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Cornhusker Economics

Cooperative Extension

Institute of Agriculture & Natural Resources
Department of Agricultural Economics
University of Nebraska – Lincoln

Integrated Water Management Options in the Nebraska Groundwater Management & Protection Act

Market Report	Yr Ago	4 Wks Ago	2/22/02
<u>Livestock and Products,</u>			
<u>Average Prices for Week Ending</u>			
Slaughter Steers, Ch. 204, 1100-1300 lb			
Omaha, cwt	\$79.86	\$68.63	\$71.04
Feeder Steers, Med. Frame, 600-650 lb			
Dodge City, KS, cwt	92.75	87.02	88.81
Feeder Steers, Med. Frame 600-650 lb,			
Nebraska Auction Wght. Avg	98.33	92.96	95.78
Carcass Price, Ch. 1-3, 550-700 lb			
Cent. US, Equiv. Index Value, cwt	122.58	105.67	110.59
Hogs, US 1-2, 220-230 lb			
Sioux Falls, SD, cwt	42.75	40.63	38.00
Feeder Pigs, US 1-2, 40-45 lb			
Sioux Falls, SD, hd	55.00	*	*
Vacuum Packed Pork Loins, Wholesale,			
13-19 lb, 1/4" Trim, Cent. US, cwt	115.00	109.60	106.00
Slaughter Lambs, Ch. & Pr., 115-125 lb			
Sioux Falls, SD, cwt	95.50	*	*
Carcass Lambs, Ch. & Pr., 1-4, 55-65 lb			
FOB Midwest, cwt	168.00	129.07	141.21
<u>Crops,</u>			
<u>Cash Truck Prices for Date Shown</u>			
Wheat, No. 1, H.W.			
Omaha, bu	3.15	3.11	3.03
Corn, No. 2, Yellow			
Omaha, bu	1.91	1.90	1.89
Soybeans, No. 1, Yellow			
Omaha, bu	4.29	4.10	4.23
Grain Sorghum, No. 2, Yellow			
Kansas City, cwt	3.59	3.63	3.54
Oats, No. 2, Heavy			
Minneapolis, MN, bu	1.35	2.21	2.48
<u>Hay,</u>			
<u>First Day of Week Pile Prices</u>			
Alfalfa, Sm. Square, RFV 150 or better			
Platte Valley, ton	115.00	*	105.00
Alfalfa, Lg. Round, Good			
Northeast Nebraska, ton	70.00	65.00	65.00
Prairie, Sm. Square, Good			
Northeast Nebraska, ton	110.00	105.00	100.00
* No market.			

Nebraska statutes authorize Natural Resources Districts (NRDs) and the Nebraska Department of Natural Resources (DNR) to regulate groundwater and surface water uses respectively, when there is insufficient water for all uses. These 1996 "integrated water management" authorities have yet to be implemented. This newsletter describes (1) the general framework of the Nebraska Groundwater Management & Protection Act (GMPA), and (2) the special GMPA integrated water management options.

GMPA. In Nebraska groundwater management is largely a local (NRD) rather than a state responsibility. Under the GMPA, all NRDs must prepare groundwater management plans (GMPs). The GMP is the framework within which NRDs may regulate groundwater development (well spacing regulations, well drilling prohibitions) and groundwater use (well metering, pumping restrictions) in groundwater management areas (GMAs). The GMP must address a variety of issues, including groundwater depletion and groundwater protection from agricultural chemical use. The GMP must be reviewed by the DNR before it can be implemented by the NRD. The GMP must also identify the regulations the NRD intends to implement to deal with specified groundwater management issues. NRD approval of the GMP, and establishing GMA regulations both are subject to public notice and hearing requirements.

Authorized GMA regulations include: (1) ground water allocation (i.e. pumping quotas), (2) rotation of use, (3) well spacing, (4) well metering, (5) irrigated acreage reduction, (6) mandatory ag chemical best management practices, (7) soil testing, (8) voluntary or mandatory educational programs, (9) water quality monitoring and



reporting, (10) limiting or preventing the expansion of irrigated acres, and (11) other reasonable rules and regulations. Regulations may be varied within a GMA based upon different GMA conditions, including different irrigation systems and differing hydrologic relationships between groundwater and surface water. When groundwater problems are so severe that they cannot be addressed solely by implementing the above GMA regulations, well drilling may be halted or conditioned. NRD permits are required before new wells pumping more than 50 gallons per minute may be constructed. The permit fee is \$17.50 (\$250 for late permits).

Most, if not all NRDs have established water quality GMAs to deal with nitrate contamination from fertilizer use. Some water quality GMAs also deal with pesticide contamination of groundwater. The Nebraska Department of Environmental Quality (DEQ) may in some circumstances establish groundwater regulations to protect groundwater quality from ag chemical use if the local NRD does not regulate, or if its water quality GMA regulations are ineffective. A few NRDs have established GMAs to manage groundwater depletion, and at least one NRD (North Platte NRD) has established a GMP to deal with surface-groundwater conflicts.

Integrated Water Management Options. NRDs have the option to deal with current or future surface-groundwater conflicts in integrated management GMAs (IM-GMAs). IM-GMA regulations may treat new wells differently from existing wells when the IM-GMA is established.

Joint Action Plan (JAP). If the NRD deals with surface-groundwater conflicts on its own, only ground water uses will be subject to IM-GMA regulation. If the NRD wishes to bring surface water uses into the IM-GMA program, the NRD may request the DNR to study the surface-groundwater conflicts. When the DNR study is completed, and if DNR concludes that surface-groundwater problems exist, the DNR holds a public hearing. Within 90 days of the hearing the NRD determines whether it will pursue an IM-GMA to deal with surface-groundwater conflicts. If so, and the DNR concurs, the NRD develops an IM-GMA joint action plan (JAP) with the DNR.

The NRD and DNR JAP is adopted within one year of the determination to proceed. The NRD portion deals with groundwater regulations and the DNR portion deals with surface water regulations. Possible DNR JAP surface water regulations include (1) increased monitoring and enforcement of surface water appropriation or

diversion rates and quantities; (2) prohibiting or limiting new appropriations, (3) requiring surface appropriators to implement reasonable conservation measures or best management practices, and (4) other reasonable regulations. The GMPA acknowledges that hydrologically connected surface and groundwater may need to be managed differently than other surface or groundwater. If the JAP establishes surface water conservation measures or best management practices, appropriators are given up to 180 days to identify such measures or practices and develop an implementation schedule. Neither well registration dates nor appropriation priority dates can be a factor in determining whether an IM-GMA is established or a JAP prepared.

When the NRD and DNR have each completed their portion of the JAP, a public hearing must be held within 60 days. The notice must include a general description of the area to be included in the IM-GMA, and the complete text of proposed regulations. The NRD determines within 90 days whether the JAP should be implemented in an integrated management GMA. If the JAP is implemented, a monitoring program must be established. The NRD may also establish a temporary 3-year ban on well drilling while the JAP is being prepared (authority expires 12/31/02).

Interstate Surface-Groundwater Disputes. The DNR may initiate the IM-GMA JAP process on its own motion where interstate surface-groundwater disputes are at issue. If the affected NRD does not participate in the JAP process, the DNR assumes the NRD responsibilities for developing IM-GMA regulations, but only with the approval of the Integrated Water Review Committee (IWRC). The IWRC is composed of the Governor and two disinterested members of the Natural Resources Commission.

The IM-GMA study that is conducted prior to preparing the JAP would be invaluable for identifying surface and groundwater management options for dealing with the surface groundwater conflicts.

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