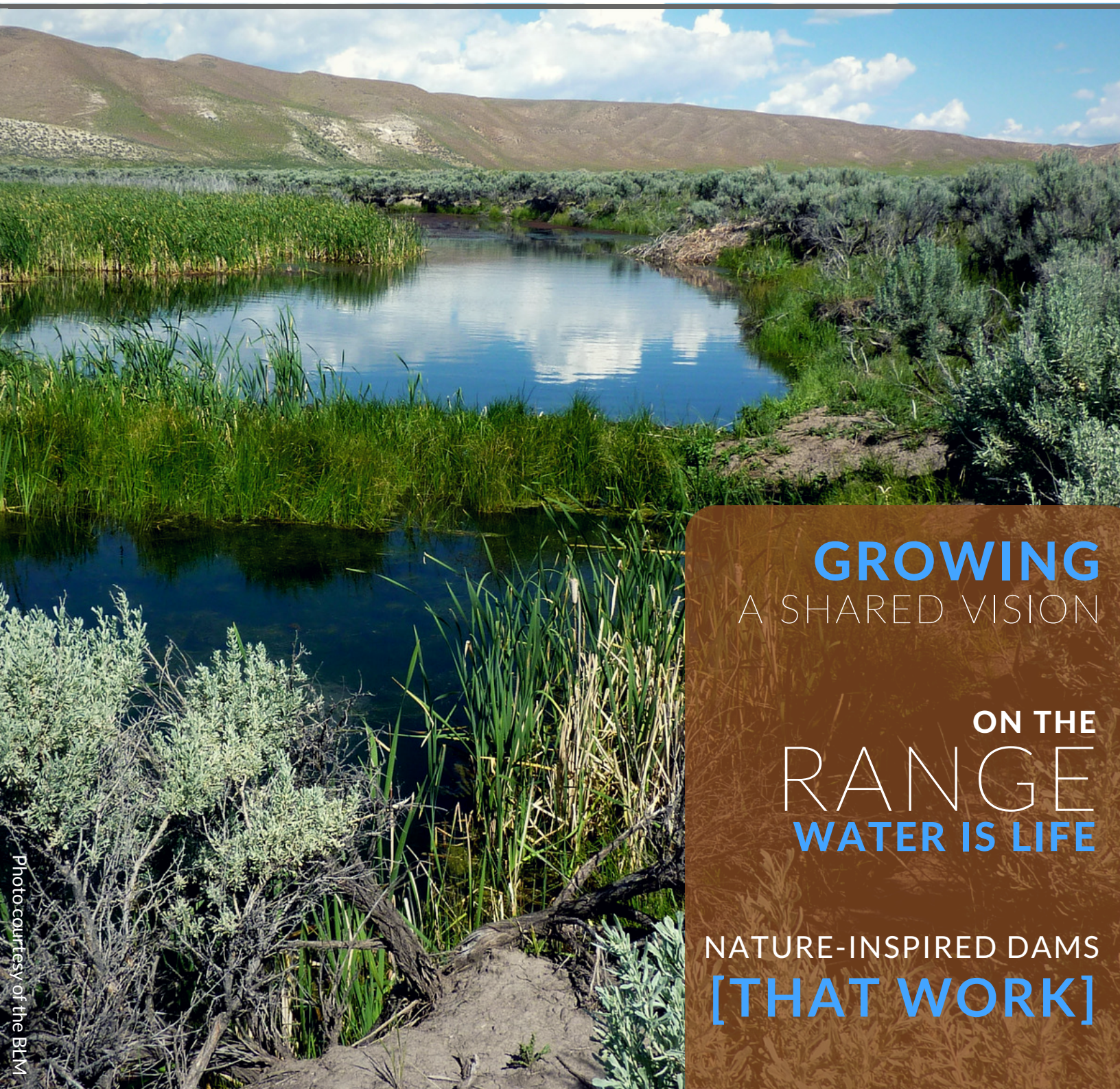


# Sagebrush Connections

SUMMER 2017 ISSUE



**GROWING**  
A SHARED VISION

ON THE  
**RANGE**  
WATER IS LIFE

NATURE-INSPIRED DAMS  
**[THAT WORK]**

A publication about the proactive sagebrush conservation alliance between the Intermountain West Joint Venture, the USDA's Natural Resources Conservation Service-led Sage Grouse Initiative, and the Bureau of Land Management.



# The Back Story

The American West is a multi-colored patchwork of private and public lands. In that the sagebrush ecosystem has been reduced to half of its original size, this place requires an all-hands approach for its conservation and restoration. Thankfully, it is still functioning as intact working landscape, one of the few remaining in the world. It covers 14 states, stretches between the Great Plains and the Pacific Crest, and provides home and habitat to people and wildlife.

**For decades, partners have invested in conserving this landscape to ensure that it sustains livelihoods for people with abounding water, energy, food, and recreation resources and habitat for over 350 species. Together we are making a difference by working across fence lines and in local communities to support sagebrush lands and rural economies.**

This **partnership** is scaling up public lands conservation using the model of the successful voluntary private lands conservation efforts pioneered by the Sage Grouse Initiative (SGI), which is led by the USDA's Natural Resources Conservation Service (NRCS). The Bureau of Land Management (BLM), Intermountain West Joint Venture (IWJV), SGI, U.S. Forest Service, and local partners are teaming up to conserve habitat across large landscapes using science-based practices. This bolsters communities that are joining together to achieve healthy, working sagebrush rangelands. This publication is a tool to communicate about these successes.



**WE ARE WORKING  
IN SHARED  
PRIORITY AREAS  
TO:**

**REMOVE**  
Expanding Conifers

**REDUCE**  
Risk of Wildfire and  
Invasive Weeds

**RESTORE**  
Wet Meadows and  
Riparian Areas

## Strategic Alliances

In 2016, the BLM signed a five-year **agreement with the IWJV** to promote solutions for people and wildlife across the sagebrush sea, modeled after the private land conservation efforts pioneered by SGI. The IWJV is working with the BLM to build capacity to expand science, on the ground conservation actions, and communications related to sagebrush conservation.

**We are doing this by building on the existing conservation work on public land using the SGI Strategic Watershed Action Team model, in addition to other efforts.**

SGI will continue to prioritize voluntary, proactive conservation on private ranchlands to benefit wildlife and working lands. The IWJV is working with the BLM, U.S. Forest Service, and partners to connect to and support similar cross-boundary efforts on public lands using actionable science to guide conservation investments.

# Partnership Perspectives

## Growing a Shared Vision Together

By Thad Heater

Sage Grouse Initiative Coordinator



Photo courtesy of Hannah Ryan

Since its inception, SGI has practiced the time-tested voluntary conservation model of working with private landowners and partners to address conservation challenges at the community level. As the NRCS continues to work under the vision of achieving wildlife conservation through sustainable ranching, we are proud of our partnership with the BLM and IWJV and excited to introduce this magazine as an outlet to highlight our collaborative accomplishments.

For more than 80 years, the NRCS has worked one-on-one with America's agricultural producers, including ranchers in the West, to tailor conservation efforts to meet local needs, protect vital habitat, and maintain strong rural economies. BLM's new partnership with IWJV is a great example of how to scale up sage grouse conservation efforts on public land by working with local partners who are already collaborating across ownership lines. These efforts will effectively build upon SGI's ongoing conservation success working with ranchers on private land at the local level.

Carefully managing our land and water resources is essential to our conservation work, our nation, and our very existence. In the West, sustainable ranching practices that sustain these resources for current and future generations is the foundation of our community-based conservation work.

**Sagebrush country houses the water sources for millions of Americans. Our goal is to make sure this ecosystem will function for people and wildlife long into the future. That's why water is the theme for the inaugural issue of this magazine.**

Through our partnership, we will achieve the collective goal of conserving the working lands, wildlife, water, and beautiful sagebrush range that we all cherish and call home. Armed with knowledge from local leaders, science, field capacity and communications resources, we will maintain working sagebrush rangelands while strengthening rural economies. Keep reading to learn how.

## Latest Happenings:

- Pheasants Forever stepped up to lead the fiscal and administrative aspects of implementing SGI 2.0, providing vital support for delivering conservation results during the SGI partnership's next phase (2016–2018).
- SGI released an interactive web application to provide free data to help local partners benefit working lands and wildlife. Explore this tool [here](#).
- The Sagebrush Rangeland Partnership launched a web portal to enhance awareness about the partner's collective accomplishments, and to champion the work of current and new partners working in sagebrush habitat conservation.





## Putting Science Into Practice

### On the Range, the West's "Emerald Isles" Support Life

In today's arid American West, water is one of our most rare and precious resources. Mesic areas — which are wet areas in sagebrush country that serve as grocery stores for wildlife by providing irreplaceable forage, water, and habitat— comprise less than 2% of the sagebrush landscape, yet 80% of wildlife rely on them. The millions of people and thousands of agricultural operations in sagebrush country depend on access to these reliable water resources, too.

SGI produced a mesic conservation strategy that empowers private ranchers and our partners to protect and enhance the wet, green places that sustain working lands and wildlife. Conserving these "emerald isles" in the sagebrush desert builds drought resilience, boosts forage productivity, and benefits wildlife.

Through SGI, the NRCS and partners are scaling up the following key conservation actions on private ranchlands across the 11-state range of sage grouse:

- Grazing Management
- Spring Protection and Enhancement
- Low-Tech Restoration
- Conifer Removal
- Mechanical Restoration
- Easements

In addition, SGI added a [new data layer](#) to the SGI Interactive Web App (a free, open-access, online tool) that helps visualize mesic resources across the entire range of sage grouse. The SGI Mesic Resources layer, developed in partnership with scientists from IWJV and University of Montana, draws upon over 30 years of satellite imagery to map the location of late-summer wet habitats. Users can measure the 'greenness' of a single ranch or an entire watershed over time, which helps managers prioritize and plan cost-effective conservation of mesic resources.

[Learn how to use these tools in this three-part video series.](#)

[New science](#) shows that sage grouse need vast, intact landscapes for long distance migration and dispersal movements. Research funded by the U.S. Forest Service, BLM, U.S. Fish and Wildlife Service, and SGI shows that some birds travel as far as 120 miles to new breeding sites. It's vital to conserve these movement pathways to sustain sage grouse populations and genetic diversity.







# People Catalyzing Conservation

## Cutting Trees + Partnering Across Whole Watersheds = More Water and Food for Everyone

If you happened to be traveling in the remote northwestern corner of Utah, you would see conservation project results extending as far as the eye could see. For miles and miles, juniper trees have been removed, leaving wide-open, intact sagebrush that spans from one foothill to the other. By cutting these invasive trees out of sagebrush habitat, partners are enhancing the range for wildlife and livestock by keeping more water in the ground, reducing wildfire risk by lowering fuel loads, growing more native grasses, and eliminating predators' easy access to prey, such as sage grouse. This is now a common practice across the West – removing conifers that have expanded into unnatural places in the sagebrush – but here in Utah's Box Elder County the extent of the projects and the people collaborating on them is remarkable.

The West Box Elder Coordinated Resource Management (CRM) Committee is in large part responsible for this success. They operate with a multi-faceted approach that garners the investment of this area's stakeholders who work together on projects that benefit people, livestock, and wildlife.

The Sagebrush Ecosystem Alliance (SEA) is the first collaboration project that the BLM, IWJV, and partners are enacting. The effort is geographically focused on 1.1 million acres of sagebrush rangelands across northwest Utah, and potentially will expand to adjoining lands in Nevada and Idaho. The Alliance leverages existing partnerships, including the West Box Elder CRM effort, by building field-level capacity for collaborative conservation, improving communication in sagebrush management, creating efficiency in managing public land uses, and implementing restoration projects.

The SEA has hired a landscape coordinator. With this added capacity, projects like cutting conifers can accelerate and provide a replicable model on bringing people together to spark and accelerate lasting conservation.



Photo courtesy of the NRCS

The Society for Range Management's science journal published 15 studies showing the benefits of removing conifers. This cutting-edge research explains how conifers negatively impact water availability in areas of encroachment along with other impacts to sagebrush systems. A free summary of these findings is now available to the public.





## Sagebrush Voices

### Where There's Water, There's a Way

The West was settled around water by homesteaders following creeks and streams to stake out new ranches. In such a dry climate, carefully conserving and storing water has always been a priority for landowners. Now, two types of nature-inspired temporary habitat restoration structures are helping people keep water on the landscape longer, while also allowing wet meadows to heal and flourish.

One method to keep more water in an area for a longer period of time involves building simple, low profile rock structures in wet meadows or small, ephemeral streams. In places like Colorado's Gunnison Basin, people are installing easy-to-build, simple rock structures. Named after Bill Zeedyk, the designer and a long-time ecologist, these Zeedyk structures slow down and spread out water. The results are impressive, and visible quickly: more forage for livestock and wildlife, less erosion, and meadows that stay wet several weeks longer in the dry season. [Check out this story here to learn more.](#)



Photo courtesy of Mandi Casolo

This down cut creek flows quickly off rancher Jay Tanner's property, leaving the surrounding lands dry by early summer. By establishing Beaver Dam Analogues, Tanner said this creek can be a demonstration site for others to learn from and help guide them on how they can save water, grow more forage, and support more livestock.

SGL sponsored a hands-on field training with Bill Zeedyk at their annual workshop in Gunnison, Colorado in June. Over 60 biologists and range managers from across the West, learned how to build these rock structures to benefit working lands and wildlife, and took their knowledge back to local communities across sagebrush country.

Another simple wet habitat restoration structure is called a Beaver Dam Analogue (BDA). Beaver dams keep floodplains and groundwater levels high enough to sustain people, livestock, and wildlife through the hot summer. But beaver can't be re-released everywhere because the land has changed over the past two centuries - along with the management objectives of the people living on it. That's where BDAs come in. These stick and log structures also slow down and spread out water. Plus, in areas with few or no beavers, it helps to give the industrious critters a foundation to build from, as well as cover from predators.

In West Box Elder County in northwestern Utah, landowners are preparing to reintroduce beaver to repair streams and wet meadows. First, though, the ranchers are building BDAs to help them survive. [Check out this in-depth article about this restoration practice and its early success.](#)

With either rocks or sticks, simple, cost-effective natural dams can help improve habitat, boost drought resilience, and enhance agricultural operations. Now that's the definition of a win-win!