

Middle Republican NRD

Total Certified Acres 335,000 based on projections

Total Irrigated Acres 2003 ? water use reports

Total Irrigated Acres 2002 from NRD 252,340 NASS  
290,191 1.15 Adjustment for NASS

Total Comingled Acres 2002 37,490 32600 x adjustment (1.15)

Total Certified GW only (Acres) ~297,510 ← 335,000 - 37,490 =

Total Ground Water Only Acres Irr. 2002 (Using Adjusted NASS) 252,701 ← 290,191 - 37,490

Total Pumpage AF 294,005 times 0.95 → 2002 5-yr running average

Pumpage for comingled at 6"/acre 18,745 ACEE.FT

Remaining Pumpage for GW only acres 275,260 ← 294,005 - 18,745

certified acres 301,500 times 0.9 acres at %

Allocation 14.5  
Use 12

294,005 acres at 14.5 in/acre allocation + dry-year activities → 1,211' 252,701 acres

Number of acres can expected to be pumped per acre

GW acres	Inches	Feet	Acres	Percent Certified Acres	Ground Water Only 2002 acres	Percent Ground Water Only
275,260	16	1.33	206,445	69%	252,701	82%
	15	1.25	220,208	74%		87%
	14	1.17	235,937	79%		93%
	12	1.00	275,260	93%		109%
	11	0.92	300,284	101%		119%
	10	0.83	330,312	111%		131%

275,260 Acres ft each combination

↑ Volume

Cuts	5% RED.	INCH	FT	ACRES	THEM	US
	261,497	15	1.25	209,198	70%	83%
	14.5	1.21	1.21	216,411	73%	86%
	14	1.17	1.17	224,140	75%	89%
	13.5	1.13	1.13	232,442	78%	92%
	13	1.08	1.08	241,382	81%	96%
	12.8	1.07	1.07	245,153	82%	97%
	12	1.00	1.00	261,497	88%	103%
	11.4	0.95	0.95	275,260	93%	109%
	10.45	0.87	0.87	300,284	101%	119%
	9.5	0.79	0.79	330,312	111%	131%
10%	14.5	1.21	1.21	205,021	69%	81%
247,734	14	1.17	1.17	212,343	71%	84%
	12.5	1.04	1.04	237,825	80%	94%
	12	1.00	1.00	247,734	83%	98%
	11	0.92	0.92	270,255	91%	107%
	10	0.83	0.83	297,281	100%	118%

~ 26,500 Acre-ft  
each combination

~ 103% of average use

~ 247,734 Acre-ft  
each combination

Deficit MRNRD % Amt Reduction QWR Acres reduction

40000 0.29 11,600 34,800 = 3 times number of acres times the amount of reduction