



Rural Futures Lab

Case Study: Ogallala Commons Brian Dabson

Rural Futures Lab Case Studies are intended to showcase innovative ideas taking root in practice across the United States. They are responses to the question that drives the Lab's work – "What can we do today to achieve positive rural outcomes tomorrow?"

The commons is a place where the entire community of creation is energized, rather than impoverished or exploited. Truly the commons exists for the common good, providing common goods for the benefit of the world. *Darryl Birkenfeld*

Ogallala Commons is an organization with minimal resources that is attempting to pursue a region-wide triple-bottom line mission while being firmly rooted in the people and communities of the High Plains. The underlying philosophy is complex and far-reaching; its challenge to address the depletion of the High Plains-Ogallala Aquifer is daunting. But there are strong connections to ongoing work in other parts of the country, particularly with those who are pursuing triple-bottom line investment or wealth creation strategies that are built on the sustainable use of local and regional assets. Ogallala Commons is a powerful case study for the Rural Futures Lab as it embraces concepts such as regional collaboration, social equity, entrepreneurship, and the engagement of young people – all with a future orientation towards making the communities of the High Plains sustainable and resilient.

The High Plains-Ogallala Aquifer

The High Plains Aquifer, which includes the Ogallala Aquifer, is one of the largest aquifer systems in the world. Underlying about 174,000 square miles, it includes parts of eight states from South Dakota in the north to Texas in the south. Water from the aquifers supports the region's cities, industries, and much of its agriculture, but the continuous pumping of large volumes of water, mainly for irrigation has led to a steady decline in water levels (Buchanan et al, 2001; 2009).

The amount of water that can be recovered from an aquifer is mainly dependent on its extent, the depth to which the aquifer is saturated, and the yield from gravity drainage. In 1990, the High Plains Aquifer contained 3,270 billion acre-feet of water, of which 65 percent was located under Nebraska, 12 percent under Texas, and 10 percent under Kansas. The natural recharge of the aquifers occurs through the percolation of precipitation through the soils, with the playas, or prairie wetlands, being the primary entry points for recharge. There are an estimated 30,000 playas across the region, which have enormous ecological importance. Before the development of irrigation, the discharge from the aquifer occurred from natural basins, streams and springs, but these have largely ceased to flow with the lowering of the water table. Today, 95 percent of water pumped from the aquifer is for irrigation – indeed the region accounts for two-thirds of the total irrigated acreage in the United States (HPWD, 2010).



Large-scale irrigation began in western Kansas in the late 1800s with the use of ditches to divert water from the Arkansas River. With the advent of large-capacity pumps, groundwater from the aquifer became the main source for farmers. Technological improvements and the introduction of center-pivot irrigation systems that allowed irrigation over uneven terrain led to dramatic increases in pumping. It also led to the cultivation of crops, such as corn, that could not previously be grown reliably in the area, and in turn to feedlots and packing plants and an economic boom for western Kansas (Buchanan et al, 2001/2009). One study (Gilson et al, 2001) estimated the annual economic benefit of irrigation in southwest Kansas as more than \$188 million.

However, the impact on the aquifer is substantial. Once thought to be an inexhaustible source of water, there is now a general recognition that it is a finite resource. Compared with predevelopment water levels, some areas have experienced declines of more than 60 percent; indeed some parts of the aquifer are effectively exhausted. Whether the High Plains aquifer can continue to support large-scale pumping will be dependent upon a number of factors:

- With proper planning, most cities and towns will be able to provide for their water needs for the foreseeable future.
- Continued agricultural use of the aquifer will depend on the price of irrigated crops, the price and availability of energy to pump the water for irrigation, any changes in climate, and on how water is managed.
- The thickness of the aquifer in any given place and the amount of recharge will be a crucial determinant.

The Kansas Geological Survey has estimated that some areas have a projected lifespan of less than 25 years, whereas others can continue to pump for the next 50 to 200 years (Buchanan et al, 2001/2009).

The Ogallala Commons...the philosophy

The Ogallala Commons is both an idea and an organization. The idea is that there is a “reservoir of valuable resources, system of social governance, and crucible for democratic aspiration” (Bollier, 2002, p.15) that is, or should be, beyond the reach of individual property ownership. The commons represents wealth that is collective and social in character.

Much of the narrative about the commons has been determined by economists, who either categorize them as public goods – “non-rival” and “non-excludable” resources from which it is difficult or costly to exclude people – or as problematic and doomed to eventual destruction. But using Bollier’s language, the Ogallala Commons is attempting to

Examples of Commons Resources

- **Government-owned property** – such as public lands, government research and development, and information resources.
- **Natural systems** – such as the atmosphere, water, local ecosystems, and genetic structures of life.
- **User-managed regimes** for conserving land, managing community gardens, developing software, and controlling access to fisheries and other natural resources.
- **Gift economies**, or social networks based on gift exchange, which exist within, for example academia, Internet communities, and local communities.
- **Shared, inherited knowledge** such as scientific research, historical knowledge, and folk wisdom, all of which comprise the public domain.
- **Cultural traditions and norms**, which serve as a set of common moral assumptions and expectations for managing daily life.

Source: Bollier, 2002, p.21

reclaim the narrative of the commons that describes people’s capacity to work together toward shared goals.

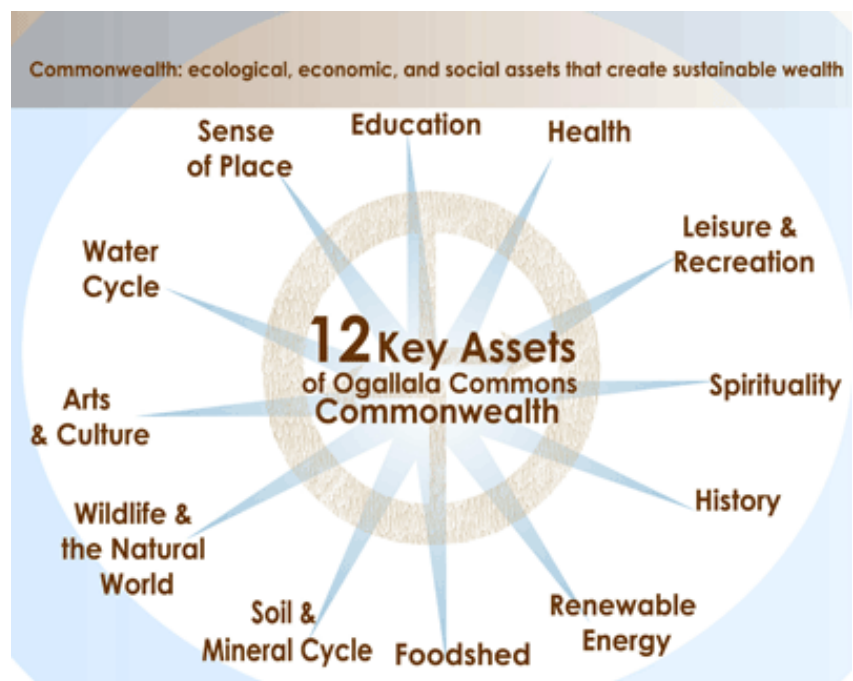
Darryl Birkenfeld, the Ogallala Commons’ executive director draws on the writings of philosophers, ecologists, economists, and theologians to set out the philosophy that drives the Ogallala Commons. The main elements are (Birkenfeld, 2009):

- A watershed commonwealth, as foreseen by John Wesley Powell in 1878, which underlies the political boundaries of eight states.
- A web of life, where all creatures and life forms thrive as members of inter-related communities, through holistic patterns of interdependent activity.
- Sustainable communities rebuilt upon principles of reciprocity (recognition of interdependence between levels and elements of human and natural systems) and subsidiarity (where decisions are made by people who are most greatly affected by them).
- “...the commons is not primarily an arena for profiteering through raw material extraction. It is a living endowment, a commonwealth that humans can use wisely and carefully, but not something we can ultimately own or are free to exhaust. The commons is a place where the entire community of creation is energized, rather than impoverished or exploited. Truly the commons exists for the common good, providing *common goods* for the benefit of the world.” (Birkenfeld, 2009 p. 5-6, original emphasis)

Ogallala Commons...the practice

Ogallala Commons, the organization, is a nonprofit community development network that offers leadership and education to reinvigorate the commonwealth that forms the basis of all communities, both human and natural, in the High Plains region. Its approach has four thrusts:

1. Weaving together and organizing a collaborative resource network of ‘renewal’ organizations, innovators, entrepreneurs, and community leaders that focuses on the High Plains region.
2. Building educational outreach, through conferences and seminars, asking key questions, offering practical knowledge and resources, and addressing structural revitalization needs of the High Plains.
3. Fostering a sense of place in the High Plains by promoting and celebrating community arts, regional cultures, and local histories.



4. Providing leadership to revitalize resilient communities across the region by reinvesting in the key assets (illustrated above) of the commonwealth in the High Plains.

Ogallala Commons has a nine-member Board of Directors with interests that include farming and ranching, education, economic development, and public policy from four states. The organization's recent activities include:

- A community internship program for students in high school, college, graduate school, or adults in continuing education programs. Internships are structured as partnerships between Ogallala Commons and the local community and generally range from 125 to 200 hours. Interns – there were 31 in 2010 – receive a stipend and gain skills in supporting local food production, being a community volunteer, public speaking, preserving oral history, community revitalization, and designing a career path. The intention is to provide both an opportunity for rural communities to inspire youth and adults to return home to live work, play and raise their families, and for the intern to build skills and critical thinking for their life's journey in the context of a community, not just an organization or a business.
- A series of playa festivals designed to educate fifth graders, their teachers, and communities about the ecology of playas and the aquifer through science, history, biology, art, and creative writing opportunities.
- A conference on local food systems in Midland/Odessa, Texas in March 2010.

An Intern's Reflections: Savanna Bragg

This summer I have learned many skills that I will use throughout the rest of my life. I have learned things about myself, my strengths and weaknesses, and more importantly what I am capable of.

I didn't expect to become as interested in Tulia as I did, or expect to really make a difference, even as much as I wanted to. Doing this internship has inspired me to help change this town for the better in so many ways. I learned how many hard-working people there are in this town, that many people are unaware of. Tulia is a small town, but has great potential. One thing that really hit me, is how many people in Tulia do more than just one job to contribute to this community. There are many people that have their plate overflowing, and they do it with a smile on their face, because they have hope for this town. This is so inspiring to me, and I hope I can make a difference in this town, and inspire others to do the same.

During my internship I helped the community in little ways such as: taking the department photos for Swisher Memorial Hospital, writing Articles and Editorials for Swisher County News, planning and organizing Swisher County 4-H's People's Choice Award, setting up the Judging of the Floats for Tulia's Picnic Parade.

This internship has given me the opportunity to meet and work with people I otherwise would not have interacted with. Yes, Tulia is a small community, but most people meet here through collaboration. Being only 16, I have not had a lot of work experience before this to meet and interact with a lot of people in this town.

The other thing that has helped me the most this summer was the Youth Entrepreneur Camp. Photography is my passion. I want to pursue it as a career, and I am now on the way to doing that. There were many business ideas and helpful hints at the camp that helped me personally. My website is now in the works, and I hope to start selling my photos there soon. We were given a step by step guide on how to create a business plan, which is something I will need for my business. Lastly, this internship has really taught me how to be an Entrepreneur. It has taught me that if I want something, I have every ability to go after it full force.

Extracts from Savanna Braggs' blog, August 23, 2010
<http://ogallalaintern1.blogspot.com>

For more information...

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About the Rural Futures Lab

The RUPRI Rural Futures Lab is a new initiative from the Rural Policy Research Institute. We are seeking to create a forward-looking narrative about rural America that recognizes the vital contribution that rural people and places make to national well-being and prosperity.

The Lab's activities focus on promising answers to the question, 'What can we do today to achieve positive rural outcomes tomorrow? Rural America plays a vital role in and can benefit from equitable collaboration and innovation in several key economic drivers that affect the entire nation. These include **regional and local food systems, alternative energy, ecosystems services, and adaptation to climate change**. There are also fundamental structural investments that will shape the ability of rural people and places to fully engage in these drivers, principally, **health systems, education, broadband, and transportation**. To encourage lasting wealth creation in rural America, we are particularly interested in looking at the drivers and investments through the lenses of **regional collaboration, social equity, innovation and entrepreneurship, and the next generation of rural leaders**.

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