

Project Name: Ucross Ranch Master Plan
Project Location: Ucross, Wyoming
Project Type: Category 2: Planning

Project Summary:

The Ucross Ranch Master Plan creates a greater awareness of the connectivity between environmental systems and human interventions, consequently engaging people with the land and strengthening their dedication to its preservation. The Master Plan provides a comprehensive site analysis and proposing simple and impactful mitigation strategies for restoration of native habitat, preservation of valuable resources, and planning for a regenerative future. Master planning solutions allow for incremental implementation that is manageable both financially and operationally.

Project Purpose:

The vision of the ranch and the master planning process is threefold: to maintain and protect historic, cultural and natural resources; to foster creative exploration for artists, writers and composers; and to serve as a planning model for other public and private land holders.

Background and Vision

Recognized by organizations such as the Nature Conservancy for its commitment to conservation and preservation, Ucross Ranch had begun to implement sustainable cattle ranching practices. However, with 22,000 acres which include wetland ecosystems, native grassland, shrub land steppe and habitat for abundant wildlife, a more holistic land management policy was required.

Located on the High Plains in northeastern Wyoming near the Bighorn Mountains, the historic ranch has been operating as a working cattle ranch since the late 1800's. The Ucross Foundation was formed in 1981 as a non-profit organization to protect historic resources and to establish a resident artist program on the property. The unique geographic location fosters innovative and creative thinking for artists and introduces individuals to the land. Both the historic Big Red Barn Complex and the Foundation's Art Gallery offer a cultural component attracting the local community and visitors from across the country.

Role of the Landscape Architect

The landscape architect led the process for the entire master plan, including a site analysis that informs subsequent planning phases of the project in a manner that is fitting and appropriate. The analysis comprehensively explored the property's apparent disturbances, as well as the off-site land uses and the small scale, often inconspicuous, impacts to environmental systems. The potential for future cumulative consequences of all impacts was anticipated and addressed.

Site analysis can often result in complex strategies which would be difficult to readily assimilate into the operations of a working ranch. The landscape architect drove the inherent goal of the Ucross Ranch Master Plan to convert multi-faceted information into simple mitigation solutions for incremental implementation. Planning documents also include strategies to direct the human experience of the property with respect to ranching practices and natural, cultural, and historic landmarks.

Special Factors: Sustainable and Regenerative Design Solutions

Environmental: Off-site and government regulated activities beyond the immediate control of the ranch are affecting the Ranch's environmental resources. Aerial weed spraying and over grazing on adjacent properties have eliminated woody vegetation in draws and gulches, resulting in eroded creek banks, faster and warmer creek water flows, and a reduction in riparian vegetation and habitat. Mitigation includes alternative weed eradication methods, creek bank stabilization, and revegetation with on-site nursery propagation. Restoring the natural ecology of the draws and gulches is an important priority for the long-term health of the land and will improve native habitat, attracting a greater diversity of species including the endangered bald eagle, the black footed ferret and a perennial orchid species, the Ute ladies'-tresses.

The Coalbed Methane extraction process on the property creates uninhabitable, unsightly, saline infiltration ponds. While the ranch can't control the extraction of coalbed methane on their property, they do have the right to require mitigation of the visual and ecological impacts in and around the

areas of disturbance. The standard rectilinear shaped infiltration ponds, where thousands of gallons of highly saline waste water are disposed of, can be designed to follow the existing contours of the land and reflect more organic shapes. Halophytic plants planted at the pond edges will create an ecosystem which utilizes and treats the otherwise unusable wastewater.

Social: Along with its rich and varied ecology, Ucross Ranch has a significant social, cultural and historic tradition. The Master Plan identifies the places that contribute to the character of the ranch and aims to sensitively integrate the activities of artists and visitors with these sites. The creation of pedestrian connections will unite the campus core with existing and future residences and studio spaces, promoting vitality and encouraging social interaction. Demonstrating sustainable building practices, such as renewable solar and wind power and harvesting and re-using rain water, helps ensure the regenerative growth of the campus and its operations. Connecting the architecture with the landscape will engage residents by bringing them closer to the land that creates an inspirational backdrop for artistic expression.

The historic Sioux Indian Teepee circles, the Childress house, and the Big Red campus complex, as well as the natural features of rock outcroppings, petrified logs and viewpoints overlooking the expansive landscape are several landmarks identified as having historic, cultural and natural significance. The Trails Master Plan defines connections to these destinations to provide visitors with a full immersion in the landscape while minimizing conflicts with on-going ranching operations. Trails and viewing blinds will invite resident artists to capture, appreciate, connect and be inspired while remaining sensitive to the natural environment. An artist's translation of their experiences promotes a renewed curiosity and desire for preserving, enhancing and understanding the natural world.

Economic Implementation: With such a significant land holding, it was not financially or practically viable for the owner to undertake wholesale changes across the entire 22,000 acre site. Strategies for phased implementation considered establishing priorities and addressing simple design interventions that are easily understood. The Plan responds to the pragmatic nature of a working ranch where changes occur incrementally but with a significant impact even when executed on a small scale. To augment their efforts, the owner is collaborating with a variety of entities to help realize the overall vision and to monitor the success of new practices. Detailed mitigation requirements for the restoration of lands disturbed due to sub-surface resource extraction are now in place to be used as negotiating tools with the extraction companies. With a well documented Master Plan that considers both comprehensive and detailed improvements, these cooperative efforts can be executed with efficient and coordinated results.

Project Significance

In depth and cohesive site analysis, knowledge of natural systems and ecology, and an understanding of the varying and often conflicting land uses are only the first steps toward regenerative land management planning. The greater role for Landscape Architects is to assimilate and translate these individual layers of information and provide simple, pragmatic solutions for implementation by land owners. This combined effort by both consultants and land owners will unify people with the land and contribute to the success of holistic and progressive land stewardship.

The impact of this Master Plan extends well beyond Ucross Ranch. The landscape of the American West has been drastically altered as a result of population growth, energy development and unsustainable land management practices, which threatens the aesthetic, cultural and ecological integrity of an entire region. In developing and implementing a sustainable land use management policy, Ucross Ranch will demonstrate progressive land stewardship and serve as a model for other public and private land holders.