The locations of new infestations may not be recorded accurately or the information may not be passed to weed coordinator/specialist. • Non-grazing vectors (e.g., recreational vehicles) contribute to the spread of noxious weeds and are beyond the control of ranchers. • Successful control may require multiple treatments over the course of many years. 	<ul style="list-style-type: none"> • Need to know where noxious weeds have become established, where they are increasing, where they have been treated, and how successful treatments have been – perhaps use ORC data. • County has compiled some noxious weed data. • Knowledge of where weed infestations are located will help identify the spread vector. • Need to know where other user groups (e.g., ORVs) are concentrated. Talk to SLFO Outdoor Rec Planner. • BLM has National Invasive Species Database to track infestations – database is new and still has a few kinks in it. 	<ul style="list-style-type: none"> • Work with Box Elder County Weed Specialist to coordinate treatment of existing weed infestations; identify and add new infestations to geodatabase. • Identify likely corridors and points where noxious weeds may become established and spread. • Continue to secure BLM and NRCS funding to treat noxious weeds (funding routed through Box Elder County). • Encourage participation in spray days and other collective efforts. • Education ATV groups on the need to reduce inadvertent spreading of weed seeds. Meet with representatives of those groups to design and implement a campaign similar to the state’s campaign on invasive aquatic species.
<p>7. OTHER INVASIVE PLANTS: Other invasive plants are managed so that productivity is maintained and desirable vegetation is preserved. <i>(Other invasive plants not designated as noxious weeds also reduce productivity on public and private lands.)</i></p>	<ul style="list-style-type: none"> • Cheatgrass continues to spread, particularly following fires in areas where it was already present. • Cheatgrass effectively competes against other cool season plants for soil moisture early in the spring. • Where present, halogeton will change soil chemistry and change vegetation composition. • Treatment of invasive plants with chemicals is expensive. • Treatment of invasive plants with fire is risky due to potential of fire to escape control. • Successful control may require multiple treatments over the course of many years. • Agencies (Forest Service in particular) dislike seeding introduced species. • Revegetation with native forbs and grasses is expensive and may not yield results as good as introduced species due to changes in site conditions. 	<ul style="list-style-type: none"> • Need to know where the other invasive plants have become established, where they are increasing, and where they have been treated – perhaps use ORC data. • Need better and lower cost sources of desirable seed. • Need to know if alternative methods would lower cost of seeding (e.g., cost-benefit analysis of establishing a local seed bank, permittees applying seed, etc.). 	<ul style="list-style-type: none"> • Identify likely corridors and points where invasive plants may become established and spread. • Identify and secure sources of funding to treat invasive plants. • Identify and secure funding to reseed wildfires on private land with desirable vegetation before invasive species can become established. • Encourage Forest Service and BLM to reseed wildfires on public land with desirable vegetation. • Establish local bank of desirable seed sources.

Water Resources

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Possible Implementation Strategies
<p>1. WATER AVAILABILITY: Wise water use and development result in a hydrologic balance between demands from agriculture (livestock and crops), vegetation, wildlife and supply of water. Groundwater levels are maintained over time and water resources are developed to legally utilize all available flow while meeting ecosystem needs. Cloud seeding programs are optimized and function at a high level of effectiveness for the project area. Vegetation cover is managed to promote infiltration and recharge. <i>(Water is the limiting resource for agriculture and affects range productivity and recovery, community development, local economic viability, and environmental resilience.)</i></p>	<ul style="list-style-type: none"> • Existing irrigation season is limited to about 2 months (mid-April to mid-June) due to seasonal nature of stream flow. • Inadequate storage to capture spring runoff and extend irrigation season into July and August. • Cost associated with reservoir construction is high and existing reservoirs do not have sufficient water or storage capacity to last entire season and provide water for subsequent years. • Ground water development and withdrawal exceed recharge in some areas. Ground water levels are dropping. • Moratorium on ground water development for agriculture purposes in the Park Valley area. • Existing irrigation conveyance structures (e.g., canals, ditches) are leaky and lose substantial water before reaching fields. • No incentive to increase in-field efficiency of irrigation (e.g., cannot use water saved by switching from flood irrigation to sprinkler irrigation). Amount of net depletion associated with water right cannot be increased. • NRCS-funded water development projects in WBE have a competitive disadvantage with projects located in other parts of the county due to lower cost/efficiency scores. • Wildlife has become dependent on riparian habitats resulting from leaky conveyance systems. 	<ul style="list-style-type: none"> • Updated water budget assessment that accounts for all inflow (e.g., surface and ground water inflow, precipitation) and outflow (e.g., evaporation, transpiration, ground water flow to Great Salt Lake). <i>Water budget from DWR basin study available (2003).</i> • Assessment of existing water sources and water use to determine if water resources are fully-allocated. Several processes that should be addressed include diversion amounts (water rights vs. actual use), net depletion (crop uptake), and leakage/recharge from canals. <i>Available information includes: Hydrologic reconnaissance reports, Proposed Determination records (water rights), vegetation mapping and ET rates. No canal leakage report identified.</i> • Reservoir feasibility study of potential construction sites and cost. <i>Archived DWR studies of potential reservoir sites (~40-50 years old).</i> • Identify water rights where net depletion could increase and not adversely affect downstream users (e.g., shallow ground water discharging to Great Salt Lake). <i>Proposed Determination records (water rights), GIS mapping of Points of Diversion.</i> • Identify irrigation systems and landowners where consolidation would improve cost/efficiency scores on NRCS-funded water improvement projects. <i>GIS mapping of irrigation systems, discussion/coordination with applicable landowners.</i> • Time series measurement of ground water levels. Assessment of potentiometric levels in project area. <i>USGS monitoring wells (typically limited data). No groundwater contours identified to date.</i> • Location of moratorium boundaries in the Park Valley area. <i>GIS mapping of moratorium boundaries.</i> • Hydrographic survey and assessment of spring development opportunities. <i>Older hydrologic reconnaissance reports available for most of project area. Water development records for BLM land available in RIPs database. Limited records</i> 	<ul style="list-style-type: none"> • Monitor surface flow, ground water flow, actual water use, and existing water rights to support regular updates of the water budget and determine how much water is available for use. • Develop and maintain springs where feasible and in a way that wildlife access to surface water will not be unreasonably compromised. • Improve existing water conveyances to reduce leakage and build new structures where feasible. Any reduction in recharge from canal leakage would be offset by increased infiltration through vegetation management – see vegetation resources. • Reduce encroachment of juniper and other invasive species that transpire substantial water and replace them with vegetation that promotes infiltration, provides livestock forage, and sustains wildlife habitat. • Restore water dependent habitat (e.g., riparian corridors, wetlands, wet meadows, etc.) by maximizing upslope infiltration, groundwater storage, and release of base flow to streams and wet areas. • Build new reservoirs in south facing canyons of the Raft River Mountains where feasible. Use beaver as alternatives to capture surface flow and increase ground water recharge.

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Possible Implementation Strategies
		<p>for water development on USFS land.</p> <ul style="list-style-type: none"> Map of irrigation systems with information defining structure type (e.g., pipelines, siphons, lined and unlined canals and ditches) and unit cost to upgrade (\$/distance). <i>GIS mapping of canals and major ditches, no mapping information on lined/unlined condition. NRCS cost information for conservation practices.</i> Assess current cloud seeding programs and determine if opportunities exist to increase the number of generators or optimize their location. <i>Program updates from DNR/DWR.</i> 	
<p>2. PUBLIC LANDS PROJECTS: Proposed developments on public land are addressed in a timely fashion, providing environmentally sound multiple use of public lands. <i>(NEPA and other federal processes are cumbersome and take a significant cost and time commitment from the agencies. As a result, many proposed projects remain uncompleted.)</i></p>	<ul style="list-style-type: none"> Limited time of service by federal employees in project area (generally less than 5 years) means less understanding of situations and needs. Agency schedules delayed by litigation. Federal funding for project development has decreased. 	<ul style="list-style-type: none"> Environmental monitoring data that can be used to support agencies during litigation process. <i>Provided by stakeholders or contractor.</i> Inventory of water development projects located on federal land (including location, construction date, and description). <i>See above Concern 1- Information or Data Needs, eighth bullet point.</i> 	<ul style="list-style-type: none"> Complete programmatic NEPA projects to address multiple concerns. Utilize third party contractors to assist government agencies in completing defensible NEPA review and process.
<p>3. VEGETATION AND WATER: Appropriate balance of trees, shrubs, forbs, and grasses that optimizes infiltration, groundwater recharge, wildlife habitat, and livestock forage. <i>(Invasive species—e.g., encroaching junipers—consume water).</i></p>	<ul style="list-style-type: none"> Vegetation treatment is expensive and requires disturbance to large areas. Revegetation efforts are sometimes difficult due to low precipitation. Approval of watershed scale treatments on public land require NEPA and time commitment from federal agencies. 	<ul style="list-style-type: none"> Updated vegetation map that identifies potential treatment locations. <i>GIS mapping – see vegetation resources.</i> Updated cost assessment for vegetation treatment. <i>NRCS cost information for conservation practices.</i> Assessment of water lost through transpiration from junipers encroaching into undesired areas. <i>Published literature documenting transpiration rates from juniper stands in Western U.S.</i> Evaluation of where saved ground water may be available for other uses. <i>Proposed Determination records (water rights),</i> 	<ul style="list-style-type: none"> See Agriculture and Range Resources
<p>4. WATER QUALITY: Existing and new livestock confinements do not contribute water quality impacts to surface or ground water bodies. All water bodies in the project area fully support their assigned beneficial uses. <i>(Federal and state water quality regulations may pose additional cost to landowners.)</i></p>	<ul style="list-style-type: none"> Existing corrals may need to be moved away from streams. Regulations will require new corrals to be built a significant distance from stream and need offsite watering structures. 	<ul style="list-style-type: none"> Location of all AFO/CAFOs and information regarding which facilities are managed or upgraded to prevent surface runoff to receiving waters. <i>NRCS Tremonton field office conservation practice records – (confidential).</i> Water quality monitoring data from receiving waters. <i>Utah Division of Water Quality records.</i> 	<ul style="list-style-type: none"> Design and locate all new corrals according to NRCS conservation practice guidelines. Cooperate with NRCS in upgrading existing facilities to meet conservation practice guidelines

Socioeconomics

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Possible Implementation Strategies
<p>1) POPULATION AND SERVICES:</p> <p>A. Fully-functioning and self-sustaining ranches in all WBE communities that don't require significant outside income to operate. See Rangeland and Agriculture, Water, and Forestry, Woodlands and Weeds for implementation strategies.</p> <p>B. Increased permanent resident population in the Grouse Creek community, ensuring sufficient population for a local school, church, store, post office, and other important amenities.</p> <p>C. Increased viability of the Grouse Creek store to ensure availability for passersby and local residents.</p> <p><i>(The population in some communities is dwindling and struggling to support basic community functions. Grouse Creek in particular has lost half of its population in the last 20 years. When people move away, they or their descendants often keep property for vacation use but don't live in the community. As a result, there is no inventory of properties available for purchase. Public schools end with 10th grade because there aren't enough students to support more teachers; fewer students could lead to the school being closed. Passersby can't rely on the Grouse Creek store to be open. As a result, they purchase goods elsewhere, making the store less viable and reliable for local populations.)</i></p>	<ul style="list-style-type: none"> • Conflict exists between some who want to increase community population and some who do not want to compromise the rural character. Some see economic development as something that provides the tools to make existing operations self-sustaining. Others see economic development as a set of activities that attract more jobs, people, and opportunities. • Population growth is severely constrained by lack of services and employment opportunities. • BE County doesn't meet the "rural fast-track" grant standards because of the urban population in Brigham. So despite the low population density in WBE, as soon as the entire county exceeds 30K population it is not eligible for the easy business development grants. • County economic development efforts naturally focus on "big fish." It is difficult to justify the economics of doing a lot of work at the county level to create five jobs in WBE if the same amount of effort may create 50 in Brigham City. • County GP contains strong policy to NOT promote rural development. 	<ul style="list-style-type: none"> • Updated demographic information/data from communities (church, school, and population records). Census data is approximate and does not appear to have reached everywhere. • Target numbers for schools, churches, and other specific services to be considered functional and viable. • Identify results of Ibapah USDA Rural Development study regarding the economic/technical feasibility of installing card-reader pumps (Dave Conine, director USDA RD Utah) • Analyze grant availability. • [Globally for Socioeconomics] Develop more robust inventory of economic resources. 	<ul style="list-style-type: none"> • Focus economic development efforts on ranching-auxiliary or non-ranching job opportunities. • Collaborate with public entities to establish paid positions in rural WBE. • Develop an inventory of properties/homes available for purchase. • Obtain card-reading gas pumps at the store in Grouse Creek. • Install signage on SR 30 to identify an alternative route through Grouse Creek to City of Rocks National Reserve (County indicated this would be an excellent candidate for TAP Grant next January.)
<p>2) RANCHING ENTRY AND RETENTION:</p> <p>Ranches are intergenerational enterprises; children can come back, either to take over ranching operations or to make a living providing services that support ranches.</p> <p><i>(Ranches are getting larger to stay economically viable, so the trend is toward fewer and larger ranches—more and smaller ranches are not realistic. As a result, the cost of entry is too high for young families or newcomers, and young people raised in ranching may not be able to make a living in existing operations.)</i></p>	<ul style="list-style-type: none"> • Bigger ranches require fewer people per productive unit (per acre, cow, etc.). As a result, sustainable ranches are increasingly in conflict with maintaining sustainable populations. 	<ul style="list-style-type: none"> • Assessment of minimum, viable size for ranching operations would be useful. Some regional information is available, but its applicability to this setting needs to be determined. 	<ul style="list-style-type: none"> • Local labor (instead of foreign or outside labor) is encouraged to support ranching. • Publicize and promote ranching and agricultural opportunities in WBE, especially for smaller, less capital-intensive agricultural opportunities.

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Possible Implementation Strategies
<p>3) MAINTAINING RURAL CHARACTER: Ranching is preserved as the dominant way of life in the area for future generations and rural character is protected.</p> <p><i>(West Box Elder offers solitude, and a “place to get away” for those seeking it. Most residents agree strongly that the rural way of life is worth preserving. Even as outsiders and newcomers arrive and communities change, community character should remain fundamentally rural.)</i></p>	<p>Maintenance of rural character is not likely to be a challenge in WBE. Not considered to entail conflicts/constraints.</p>	<ul style="list-style-type: none"> No information/data gathering is anticipated to be needed for this concern. 	<ul style="list-style-type: none"> Ensure modern tools, such as conservation easements, are available to help preserve ranch lands.
<p>4) SAGE GROUSE THREAT TO ECONOMY: Ensure ultimate sage-grouse management does not present a threat to local economies.</p> <p><i>(Sage-grouse listing as threatened or endangered may alter local economics that WBE communities depend on.)</i></p>	<p>See “Wildlife” section for planning related to Sage Grouse.</p>	<p>See “Wildlife” section for planning related to Sage Grouse.</p>	<p>See “Wildlife” section for planning related to Sage Grouse.</p>
<p>5) COMPLEX LAND OWNERSHIP AND GOVERNMENT REGULATION: Minimize the effects of government regulation and environmental litigation on the economics and operations in WBE.</p> <p><i>(The complex mosaic of federal, state, and private lands means greater involvement of government agencies and outside groups in decisions, resulting in communities that are less able to maintain local control over their own destiny.)</i></p>	<ul style="list-style-type: none"> Strategies that significantly reduce the potential effects of government on land-use and land-management are very challenging to implement and achieve. Some government-imposed land-uses, such as roadless areas, are preferred by residents because they limit damage by motorized vehicle users – at the same time, they limit the ability to use vehicles for servicing allotment infrastructure. 	<ul style="list-style-type: none"> Conversations involving BLM, USFS, and SITLA are suggested to look more deeply into the agency side of land-use and regulation challenges. As the CRMP seeks to reduce the weight of government effects on management, the agency perspectives and buy-in are critical. This is a major project collaboration imperative. Determine all SITLA land projects and opportunities in WBE. Obtain all BLM allotment-specific plans. Obtain current county GIS and mapping resources for analysis. 	<ul style="list-style-type: none"> Investigate the potential for a broad-scale, multi-agency land exchange that would benefit resources and simplify land management. Ensure county-level zoning protects important social and economic conditions in rural WBE. Ensure involvement and representation in all agency planning groups (e.g., BE County Public Lands Committee, BE Economic Development Alliance).
<p>6) RANCHING AUXILIARY JOBS: Commodities that are produced in and exported from WBE are processed, distributed, and supported by businesses based in WBE. Additional opportunities for urban visitors (dude ranches, etc.) are promoted in WBE.</p> <p><i>(Currently few if any businesses are present to capitalize on the ranching commodities produced in WBE.)</i></p>	<ul style="list-style-type: none"> The large size of WBE (with significantly divided north-slope and south-slope communities) may make it difficult to consolidate ranching-auxiliary operations at locations that work for everybody. A lack of information-sharing and coordination among WBE producers may be resulting in lost opportunities. 	<ul style="list-style-type: none"> An inventory of the commodities (and quantities of each) produced locally but processed outside of WBE. Should include information about where the commodities are sent by each producer. Analyze grant availability. Analyze minimum operation scale for processing beef cattle and sheep. Explore exemptions available for small, rural packing plants. 	<ul style="list-style-type: none"> Marketing cooperatives provide new opportunities for efficiently processing, selling, and distributing agricultural products. Encourage and promote “collector” businesses that support broad operations throughout WBE and create distribution efficiency (e.g., a creamery).

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Possible Implementation Strategies
<p>7) NON-RANCHING JOBS: A variety of non-ranching employment and business opportunities are available in WBE. Technology—such as availability of fiber optic lines—is leveraged by local businesses. People who desire the “outside life” or solitude (but do not need ranching employment) are attracted to the area.</p> <p><i>(Only a few non-ranching jobs are available to augment the WBE economy. Not all new opportunities provide jobs for residents; sometimes (e.g., Ruby Pipeline) they require specialized expertise that the companies bring from elsewhere. These non-ranching jobs often provide access to health care benefits not otherwise available to ranchers. Communities need more diversity than ranching and agriculture provide to ensure economic health.)</i></p>	<ul style="list-style-type: none"> • Distribution can be a huge challenge because of remoteness/distance. Online businesses that use drop-ship brokering can mitigate the problem. There may be a lack of knowledge about the mechanics of this. • Home-based businesses can supplement income. In some cases, businesses operate and exist elsewhere but are managed remotely from WBE. • There is not enough business to support a local garage or towing service, so land owners occasionally have to provide assistance to visitors who get in trouble in these remote places, such as getting stuck in snow and mud, running out of fuel, etc. (Could this service be combined with other similar services provided from a single source?) 	<ul style="list-style-type: none"> • Inventory non-ranching service needs of the communities that are not currently available. • Inventory non-ranching commodities (including natural resources) that can be developed. Specific questions to ask include “what workforce is available,” and “what niche can be exploited.” • Explore opportunities for collectives or clinics for affordable health care. • Analyze grant availability. 	<ul style="list-style-type: none"> • Promote jobs that use labor available from WBE before those that import labor from outside. • Focus distribution close to WBE (Snowville?). • Develop non-agricultural natural resource commodities (rock quarries, wind farms, etc.). • Maximize opportunities to capitalize on wildlife resources (hunting and watching).
<p>8) INFRASTRUCTURE: Available infrastructure supports community needs and public welfare/safety in WBE.</p> <p><i>(Several communities lack basic infrastructure items such as culinary water, sewer, emergency services, and medical care.)</i></p>	<ul style="list-style-type: none"> • The economics of the small and dispersed population clusters make provision of comprehensive infrastructure impractical. 	<ul style="list-style-type: none"> • Are there any government-mandated infrastructure requirements that are not being met in WBE (e.g., emergency services or medical facilities)? • Analyze grant availability. 	
<p>9) RECREATION AND EVENTS: Sustainable recreation opportunities and special events that attract outside visitors without compromising local resources are developed and promoted in WBE.</p> <p><i>(Recreation amenities and special events for outsiders could potentially support a variety of economic activities and opportunities but are not promoted strongly to people outside of WBE. There are very few designated places for outsiders to lodge, camp, or dine.)</i></p>	<ul style="list-style-type: none"> • Residents do not agree on the desirability of all varieties of recreation promotion. For example, a designated/promoted ATV trail system would certainly bring visitors and money from the outside, but at the cost of solitude and with potential adverse effects on soil, water, weeds, and livestock. • During hunting seasons (sage-grouse, deer, and mountain lion) people camp along roads on both private and public land, with impacts of trash, streamside trampling, leaving gates open and cutting fences (which results in cattle trespassing, etc.). 	<ul style="list-style-type: none"> • Are there any partial/uncompleted plans for recreational developments or amenities in WBE? (check with all agencies and government partners). • Analyze grant availability. • Inventory of lodging/dining resources in WBE. • Assess visitation at Sun Tunnels during Solstice and visitors to City of Rocks National Reserve. 	<ul style="list-style-type: none"> • Consider design and development of an ATV destination trail system in WBE. • Consider ways to leverage Spiral Jetty and Sun Tunnels events. Consider potential “Landscape Art Complex” in WBE and promote other major art projects. • Improve special events (bicycle races, Fourth of July rodeo, etc.) promotion. • Promote lodging/camping locations in Grouse Creek with signage; develop more locations if feasible.

Wildlife

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Implementation Strategies
<p>10) SAGE-GROUSE LISTING: Sage-grouse populations in WBE are studied and major threats eliminated with minimal impacts on ranching. The general public realizes that ranching is not a significant threat to sage-grouse. <i>(With the recent designation of sage-grouse as warranted but precluded and a decision on formal listing due in 2015 by the USFWS, there is widespread concern that listing the species as threatened or endangered would remove local control and impose severe costs on local ranchers and residents. To prevent listing, local land users are committed to implementing practices and improvements that benefit sage-grouse, but also benefit livestock ranching and residents.)</i></p>	<ul style="list-style-type: none"> WBE and the state of Utah have developed conservation plans for sage-grouse. These should be reviewed with respect to recent data and should be compatible with federal agency directions, and vice versa.. 	<ul style="list-style-type: none"> Identify what type of habitat (lekking, nesting, brood-rearing, or winter) is most limiting in WBE. Location of critical habitat for sage-grouse. Population trends of sage-grouse in WBE for both grazed and ungrazed areas. (Available from lek counts.) Population trend data for other areas outside of WBE that have been grazed over long periods of time for comparison. (Available from DL&L lek counts.) Analyze availability of grants and financial assistance, especially for improvements that benefit both sage-grouse and livestock. Information on the findings of the Governor Herbert's sage-grouse task force in-progress. (Report due July 2012.) 	<ul style="list-style-type: none"> Support USU in studying sage-grouse in WBE. Identify habitat improvements that can benefit both sage-grouse and livestock. Billboard or other PR campaign to educate public?
<p>11) WILDFIRE: Threat of wildfire is reduced, especially in sensitive areas. <i>(Wildfires that have occurred in sagebrush communities in WBE and have resulted in grass monocultures that do not support important wildlife, such as sage-grouse, although a few have been perceived as beneficial to livestock. Wildfire is considered the single biggest threat to sage-grouse.)</i></p>	<ul style="list-style-type: none"> Fire where cheatgrass is present is likely to result in a monoculture of cheatgrass which leads to increased wildfire risk. 	<ul style="list-style-type: none"> Success of forage kochia fire breaks in protecting critical sage-grouse areas. (Being studied right now by USU.) Areas are crucial to protect from wildfire. (USU has this data but it may not all be ready for release yet and there may need to be some discussion.) Areas that could be burned without impact on sensitive species. (Need to identify these areas.) Revegetation options and past success or failure. 	<ul style="list-style-type: none"> Prescribed burns are facilitated and completed in suitable areas. Fire breaks are constructed to protect critical areas.
<p>12) FEDERAL MANDATES ON OTHER SPECIES: Effects of livestock use of water sources used by boreal toads are understood and any impacts are minimized. Chytrid fungus is kept out of WBE to protect boreal toads. <i>(There are three populations of boreal toads in WBE found in the Goose Creek, Raft River, and Grouse Creek mountains which need to be protected and residents are concerned about the costs that could be incurred.)</i></p>	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> How does livestock use affect boreal toads? (Many published papers on this but results are conflicting and none have been done in areas similar to WBE.) What money is available to develop water sources such that boreal toads and livestock can coexist with minimal impacts on each other? What is the current extent of chytrid fungus in the area and how do we avoid contaminating uninfected areas? <ul style="list-style-type: none"> The state should have a rough extent of the fungus. There are some ideas on how to reduce the spread of chytrid fungus but nothing can guarantee the 	<ul style="list-style-type: none"> Conduct studies on the WBE boreal toad populations to determine effects of livestock on boreal toads. Maintain corridors connecting fungus free boreal toad populations. Possibly disrupt corridors that connect infected and uninfected boreal toad populations. Possibly restrict access of livestock traveling between infected and uninfected boreal toad populations. If recreation is a major use in boreal toad habitat, use public relations tools to inform the public how to avoid transferring fungus between areas.

Desired Future Conditions	Conflicts and Constraints	Information or Data Needs	Implementation Strategies
<p>13) HABITAT FRAGMENTATION: Habitat fragmentation and effects on wildlife are minimized. <i>(Wildlife habitat is lightly fragmented. Most fragmentation comes from dirt roads which do not pose significant barriers to most species. However if ranches were sold for housing development fragmentation would increase significantly. Fire breaks would further fragment habitat.)</i></p>	<ul style="list-style-type: none"> • 	<p>fungus does not spread.</p> <ul style="list-style-type: none"> • Assess how is habitat fragmentation is affecting local wildlife. • Determine which sensitive species could be highly affected by further habitat fragmentation. (Literature review.) 	<ul style="list-style-type: none"> • Activities that fragment habitat are curtailed if it is determined that they are detrimentally affecting wildlife. • Areas could be zoned such that if developed fragmentation will be minimized. • Zoning prevents small subdivision in areas where preventing fragmentation is critical for habitat. • Conservation easements could be used to protect habitat from development. • Preventing fragmentation becomes a major cornerstone of Utah wildlife plans.
<p>14) PREDATORS: Wolves do not become established in WBE and effects of predation on sage-grouse are reduced. <i>(There are no known wolf packs in WBE but residents are concerned that there may be soon. There are high numbers of mesopredators which have impacts on sage-grouse survival and recruitment.)</i></p>	<ul style="list-style-type: none"> • Ravens, one of the biggest predators of sage-grouse nests, are protected under the Migratory Bird Treaty Act making control difficult. • Wolves are a protected species in WBE although they are not known to occur there. 	<ul style="list-style-type: none"> • What is the extent of wolf packs in Idaho and how long till we can expect they will reach WBE? <ul style="list-style-type: none"> ○ Idaho Fish and Game should have the extent info and may be able to estimate a timeframe. • Are there any feasible mesopredator control methods to cut down on predation of sage-grouse? <ul style="list-style-type: none"> ○ There is plenty of data on this and it seems the answer is no. 	<ul style="list-style-type: none"> • Improvement of habitat quality can reduce predation.
<p>15) CWMUs: CWMUs are established where appropriate to benefit local residents and augment ranch income. <i>(There are 13 CWMUs in WBE. CWMUs can work with good guides, be fun for the landowner, attract better law enforcement that encourages users to act more responsibly, keep land owners better apprised of activities on more remote lands, and provide opportunities for new associations.)</i></p>	<ul style="list-style-type: none"> • CWMUs can provide extra income to augment ranching revenues. DWR must approve; tightly recommended. Need minimum 3,000 contiguous acres but can combine multiple owners; tags split between public and land owner. 	<ul style="list-style-type: none"> • Need data on characteristics of existing CWMUs, extent of similar habitat and wildlife population densities. • Willingness of land owners and DWR to cooperate on CWMUs. 	<ul style="list-style-type: none"> • Work with DWR and land owners to seek new possibilities for CWMUs that could benefit local residents and the community.