

Environmental and Natural Resources Management (2021-)

Analyze the relationships that have been established between humans and natural resources, specifically addressing sustainability of modern agriculture and governmental involvement of improvement methods. [AFNR.HS.14.1](#)

- a** Compare and contrast renewable and nonrenewable resources in regards to their impact on water, soil, fish, wildlife, and forestry. [AFNR.HS.14.1.A](#)
- b** Identify actions taken at local, state, and national levels to protect water quality, soil health, air quality, wildlife, and plant species. [AFNR.HS.14.1.B](#)
- c** Assess historical events of the United States' conservation programs and the human population's attitude and ecological outlook on the nation's natural resources. [AFNR.HS.14.1.C](#)
- d** Compare and contrast modern tools, equipment, machinery, and technology used to accomplish environmental tasks. [AFNR.HS.14.1.D](#)
- e** Apply cartographic skills to determine area, boundaries, and elevations in relation to natural resources and modern agriculture. [AFNR.HS.14.1.E](#)

Analyze the interrelationships between natural resources and humans and their effect on social, scientific, and industrial uses of natural resources. [AFNR.HS.14.2](#)

- a** Explain current aspects of modern agriculture and the impact to natural resources. [AFNR.HS.14.2.A](#)
- b** Evaluate the current programs in place with conservation and sustainability of natural resources within Nebraska (e.g., Conservation Reserve Program, Environmental Quality Incentives Program, Depredation, Private Waters Programs, Small Watershed Rehabilitation Program, Conservation Innovation Grants). [AFNR.HS.14.2.B](#)
- c** Assess the importance of Nebraska conservation and sustainability programs. [AFNR.HS.14.2.C](#)
- d** Describe the implementation of conservation programs. [AFNR.HS.14.2.D](#)
- e** Critique the effectiveness of production methods that are relevant to different environmental conditions, conservation, and sustainability of natural resources. [AFNR.HS.14.2.E](#)
- f** Analyze the impact of modern technology in agriculture and natural resources and its overall effect on natural resources. [AFNR.HS.14.2.F](#)

Explain factors that contribute to ensuring sustainable natural resources production of wind energy, water quality, soil health, and forestry/rangeland health. [AFNR.HS.14.3](#)

- a** Identify components of ecological succession and the linkage between carbon, water, and hydrogen biological cycles. [AFNR.HS.14.3.A](#)
- b** Describe the components of the earth's atmosphere and the importance of air quality in relation to global warming. [AFNR.HS.14.3.B](#)
- c** Explain the allocation of water sources in relation to natural resource management. [AFNR.HS.14.3.C](#)
- d** Explain components of soil formation, classification, and erosion to explain land use of Nebraska Farmland. [AFNR.HS.14.3.D](#)
- e** Summarize fire management strategies, forestry products, and woodland management aspects of the forest industry. [AFNR.HS.14.3.E](#)

Critique management procedures and techniques to protect, maintain, enhance, and improve natural resources. [AFNR.HS.14.4](#)

- a** Analyze the effectiveness of specific environmental regulation policies (e.g., Clean Air Act, EISA, Clean Water Act, Superfund). [AFNR.HS.14.4.A](#)
- b** Distinguish between alternative energy sources and determine the benefits/costs of such energy sources. [AFNR.HS.14.4.B](#)
- c** Compare non-native and invasive species in Nebraska and their impact on the local and state-wide agricultural economy. [AFNR.HS.14.4.C](#)
- d** Analyze the financial and environmental cost and issues related to the introduction of non-native species. [AFNR.HS.14.4.D](#)