

Nebraska Historical Drought Impacts and Actions (1974 - 1997)

This table was compiled by the National Drought Mitigation Center (NDMC) [(402) 472-6707] at the University of Nebraska - Lincoln (UNL). Most information was obtained by a literature search of newspaper articles and other publications referring to Nebraska droughts between 1974 and 1997. Additional information was obtained through telephone and personal interviews with scientists and other relevant individuals throughout Nebraska. The NDMC is probably the primary contact for general drought information in Nebraska. Other various contacts are also listed below.

Sector	Impact	Actions Taken	Other Options	Contacts
Agriculture			Improve monitoring and access of real-time climate information to farmers	
Economic	Loss of crop production (primarily dry land)	Provided individual loans, grants and disaster payments to declared disaster areas		Ag. Economics Department (UNL) (402) 472-3401 UNL Cooperative Extension Administration (402) 472-2966 Civil Defense/Emergency Services (402) 471-7421 Farm Service Agency (402) 437-5581
		Increased number of multi-peril crop insurances coverage during potential drought years		
		Expanded irrigation and irrigated before planting to enhance soil moisture		
		Promoted the use of drought-resistant seeds and switched crop varieties (i.e., sorghum and soybeans)		
	Tight credit situation	Provided direct and guaranteed loans for water development (i.e., FmHA guaranteed)		
	Liquidation of cattle herds	Culled cows closely and weaned early		

Sector	Impact	Actions Taken	Other Options	Contacts
	Increased costs of cattle production (feed, shipping, lease)	Established a "Hay List" of prices and contacts		
		Eased restrictions to allow haying and grazing on idled lands		
		Granted FmHA feed programs (hay sales and grazing permits)		
		Granted emergency feed assistance (ASCS cost-sharing, etc.)		
		Approved road-side haying and median hay sales		
		Shipped livestock to areas with feed		
		Fed reserve stocks		
	Decrease in slaughter cattle prices from sell-offs			
	Reduced income for some farmers/ranchers	Established relief programs and provided management information		
Environmental	Reduced cropland quality (wind erosion)	Provided funds and training to farmers and extension personnel for conservation measures		
		Provided emergency loans, deficiency payments and Payment-in-Kind commodities in exchange for idling land		
Social	Need for information	Formed a permanent Farm Hotline in 1984 and a Drought Hotline during droughts		1-800-464-0258 (Farm Hotline)

Sector	Impact	Actions Taken	Other Options	Contacts
		The government sponsored workshops and educational programs on drought-related topics		UNL Cooperative Extension Administration, Nebraska Natural Resources Districts
	Conflicts between irrigators and other water users			University of Nebraska Water Center (402) 472-3305
Lessons Learned	Most losses to agricultural crops in Nebraska were in dryland cropping regions.			
Drought Management	In 1977, a state task force was formed to coordinate drought activities (Drought Assessment Response Team). The task force met as needed in following years	Agencies organized drought information for govt. education and public outreach		National Drought Mitigation Center
		Participated in regional drought task forces for research and federal lobbying efforts		
	The Nebraska Drought Plan was created in 1985			
	In 1991, formed the Climate Assessment and Response Committee (CARC)			
	In 1991, formed the Water Availability and Outlook Committee (WAOC)			
	In 1991, formed the Impact Assessment Committee			
	In 1991, formed the Emergency Response Committee			

Sector	Impact	Actions Taken	Other Options	Contacts
Lessons Learned	Nebraska's drought plan deals with response, and the plan would be improved if it was rewritten to include mitigation actions. In addition, an improved statewide monitoring system of climate, soil, and remotely-sensed data would be beneficial for both the WAOC and the CARC. Funding for such a system was turned down by FEMA.			
Water Resources				
Economic	Increased irrigation costs from increased water demands	Provided loans to public power and irrigation districts for conservation and expansion measures		Ag. Economics Dept (UNL) NE Natural Resource Districts NE Power Review Board (402) 471-2301
		Grant to UNL to train irrigators to improve water and fuel utilization		
		Provided cost-share funds to install water meters on irrigation operations		
	Early spring start for irrigation, creating higher energy costs and fuel shortages	Better fuel planning		
	An increase in expenses for irrigation expansion and private well development	Provided direct and guaranteed loans for small-scale water resources development		
Environmental	Increased reduction of ground and surface water levels from irrigation and consumption that affect water levels and quality			Unites States Geological Survey (NE) (402) 437-5082 NE Department of Environmental Quality (402) 471-2186 NE Department of Water Resources (402) 471-2363 UNL Conservation and Survey Division (402) 471-3471
	Loss of rain-fed wetlands	Increased funding and legislation for wetland development and protection		University of Nebraska Water Center

Sector	Impact	Actions Taken	Other Options	Contacts
		Increased public advocacy and education about wetlands		
Social	Increased consumption of water in urban areas	Promoted voluntary water conservation or water rationing to lawns, parks, etc.		Municipalities (especially in south-eastern Nebraska)
	Conflicts between irrigators and rural individuals over water rights			NE Natural Resource Districts College of Law (UNL) (402) 472-2161
	Conflicts between conservationists and irrigators over stream flow appropriation			University of Nebraska Water Center
	Conflicts between reservoir management and tourism needs (declining lake levels)			NE Economic Development, Tourism Division (402) 471-3784
Lessons				
Wildfire-Forest Health				NE State Forestry Office (402) 472-6636
Economic	not available			
Environmental	Increase in grass fires			
Social	not available			
Lessons Learned	Because Nebraska relies on volunteer wildfire personnel, they are not eligible for FEMA funds for firefighting.			
Natural Resources (Wildlife)				
Economic	Increased costs of conservation activities			NE Game & Parks Commission (402) 471-0641

Sector	Impact	Actions Taken	Other Options	Contacts
Environmental	Loss of fish, waterfowl and shore bird habitat (including local, migratory, and endangered species)	Provided grants to drill wells and distribute water at wildlife areas		NE Game and Parks Commission UNL Forestry, Fisheries and Wildlife Dept (402) 472-2944
		Provided grants to supply water to fish hatcheries and to create wildlife habitat		
		Increased public advocacy and education about wetlands ecosystems		
Social	Increased controversy over wetland ecosystems			University of Nebraska Water Center, College of Law (UNL)
	Conflicts between conservationists and irrigators over stream flow appropriation			
Lessons Learned				
Health Environment				
Economic	not available			
Environmental	With ground water reductions, microbial and other contaminant concentrations increase			NE Department of Health (402) 471-2541 Department of Environmental Quality
Social	Problems with adequate rural domestic water supply	Provided direct and guaranteed loans for small-scale water resources development		
		Provide informational packets and programs regarding water quality		

Sector	Impact	Actions Taken	Other Options	Contacts
	Some reduction in air quality from dust			
Lessons Learned				
Commerce-Economic				
Economic	Some decline in agribusiness sales (machinery, fertilizers) and repair services			Ag. Economics Department UNL Bureau of Business Research (402) 472-2334
	Shortened seasons and reduced loads for Missouri River commercial navigation	River flow regulation and dredging		Army Corp of Engineers - Omaha (402) 221-3916
	Loss of revenue to area businesses when tourism declines from low lake levels			Nebraska Economic Development, Tourism Division
Environmental	not available			
Social	Reduction to some individuals' personal income			
Lessons Learned				
Tourism - Recreation				
Economic	Loss of revenue from tourists when lake levels decline			Nebraska Economic Development, Tourism Division
	Potential for waterfowl tourism activities to be affected due to changes in wetlands			UNL Forestry, Fisheries and Wildlife Dept

Sector	Impact	Actions Taken	Other Options	Contacts
Environmental	not available			
Social	Conflicting attitudes between reservoir management and tourism needs			Nebraska Economic Development, Tourism Division
Lessons Learned				