

MUNICIPAL USE IN ACRE FEET

LINCOLN USES APPROXIMATELY 45,000 AC/IN OF WATER PER YEAR
THE AREA OF THE CITY OF LINCOLN COVERS APPROXIMATELY 77 SQUARE

MILES

- LINCOLN USES 11 AC/IN PER YEAR FOR AERIAL USES
- 8 AC/IN PER YEAR IS USED FOR INSIDE USES OF ALL CUSTOMERS
- 3 AC/IN PER YEAR IS USED FOR OUTSIDE USES FOR ALL CUSTOMERS
- GRAND ISLAND USES ABOUT 9 AC/IN PER YEAR FOR ALL USES
- OMAHA USES ABOUT 11 AC/IN PER YEAR FOR ALL USES

IRRIGATED AGRICULTURAL AVERAGE USE IN 1995 WAS 13 INCHES, WITH A HIGH OF 31 INCHES AND A LOW OF 7.9 INCHES.

UPPER BIG BLUE NRD

MUNICIPAL AVERAGE ANNUAL WATER USE - PER ACRE BASIS									
2001 thru 2003 Data	Aurora	Henderson	Stromsburg	Osceola	Fairmont	Giltner	McCool JCT	Ulysses	Total
Population	3,810	999	1,241	879	708	367	372	276	8,652
Average Annual Water Use - Gallons	400,810,400	171,260,953	90,719,000	124,521,453	48,177,333	45,666,667	24,860,727	29,666,667	935,683,200
Avg Gallons per Capita per Day	288	470	200	388	186	341	183	294	296
Avg Annual Water Use - Acre Feet	1,230.0	525.6	278.4	382.1	147.9	140.1	76.3	91.0	2,872
Corporate Area - Acres	1,354.5	397.6	646.5	615.0	376.0	120.0	331.0	120.0	3,961
Avg Annual Water Use per Acre - Ac. Ft.	0.91	1.32	0.43	0.62	0.39	1.17	0.23	0.76	0.73
Avg Annual Water Use per Acre - Ac. In.	10.9	15.9	5.2	7.5	4.7	14.0	2.8	9.1	8.7
	Meters	No Meters	Meters	No Meters	Meters installed in May 2002	No Meters	Meters	No Meters	

Upper Big Blue NRD			
2001 - 2003	Crop Irrigation from Water pumping reports	Acre Inches	# of Reports
		10.7	223
Corn - Center Pivots		9.4	96
		16.3	28
Corn - Gravity Irrigation		12.9	19
			1,876
Soybeans - Gravity Irrigation			1,201

April 1 - Sept 1 Rainfall	2001	2002	2003
Aurora	15.2	14.3	19.2
Geneva	18.5	13.5	13.2
Osceola	16.5	14.7	13.4
Seward	17.0	18.0	16.1
York	17.7	15.1	11.9

Average Rainfall	2001 - 2003	1949 - 2003	Difference from 1949 - 2003
Aurora	27.6	27.5	0.14
Geneva	27.1	28.8	(1.64)
Osceola	24.1	27.0	(2.84)
Seward	26.2	27.2	(0.97)
York	23.1	28.1	(4.95)

SUMMARY OF ALLOCATION compared to ACTUAL WATER USE

City / Village	Aurora	Henderson	Stromsburg	Osceola	Fairmont	Giltner	McCool JCT	Ulysses
Population	3,810	999	1,241	879	708	367	372	276
Total Area (acres)	1,354.5	397.6	646.5	615.0	376.0	120.0	331.0	120.0
Irrigated Crop Lands (golf course on City Water)	40.0							
Total Non-Ag Lands	1,314.5	397.6	646.5	615.0	376.0	120.0	331.0	120.0
1/3 of Non-Ag Lands	438.2	132.5	215.5	205.0	125.3	40.0	110.3	40.0
Actual Water Use (gallons)								
2001	408,132,600	176,217,160	88,973,000	126,363,365	59,797,000	49,000,000	25,189,111	29,000,000
2002	428,826,800	179,602,800	92,681,000	126,491,115	47,324,000	49,000,000	24,114,030	30,000,000
2003	365,471,800	157,962,900	90,503,000	120,709,880	37,411,000	39,000,000	25,279,040	30,000,000
Actual Water Use (gallons) Total	1,202,431,200	513,782,860	272,157,000	373,564,360	144,532,000	137,000,000	74,582,181	89,000,000
Allocation for 3 years (if there had been an Allocation)								
250 gallons per capita for 3 years	1,043,940,000	273,726,000	340,034,000	240,846,000	193,992,000	100,558,000	101,928,000	75,624,000
Gallons for 1/3 of Non-Ag lands for 3 years	571,146,374	172,721,163	280,880,976	267,195,360	163,358,464	52,135,680	143,807,584	52,135,680
Gallons for Ag lands for 3 years	52,135,680							
Exempt Fire Protection, Water & Sewer Maint.								
Total Allocation	1,667,222,054	446,447,163	620,914,976	508,041,360	357,350,464	152,693,680	245,735,584	127,759,680
Total Gallons Allocated								
Gallons per capita per day Allocation	400	408	457	528	461	380	603	423

Actual Water Use								
Total Gallons Used	1,202,431,200	513,782,860	272,157,000	373,564,360	144,532,000	137,000,000	74,582,181	89,000,000
Gallons per capita per day Actual	288	470	200	388	186	341	183	294
Population Density per Acre	2.81	2.51	1.92	1.43	1.88	3.06	1.12	2.30
Water Meters	Meters	No Meters	Meters	No Meters	Meters installed in May 2002	No Meters	Meters	No Meters
Comments				231 gals per Capita per day in 2001	Installing Meters in 2004			

COMPARISON ESTIMATED MUNICIPAL USE

Table 1

	Pop. 2000	Pop. 1990	Area	Highest Historical Use in gallons	GPD per person 2000 using HHU	Est. allocation using proposed formula.	Irrigated acres w/in NRD	Muni total % Irrig.	Muni difference % Irrigation
North Platte River									
Gering	7951	7946	2800	1,250,000,000	430.72	533.69	373463.1	1.26%	0.24%
Ogallala	5,100	5,216	3,238	491,065,000	263.80	543.06	183133.36	1.67%	0.86%
North Platte	23878	22605	7974	2,682,324,000	307.77	439.49	393873	2.90%	0.89%
South Platte River									
Kimball	2559		960	305,071,148	326.61	471.08	183133.36	0.73%	0.23%
Sidney	6282	5959	7000	966,740,000	421.61	800.16	183133.36	2.98%	1.43%
Platte River									
Kearney	28000	24936	7040	2,605,136,000	254.91	365.67	1461807	0.78%	0.24%
Republican River									
McCook	7996	8112	3570	1,153,413,000	395.2	550.93	427021.1	1.14%	0.33%

Estimated allocation includes (250 gpd x 2000 population), + (calculated gpd - 250 x .7), + (6 inches x area)