Commentary

Confessions of a collaborator: Shoesole and Stewardship Alliance of Northeast Elko County, Nevada

ROBIN BOIES, HC 34 Box 300, Wells, NV 89835, USA vineyard.boies@gmail.com

Abstract: The Shoesole Management Team (Shoesole) and the Stewardship Alliance of Northeast Elko (SANE) are place-based, landowner-organized, natural and human resource conservation initiatives. The Shoesole was organized in 2002 to implement a more holistic approach to rangeland management on 2 federal livestock grazing allotments. This effort provided the foundation for SANE, which was organized in 2012 by representatives of 8 ranches in northeastern Nevada in response to the potential listing of the greater sage-grouse (*Centrocercus urophasianus*; sage-grouse). The SANE and Shoesole encompass >688,000 ha in northeastern Nevada, of which 200,000 ha is privately owned and 488,000 ha is comprised of public land allotments managed by the Bureau of Land Management (BLM) and U.S. Forest Service (USFS). Over 50% of the sagebrush (*Artemisia* spp.) habitat in the SANE area was designated a Sagebrush Focal Area in the BLM Resource Plan and USFS Land Use Plan sage-grouse amendments. The SANE includes state and federal land management and resource agencies with regulatory and management authority in the region. The SANE group tackled the planning and implementation of sound conservation management through the development of a Sagebrush Ecosystem Conservation Plan. The SANE and Shoesole came together voluntarily, as rancher-organized grassroots initiatives, with a common goal of creating a better place-based conservation decision-making process. They addressed the human dimension aspects of range management, and challenges, to include sage-grouse habitat issues through a facilitated collaborative model that incorporated the building of trusting relationships as the foundation of solution, and place-based resource management strategies as a method to increase transparency and reduce conflict through civil dialogue.

Key words: adaptive management, Centrocercus urophasianus, collaboration, communitybased conservation, consensus, greater sage-grouse, livestock grazing, Nevada, public lands, resource management

movement in the United States in the late nineteenth century, a growing awareness and demand for new social responsibility to protect environmental qualities and values, along with a demand for natural resource protections, has grown (Holechek 1981, Stegner 1992, Brinkley 1995, Rushefsky 2002). Historical use of the western rangelands resulted in mismanagement in some areas that is still evident today (Dagget and Dusard 1995). The evolving regulatory oversight in livestock grazing that was brought about by the Taylor Grazing Act in 1934, coupled with evolving range science generated by landgrant universities, resulted in slow incremental changes in management in sectors of the livestock industry (Holechek 1981).

From the 1960s to the present, the change in

SINCE THE BEGINNING of the conservation agencies was shifting focus from predominately extractive and commodity-driven management of the public land resources to more consideration of recreation and preservation values to accommodate public interests (Holechek 1981, Brinkley 1995, Rushefsky 2002). The public's growing involvement and concern over natural resource issues, coupled with a growing interest and focus on threatened or endangered species, resulted in new federal legislation during the 1960s through the 1990s (Brinkley 1995, Rushefsky 2002). The Clean Air and Water Act, National Environmental Protection Act, Federal Land Policy Management Act, Endangered Species Act (ESA), and Wild Horse and Burro Act signified a new social contract affecting public land uses (Brinkley 1995).

Changing public perceptions, growing management values of the public and of federal involvement and use of public lands, and

differing expectations of the appropriate use of federal lands created a growing divide between traditional uses in rural resource dependent communities and industries as well as the expanding environmental community and growing population (Cawley 1993). The widening schism was exacerbated by misunderstanding and misperception, inadequate communication and education, and unwillingness by some livestock producers to change management practices, resulting in widespread distrust (Rural Voices for Conservation Coalition 2007). Federal agency implementation of regulation, policy, and natural resource laws often exacerbated the divide between traditional resource users and the federal and state government agencies with regulatory authority, and the public (Cawley 1993, U.S. Fish and Wildlife Service [USFWS] 2010, Bureau of Land Management [BLM] 2015a).

In the 1990s, viewpoints hardened and many areas in the western United States became embroiled in conflict. Traditional uses like livestock grazing or harvesting timber on public land and the associated practices and outcomes faced increased litigation (Cawley 1993, Rushefsky 2002). The multiple use concept on the West's public lands seemed threatened. Increased vitriol and vilification of the other side from extreme voices in the environmental community and extreme voices in the public lands resource-based communities resulted in a "them vs. us" culture that deepened following the listing of the spotted owl (Strix occidentalis) for ESA protection and the crisis in the Klamath Basin in southwestern Oregon (Andre and Velasquez 1991, Rushefsky 2002).

Increasingly, livestock grazing stood in the crosshairs of organizations committed to the abolishment of livestock grazing on public lands (Cawley 1993, Rural Voices for Conservation Coalition 2007). Increased scrutiny of federal management of the public lands and a public questioning rangeland health conditions led to more and more legal challenges at the federal grazing allotment level (Cawley 1993, Rushefsky 2002).

In response to the growing conflict and litigation during the 1990s, a counter culture emerged around the edges of resource management across the West (Kemmis 1990, Limerick 2000). In the 1990s, collaborative community-based efforts germinated across the western United States

(Stegner 1992, Limerick 2000, Van Riper 2012, 2013). These locally focused, place-based groups seemed like an unintended consequence, the good news that grew out of the natural resource spectrum of conflict (Brueggemann 2002, Bryan 2004, Boies 2014).

In the mid-1990s, the collaborative management movement took root northeastern Nevada, resulting in the formation of the Shoesole Management Team (Shoesole) and the Stewardship Alliance of Northeast Elko (SANE) in 2002 and 2012, respectively. These groups were formed to improve communication between landowners and agencies, implement progressive management practices, improve rangeland and riparian health. The group process adopted by Shoesole and SANE provided an inclusive, proactive path for hammering out durable solutions to challenges in public land policy that livestock operators and landowners faced. These collaborative group efforts resulted in a growing trust and new, more effective relationships with state and federal agencies and the interested public.

The efforts that led to the formation of the Shoesole originated in the mid-1990s amidst growing regulatory pressures and public scrutiny (McAdoo 2017). The Shoesole focused on the individual grazing allotment of each ranch, addressing individual grazing and range management practices. The SANE was formally organized in 2012 by representatives of 8 ranches in northeastern Nevada in response to the potential listing of the greater sage-grouse (*Centrocercus urophasianus*; sage-grouse; Figure 1) for protection under the Endangered Species Act (USFWS 2010).

The SANE group addresses landscape scale management at the local level (SANE 2014) while striving to maintain ecological integrity and economic viability of the livestock operators on the SANE team. The Shoesole member ranches are a part of SANE. In addition to ranchers, both the Shoesole and SANE include public land users and public resource agency specialists from state and federal wildlife and land management agencies with regulatory authority.

This commentary supplies the historical context to provide background information that led to the formation of SANE. The Shoesole and SANE collaborative planning process is



Figure 1. The Stewardship Alliance of Northeast Elko was organized in 2012 in response to the potential listing of the greater sage-grouse (*Centrocercus urophasianus*) for protection under the Endangered Species Act (U.S. Fish and Wildlife Service 2010; *photo courtesy of T. Black*).

described relative to the following adaptive and collaborative management (ACM) factors:

1) ability to address emerging problems, 2) emphasis on cross-scale networks, 3) self-organization and governance arrangements capable of supporting cycles of learning-from-action (adaptive management), 4) decision-making through communication and negotiation, 5) the formation and deployment of social and human capital, and 6) learning-by-doing (Olsson et al. 2004, Folke et al. 2005, Stringer et al. 2006). These papers also present a narrative of ACM initiated by local interests, which are often the most affected by conservation polices (Berkes 2004, Smedstad and Gosnell 2013, BLM 2015b).

Focus area

The Shoesole was the result of consolidating 2 separate ranch teams in 2002, the Cottonwood Ranch team, which started in 1995, and the Boies Ranch team, which started in 2000. These teams consisted of state and federal land and wildlife management agencies, the interested public, and ranch members focused on the individual grazing management plans of each ranch. In the beginning, the Shoesole team identified common agreed-upon values and goals for the ecological health and diversity of the land, the economic sustainability of the family business, the human side of living, and working on and in a specific landscape and

community. This could be described as taking a holistic approach to management. Holistic management is sometimes symbolized by a 3-legged stool representing the triple bottom line of ecology, economy, and social/cultural values. If 1 leg of the stool is broken, it affects the use and stability of the whole (Savory and Butterfield 2013).

The Shoesole: Cottonwood Ranch, Boies Ranch, and Uhart Ranch

The Cottonwood Ranch, a cattle and guest ranch business, consists of 447 ha of privately owned land and 12,778 ha of BLM and U.S. Forest Service (USFS) grazing allotments (Figure 2). Originally, the ranch consisted of 4 main pastures on their BLM allotment and 2 management units on 2 USFS allotments. During the 1990s, the Cottonwood Ranch faced increasing conflicts with the BLM and USFS over riparian conditions, which resulted in increasingly restrictive grazing limits threatening the economic viability of the ranch. After attending a class on holistic resource management (HRM) concepts (Savory and Butterfield 2013), the family entered into dialogue with federal and state land management agencies and other interested parties, including the Elko County Commission, to discuss grazing management changes.

These discussions resulted in the BLM and USFS jointly completing an Environmental Assessment, implementing an HRM approach in 1996. The centerpiece of this process was the establishment of a collaborative team, which used the HRM planning process to develop common goals for the allotment and help the ranch plan annual grazing management around key resource, ranch operational, and other key considerations and/or limiting factors (J. Moore, BLM, unpublished data). The collaborative team approach, led by outside trained facilitators, was critical to the development of common goals and developing a ranch management plan that started to address range health concerns on the Cottonwood allotment. The support of local government, the BLM, and USFS were essential.

After implementing holistic management, the ranch utilized electric fencing and natural barriers to divide the 4 pastures on the BLM allotment into 14 identified use areas. The cattle

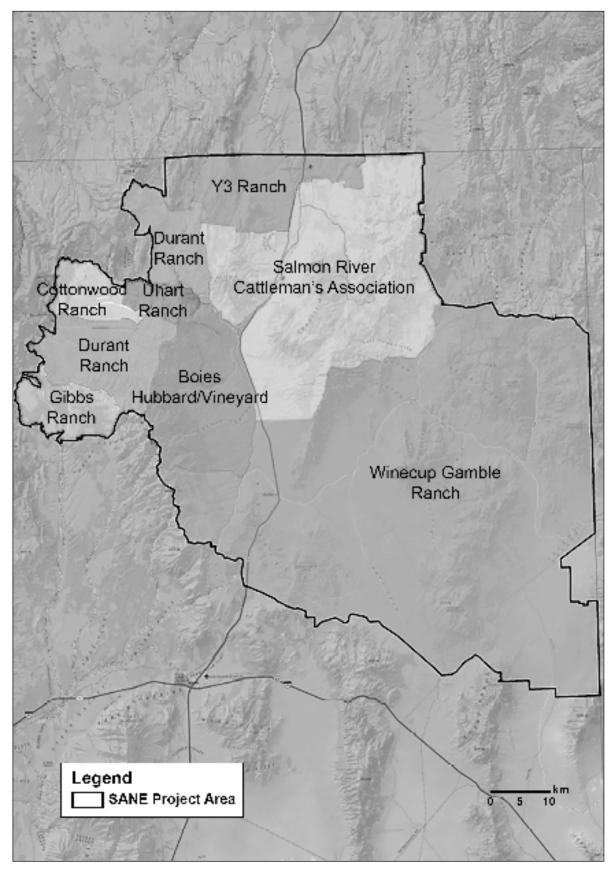


Figure 2. The Stewardship Alliance of Northeast Elko County (SANE), Nevada and Shoesole encompasses 8 ranches on >688,000 ha in northeastern Nevada, of which 200,000 ha are privately owned and 488,000 ha are comprised of public land allotments managed by the Bureau of Land Management and U.S. Forest Service.

(*Bos* spp.) are typically bunched in a single herd, which rotates through these use areas, plus the 2 USFS allotments, throughout each year. The timing of use of each pasture is rotated across years. The ranch employs riding and herding techniques within each management unit, especially on the USFS allotments. The cattle herd spends 1–3 weeks in each use area each year, which reduces the impacts of grazing on vegetation regrowth.

The BLM completed an allotment evaluation, including Standards and Guidelines for Rangeland Health determinations, on the Cottonwood allotment in 2003 (BLM 2015b; National Riparian Service Team, unpublished data). The BLM concluded that all standards had been partially to completely met, with the reasons for non-attainment identified as not related to livestock grazing management. Riparian condition assessments conducted on the allotment in the years since the evaluation showed continued improvements in riparian condition classes (J. Moore, BLM, unpublished data; Figure 3).

The Boies Ranch, the Hubbard/Vineyard allotment, consists of 5,116 ha that are privately owned and 45,417 ha that are public land and grazed under a BLM grazing permit. Prior to the mid-1990s, the Hubbard/Vineyard allotment had few internal fences, subjecting much of the allotment to season-long grazing practices. From 1992 to 1996, after attending introductory HRM classes and participating in the Cottonwood Ranch management team, the Boies Ranch voluntarily adopted management changes, incorporating rest in pastures that had not seen spring rest since cattle arrived in the region in the mid-1860s. Facing the challenge of an allotment with few interior fences to help facilitate livestock management, the family started working with the BLM to construct interior pasture fencing on the allotment. The allotment is now divided into 12 main pastures, plus several additional private and fenced federal range pastures.

In 2000, the Boies Ranch formed their own management team that included many of the same agency personnel that attended the Cottonwood HRM team. At this time, the Boies Ranch was also involved in a renewal process for their 10-year BLM grazing permit. Through the BLM allotment evaluation and National

Environmental Policy Act (NEPA) process (BLM 2015b), the voluntary management changes made by the Boies Ranch by changing season of use, adding rest, using private pastures during the growing season, and increasing dormant season use were incorporated into the permit renewal.

In 2009, the BLM completed the Boies Ranch allotment evaluation, including Standards and Guidelines for Rangeland Health determinations (BLM 2015b; National Riparian Service Team, unpublished data) on the allotment that concluded all standards had been partially to completely met across most of the allotment, and riparian conditions had continued to improve (J. Moore, BLM, unpublished data; Figure 4). The BLM subsequently prevailed on 2 legal appeals on the Hubbard/Vineyard allotment evaluation (Figure 3).

The Shoesole, having demonstrated success and observable outcomes, prompted the Uhart family in 2013, after purchasing a ranch operation between the Cottonwood and Hubbard/ Vineyard allotments, to join the Shoesole. The ranch consists of 594 ha of privately owned and 7,610 ha of BLM grazing allotments. A 4.5-ha riparian pasture was created on Salmon Falls Creek following a fire in 2007. Private lands are operated in conjunction with the BLM allotment, and an annual grazing plan is coordinated with the BLM range conservationist to set stocking rates and use periods for each of the 3 allotment pastures. A deferred rotation grazing system provides for periodic rest from grazing during the growing season in each pasture.

Shoesole principles and process

The Shoesole is a landowner-driven group that includes representatives of the BLM and USFS, plus other agencies such as Nevada Division of Wildlife (NDOW), USFWS, University of Nevada Cooperative Extension, Natural Resources Conservation Service (NRCS), Trout Unlimited, Nevada Department of Agriculture, Nevada Division of Forestry, plus interested public. The purpose of the group is to support and advise the regulatory authority of the governing management agencies in their decision-making about a specific landscape of common concern. The Shoesole uses a consensus-based process to engineer solutions that will result in durable outcomes (McAdoo 2017). From the beginning,

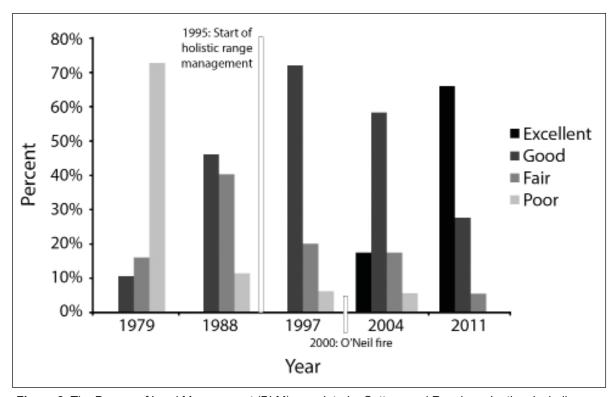


Figure 3. The Bureau of Land Management (BLM) completed a Cottonwood Ranch evaluation, including Standards and Guidelines for Rangeland Health determinations (National Riparian Service Team 2008, BLM 2015b) on the Cottonwood allotment in 2003. The BLM concluded that all standards had been partially to completely met. Riparian condition assessments conducted on the allotment in the years since the evaluation showed continued improvements in riparian condition classes (J. Moore, BLM, unpublished data).

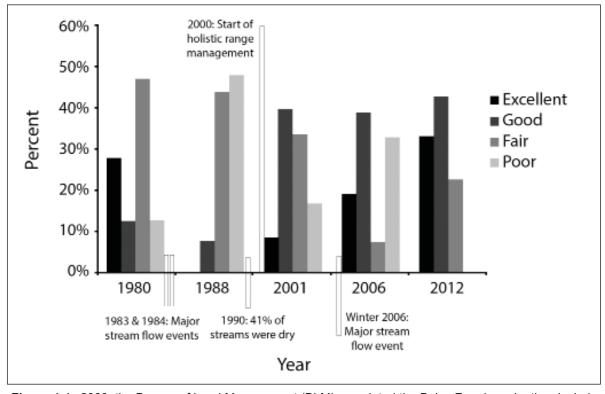


Figure 4. In 2009, the Bureau of Land Management (BLM) completed the Boies Ranch evaluation, including Standards and Guidelines for Rangeland Health determinations (National Riparian Service Team 2008, BLM 2015b) on the allotment that concluded all standards had been partially to completely met across most of the allotment, and riparian conditions had continued to improve (J. Moore, BLM, unpublished data).

trained facilitators have played a key and critical role in the long-term success of the group, resulting in a strong sense of trust among the members. Representatives of various agencies know their specific resource concerns will be fully addressed and considered should they have to miss a group meeting. Team members serve as proxy to absent team members. The Shoesole formally meets 3 times each year. In spring, the group convenes to plan annual grazing use on the 3 ranches. Each grazing plan takes into account wildlife and resource needs in addition to ranch operational limitations and other human factors. During the summer, the group meets for a field tour "of joint fact finding" on various parts of the 3 involved ranches. The last meeting of the year occurs in early winter, when the group reviews how the previous grazing season progressed and shares lessons learned, monitoring data, and observations.

Stewardship Alliance of Northeast Elko

What started with the Cottonwood and Boies Ranches in the mid-1990s, with their individual allotments and diverse multi-disciplinary teams melding into the Shoesole Management Team in 2002, paved the way and laid the foundation for a group of 8 ranches to form The Stewardship Alliance of Northeast Elko (SANE). The SANE incorporates the Shoesole (Cottonwood, Boies, and Uhart Ranches) and 5 additional neighboring ranches plus many of the agency representatives that participate in the Shoesole (Figure 2).

The SANE plan area covers >687,900 ha. The plan area includes 8 ranches that encompass approximately 200,319 ha of private ranch land, 485,622 ha of public land allotments managed by the BLM, and 12,140 ha of USFS allotments (SANE 2014). The geographic boundaries of the SANE plan area are within the Northeast Elko Conservation District jurisdictional area. The plan area extends from the Nevada–Idaho border on the north, to the Mary's River Mountain Range on the west, the Pequop Mountains on the south, and the Nevada–Utah border on the east (Figure 2).

The diverse topography of the SANE plan area includes basins, mountains, and plateaus, many of which are dissected by steep canyons and escarpments. Elevations range from 1,292 m

at Montello to 3,267 m at Pilot Peak. The climate is semi-arid with cold, wet winters, wet springs, and warm dry summers. Annual precipitation across the plan area ranges from 20 cm to >40 cm at the higher elevations. Precipitation is highly variable. Lower-elevation basins are typically hotter and drier desert shrublands, while numerous perennial and ephemeral streams dissect mid-elevation slopes and fans. Higher elevations are typically cooler and moister and support mixed mountain shrublands transitioning into coniferous and aspen (*Populus tremuloides*) forests at the highest elevations.

The SANE plan area includes portions of 3 major drainage basins. The Lahontan Basin is defined by tributaries to the Humboldt River that drain the western-most portions of the plan area. The southern portion of the plan area drains into the Bonneville Basin, and the north and eastern areas of the plan area comprising the largest drainages are some of the southernmost reaches of the Snake River Basin (SANE 2014, BLM 2015*a*).

SANE principles and process

The SANE was organized in 2012 around landscape scale management issues and implemented at the allotment level to address the challenges that arose with the potential listing of the greater sage-grouse. The success of the Shoesole's facilitated, collaborative, consensus-based process provided a model for SANE to adopt. The SANE members came together voluntarily as an independent, foresighted group of ranchers and agency representatives with a common goal to create and be part of a better decision-making process for conservation in their backyard. Landowner members, in a show of commitment to the SANE process, agreed to a 3-year assessment on active preference Animal Unit Months (AUMs) on each participating allotment, thus helping to establish some short-term financial stability to the group; ongoing discussions of the possibility of hiring an organizational coordinator for SANE helped prompt this financial commitment by the ranchers.

In the early development stages of SANE, a relationship with the local Conservation District, a governmental subdivision of the State of Nevada, was established. The SANE functions as a working group under the

Northeast Elko Conservation District, which acts as SANE's fiduciary agent. The SANE began with the sole focus of putting projects on the ground to enhance sage-grouse habitat in some of the highest quality sage-grouse habitat in Nevada. Over time, it became apparent that there was an opportunity to expand the mission and purpose of SANE into a more strategic and lasting presence.

In 2013, SANE received a grant from the Public Lands Council Trust, which funded the development of the SANE Sagebrush Ecosystem Management Plan. The SANE Plan was modeled after the Bi-State Sage-Grouse Plan (SANE 2014). The SANE Plan identified 2 primary goals, each with multiple objectives that serve as the roadmap for moving forward. The goals represent a triple bottom line of ecological accountability and sustainability, economic resilience, and social/cultural diversity and preservation.

Socio-economic goal: Elevate public awareness of the present and historic interdependence between public and private lands in the West by implementing a management approach for natural resources focused on the reliance between public and private assets as the basis for natural resource conservation, land management, and economic viability of rural ranching communities.

Ecological goal: Maintain sustainable sagebrush ecosystems to provide habitat (food, shelter, and water) for wildlife, including sage-grouse, and domestic livestock.

The SANE Technical Advisory Team (TAC), created during the writing of the Sagebrush Ecosystem Management Plan, is made up of state and federal wildlife biologists and resource specialists who bring scientific expertise, longterm local knowledge, and evolving science of wildlife populations, wildland fire, range management, ecological conditions, and public land management policy and regulations into the planning process (SANE 2014). The TAC developed a project database that provides a roadmap for prioritizing, scheduling, and tracking habitat restoration and management activities. The SANE and TAC used quantitative process to prioritize actions in the database based on the following criteria: sagegrouse threats, required level of NEPA, project scale, habitat conservation, available funding opportunities, and potential for water quality improvement.

In November 2014, there were 86 projects in the SANE database, using the primary risk to sage-grouse as a metric. Fifty-seven of the projects improved grazing management, 11 projects addressed large-scale fire prevention, 8 projects reduced conifer encroachment, 5 projects removed or modified fences, 3 projects reduced the presence of invasive plant species, and 2 projects addressed predation. By May 2017, 33 of the original 86 projects had been completed. Twelve of the completed projects spring/meadow provided protection, projects were pipeline repairs or new wells that improved cattle distribution, 5 projects removed or modified existing fences, 3 projects were hay meadow improvements by increasing legumes, and 1 project focused on rehabilitation of an area that was burned by wildfire. Many of the SANE projects on private and public land have been funded by the NRCS Environmental Quality Incentives Program (EQIP), NDOW, USFWS Partners Program, BLM, NRCS Sagegrouse Initiative, Elko County Fire Protection District, Nevada Department of Conservation Natural Resources, Northeast Elko Conservation District, and private landowners. Each landowner works with the appropriate agency or agencies to implement projects. Most of the landowners have an established longterm relationship with the NRCS through such programs as EQIP and conservation planning on their private land. There has been support from county government to help establish and support a first responder volunteer fire department in a more isolated landscape location within the SANE area. Ongoing noxious weed coordination between the conservation district, BLM, and private landowners has developed, as have other projects through cooperative implementation across state and federal agencies. Success is measured through project completion, monitoring of habitat trend through state and federal agencies, and private landowner-funded monitoring efforts. Monitoring is focused on habitat trend, recognizing the many variables that can affect population counts.

In conjunction with the SANE project development, the BLM Wells Field Office Fuels Program started an Environmental Assessment (EA) for NEPA compliance. These projects included conifer removal, installing fuel breaks along existing roadways, fire rehabilitation, and herbicide treatments.

The SANE had already identified the need for these projects prior to the Fire and Invasive Assessment Tool process that led to the O'Neil Project Planning Area EA (O'Neil PPA), so the projects were all incorporated into the O'Neil PPA. It is anticipated that NEPA will be completed by the end of 2017 and implementation will begin in 2018. Some of the projects are ongoing actions such as monitoring (vegetation and weeds), conservation planning through NRCS, and reducing anthropogenic raven (*Corvus corax*) subsidies through better management practices. As of fall 2017, there are 54 projects in the SANE database. Many of these will be incorporated into the BLM or USFS environmental assessment for permit renewal. The NEPA adequacy may be documented for other projects that will enable implementation to occur sooner (K. Huebner, NDOW, personal communication).

Adaptive management, local knowledge, and conservation planning

A framework of adaptive management based on local knowledge from both stakeholders and technical specialists brings applicable experience to implement workable solutions and adjustments in the form of short-term management alternatives that are consistent with agency regulations (Folke et al. 2005, Stringer et al. 2006). Adaptive management decisions based on ongoing feedback and revisions enable a timely response to uncertainty in climatic conditions, wildfire, and other unforeseeable environmental events to increase effectiveness, efficiency, and accountability as an integral part of any planning (Berkes 2004, Folke et al. 2005, Stringer et al. 2006).

Plan implementation and monitoring produced site-specific information for evaluation of progress toward achieving objectives, for validation of objectives, and to identify improved approaches and practices to achieve sagebrush ecosystem conservation and economic viability of ranches (Berkes 2004, SANE 2014).

The Shoesole and SANE approach, being a grassroots, bottom-up planning effort, uses a framework of adaptive management and strives to achieve:

- Enhanced viability of range livestock operations in the SANE plan area through improved practices to minimize any negative impacts of operating a livestock grazing business on public lands within priority sage-grouse habitat
- Sagebrush ecosystem conservation and mitigation of specific documented risks by using collaborative planning centered on science and local expertise to develop, implement, and monitor projects in the SANE plan area
- Increased understanding and perpetuation of the public land/private land interrelationship and the responsibilities associated with implementation of management actions and monitoring for adaptive management
- Creation of an operational framework based on long-term commitment to collaborative planning that younger generations can follow

To begin working on these goals, SANE developed a local understanding of habitat and population threats to sage-grouse. Local development of the proposed actions in the SANE Plan increases the assurance that actions will be implemented and that implemented actions will be effective. The foundation of the SANE Sagebrush Ecosystem Conservation Plan (SANE 2014) is based on an ongoing commitment to meeting the persistent challenges of grazing western public lands by incorporating conservation education and evaluation with flexibility and long-term commitment of the SANE members to meet common goals. A commitment and understanding has grown within the SANE group that education, perseverance, and sometimes patience to build the trust needed to move some landowners into more progressive and sustainable management practices—and to help inexperienced agency personnel become familiar and knowledgeable about their assigned landscape area-are essential. The SANE has demonstrated a commitment to ongoing education. group has sponsored classes and workshops in the area to address low-stress livestock handling, beaver (Castor canadensis) ecology, wetlands development, holistic resource management, National Riparian Service Team

livestock management and riparian health, and a facilitation-training workshop to help in developing the pool of available and talented facilitators.

In August 2017, SANE hired a coordinator to build the capacity of the organization, manage and assist in implementing the project list, represent SANE, and further develop and maintain relationships with decision makers, landowners, partners, and agencies. Along with the seed money provided by the landowner AUM assessment, SANE successfully reached out to NDOW, BLM, USFWS, and Intermountain West Joint Venture for their support in funding a full-time coordinator. This outside request for funding was presented as a 3-year commitment for salary, administrative, and operational costs for the organization.

Social and human capital

A keystone to the success of the Shoesole and SANE teams has been the attention and time allocated to the human dimension within today's natural resource challenges. Another essential component of success has been the use of highly skilled and trained facilitators. A good facilitator helps to create a functioning consensus-based group of diverse stakeholders with the ability to find solutions amidst conflict and sometimes agency regulatory or policy limitations (Berkes 2004, Folke et al. 2005). The radical center, a term coined by the Quivera Coalition, Sante Fe, New Mexico, is the territory where solutions are carved out by finding new ground (Chadwick 2012). In the radical center, respectful listening is a guiding principle, and over time, trust is established among a diverse group of individuals who build the opportunity to move from stakeholder positions to problem-solving partners. The cultivation of listening leads to better understanding, trust, and improved knowledge, bringing a group of individuals to consensus with their integrity intact, so they can get to an agreement upon next steps (Chadwick 2012).

Finding new ground allows a working relationship to be forged between stakeholders where understanding of one another's work can grow. Ranchers grow to understand the challenges and frustrations of agency partners. Agency partners grow to understand how impossible it might be to herd 350 head of cows

and calves 13 km from the south end of an allotment to the northern most end in the heat of summer. Each can discover how essential the sharing and coordination of information across state and federal agencies is to conserve human and financial capital if success is to be achieved (e.g., the fight against the invasion of noxious weeds).

There have been and will continue to be challenges: industry skepticism and suspicion, shortage of facilitators, and challenges in livestock production from generational transitions of an aging landowner demographic, to a volatile commodity-driven livestock market, to continuing policy and regulatory demands placed on the industry. Regulatory requirements like NEPA can hold up a needed livestock improvement for years. Agency turnover remains an issue that affects continuity and progress. A project may start with an interdisciplinary team of specialists and from beginning to end see a full turnover in personnel multiple times before completion. Months can elapse in hiring new personnel, followed by job training, creating even more backlog.

Final thoughts

For most ranchers who became involved in Shoesole and SANE, there was at first a motive of self-preservation that drove the decision to join the movement of collaborative management. Over time, this motive of self-preservation has fertile ground to grow into a deeper level of commitment grounded in land ethics—how to use and leave the land, how to treat livestock and wildlife that inhabit the place—all the while finding a broader definition of community and how to relate to that community. Driven by personal values, personal choice about land use, and sense of community, it can become a choice to use litigation as a last resort versus a weapon of choice.

History shows us that lasting change is driven by nonviolent, ground swell support and actions. We are in this conundrum of public land use together, whether we like it or not, for better or worse. Our own individual choices can contribute to creating a more civil society grounded in civil dialogue and the principles of local grassroots democracy, or our choices can lead to conflict and sometimes violence.

For many, there is a sense of loss associated

with a shrinking open and unaltered landscape. Rapid social and technological change has given rise to fear for the loss of rural lifestyles and associated industries in some traditional land-based cultures. A grief over loss of wild places and species threatened or lost weighs heavily on all who want to know that untamed lands and native wildlife will always be there for their children's children. These are issues that cannot achieve enduring solutions through legislation or science alone. They are human issues that require understanding, empathy, and in some cases, reconciliation. They are issues that demand the hard conversations necessary to forge a new ground of common interest.

There is no more land to explore and settle, allowing us to move on or to move away from competing uses and values. Our challenge lies in finding ways to work together and do a better job in managing land and water resources. There are no guarantees whether the type of collaborative process that has served the Shoesole and SANE groups so well will be durable. These efforts scattered across the West represent a new frontier of governance, led by modern pioneers who are reimagining an expanded sense of the western community by building communities of practice.

John Wesley Powell again and again urged westerners to adapt to the land, to organize institutions that would cultivate democracy at local and regional scales, and to reform the laws that undermined the health of the land and society. And he urged always that these actions not be piecemeal, but that they be unified in a new and integrated approach to the settlement of the arid West. Powell stands as a model of holistic thinking, appropriate to any land or era (duBuys 2001).

Perhaps there is an argument to be made that this work along a spectrum of collaborative land management in the West is fulfilling Powell's delayed legacy, and that these groups represent the fulfillment of a new social contract. A collaborative consensus-based approach that can effectively establish a strong, steady, solution-oriented system can help meet the ongoing challenges that arise over shared resources. The collaborative process represents an inclusive way to embrace a broader context of truth where there is more opportunity to

reconcile differences (Boies 2014, Pope Francis 2015). Reducing conflict helps promote a level of security and certainty for local communities. Groups like Shoesole and SANE have the potential to create long-term value for their members and the larger community through an emerging system of shared governance that is grounded in trust, integrity and accountability for all (Berkes 2004, Smedstad and Gosnell 2013).

Acknowledgments

I acknowledge the input and support of the Shoesole and SANE partnership. Editorial comments and reviews provided by associate *HWI* editor, G. Massei, as well as 2 anonymous reviewers, T. Messmer, S. Anderson, and H. Feiss greatly improved the manuscript.

Literature cited

Andre, C., and M. Velasquez. 1991. Ethics and the spotted owl controversy. Issues in Ethics, Vol. 4, <<ht><https://legacy.scu.edu/ethics/publications/iie/v4n1/homepage.html>>. Accessed May 5, 2017.

Berkes, F. 2004. Rethinking community-based conservation. Conservation Biology 18:621–630.

Boies, R. 2014. The common good and peace in society. Desert Chronicle, Monastery of the Ascension, XXXIII, No. 2.

Brinkley, A. 1995. American history, a survey. Ninth edition. McGraw-Hill, New York, New York, USA.

Brueggemann, W. 2002. The land: place as gift, promise, and challenge in biblical faith. Second Edition. Fortress Press, Minneapolis, Minnesota, USA.

Bryan, T. A. 2004. Tragedy averted: the promise of collaboration. Society and Natural Resources 17:881–896.

Bureau of Land Management. 2015a. Record of decision and approved resource management plan amendments for the Great Basin region. U.S. Department of the Interior, Washington, D.C., USA, <<https://eplanning.blm.gov/eplfront-office/projects/lup/21152/63385/68727/Great_Basin_ROD_9.21.15_508.pdf>>. Accessed May 5, 2017.

Bureau of Land Management. 2015b. Transforming collaborative action and dispute resolution in the BLM: a strategic plan. Division of Decision Support, Planning and NEPA, Washington, D.C., USA.

Cawley, R. M. 1993. Federal land, western anger:

- the sagebrush rebellion and environmental politics. University Press of Kansas, Lawrence, Kansas, USA.
- Chadwick, R. J. 2012. Finding new ground: moving beyond conflict to consensus. One Tree Publishing, Terrebonne, Oregon, USA.
- Dagget, D., and J. Dusard. 1995. Beyond rangeland conflict: toward a West that works. Good Stewards Project, Grand Canyon Trust, Flagstaff, Arizona, USA.
- duBuys, W. E. 2001. Seeing things whole: the essential John Wesley Powell. Island Press, Washington, D.C., USA.
- Folke, C., T. Hahn, P. Olsson, and J. Norberg. 2005. Adaptive governance of social-ecological systems. Annual Review of Environment and Resources 30:441–473.
- Holechek, J. L. 1981. A brief history of range management in the United States. Rangelands 3:16–18.
- Kemmis, D. 1990. Community and the politics of place. University of Oklahoma Press, Norman, Oklahoma, USA.
- Limerick, P. N. 2000. Something in the soil: legacies and reckonings in the New West. W. W. Norton and Company, New York, New York, USA.
- McAdoo, K., C. Petersen, R. Boies, A. Smith, J. Moore, and P. Coffin. 2017. Shoesole Resource Management Group case study: 20 years of collaborative conservation success. University of Nevada Cooperative Extension Special Publication, SP-17-07.
- Olsson, P., C. Folke, and T. Hahn. 2004. Socialecological transformation for ecosystem management: the development of adaptive comanagement of a wetland landscape in southern Sweden. Ecology and Society 9:2.
- Pope Francis. 2015. Laudato si': on care for our common home. Our Sunday Visitor Publications, Huntington, Indiana, USA.
- Rural Voices for Conservation Coalition. 2007. Collaboration issue paper, <https://static1.square-space.com/static/562e839ee4b0332955e8143d/t/5654bac5e4b085d161b0f37f/1448393413067/lssue+Paper+-+Collaboration07.pdf>. Accessed May 6, 2017.
- Rushefsky, M. E. 2002. Public policy in the United States: at the dawn of the twenty-first century. Third edition. Routledge, London, United Kingdom.
- Savory, A., and J. Butterfield. 2013. Holistic management: a new framework for decision mak-

- ing. Second edition. Island Press, Washington, D.C., USA.
- Smedstad, J. A., and H. Gosnell. 2013. Do adaptive co-management processes lead to adaptive comanagement outcomes? A multicase study of long-term outcomes associated with the National Riparian Service Team's place-based riparian assistance. Ecology and Society 18:8.
- Stegner, W. 1992. Where the bluebird sings to the lemonade springs: living and writing in the West. Random House, New York, New York, USA.
- Stewardship Alliance of Northeast Elko County. 2014. SANE Sagebrush Ecosystem Conservation Plan. Stewardship Alliance of Northeast Elko County, Elko, Nevada, USA.
- Stringer, L. C., A. J. Dougill, E. Fraser, K. Hubacek, C. Prell, and M. S. Reed. 2006. Unpacking "participation" in the adaptive management of social—ecological systems: a critical review. Ecology and Society 11:39.
- USFWS. 2010. Endangered and threatened wild-life and plants; 12-month finding for petitions to list the greater sage-grouse (*Centrocercus urophasianus*) as threatened or endangered. Proposed rule, Federal Register, <<http://www.fws.gov/mountainprairie/species/birds/sage-grouse/FR03052010.pdf>>. Accessed October 3, 2017.
- Van Riper, L. 2012. The interagency creeks and communities strategy: creating healthy streams and wetlands by bringing people together. Rangelands 34:5–10.
- Van Riper, L. 2013. Women as collaborative leaders on rangelands in the western United States. Rangelands 35:47–57.

Associate Editor: Giovanna Massei

ROBIN BOIES lives and works in northeast Nevada on the family owned Boies Ranch. She



has spent the past 25 years studying and participating in collaborative processes with the Shoesole Management Team the Stewardship Alliance of Northeast Elko as well as working with Sustainable Northwest and Rural Voices for Conservation Coalition. She has served on the boards of the Nevada Chapter of the Nature Conservancy and

Sustainable Northwest, and she is a supervisor of the local conservation district. She remains an active participant in promoting community-based conservation and works proactively to maintain, restore, and sustain a healthy sagebrush ecosystem.