



Natural-Resource Amenities and Nebraska's Economy:

Current Connections, Challenges, and Possibilities

Prepared by

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EXECUTIVE SUMMARY

Natural resources do not have to be converted into crops, electricity, or other commodities to support economic growth. Instead, growth can occur when natural resources provide recreational opportunities (bird-watching, fishing, boating, etc.) and other amenities consumers find desirable. This process is called amenity-driven growth.

This report examines the current status of, and potential for natural-resource-related, amenity-driven growth in Nebraska. Resource-related amenities may be able to stimulate economic growth in the state through four mechanisms:

- 1. Improve the Quality of Life.** Nebraskans may be able to improve the economy by making the state more attractive, especially to highly productive people. Areas with abundant amenities tend to attract people—especially entrepreneurs and those with high levels of education—and to experience faster growth in jobs and income.
- 2. Encourage Feedback to the Farm Sector.** Nebraskans may be able to improve the economy by capitalizing on natural-resource amenities in ways to bolster the farm sector. Amenity-driven growth may increase off-farm job opportunities for members of farm and ranch families. Some farms and ranches may increase earnings by using natural resources for agritourism activities. Practicing environmentally sound farm practices, such as irrigating with no more water than crops need, may increase many farms' net earnings.
- 3. Expand Recreation and Other Commercial Uses of Natural Resources.** Nebraskans may be able to improve the economy by stimulating growth in the recreation industry. Americans spend a lot on resource-related recreation. National expenditures in 2001 on three activities, fishing, hunting, and wildlife-watching, averaged \$81, \$103, and \$103, respectively per trip, and totaled \$35.6, \$20.6, and \$38.4 billion for the year. Some recreational activities important in Nebraska, such as bird-watching, are growing rapidly.
- 4. Protect Environmental Values.** Nebraskans may be able to improve the economy by reducing damage to the environment. Ecosystems provide many valuable goods and services. Some sustain species and special landscapes, others knit together the web of life, mitigate floods, control pests, ... the list is perhaps endless. Impairing these goods and services can retard growth by causing communities to rely on more costly substitute services, and by triggering changes in economic behavior, either voluntarily or through regulation.

The economic forces underlying amenity-driven growth are powerful. Spatial differences in amenities, of all types, account for about half the interstate differences in job growth. Natural-resource amenities are especially important. Most studies, though, have focused on mountains, ocean beaches, and other amenities absent in Nebraska, raising the

possibility that it lacks what is needed to have any hope of using natural-resource amenities to generate jobs, incomes, and community stability.

Evidence indicates, however, that Nebraska has its own, distinctive style of amenities potentially capable of generating amenity-driven growth: rivers and reservoirs; agricultural as well as undeveloped landscapes; opportunities for fishing, hunting, and wildlife-watching; trails; state parks; and areas with aesthetically pleasing topography and scenery. Nearly all Nebraskans indicate that the state's natural resources are important to the quality of life they enjoy living in Nebraska.

These feelings notwithstanding, the four mechanisms of amenity-driven growth currently sometimes work to Nebraska's disadvantage.

Quality of Life. Nebraska has some serious economic challenges, some of which seem to stem from its inability to compete successfully with other states for productive households. Much of the state exhibits slow or even negative growth: between 2000 and 2004, for example, only one county (Sarpy) experienced population growth faster than the national average. Moreover, the state has demonstrated a tendency to lose highly-educated people. Between 1995 and 2000 it had a net loss of more than 4,500 young people with at least a bachelor's degree; between 1985 and 1999, it lost \$246 million in personal income—about 1.1 percent of the state's total—because of the brain drain.

These challenges have many roots, among them limited public access to amenities, and perceptions that natural resources are degraded. About 97 percent of Nebraska is privately owned and typically managed for purposes other than providing the public with recreational and other amenities. News items about environmental degradation are abundant, among them: surface waters typically contain 10 – 14 herbicides or related chemical compounds; the width of the Platte River has been reduced 40 – 90 percent above Grand Island; manipulation of the Missouri River Basin has reduced populations of invertebrate species important to the food web by about 70 percent. To the extent that people perceive Nebraska's natural resources to be degraded and difficult to reach, these resources are likely to exert a negative, not positive, influence on household-location decisions.

Farm Sector. Agriculture is an economic powerhouse in Nebraska. Even so, some farmers and ranchers face challenges that amenity-driven growth might ease. Some landowners might earn additional revenues through agritourism: those who lease land for hunting, for example, earn \$10 – \$20 per acre. Others might reduce their costs: research in the Upper Big Blue Natural Resources District, for example, found that, with more efficient use of water and fertilizer, some farmers with 500 acres could realize annual savings of \$23,600, reduce pollution, and leave water for other uses. And amenity-driven growth might generate new off-farm job opportunities for some who depend on income from off-farm sources to sustain not just their standard of living but their ability to remain on their farms and ranches.

Recreation Industry. Recreationists took almost 8 million trips to fish, hunt, and watch wildlife in Nebraska in 2001, and spent \$46, \$90, and \$59 per trip, respectively. Nonetheless, the state's recreation industry is one of the smallest in the United States. In contrast to other western states, little land and water is open to public access. Also important is a prevailing attitude among landowners, which sees land and water primarily, if not exclusively, as economically important only when they are used as inputs to the production of commodities—crops, livestock, and electricity—or when they absorb pollutants. Some evidence indicates this attitude is changing. A growing number of farmers are expressing interest in agri-tourism, for example, as a way to augment farm earnings. Several communities are leading the way to capitalize on natural-resource amenities: attracting business and residential investment to the riverfront in Omaha, rafters to the Niobrara River in Valentine, and bird-watchers to the central Platte. Much potential remains untapped, however.

Environmental Values. Past actions have reduced the ecosystem's ability to provide valuable goods and services. Groundwater pollution threatens water supplies of the state's major cities, for example, the state has lost many of its wetlands, and more than 600 species face significant risk of extirpation in the state, with 80 of these among those most at risk of extinction globally or nationally. As the ecosystem's ability to provide goods and services declines, society must do without or develop more costly substitutes.

The value of lands used to produce recreational and other amenities compares favorably with, and sometimes exceeds, the value of lands used to produce crops and livestock. Areas providing high-quality recreational opportunities probably can support fishing, hunting, and wildlife-watching activities with an annual value greater than \$120 per acre, whereas the annual rent in Nebraska for agricultural production is \$97 per acre for cropland and \$12 per acre for pasture. Overall willingness to pay for preserving areas capable of producing recreational and other amenities, including the protection of rare species, can be as high as \$3,000 – 7,000 per acre. In contrast, the average price of agricultural land in Nebraska is \$1,430 per acre for cropland and \$310 per acre for pasture.

The economic output of activities linked to the amenities derived from the state's natural resources is smaller than the output linked to the commodities, but it is nonetheless significant. The 2002 agricultural census, for example, found that farms and ranches in Nebraska produced crops and livestock with a commercial net value, exclusive of government subsidies, of about \$890 million. In comparison, a 2001 survey found that the resources supporting fishing, hunting, and wildlife-watching activities in the state had a net value of about \$350 million.

Many Nebraskans have demonstrated a willingness to promote amenities, such as bird migrations, seeing their actions as a contribution to the quality of life not just for themselves but also for others. The information presented in this report indicates that greater contributions to the state's

economy are possible. They typically would originate from the interests of landowners, and be linked to private and public investments in access and ancillary facilities (roads, motels, etc.). Some efforts to capitalize on amenities might entail converting land and water resources from the production of commodities (corn, cattle, etc.) to the production of amenities (recreational opportunities, fish and wildlife habitat, etc.). Others would not: with appropriate marketing and ancillary investments a farmer or rancher might enjoy higher earnings by producing commodities and amenities rather than commodities alone.

Unless Nebraskans act more aggressively to capitalize on them, the economic forces underlying amenity-driven growth are likely to work to the state’s disadvantage. Some amenities in other states can generate economic growth even when trampled, hard to reach, and overlooked, but Nebraska doesn’t have this luxury. Amenities similar to Nebraska’s are found elsewhere in the Great Plains, and, if Nebraska is to realize the full benefits of amenity-drive growth, it must distinguish itself from the crowd. To do so, Nebraskans must ensure their amenities have higher quality and better access, and they must have a clear vision of how to make the most of them. These are some of the areas with untapped potential for amenity-driven growth:

Omaha’s riverfront	Missouri River trails	National wildlife refuges
Niobrara River-Valentine	Ponca State Park	Pine Ridge region
Middle Platte River	Wetlands	Lake McConaughy

The forces underlying amenity-driven growth affect the potential effectiveness of economic–development strategies that receive a lot of attention. A strategy to invest in education may have limited success unless the state becomes more attractive to highly-educated individuals and entrepreneurs. Relaxing environmental standards for some industries might increase the costs other industries and households incur to cope with environmental degradation and reinforce the perceptions that encourage some highly productive households to locate elsewhere. Intensifying the application of natural resources to agricultural production might boost that industry’s output but slow overall economic growth unless the agricultural sector can reverse its declining ability to support farm families and avoid spillover costs that retard growth in other, faster-growing sectors.

None of this is intended to diminish in any way the economic importance of agriculture or other natural-resource industries, nor is it intended to disparage those who own and manage the state’s land and water. Rather, the core message of this report is that the economic forces underlying amenity-driven growth exert a powerful influence on Nebraska’s economy. The state possesses resources that could be used to take advantage of these forces, but so far Nebraskans have not fully seized these opportunities. This report makes no recommendations; it only provides background information for Nebraskans to consider as they make resource-management decisions in the future.

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