Appendix F

Water Demand Information

Appendix F1

Water Use Data

### Table F1-1. Taos Region Water Use Water Year 2000

	Withdrawa	l (acre-feet)	Depletion	(acre-feet)	Return Flov	v (acre-feet)	Total	Total	Total
	Surface		Surface		Surface		Withdrawal	Depletion	<b>Return Flow</b>
Use Category	Water	Groundwater	Water	Groundwater	Water	Groundwater	(acre-feet)	(acre-feet)	(acre-feet)
North Subregion									
Commercial (self-supplied)	5.00	35.75	1.00	31.25	4.00	4.50	40.75	32.25	8.50
Industrial (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigated Agriculture	27,862.00	1,280.00	9,529.00	1,050.00	18,333.00	230.00	29,142.00	10,579.00	18,563.00
Livestock (self-supplied)	12.09	17.86	12.09	17.86	0.00	0.00	29.95	29.95	0.00
Mining (self-supplied)	515.00	2,578.60	87.55	438.40	427.45	2,140.20	3,093.60	525.95	2,567.65
Power (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Water Supply	91.47	697.40	16.14	292.91	75.33	404.49	788.87	309.05	479.82
Reservoir Evaporation	578.00	0.00	578.00	0.00	0.00	0.00	578.00	578.00	0.00
Totals	29,063.56	4,609.61	10,223.78	1,830.41	18,839.78	2,779.19	33,673.17	12,054.20	21,618.97
Central Subregion									
Commercial (self-supplied)	200.51	148.38	20.05	127.34	180.46	21.04	348.89	147.39	201.50
Industrial (self-supplied)	0.00	2.54	0.00	2.54	0.00	0.00	2.54	2.54	0.00
Irrigated Agriculture	52,755.00	350.00	21,271.00	222.00	31,484.00	128.00	53,105.00	21,493.00	31,612.00
Livestock (self-supplied)	12.09	17.86	12.09	17.86	0.00	0.00	29.95	29.95	0.00
Mining (self-supplied)	0.00	0.04	0.00	0.04	0.00	0.00	0.04	0.04	0.00
Power (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Water Supply	0.00	1,432.00	0.00	601.44	0.00	830.56	1,432.00	601.44	830.56
Reservoir Evaporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals	52,967.60	1,950.82	21,303.14	971.22	31,664.46	979.60	54,918.42	22,274.36	32,644.06

Source: Wilson et al., 2003, except where noted

Notes: 1. With the exception of the irrigated agriculture category, this table provides water use information for Taos County only; it does not include water use estimates for the small portion of Rio Arriba County that lies within the planning region. OSE includes Embudo and vicinity in its Taos County totals for irrigated agriculture, which is in the portion of Rio Arriba County that is in the Taos region

2. Wilson et al. (2003) do not present water use by subregions. Where possible, the numbers reported by Wilson et al. have been broken down based on location information provided. For livestock, 30% of the reported use was attributed to each of the North, Central, and South subregions, with the remaining 10% assigned to the West subregion.

3. Domestic self-supplied use estimated by DBS&A

### Table F1-1. Taos Region Water Use Water Year 2000

	Withdrawa	l (acre-feet)	Depletion	(acre-feet)	Return Flov	v (acre-feet)	Total	Total	Total
	Surface		Surface		Surface		Withdrawal	Depletion	<b>Return Flow</b>
Use Category	Water	Groundwater	Water	Groundwater	Water	Groundwater	(acre-feet)	(acre-feet)	(acre-feet)
South Subregion									
Commercial (self-supplied)	0.00	18.72	0.00	16.22	0.00	2.50	18.72	16.22	2.50
Industrial (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigated Agriculture	16,638.00	466.00	6,708.00	382.00	9,930.00	84.00	17,104.00	7,090.00	10,014.00
Livestock (self-supplied)	12.09	17.86	12.09	17.86	0.00	0.00	29.95	29.95	0.00
Mining (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Water Supply	0.00	117.70	16.14	49.43	0.00	68.27	117.70	65.57	68.27
Reservoir Evaporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals	16,650.09	620.28	6,736.23	465.51	9,930.00	154.77	17,270.37	7,201.74	10,084.77
West Subregion									
Commercial (self-supplied)	0.00	27.67	0.00	18.42	0.00	9.25	27.67	18.42	9.25
Industrial (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Irrigated Agriculture	206.00	0.00	106.00	0.00	100.00	0.00	206.00	106.00	100.00
Livestock (self-supplied)	4.03	5.95	4.03	5.95	0.00	0.00	9.98	9.98	0.00
Mining (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power (self-supplied)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Water Supply	0.00	53.00	0.00	22.26	0.00	30.74	53.00	22.26	30.74
Reservoir Evaporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals	210.03	86.62	110.03	46.63	100.00	39.99	296.65	156.66	139.99

Source: Wilson et al., 2003, except where noted

Notes: 1. With the exception of the irrigated agriculture category, this table provides water use information for Taos County only; it does not include water use estimates for the small portion of Rio Arriba County that lies within the planning region. OSE includes Embudo and vicinity in its Taos County totals for irrigated agriculture, which is in the portion of Rio Arriba County that is in the Taos region

 Wilson et al. (2003) do not present water use by subregions. Where possible, the numbers reported by Wilson et al. have been broken down based on location information provided. For livestock, 30% of the reported use was attributed to each of the North, Central, and South subregions, with the remaining 10% assigned to the West subregion.

3. Domestic self-supplied use estimated by DBS&A

#### Table F1-2. Public Water System Data

				Withdr	awals <sup>a</sup>	Depletior	n Factor <sup>b</sup>	Deple	etions <sup>a</sup>				Popula	tion used by DBS&A	
		OSE													
		Population		Surface	Ground-	Surface	Ground-	Surface	Ground-	Per Capita <sup>c</sup>	Per Capita <sup>c</sup>	NMED DWB			Transient
System Name	City	2000	MGW	Water	water	Water	water	Water	water	(ac-ft/yr)	(gpcd)	Population	Population	Source <sup>d</sup>	Population
North Subregion															
Cerro East MDWCA	Cerro				9.2				4.6			81	81	NMED DWB	
Cerro West MDWCA	Cerro				14.7				7.4			130	130	NMED DWB	
Costilla MDWCA	Costilla				48.1				24.1			425	425	NMED DWB	
Eagle Rock Village	Questa				13.6				6.8			120	120	NMED DWB	
Lama MDWCA	Lama				9.1				4.5			80	80	NMED DWB	
Questa Water System	Questa	1.864	Y	0	210.4	0	0.5	0	105.2	0.12	104	1.800	1.800	NMED DWB	
Red River Water System	Red River	484	Ý	87.06	487.0	0.16	0.16	13.9296	77.9	0.35	314	350	350	NMED DWB	1.281
San Cristobal MDWCA	San Cristobal	110	Ý	4.411	0.0	0.5	0	2.2055	0.0	0.03	28	139	139	NMED DWB	.,
Sangre de Cristo MHP	Taos				3.2				1.6				25	Wilson and Lucero, 1997	
Two Lakes Village	Questa				71				3.6			63	63	NMED DWB	
Total North	Quoola	2 458		91	802			16	236	0.20	178	3 188	3 213		
Average residential only with data		2,100		0.	002				200	0.03	28	0,100	0,210		
Average of all systems with data										0.33	291				
riverage of all systems with data										0.00	201				
Central Subregion															
Arrovo Seco MDWCA	Arrovo Seco				35.5				17.8			570	280		
Anoyo beed mbwoA	Anoyo occo				00.0				17.0			570	200	120 connections times	
														house size (Garcia, 2005)	
														nouse size (Garcia, 2005)	
PMC Troiler Park	Donahaa da Taaa				E 1		-		2.5			40	40		
		260	v	0	52.0	0	0.5	0	2.5	0.00	70	40	40		
Canon WDWCA	Taus	360	f	0	52.9	0	0.5	0	20.4	0.09	79	600	600		
Enchanted Mobile Home Park	Boulder	180	ř V	0	15.2	0	0.5	0	7.0	0.08	75	100	180	Wilson et al., 2003	
El Prado Water & Sanitation District	ELPIADO	1,000	ř	0	67.7	0	0.5	0	33.8	0.07	64	70	1,008	El Prado Water Plan	
El Rancho Mobile Home Park	Taos Arresta Casa	04.0	V	0	9.1	0	0.5	0	4.6	0.00	70	12	72	NMED DVVB	
	Arroyo Seco	216	ř	0	17.6	0	0.5	0	8.8	0.08	73	000	216	Wilson et al., 2003	
El Valle Escondito Water	laos	250	Y	0	22.6	0	0.5	0	11.3	0.08	67	300	300	NMED DWB	
Hacienda Subdivision Water System	Rancho de Taos				9.1				4.6	0.13	113	/2	/2	NMED DWB	
Las Colonias Mobile Home Park	laos	80			5.9				3.0	0.13	113	50	47	20 connections times	
														average house size	
	_													(Jarmillo, 2005)	
La Lomita Trailer Park	laos	100	Y	0	8.7	0	0.5	0	4.3	0.09	78		100	Wilson et al., 2003	
Llano Quemado MDWCA	Ruidoso	650	Y	0	39.6	0	0.5	0	19.8	0.06	54	650	650	NMED DWB	
Lower Arroyo Hondo MDWCA	Arroyo Hondo	210	Y	0	14.2	0	0.5	0	7.1	0.04	33	388	388	NMED DWB	
Lower des Montes MDWCA	El Prado				38.1				19.0	0.13	113	300	300	NMED DWB	
Ranchitos	Taos	190	Y	0	18.6	0	0.5	0	9.3	0.07	62	266	266	NMED DWB	
Ranchos de Taos MDWCA	Ranchos de Taos	720	Y	0	49.6	0	0.5	0	24.8	0.05	40	1,100	1,100	NMED DWB	
St. Bernard Condos Water System	Taos Ski Valley				9.7				4.8				76	Wilson and Lucero, 1997	
Talpa MDWCA	Taos	880	Y	0	53.6	0	0.5	0	26.8	0.07	65	735	735	NMED DWB	
Taos Municipal Water System	Taos	4,700	Y	0	895.3	0	0.5	0	447.7	0.20	178	4,500	4,500	NMED DWB	
Taos Pueblo	Taos													U.S. Census	
Upper Arroyo Hondo MDWCA	Arroyo Hondo	176	Y	0	8.7	0	0.5	0	4.3	0.06	52	150	150	NMED DWB	
Upper des Montes MDWCA	El Prado	240	Y	0	64.2	0	0.5	0	32.1	0.23	205	280	280	NMED DWB	
Valdez MDWCA	Valdez				5.8				2.9	0.0482	43	120	120	NMED DWB	
Vigils Trailer Park	Ranchos de Taos	100			9.0				4.5	0.0970	87	150	93	40 connections times	
														average house size (Vigil	
														2005)	
Village of Taos Ski Valley	Taos Ski Valley	1,000	Y	0	104.3	0.5	0.5	0	52.2	0.16	143	650	40	2000 U.S. Census	610
														estimate of 40 subtracted	
														from NMED population	
														estimate to obtain	
														transient population	
														estimate	
Total Central		11,052		0	1,560				780	0.13	120	11,093	11,612		
Average residential only with data										0.07	60				
Average of all systems with data										0.16	143				

#### Table F1-2. Public Water System Data

				Withdr	awals <sup>a</sup>	Depletion	n Factor <sup>b</sup>	Deple	etions <sup>a</sup>				Population used by DBS&A		
		OSE													
		Population		Surface	Ground-	Surface	Ground-	Surface	Ground-	Per Capita <sup>c</sup>	Per Capita <sup>c</sup>	NMED DWB		d	Transient
System Name	City	2000	MGW	Water	water	Water	water	Water	water	(ac-ft/yr)	(gpcd)	Population	Population	Source	Population
South Subregion															
Apodaca MDWCA	Dixon				13.0			0	6.5			200	107	44 connections, no	
														meters on wells or	
														homes; survey says 135	
														residents served	
Chamisal MDWCA	Chamisal				37.8				18.9			550	313	130 connections times	
														house size	
Cuchilla del Llano MDWCA	Penasco				21.8				10.9			400	181	75 connections times	
														house size	
Dixon MDWCA	Dixon	400	Y	0	37.2	0	0.5	0	18.6	0.09	83	531	400	Wilson et al., 2003	
Llano San Juan MDWCA	Llano		Y	0	10.1	0	0.5	0	5.1	0.12	109	84	84	NMED DWB	
Montecito MDWCA	Dixon				7.2				3.6			60	60	NMED DWB	
Ojo Sarco MDWCA	Ojo Sarco	116	Y	0	10.9	0	0.5	0	5.5	0.09	84	140	116	Wilson et al., 2003	
Penasco MDWCA	Penasco	437	Y	0	89.4	0	0.5	0	44.7	0.20	183	513	437	Wilson et al., 2003	
Picuris Pueblo	Picuris													U.S. Census	
Placitas MDWCA	Penasco				13.2				6.6			252	220	Wilson and Lucero, 1997	
Rio Lucio MDWCA	Penasco	360	Y	0	22.6	0	0.5	0	11.3	0.06	56	500	360	Wilson et al., 2003	
Rodarte MDWCA	Rodarte				14.5				7.2			120	120	NMED DWB	
Trampas MDWCA	Chamisal	120	Y	0	5.7	0	0.5	0	2.9	0.05	43	200	120	Wilson et al., 2003	
Upper Canoncito MDWCA	Dixon	75	Y	0	3.1	0	0.5	0	1.5	0.04	36	80	75	Wilson et al., 2003	
Vadito MDWCA	Vadito				21.7				10.9			180	180	NMED DWB	
Total South		1,508		0	308				154	0.11	99	3,810	2,774		
Rio Arriba total in South subregion		591.0			71				36			1011	758		
Average residential only with data										0.09	77				
Average of all systems with data										0.09	78				
West Subregion															
Ojo Caliente MDWCA	Ojo Caliente	277	Y	0	40.5	0	0.5	0	20.2	0.16	144	250	184	2000 U.S. Census	
Tres Piedras MDWCA	Tres Piedras	117	Y	0	12.5	0	0.5	0	6.3	0.11	95	218	117	Wilson et al., 2003	
Total West		394			53				26	0.14	129	468	301		
		1													
Total Taos Region		15,412		91	2,724				1196	0.16	142	15,760	17,674		
Taos Region in Taos Co		14,821			2,652				1161	0.16	140	14,749	16,916		
Taos Region in Rio Arriba Co		591			71				36	0.09	84	1,011	758		

a If MGW (measured groundwater) is Y, then groundwater withdrawals are derived from Wilson et al. (2003). Otherwise, diversion is estimated based on population and calculated per capita demand rate

b Wilson et al., 2003

• The per capita demand rate was estimated for those systems without measured diversions using assumptions established by Wilson (1996):

• Each person uses 60 gpcd for indoor use.

• Each home has 800 ft<sup>2</sup> of Kentucky bluegrass,1,000 ft<sup>2</sup> of trees and shrubs, and 200 ft<sup>2</sup> of vegetables and herbs.

Based on these assumptions, per capita demand in the Central, South and West subregions was estimated at 113, 108, and 108 gpcd respectively,

or about 0.12 acre-foot per person. In the North subregion, which is cooler, the per capita use was estimated at 100 gpcd or 0.11 acre-foot per

d Wilson, B. and A.A. Lucero. 1997. Water use by categories in New Mexico counties and river basins, and irrigated acreage in 1995. New Mexico Office of the State Engineer Technical Report 49. Garcia, O. 2005. Personal communication with Olympia Garcia, Arroyo Seco, June 8, 2005

Wilson, B., A.A. Lucero, J.T. Romero, and P.J. Romero. 2003. Water use by categories in New Mexico counties and river basins, and irrigated acreage in 2000. New Mexico Office of the State Engineer Technical Report 51.

Jarmillo, C. 2005. Personal communication with Manager Casilda Jarmillo, June 8, 2005

Vigil, T. 2005. Personal communication with Terry Vigil, June 8, 2005

				Acres	Water		
		By-Laws as		Irrigated	Diversions	Water	o (1 · ) (1
		of 1987		(based on	per Acre <sup>a</sup>	Diversions	Source of Irrigated
Community	Acequias	(1987 OSE)	Watersheds	best source)	(ac-ft/ac)	(ac-ft)	Acreage <sup>D</sup>
North subregion							
Costilla	Acequia de Cerrito #1	Yes	Rio Costilla	305	2.21	305	LWA 1978
	Acequia de Cerrito #2	yes		238.5	2.21	526	OSE, 1987
	Acequia de J.J. Santistevan	yes		219.6	2.21	485	OSE, 1987
	Acequia de la Plaza de Arriba	yes	1	100	2.21	221	LWA 1978
	Acequia de Penasquito	yes	1	524	2.21	1,156	LWA 1978
	Aceguia del Lado Norte	no		72	2.21	159	LWA 1978
	Aceguia J.D. Lovato	ves		0	2.21	0	LWA 1978
	Acequia Madre de Rio Costilla (Cordillera Ditch)	Yes		1100	2.21	2.427	LWA 1978
	Balleios-Martinez Ditch	Yes	1	51.2	2.21	, 113	OSE, 1987
	Balleios-Martinez Ditch #4	no	1	53.4	2.21	118	OSE, 1987
	Barela Ditch	no	1	16	2.21	35	LWA 1978
Amalia	Aceguia de Arcadia Lucero #1	no	Ute Creek Water System	40.5	2.21	89	OSF, 1987
	Acequia de Arcadia Lucero #2	no		18.5	2.21	41	OSE, 1987
		no	4	6.3	2 21	19	Costilla Decree
	Acequia de Jose Agapito Gonzales	110	4	3.75	2.21	12	Costilla Decree
	Acequia de Jose Angel Martinez #1	no	4	39.7	2.21	88	OSE 1987
	Acequia de Jose Angel Martinez #2	110	4	1.03	2.21	3	Costilla Decree
		no	-	1.00	2.21	241	
		no	-	114 1	2.21	252	OSE 1987
	Acequia de Theodore Martinez	110	-	3.69	2.21	2.52	Costilla Docroo
	Monzonaros		-	3.00	2.21	177	
	Plaza del Medio		-	280	2.21	618	
			-	200	2.21	631	
	A.J. Tiljos		4	200	2.21	001	
	Brivete Ditebee		4	204.45	2.21	20	
	Pilvale Diches		4	294.45	2.21	650	LVVA 1970
	RIO COSTIlla LIVESTOCK ASSOC.			3,000	2.21	6,620	LVVA 1978
Oueste	Cabracta Ditab #1 (Las Ladaritas)	Vaa	Total Costilla	6,969	2 70	15,019	Ded Diver Adi
Questa	Cabresto Ditch #1 (Las Ladenias)	res	Cabresto Creek via the Red River	53.4	3.70	197	Red River Adj
	Cabresto Ditch #2 (Rito de Medio)	res	4	110.8	3.70	410	Red River Adj
	Cabresto Ditch #3 (Plaza)	Yes	4	188.8	3.70	698	Red River Adj
	Cabresto Ditch #4 (Liano)	Yes	-	657.4	3.70	2,430	Red River Adj
	Cabresto Ditch #5 (Gallegos)	Yes	4	121.4	3.70	449	Red River Adj
		Yes	4	1,534.2	3.70	5,671	Red River Adj
	Acequia del Molino Ditch			6.9	3.70	26	Red River Adj
	Questa Middle Ditch		Red River	62.4	3.70	231	Red River Adj
	Questa North Ditch (Rio Colorado Ditch)		1	480.1	3.70	1,775	Red River Adj
	Questa South Ditch			83.9	3.70	310	Red River Adj

				Acres	Water		
		By-Laws as		Irrigated	Diversions	Water	
		of 1987		(based on	per Acre <sup>a</sup>	Diversions	Source of Irrigated
Community	Acequias	(1987 OSE)	Watersheds	best source)	(ac-ft/ac)	(ac-ft)	Acreage <sup>b</sup>
La Lama	Acequia El Rito de la Lama	no	El Rito de la Lama	245.7	3.70	908	Red River Adj
Latir	Acequia El Rito de Latir	-	Latir Creek		3.70	0	Denver
Versylvia	Acequia de el Rito de Latir		Latir Peak		3.70	0	Denver
5	Acequia de el Rito de Medio				3.70	0	Denver
	Acequia de el Rito de Primero		1		3.70	0	Denver
Sunshine Valley	Groundwater Irrigation rights			5,113.8		10,371	Red River Adj
San Cristobal	Acequia Madre de San Cristobal	no	San Cristobal Creek	140.5	2.32	326	OSE, 1987
	Drainage Ditch	no		19	2.32	44	OSE, 1987
	Highland Ditch	no		40.7	2.32	94	OSE, 1987
	Middle Ditch	no		207.9	2.32	482	OSE, 1987
	Trujillo-Cordova Ditch	no		3.5	2.32	8	OSE, 1987
Cerro de Guadalupe	Acequia de Madre del Cerro de Guadalupe Lateral No 1	no	West Latir Creek	772.5	3.70	2,856	Red River Adj
	Lateral #2			676.8	3.70	2,502	Red River Adj
	Lateral #4			447.7	3.70	1,655	Red River Adj
	Lateral #3			328.1	3.70	1,213	Red River Adj
	Garcia Ditch No 1			4.5	3.70	17	Red River Adj
	Garcia Ditch No 2			19.2	3.70	71	Red River Adj
	Jarosa Creek Ditch			24	3.70	89	Red River Adj
	Latir Community Ditch			845.1	3.70	3,124	Red River Adj
	Latir Community Ditch(Archuleta Lateral)			26.7	3.70	99	Red River Adj
	Lonsdale Ditch No 1			2.6	3.70	10	Red River Adj
	Lonsdale Ditch No 2			4.5	3.70	17	Red River Adj
	Mascarenas Ditch			11.4	3.70	42	Red River Adj
	Quintana Ditch No 1			25.3	3.70	94	Red River Adj
	Quintana Ditch No 1A			2.2	3.70	8	Red River Adj
	Quintana Ditch No 2			0.6	3.70	2	Red River Adj
	Quintana Ditch No 3			0.7	3.70	3	Red River Adj
	Quintana Ditch No 4			1.7	3.70	6	Red River Adj
	Quintana Ditch No 5			2	3.70	7	Red River Adj
	Quintana Ditch No 6			0.8	3.70	3	Red River Adj
	Quintana Ditch No 7			0.1	3.70	0	Red River Adj
	Ryan Ditch 'A'		-	7.2	3.70	27	Red River Adj
	Ryan Ditch 'B'			16.7	3.70	62	Red River Adj
	Ryan Ditch 'C'			2.4	3.70	9	Red River Adj
	Ryan Ditch 'D'		4	31	3.70	115	Red River Adj
	Ryan Ditch 'E'		4	3.3	3.70	12	Red River Adj
	Ryan Ditch 'F' (denied)		4	0	3.70	0	Red River Adj
	Ryan Ditch 'G'			11.3	3.70	42	Red River Adj

				Acres	Water		
		Bv-Laws as		Irrigated	Diversions	Water	
		of 1987		(based on	per Acre <sup>a</sup>	Diversions	Source of Irrigated
Community	Acequias	(1987 OSE)	Watersheds	best source)	(ac-ft/ac)	(ac-ft)	Acreage <sup>b</sup>
Cerro de Guadalupe (cont.)	Ryan Ditch 'H'		West Latir Creek (cont.)	36.9	3.70	136	Red River Adj
	Ryan Ditch 'l'			69.7	3.70	258	Red River Adj
Unknown	Alvino Barela Ditch (Columbine Ditch)		Red River	19.1	3.70	71	Red River Adj
	Carmichael Ditch			30.6	3.70	113	Red River Adj
	Gwinn Ditch			2.5	3.70	9	Red River Adj
	Mutz Bros. Ditch No 1			14.8	3.70	55	Red River Adj
	Mutz Bros. Ditch No 2			46.4	3.70	172	Red River Adj
	Mutz Bros Ditch No 3			24.2	3.70	89	Red River Adj
	Mutz Bros. Ditch No 4			10.7	3.70	40	Red River Adj
	Mutz Bros. Ditch No 5			4.4	3.70	16	Red River Adj
	Spring Gulch Ditch			1	3.70	4	Red River Adj
	Young Ditch No 1			6.5	3.70	24	Red River Adj
	Young Ditch No 2			4	3.70	15	Red River Adj
	Young Ditch No 3			0.4	3.70	1	Red River Adj
	Young Ditch No 4			0.6	3.70	2	Red River Adj
	Young Ditch No 5			0.8	3.70	3	Red River Adj
			Total Rio Grande Tribs only	12,611		37,520	
			Total North	19,580		52,539	
Central subregion							
Talpa	Acequia del Antonio Maria Graham	yes	Rio Chiquito	23.27	3.94	92	McCall
	Acequia del Monte	no		308.02	3.94	1,214	McCall
	Acequia Madre del Rio Chiquito	no		836.25	3.94	3,297	McCall
Canon	Acequia de Jose Venito Martinez	yes	Rio Fernando	174.8	3.94	689	McCall
	Acequia de los Alamitos (East #2)			40.5	3.94	160	McCall
	Acequia de los Prandos			0	3.94	0	Denver
	Acequia de Vigil y Romo	no		45.2	3.94	178	McCall
	Acequia del Norte del Canon	no		138.1	3.94	545	McCall
	Acequia del Sur del Canon	no		387.01	3.94	1,526	McCall
	Anderson Ditch	no		9.8	3.94	39	McCall
Talpa	Acequia la Venita del San Francisco de Assisi #1		Rio Grande del Rancho	0	3.94	0	Denver
	Acequia la Venita del San Francisco de Assisi #2			0	3.94	0	Denver
	Acequia la Venita del Teodora Romero			0	3.94	0	Denver
	Acequia la Venita el Molino			0	3.94	0	Denver
	Acequia la Venita el Pueblito	no		54.91	3.94	217	McCall
	Acequia la Venita Filemon Gutierrez			0	3.94	0	Denver
	Acequia la Venita Gonzales			13.5	3.94	53	McCall
	Acequia la Venita Lucero	no		7.7	3.94	30	McCall

				Acres	Water		
		By-Laws as		Irrigated	Diversions	Water	
		of 1987		(based on	per Acre <sup>a</sup>	Diversions	Source of Irrigated
Community	Acequias	(1987 OSE)	Watersheds	best source)	(ac-ft/ac)	(ac-ft)	Acreage <sup>b</sup>
Llano Quemado	Acequia Abajo la Loma	yes	Rio Grande del Rancho (cont.)	61.9	3.94	244	McCall
Los Cordovas (La Cordillera?)	Acequia del Finado Francisco Martinez	no	]	555.63	3.94	2,191	McCall
La Cordillera	Acequia del Tio Gerbacio Ditch	yes		132.47	3.94	522	McCall
Llano Quemado	Acequia el Saucito	no		68.68	3.94	271	McCall
Ranchos de Taos	Acequia En Medio los Rios	ves		59.1	3.94	233	McCall
Llano Quemado	Aceguia la Jarosa	no		82.6	3.94	326	McCall
La Cordillera	Acequia Madre del Rio Grande	no		25.72	3.94	101	McCall
Talpa	Acequia Madre del Rio Grande	no		680.35	3.94	2.683	McCall
La Cordillera	Hart Ditch	no	1	0	3.94	0	OSE, 1987
Los Cordovas/Llano Quemado	Los Cordovas Ditch #1	no	1	395.53	3.94	1.560	McCall
	Los Cordovas Ditch #2 (Acequia Marano)	no		174.3	3.94	687	McCall
Arrovo Seco/Valdez	Acequia Canoncito North	no	Rio Hondo	22.4	3.94	88	McCall
,	Acequia Canoncito South	no	1	54.7	3.94	216	McCall
Arrovo Hondo	Aceguia de Atalava	no		333.4	3.94	1.315	McCall
	Aceguia de la Plaza	no	1	106.4	3.94	420	McCall
Valdez	Acequia de Los Pandos	no		45.3	3.94	179	McCall
	Aceguia de San Antonio	ves		200.25	3.94	790	McCall
Arrovo Hondo	Acequia Madre del Llano	no	1	652.8	3.94	2.574	McCall
Des Montes	Acequia del Llano	no	Rio Hondo via Rio Cuchilla	240.9	3.94	950	McCall
	Hawk Ditch	no	Rio Hondo	203.2	3.94	801	McCall
	Mariposa Ditch	no	Rio Hondo via Rio Cuchilla	255.7	3.94	1.008	McCall
	Des Montes Cuchilla Ditch	no		402.3	3.94	1.586	McCall
Upper Las Colonias	Rebalse Ditch	no		556.3	3.94	2.193	McCall
Upper Ranchitos	South Loma Lateral		Rio Lucero	63.2	3.94	249	McCall
	Acequia de Cortez y Sisneros	no		25.3	3.94	100	McCall
	Acequia Madre de la Loma	ves		446.9	3.94	1,762	McCall
	Dan Archuleta Ditch	no		2.5	3.94	10	McCall
El Prado	Acequia del Tongue		Rio Lucero Springs via Indian	0	3.94	0	Denver
	Cirquello Ditch		Pasture	0	3.94	0	Denver
	Rivera Ditch			0	3.94	0	Denver
	Varos Ditch			0	3.94	0	Denver
	Acequia Madre del Prado	yes	1	953.33	3.94	3,759	McCall
	Acequia Madre del Prado del Rio Lucero	no		641.3	3.94	2,529	McCall
Arroyo Seco/Valdez	Acequia de la Plaza	no	Rio Lucero via Arroyo Seco	49.3	3.94	194	McCall
-	Alamitos Ditch	no	1	209.6	3.94	826	McCall
	Brazitos Ditch	1	1	0	3.94	0	Denver
	El Rito Ditch	no	1	7.4	3.94	29	McCall
	Elizardo Pacheco Ditch		1	1.4	3.94	6	McCall

				Acres	Water		
		By-Laws as		Irrigated	Diversions	Water	
		of 1987		(based on	per Acre <sup>a</sup>	Diversions	Source of Irrigated
Community	Acequias	(1987 OSE)	Watersheds	best source)	(ac-ft/ac)	(ac-ft)	Acreage <sup>b</sup>
Arroyo Seco/Valdez (cont.)	Eraclio Martinez Ditch		Rio Lucero via Arroyo Seco (cont.)	0.2	3.94	1	McCall
	Espinosa Ditch	no		195.8	3.94	772	McCall
	Juan C. Marquez Ditch			0.2	3.94	1	McCall
	Juan Manuel Lucero Community Ditch	no		224.8	3.94	886	McCall
	Jose Manuel Lucero Community Ditch	no		223.6	3.94	882	McCall
	Lower Arroyo Seco Ditch	no		7.6	3.94	30	McCall
	Manual Andres Trujillo Ditch (Lower)			0	3.94	0	Denver
	Manuel Andres Trujillo Ditch (Upper)	no		635.8	3.94	2,507	McCall
	Martinez Ditch			0	3.94	0	Denver
	Temporales Ditch	no		103.6	3.94	408	McCall
	Toribio Martinez ditch			7.9	3.94	31	McCall
	Torreon Ditch	no		201.9	3.94	796	McCall
Lower Ranchitos	Acequia de los Lovatos	no	Rio Pueblo de Taos	279.2	3.94	1,101	McCall
	Acequia de los Sanchez	no		59.31	3.94	234	McCall
	Pacheco Community Ditch	yes		99.5	3.94	392	McCall
	Pena Negro Ditch			0	3.94	0	Denver
Upper Ranchitos	Acequia de San Francisco de Padua	?	Rio Pueblo	114.2	3.94	450	McCall
	Acequia del Finado Benito Martinez			0	3.94	0	Denver
	Acequia del Molino (East #1)	no	Rio Pueblo de Taos	62.8	3.94	248	McCall
	Acequia del Molino (West #2)	no		45.8	3.94	181	McCall
	Acequia la Loma Abajo	no		51.2	3.94	202	McCall
	Acequia De Los Archuletas	no		26.8	3.94	106	McCall
	Acequia Madre del Pueblo	no		581.48	3.94	2,293	McCall
El Prado	Acequia Madre del Medio del Prado	no	Rio Pueblo	221	3.94	871	McCall
	McClure Ditch	no	Rio Pueblo (Rio Lucero?)	61.4	3.94	242	McCall
Ranchos de Taos	Acequia Emilio Chavez/Ponce de Leon		Rio Grande del Rancho	1.21	3.94	5	McCall
	Talpa Reservoir Ditch (not an acequia, feeds Talpa						
Talpa	Reservoir)	no		4.57	3.94	18	McCall
Unknown	Byron Whitt Ditch	no	Arroyo del Alamo	60.1	3.94	237	McCall
	Canoncito Ditch	no	Miranda Canon	0	3.94	0	OSE, 1987
	Alamitos		Not stated	125.6	3.94	495	McCall
	Andres Hernandez			9.8	3.94	39	McCall
	Blas Chavez			6	3.94	24	McCall
	Cecil Howell Nos 1 - 4			39.1	3.94	154	McCall
	Herbert Quintana Nos 1-3			24.7	3.94	97	McCall
	Manuel Quintana Nos 1 - 4			52.9	3.94	209	McCall
	McCarthy			68.2	3.94	269	McCall
	Sedillo Nos 1-5			5.2	3.94	21	McCall

				Acres	Water		
		By-Laws as		Irrigated	Diversions	Water	
		of 1987		(based on	per Acre <sup>a</sup>	Diversions	Source of Irrigated
Community	Acequias	(1987 OSF)	Watersheds	best source)	(ac-ft/ac)	(ac-ft)	Acreage <sup>b</sup>
Unknown	Mitchell 1	(1001 002)	Not stated	18.1	3.94	71	McCall
	Mitchell 2			62.8	3.94	248	McCall
	Monte del Sol			5.5	3.94	22	McCall
	Pacheco			10.9	3.94	43	McCall
	Spring			22.7	3.94	90	McCall
	Tarleton		1	17.2	3 94	68	McCall
	Truillo		-	34	3 94	134	McCall
	Ponce de Leon Hot Springs		-	17 22	3 94	68	McCall
	Los Cordovas No. 1 & 2		-	17.22	3.94	71	McCall
			-	91.25	3.94	360	McCall
	Acequia de la Otra Banda		-	47.7	3 94	188	McCall
	Acequia de los Molinos		-	45.8	3 94	181	McCall
	I Innamed Ditch		-	222.9	3 94	879	McCall
			-	8.09	3.94	32	McCall
			-	100.00	3.04	788	McCall
			Non-Pueblo Ditch Total	14 172 66	5.54	55 881	WicCall
Pueblo Limit of HIA right				14,172.00		33,001	
	C		Rio Pueblo de Taos	26.48	3 94	104	Abevta
	1908		Rio Lucero	280.34	3 94	1 105	Abevta
	Acequia de los Lovatos		Rio Pueblo de Taos	33.3	3.94	131	Abevta
	Acequia Madre de Medio		Rio Lucero	45.82	3.94	181	Abevta
	Acequia Madre de la Loma			88.02	3.94	347	Abevta
	Acequia Madre del Prado			14.37	3.94	57	Abevta
	Acequia Madre del Pueblo		Rio Pueblo de Taos	93.6	3.94	369	Abevta
	Beeline		Rio Lucero	206 44	3.94	814	Abevta
	Buried Roots		Rio Pueblo de Taos	86.09	3.94	339	Abevta
	Cicada Nose			29.04	3.94	115	Abevta
	Cortez y Cisneros		Rio Lucero	1.17	3.94	5	Abevta
	Deer Jaw		Rio Pueblo de Taos	80.26	3.94	316	Abevta
	Elk Horn			8.42	3.94	33	Abevta
	Grouse (to Buffalo Pasture)		Rio Pueblo de Taos/Rio Lucero	55.2	3.94	218	Abevta
	Grouse		Rio Lucero	173.51	3.94	684	Abevta
	Indian	1	1	164.34	3.94	648	Abevta
	McClure		Rio Pueblo de Taos	11.4	3.94	45	Abevta
	Mirabal	1		17.14	3.94	68	Abevta
	No. Trash Pile	1	1	29.83	3.94	118	Abevta
	Phia-No	1	1	74.3	3.94	293	Abevta
	Pottery	1	1	57.52	3.94	200	Abevta
U		- 1		01.02	0.04		

				A	Water		
		Dutana		Acres	Diversions	Matan	
		By-Laws as		Irrigated		Vvater	Source of Irrigated
Community	Appruipe	(1097 005)	Watarahada	(based on	per Acre	Diversions	
	Acequias	(1987 USE)		best source)	(ac-it/ac)	(ac-it)	Acreage
Taos Pueblo (cont.)	Pull Leaf		Rio Pueblo de Taos (cont.)	82.06	3.94	324	Abeyta
	So.La. Loma Lateral			4.26	3.94	17	Abeyta
	So. Trash Pile		RIO Pueblo de Taos	38.58	3.94	152	Abeyta
			Rio Lucero	12.59	3.94	50	Abeyta
	lenorio			598.5	3.94	2,360	Abeyta
	Ventura		Rio Pueblo de Taos	9.87	3.94	39	Abeyta
			Taos Pueblo Total	2,322.45	3.94	9,157	Abeyta
			I otal Central	16,495.11	3.94	65,038	Abeyta
South subregion							
Pilar	Acequia de la Plaza		Agua Caliente Canyon		2.58	0	Denver
	Acequia de los Ojos de la Agua Caliente (South)				2.58	0	Denver
	Acequia de los Ojos de la Agua Caliente (North)	no		46	2.58	118	OSE, 1987
	Pilar Community Ditch	Yes		62.3	2.58	160	OSE, 1987
Las Trampas	Las Trampas Acequia #2 (Norte De Las Trampas)	no	Las Trampas Lake	110	3.31	365	OSE, 1987
Penasco	Acequia de Rio Lucio		Rio del Pueblo	0	3.31	0	Denver
Rio Lucio	Acequia del Medio	no	Rio del Pueblo (Rio Santa	165	3.31	547	OSE, 1987
	Acequia del Norte de Rio Lucio	no	Barbara?)	166	3.31	550	OSE, 1987
	Acequia del Sur	no		183	3.31	607	OSE, 1987
Penasco	Acequia Rio Chiquito		Rio del Pueblo	0	3.31	0	Denver
Vadito	Northside Vadito Acequia	yes	Rio del Pueblo de Picuris	130	3.31	431	OSE, 1987
Las Trampas	Las Trampas Acequia #1 (Sur de Las Trampas)	no	Rio Las Trampas	100	3.31	331	OSE, 1987
El Valle	Acequia de Abajo de el Valle	yes	Rio Las Trampas via Las Trampas	85	3.31	282	OSE, 1987
	Acequia de Arriba de el Valle	no	Lake	110	3.31	365	OSE, 1987
	Acequia del Llano de San Miguel	no		120	3.31	398	OSE, 1987
Penasco	Acequia de Abrieu	no	Rio Santa Barbara	38	3.31	126	OSE, 1987
Llano San Juan	Acequia de la Plaza			0	3.31	0	Denver
	Acequia de las Jollas			0	3.31	0	Denver
Penasco	Acequia de Molino #1			0	3.31	0	Denver
	Acequia de Molino #2			0	3.31	0	Denver
	Acequia de Pajones			0	3.31	0	Denver
	Acequia de Zorras			0	3.31	0	Denver
Llano San Juan	Acequia del Monte			0	3.31	0	Denver
Penasco	Acequiacita de Penasco	ves		68	3.31	225	OSE, 1987
Rodarte	Acequia de Chamisal Ojito	,		0	3.31	0	Denver
	Aceguia de Llano de Llegua	yes	1	700	3.31	2,320	OSE, 1987
Llano Largo	Aceguia de Sombrio	,	1	0	3.31	0	Denver
, , , , , , , , , , , , , , , , , , ,	Aceguia de Trinidad Martinez		1	0	3.31	0	Denver
Penasco	Acequia del Camino de Penasco	yes	1	158	3.31	524	OSE, 1987

				Acres	Water		
		By-Laws as		Irrigated	Diversions	Water	
		of 1987		(based on		Diversions	Source of Irrigated
Community	Acequias	(1987 OSE)	Watersheds	best source)	(ac-ft/ac)	(ac-ft)	Acreage
Llano Largo	Acequia del Molino	(	Rio Santa Barbara (cont.)	0	3.31	0	Denver
	Acequia Llano Largo	yes		150	3.31	497	OSE, 1987
Llano San Juan	Acequia Madre de Llano de San Juan	ves		890	3.31	2,950	OSE, 1987
Penasco	Acequia Madre de Penasco	no		323	3.31	1,071	OSE, 1987
Rodarte	Acequia Sur de Rodarte	no		175	3.31	580	OSE, 1987
Chamisal	Acequia de Abajo			0	3.31	0	Denver
	Acequia de Canon			0	3.31	0	Denver
	Acequia de Chamisal-Ojito	yes		700	3.31	2,320	OSE, 1987
	Acequia de la Otra Banda	no	Rio Santa Barbara/Rio Pueblo de	133.3	3.31	442	OSE, 1987
	Acequia de Lino		Rio Santa Barbara	0	3.31	0	Denver
	Acequia de Madre	no		825	3.31	2,734	OSE, 1987
	Acequia de Medio			0	3.31	0	Denver
	Acequia de Monte			0	3.31	0	Denver
	Acequia de Sague de Macedonio Martinez			0	3.31	0	Denver
Tierra Blanca	Acequia de la Canada de los Alamos		South Face of Picuris Peak	0	3.31	0	Denver
Vadito	Acequia de Placitas del Sur Vadito	no	Rio Pueblo De Picuris	215	3.31	713	OSE, 1987
Las Trampas	Romero Acequia		Las Trampas	0	3.31	0	Denver
Vadito	Southside Vadito Acequia	yes	Rio Pueblo De Picuris	183	3.31	607	OSE, 1987
Dixon	Acequia del Medio	no	Embudo Creek	105	3.31	348	OSE, 1987
	Acequia Sancochoda	no		45	3.31	149	OSE, 1987
	Acequia de Los Duranes	no		47	3.31	156	OSE, 1987
	Acequia Leandro Martinez	no		40	3.31	133	OSE, 1987
	Acequia del Llano	yes		225	3.31	746	OSE, 1987
	Acequia de la Plaza Blanca	no		184	3.31	610	OSE, 1987
Embudo	Acequia La Junta y Cienega	yes		80	3.31	265	OSE, 1987
Dixon	Acequia de la Apodaca	yes		0	3.31	0	OSE, 1987
	Acequia del Bosque	yes		0	3.31	0	OSE, 1987
Embudo	Acequia del Rincon	no		0	3.31	0	OSE, 1987
Ojo Sarco	Acequia del Ojo Sarco	yes	Rio de Las Trampas	60	3.31	199	OSE, 1987
	Acequia De Los Alamitos	no	Rio Pueblo De Picuris	40.5	3.31	134	OSE, 1987
	Los Mochas Ditch	no		50	3.31	166	OSE, 1987
	Abelino Archuleta Ditch	no		40	3.31	133	OSE, 1987
	Acequia de Rio Pueblo	yes		0	3.31	0	OSE, 1987
	Spring Ditch	no		22.7	3.31	75	OSE, 1987
	Short Ditch	no	Hondo Canyon	30	3.31	99	OSE, 1987
			Total South	6,804.8		22,473	

Community	Acequias	By-Laws as of 1987 (1987 OSE)	Watersheds	Acres Irrigated (based on best source)	Water Diversions per Acre <sup>a</sup> (ac-ft/ac)	Water Diversions (ac-ft)	Source of Irrigated Acreage <sup>b</sup>
West subregion							
Ojo Caliente	Duranes Ditch	yes	Rio Chama Hydrant	151.4	2.58	390	OSE,1987
	Gavilan Ditch	yes		270.4	2.58	696	OSE, 1987
	Ojo Caliente Ditch	no		205.3	2.58	529	OSE, 1987
			Total West	205.3	2.58	529	

<sup>a</sup> Based on Wilson et al. (2003) CIR/EF/EC, except for the central region, Abeyta CIR of 1.38 acre-feet per acre is used

### <sup>b</sup> Sources of information:

Red River Adj	U.S. District Court. Undated. Addendum to final judgment and decree on non-federal water rights, Book 1. State of New Mexico, et al. v. Molycorp, Inc., et al., Red River adjudication, Civ.No. 72-9780 JC.
Denver OSE, 1987	Information compiled by Butchie Denver, planner for Taos County, from talking to parciantes Saavedra, P. 1987. Surface water irrigation organizations in New Mexico. Report TDDC 87 2, New Mexico State Engineer Office, Santa Fe, New Mexico. March 1987.
McCall Abeyta	McCall, K. 2005. Letter from Karla McCall, Data Manager, to Amy Lewis regarding database for Taos Adjudication. October 13, 2005 U.S. District Court, District of New Mexico. 2006. Abeyta water rights adjudication: Taos Pueblo draft settlement agreement among the United States of America, Taos Pueblo, the State of New Mexico, the Taos Valley Acequia Association and its 55 member acequias, the Town of Taos, El Prado Water and Sanitation District, and the 12 Taos area mutual domestic water consumers' associations. Draft for discussion purposes, March 31, 2006.
Costilla Decree	Territory of New Mexico County of Taos in the District Court in and for Said County and Territory. 1911. Decree <i>In re</i> Ferdinand Meyer, The Costilla Estate Development Company and the Manzanares et all, v. La Acequia Madre, et al. December 2, 1911
LWA 1978	Water Availability and Water Quality Taos County, N.M. Lee Wilson & Associates

		Withdrawal (ac-ft/yr)		Depletion Factor		Depletion (ac-ft/yr)	
		Surface		Surface		Surface	
CN	User	Water	Groundwater	Water	Groundwater	Water	Groundwater
Cent	ral Subregion						
55	Ranchos Elementary SchTaos	0.00	9.88	0.00	1.00	0.00	9.88
55	Shuree Camp Water System	0.00	2.00	0.00	1.00	0.00	2.00
55	Millicent Rogers Museum	0.00	0.17	0.00	1.00	0.00	0.17
55	Mini-Mart Car Wash	0.00	3.00	0.00	1.00	0.00	3.00
55	Misc Businesses	0.00	10.00	0.00	1.00	0.00	10.00
55	Mountain View GroceryEl Prado	0.00	0.30	0.00	1.00	0.00	0.30
55	NM National Guard	0.00	0.50	0.00	1.00	0.00	0.50
55	Pendleton Oil & Gas	0.00	0.50	0.00	1.00	0.00	0.50
55	Plaza de Retiro Inc.	0.00	2.69	0.00	1.00	0.00	2.69
55	Koch Marketinggas station	0.00	0.50	0.00	1.00	0.00	0.50
55	Quail Ridge Inn	0.00	14.52	0.00	0.80	0.00	11.62
55	Karavas, SMotel La Fonda	0.00	0.93	0.00	1.00	0.00	0.93
55	Randall's	0.00	0.50	0.00	1.00	0.00	0.50
55	Ratchner, Alodge	0.00	2.00	0.00	1.00	0.00	2.00
55	Rio Grande Cash Lumberoffice	0.00	0.50	0.00	1.00	0.00	0.50
55	Sagebrush Inn & RestTaos	0.00	3.00	0.00	1.00	0.00	3.00
55	Sahd Enterprises	0.00	0.14	0.00	1.00	0.00	0.14
55	San Geronimo Lodge	0.00	2.00	0.00	1.00	0.00	2.00
55	Schoen Construction	0.00	0.26	0.00	1.00	0.00	0.26
55	Shady Brook Inn & Cafe (Hwy 64 E)	0.00	2.00	0.00	1.00	0.00	2.00
55	Shady Mtn Ranchlodge (Hwy 64 E)	0.00	1.00	0.00	1.00	0.00	1.00
55	Pueblo CafeTaos	0.00	1.00	0.00	1.00	0.00	1.00
55	Clean Water Solutions	0.00	0.43	0.00	1.00	0.00	0.43
55	Amizette InnTaos Ski Valley	0.00	1.00	0.00	1.00	0.00	1.00
55	Anansi Day SchoolEl Prado	0.00	2.00	0.00	1.00	0.00	2.00
55	Arrow Gas Co.	0.00	0.50	0.00	1.00	0.00	0.50
55	Arroyo Seco Animal Hospital	0.00	0.63	0.00	1.00	0.00	0.63
55	Austing Haus Motel & RestTaos Ski	0.00	2.00	0.00	1.00	0.00	2.00
55	BLMOrilla Verde Rec Area	0.00	0.11	0.00	1.00	0.00	0.11
55	Baskin-RobbinsTaos	0.00	0.30	0.00	1.00	0.00	0.30
55	Blake's Lota BurgerTaos	0.00	0.30	0.00	1.00	0.00	0.30
55	Martinez, J.Bgas station	0.00	0.50	0.00	1.00	0.00	0.50
55	Chile ConnectionTaos	0.00	2.00	0.00	1.00	0.00	2.00
55	El Prado Post Office	0.00	0.40	0.00	1.00	0.00	0.40
55	Columbine Inn & RestTaos Ski Val	0.00	2.00	0.00	1.00	0.00	2.00
55	Cottams Ski Shop & Rooms for Rent	0.00	0.20	0.00	1.00	0.00	0.20
55	D. H. Lawrence Ranch	0.00	0.50	0.00	1.00	0.00	0.50
55	Enchanted Moon RV Park (Hwy 64 E)	0.00	1.00	0.00	1.00	0.00	1.00
55	Ft Bergwin Resch CtrRnch de Taos	0.00	2.00	0.00	1.00	0.00	2.00
55	Hacienda InnTaos	0.00	1.67	0.00	1.00	0.00	1.67
55	Harold Young Guest Ranch	0.00	26.13	0.00	0.50	0.00	13.06
55	Harold's Auto Supply	0.00	0.03	0.00	1.00	0.00	0.03
55	Inn at the RioTaos	0.00	2.00	0.00	1.00	0.00	2.00
55	CRW Developmentbar	0.00	0.43	0.00	1.00	0.00	0.43
55	Taos Cnty Admin Offices	0.00	2.34	0.00	1.00	0.00	2.34
55	Taos Ski Valleysnowmaking	200.51	0.00	0.10	1.00	20.05	0.00
55	Taos Ski ValleyWhistlestop Rest	0.00	0.22	0.00	1.00	0.00	0.22
55	Taos Mun Airport	0.00	0.06	0.00	1.00	0.00	0.06

### Table F1-4. Commercial Water Use in Taos Water Planning Region

		Withdrawal (ac-ft/yr)		Depletion Factor		Depletion (ac-ft/yr)	
		Surface		Surface		Surface	
CN	User	Water	Groundwater	Water	Groundwater	Water	Groundwater
55	Taos Mtn Lodge	0.00	2.00	0.00	1.00	0.00	2.00
55	Taos MotelRancho de Taos	0.00	2.00	0.00	1.00	0.00	2.00
55	Taos Tire & Safey Service	0.00	4.19	0.00	0.50	0.00	2.10
55	USFSEl Nogal CampgroundTaos	0.00	1.00	0.00	1.00	0.00	1.00
55	Taos Treatment Plant	0.00	5.95	0.00	0.50	0.00	2.97
55	Taos Valley RV Park	0.00	1.97	0.00	1.00	0.00	1.97
55	Taos IceEl Prado	0.00	0.50	0.00	1.00	0.00	0.50
55	Taos Spa & Court Club	0.00	3.14	0.00	1.00	0.00	3.14
55	Taos Cnty Sherriff's Posse	0.00	0.31	0.00	1.00	0.00	0.31
55	Taos InnDowntown Taos	0.00	2.00	0.00	1.00	0.00	2.00
55	Taos Christian Academy	0.00	3.00	0.00	1.00	0.00	3.00
55	Taos Baptist Tabernacle	0.00	0.13	0.00	1.00	0.00	0.13
55	Qwest (US West)	0.00	0.02	0.00	1.00	0.00	0.02
55	Whitey's Brett House RestTaos	0.00	2.00	0.00	1.00	0.00	2.00
55	Taos 1st State Bank	0.00	0.52	0.00	1.00	0.00	0.52
55	Young's Guest Ranch	0.00	2.58	0.00	1.00	0.00	2.58
55	Susan's GrillTaos	0.00	2.00	0.00	1.00	0.00	2.00
55	Stakeout Restaurant	0.00	2.00	0.00	1.00	0.00	2.00
55	Ski Tip RestaurantTaos	0.00	1.00	0.00	1.00	0.00	1.00
55	Sierra Village RV Park (Hwy 64 E)	0.00	1.00	0.00	1.00	0.00	1.00
55	Taos Elementary Sch	0.00	4.93	0.00	1.00	0.00	4.93
	Total Central	200.51	148.38			20.05	127.34
Nortl	h Subregion						
55	USFSFawn Lakes CampgroundQuest	0.00	1.00	0.00	1.00	0.00	1.00
55	Costilla Elementary Sch	0.00	1.00	0.00	1.00	0.00	1.00
55	USFSJune Bug CampgroundQuesta	0.00	1.00	0.00	1.00	0.00	1.00
55	Bitter Creek Guest RanchRed River	0.00	3.00	0.00	1.00	0.00	3.00
55	USFSQuesta Ranger Station	0.00	0.50	0.00	1.00	0.00	0.50
55	Aspen Park Guest RanchRed River	0.00	3.00	0.00	1.00	0.00	3.00
55	USFSElephant Rock CGQuesta	0.00	1.00	0.00	1.00	0.00	1.00
55	Ventero Fire Dept	0.00	0.50	0.00	1.00	0.00	0.50
55	Amalia-Ventero Fire Dept	0.00	0.10	0.00	1.00	0.00	0.10
55	Cottonwood ParkRV Park	0.00	2.16	0.00	1.00	0.00	2.16
55	BLMWild Rivers Rec Area	0.00	0.00	0.00	1.00	0.00	0.00
55	Tall Pines ResortRed River	0.00	3.00	0.00	1.00	0.00	3.00
55	Ski Rio	0.00	8.99	0.00	0.50	0.00	4.49
55	River RanchRed River	0.00	3.00	0.00	1.00	0.00	3.00
55	Rio Colorado LodgeRed River	0.00	3.00	0.00	1.00	0.00	3.00
55	Red River Fish Hatchery	5.00	0.00	1.00	1.00	5.00	0.00
55	Martinez, J.Blaundromat	0.00	3.00	0.00	1.00	0.00	3.00
55	Latir Vol Fire Dept	0.00	0.50	0.00	1.00	0.00	0.50
55	USFSColumbine CampgroundQuesta	0.00	1.00	0.00	1.00	0.00	1.00
	Total North	5.00	35.75			5.00	31.25
Sout	h Subregion						
55	USFSLa Vinateria Picnic AreaPen	0.00	0.20	0.00	1.00	0.00	0.20
55	Picuris Pueblo Casino	0.00	5.00	0.00	0.50	0.00	2.50
55	USFSDuran CampgroundPenasco	0.00	1.00	0.00	1.00	0.00	1.00
55	Sipapu Lodge & CafeVidito	0.00	3.00	0.00	1.00	0.00	3.00
55	Pilar CafeTaos	0.00	1.00	0.00	1.00	0.00	1.00

# Table F1-4. Commercial Water Use in Taos Water Planning Region

		Withdrav	val (ac-ft/yr)	Deple	tion Factor	Depletic	on (ac-ft/yr)
				Surface		Surface	
CN	User	Water	Groundwater	Water	Groundwater	Water	Groundwater
55	USFSUpper La Junta CGTres Ritos	0.00	1.00	0.00	1.00	0.00	1.00
55	Camp Summer LifeVadito	0.00	2.00	0.00	1.00	0.00	2.00
55	USFSLa Sombra CampgroundPenaso	0.00	1.00	0.00	1.00	0.00	1.00
55	USFSAgua Piedra CGTres Ritos	0.00	1.00	0.00	1.00	0.00	1.00
55	USFSCapulin CampgroundPenasco	0.00	1.00	0.00	1.00	0.00	1.00
55	Embudo Stationrestaurant	0.00	2.00	0.00	1.00	0.00	2.00
55	Penasco Schoolball park	0.00	0.52	0.00	1.00	0.00	0.52
	Total South	0.00	18.72			0.00	16.22
West	t Subregion						
Rio A	Arriba County						
39	Ojo Caliente Public Sch	0.00	3.00	0.00	1.00	0.00	3.00
39	Ojo Caliente Public Sch	0.00	2.67	0.00	1.00	0.00	2.67
39	Mesa Vista High SchoolEl Rito	0.00	8.00	0.00	0.50	0.00	4.00
39	Ojo Caliente Mineral Spgs	0.00	10.50	0.00	0.50	0.00	5.25
39	Gordo's CafeOjo Caliente	0.00	2.00	0.00	1.00	0.00	2.00
Taos	County						
55	USFSLagunitas CGTres Piedras	0.00	1.00	0.00	1.00	0.00	1.00
55	USFSTres Piedras Ranger Station	0.00	0.50	0.00	1.00	0.00	0.50
	Total West	0.00	27.67			0.00	18.42

# Table F1-4. Commercial Water Use in Taos Water Planning Region

Source: Wilson et al., 2003

Appendix F2

**Growth Projections** 

# TAOS COUNTY WATER PLAN PROJECTION OF REGIONAL GROWTH 2000 – 2050 Southwest Planning & Marketing May 2006

# Methodology

In order to project the Taos County Regional Water Plan population projections, Southwest Planning & Marketing (SPM) reviewed existing forecasts, conducted an analysis of historic trends, and interviewed knowledgeable persons. The planning team studied and analyzed existing studies such as comprehensive plans, population studies, and water studies that contained historical population trends and projections. Additionally, the team interviewed individuals with expertise and knowledge in economic trends including: governmental officials, business professionals, non-profit staff, and real estate brokers who helped identify what future economic, residential, or commercial developments might impact future growth in the area. This information was taken into account to develop low and high growth scenarios for future population growth in the entire Taos Water Planning Region.

To calculate the population projections for the entire planning region as well as for the four subregions, SPM used the Census subdivisions (census county divisions [CCDs]) instead of census tracts. The Census subdivisions were the most accurate and geographically similar to the watershed basins. They were also consistent from 1990 to 2000 for more accurate comparisons. The Census subdivisions and their corresponding subbasins are listed below in Table A. However, it was necessary to subdivide the Arroyo Hondo CCD, which lies in both the Central and North subregions, into north and south subsections in order to reflect more accurately the watershed regions. To divide the CCD, corresponding Census Tracts and Block Groups were identified and allocated to either the North or Central subregions.

Water Planning	Corresponding Census Subdivision Geography
Subregion	
Central	Taos Pueblo CCD
	Taos CCD
	Arroyo Hondo South CCD (consists of Census Tract 9521
	Block Group 3 and 4)
North	Questa CCD
	Arroyo Hondo North CCD (consists of CCD minus Census
	Tract 9521 Block Group 3 and 4)
South	Picuris CCD
	Penasco CCD
	Dixon CCD (Part of Rio Arriba County)
West	Tres Piedras CCD

### TABLE A

To determine the future population from 2000 to 2050 for the entire Taos County water planning region, two potential scenarios were identified. The first scenario is a low growth projection and the second scenario is a high growth projection. The low scenario reflects a slower growth projection than the current trend and is based on the University of New Mexico Bureau of Business and Economic Research (BBER) projection done for the Interstate Stream Commission regional water planning process in 2000. The SPM projection differs from the BBER projection in that growth does not decline on a linear slope, instead decreasing on an exponential curve in which growth slows more gradually. The high scenario reflects a faster growth rate than the trend. The high scenario initially used the same linear slope as the BBER projections, but was modified using an exponential curve to decline at a more gradual rate. We believe that, of the two scenarios, the high scenario is the more likely to be achieved and that adequate water supplies should be secured to meet this scenario.

Next, to determine the subarea growth rates, an apportionment model was used to distribute the projected growth to the four subregions based upon historical trends, expected future trends, and the potential for residential and/or commercial build-out. The subregion trends from the past decade were applied through 2010 and then adjusted based upon possible future growth scenarios. For each of these scenarios, the assumptions are explained more fully in the section on projections.

It is recognized that there are some undocumented workers living in the County who are not accounted for in official census numbers. An attempt to quantify this population via such sources as the Taos Municipal Schools and Department of Motor Vehicles was unsuccessful (the schools data is considered confidential, while DMV staff in Taos do not believe that many undocumented workers have received licenses). According to the PEW Hispanic Center, there are about 50,000 to 75,000 undocumented workers in New Mexico, with this population growing at an annual rate of 4 percent. As an upper limit, we would expect the number of undocumented residents in New Mexico to be about 10 percent of the legal residents counted in the census. However, given the higher cost of living in Taos and its distance from the border, we would not expect the undocumented population to amount to more than 5 percent of the official Taos population figure.

There are also a number of second home residents living in the County who are not counted as permanent residents. We discuss this demographic below in a section on lodging, second homes, and condos.

# **Taos County Population Trends**

After a twenty year population decline from 1940 to 1960, Taos County has grown consistently since the 1960's with the greatest growth rate occurring during the past decade between 1990 and 2000.



FIGURE A Taos County and Town of Taos Population 1940 – 2000

The average annual growth rate for Taos County was 1.05% for the decade from 1970-1980, 1.74% from 1980-1990, and 2.60% from 1990-2000. During the past decade, growth in the County has outpaced the growth of the Town, with the majority of the County growth occurring in the Taos Valley surrounding the Town of Taos. The 2004 Bureau of Census estimate for Taos County population is 31,464.<sup>1</sup> That is an increase of 1,485 people since 2000, a 5.0% change. There were 236 single family residential building permits issued in the County in 2005, up from 213 in 2004, 175 in 2003, 174 in 2002, and 128 in 2001.

TABLE BTaos County Growth Trends 1970 to 2000

	1970-1980	1980-1990	1990-2000
Population Percent Change	11.6%	18.8%	36.8%
<b>Population Growth Rate</b>	1.05%	1.74%	2.60%

The Town of Taos has historically absorbed the majority of the growth. It grew at a faster rate than the County as a whole from 1970 to 1990, but slowed significantly during the past two decades with most of the growth occurring in the Taos Valley surrounding the Town. Based on the most recent BBER estimates, this trend has continued during 2000 to 2003. The 2003

<sup>&</sup>lt;sup>1</sup> It is important to note that the BBER estimates that the Census undercounted Taos County in 2000 by 89 people and thus the 2000 county population should be 30,154 increasing by July 2001 by 307 people to 31,461. Despite the undercount, the BBER percentage change and growth rate are the same as the Bureau of the Census. Thus the base population for 2000 in all forecasts is the BBER estimate.

estimates show the Town of Taos growing at the same growth rate as that between 1990 and 2000, i.e. 0.63%.

	1970-1980	1980-1990	1990-2000
Population Percent Change	36.1%	31.0%	6.7%
<b>Population Growth Rate</b>	3.13%	2.73%	0.63%

# TABLE CTown of Taos Growth Trends 1970 to 2000

# **Taos County Water Planning Region Population Trends**

Table D illustrates the four planning subregions and their growth over the last decade. For the entire planning region, between 1990 and 2000, the population increased by 6,997 people. This is a 28.6% change and a growth rate of 2.55%.

### Central

For the decade between 1990 and 2000, the Central subregion grew at 3.18%. The Central region, which is essentially the Taos Valley, accounts for approximately 66.0% of the total water planning region population and, for the past decade, nearly 81.0% of the total population growth, adding 5,607 people. While the Town of Taos grew at a very modest 0.63%, the area surrounding the town grew at 3.37% and the area surrounding Arroyo Hondo grew at an even greater rate of 5.39%. There were approximately 120 residential building permits issued in the Town in both 2004 and 2005, a significant increase from all previous years.

### North Subregion

Both the South and North subregions grew more slowly. The North subregion accounted for 9.1% of the total population growth over the last decade, adding 641 people. The North subregion growth rate was 1.42%, with the Village of Questa and the area around El Rito accounting for most of that growth. Between 1990 and 2000, The Village of Questa growth rate was at 2.28% while the Town of Red River rate of growth was the lowest it has been in thirty years, at 1.41%.

	1990	2000	Increase	% Change 1990 - 2000	Growth Rate 1990 - 2000
Central	15,227	20,834	5,607	36.8%	3.18%
Taos Pueblo	2,206	2,325	119	5.4%	0.52%
Town of Taos <sup>1</sup>	11,265	15,541	4,276	38.0%	3.37%
Arroyo Hondo south <sup>2</sup>	1,756	2,968	1,212	69.0%	5.38%
South	4,508	4,707	199	4.4%	0.43%
Picuris	1,882	1,801	-81	-4.3%	-0.43
Penasco	1,257	1,401	144	11.5%	1.09%
Dixon <sup>3</sup>	1,369	1,505	136	9.9%	0.95%
North	4,299	4,940	641	14.9%	1.42%
Arroyo Hondo north <sup>4</sup>	923	941	18	2.0%	.95%
Questa	3,376	3,999	623	18.5%	1.70%
West <sup>5</sup>	453	1003	550	121.4%	8.27%
Water Planning Area Total	24,487	31,484	6,997	28.6%	2.55%

 TABLE D

 Taos County Water Planning Area Subregions and Subdivisions (CCDs)

 Population Change 1990 to 2000

All subdivisions are from the 1990 & 2000 Census.

<sup>1</sup> Taos population based on census tracts is larger than population within the Town limits shown on Table F

<sup>2</sup> Arroyo Hondo South consists of Census Tract 9521 Block Groups 3 & 4.

<sup>3</sup> Dixon is within Rio Arriba County, but is included as part of the South subregion

<sup>4</sup> Arroyo Hondo North includes the Arroyo Hondo subdivision minus Census Tract 9521Block Groups 3 & 4.

<sup>5</sup> The West subregion comprises one subdivision, Tres Piedras.

### **South Subregion**

The South subregion grew the most slowly at just 0.43% for the past decade, adding 199 people. The Picuris subdivision lost population while Penasco and Dixon grew at 1.09% and 0.95%, respectively. The South subregion accounted for 2.84% of the total population increase over the past decade.

### West Subregion

The West subregion is the most interesting growth area. It grew at the greatest rate of any subregion, 8.27%, with a population percent change of 121.4%. The area has the lowest average household occupancy rate, less than 2 people per household compared with 2.43 for the County as a whole. It accounted for 7.86% of the total population increase from 1990 to 2000.

### **Demographic Characteristics and Changes**

Throughout the intermountain West, there have been significant changes occurring in small mountain and rural communities. Advances in technology and infrastructure have allowed professionals to work from anywhere, allowing for relocation to desirable amenity rich mountain communities. Second, the economic success of the baby boomers has hastened early or pending retirement, allowing for relocation to these communities. Finally, low interest rates have driven a second home construction boom in most resort communities. All these factors have resulted in fast growth and changing economies all over the Rockies.

The Taos Valley is following this national trend. Between 1990 and 2000, the average household size decreased by 11.4% from 2.64 to 2.34 persons per household. The average family size decreased as well from 3.20 to 2.98, a decrease of 6.9%.<sup>2</sup> Simultaneously, the County saw a large increase in the 45-54 year old age group (103.7% change), the 55-59 year old age group (78.0% change), and the 60-64 year old age group (56.7% change). This most likely indicates a significant increase in people moving into the community who are older and without families. This trend will most likely continue for the next twenty years as the youngest baby boomers are just over forty years of age while the oldest are about to turn sixty.

Simultaneously, the County saw a minimal increase in the segment of the population aged 20-24. Since the net migration trend has been slightly more in-migration than out-migration, this demographic shift most likely indicates youth are out-migrating in order to seek opportunities outside the community.<sup>3</sup>

Individuals migrating to the Taos County region have been a large and significant component of population change with large implications for the economy and social services in the future. According to a report on migration patterns in Taos County conducted by BBER in 2000, inmigration in Taos County between 1980 and 1990 accounted for 29.8% of the total population increase. Additionally, the areas with the highest poverty rates had the greatest number of intracounty movers as they relocated for economic opportunity and to find more affordable housing. This will most likely be a trend that continues for at least the next twenty years.

According to the Census 2000 residence characteristics, the greatest percentage of out-of-state in-migration occurred in the Central and North subregions, especially in the areas of Arroyo Hondo, the Town of Taos, and Questa. After these subregions the West subregion had the next largest percentage of out-of-state migrants. The greatest percentage of in-state in-migration occurred in Dixon and Penasco of the South subregion.

The most recent migration estimates by the Bureau of Census are below in Table E. For the period from April 2000 to July 2004, the Bureau of the Census estimates a total population

<sup>&</sup>lt;sup>2</sup> Although, within the planning region as a whole, there is wide variation in household size.

<sup>&</sup>lt;sup>3</sup> The IRS reported net migration for 1999-2000 as 160 people. The in-migration was 1,447, and the out-migration was 1,287.

May 2006 Taos County Regional Water Plan Population Projections

increase of 1,485 people. Of that, net migration is 951 people, or 64.0%, and natural increase is 549 people, or 36.0%.<sup>4</sup> This is an annual average net population increase of 374 people per year.

# TABLE EBureau of Census Estimated Taos County Migration 2000 to 2004

County	Numeric Population Change	Births	Deaths	Natural Increase (Births – Deaths)	Net International Migration <sup>5</sup>	Net Domestic Migration
Taos County	1,485	1,510	961	549	288	663

### **Previous Population Projections**

As a part of this analysis, SPM looked at other population projections for Taos County done by the Bureau of the Census, BBER, the Taos Municipal School District, and the Town of Taos Vision 2020 Plan.

Average Annual County Growth Rate							
	1990 - 2000	2000 - 2010	2010 - 2020				
Town of Taos	2.90%	7.73%	1.23%				
<b>Taos County</b>	1.80%	1.47%	1.27%				
	County Pop	oulation					
	2000	2010	2020				
Town of Taos	5,866	7,243	8,695				
Taos County	27,715	32,065	36,387				

TABLE FBureau of Census Town of Taos Vision 2020 Population Projections

The Town of Taos *Vision 2020 Comprehensive Plan* used population projections from the Bureau of the Census and BBER as of November 1997. Significantly, the actual annual growth for the Town of Taos between 1990 and 2000 has been much lower during the past decade than was projected, 0.63% versus 2.9%, and the rate of growth for the County has been 40% higher than projected, 2.6% versus 1.8%.

### **Bureau of Business and Economic Research Projections**

In October of 2003, the BBER conducted a *Demographic and Population Study for Regional and Statewide Water Planning*. The study projected the county populations of the sixteen water planning regions throughout the state, including Taos County, from July 1, 2000 to July 1, 2060.

<sup>&</sup>lt;sup>4</sup> Net migration is in-migration minus out-migration. A positive number reflects more people moving in than out.

<sup>&</sup>lt;sup>5</sup> Net international migration includes estimates for both legal and illegal migrants.

These projections predict an increase in population, but a continuously declining growth rate over the sixty year period.

Annual County Growth Rate								
2000 - 201	0 2010 -	2020 2020 -	2030 203	80 - 2040	2040 - 2	2050	2050 - 2060	
1.53% 1.18%		% 0.80	)%	0.46%		%	-0.02	
		Сог	inty Popula	tion				
2000	2010	2020	2030	)	2040	2050	2060	
30,154	35,114	39,492	42,78	1 4	44,760	45,40	5 45,265	

# TABLE GBBER Taos County Population Projections (BBER, 2003)

In July 2004, BBER released an updated population projection for New Mexico counties. For Taos County, the projection was nearly the same as that from October 2003 with a very slight 0.01% decrease in the annual growth rate. BBER projects the County to continue to grow with an average growth rate of 1.53% between 2000 and 2010, slowing to 1.18% between 2010 and 2020, decreasing again between 2020 and 2030 to 0.80% to 0.46% between 2030 and 2040, and finally decreasing to 0.15% by 2050. For both BBER projections, this would be an increase of 14,606 people to Taos County over the next forty years. This BBER forecast is the basis for the forecast used by the Taos Municipal School District.

# TABLE HBBER Taos County Population Projections (BBER, 2004)

	Annual County Growth Rate										
2000 - 2010	2000 - 2010 2010 - 2020 2020 - 2030 2030 - 2040										
1.53%	1.1	18%	0.80%	0.46%							
		<u>.</u>									
	Ann	ual County Popu	lation								
2000	2000 2010 2020 2030 2040										
30,154	35,097	39,442	42,678	44,760							

Based on revised April 2004 BBER population estimates

The Taos County Assessor conservatively estimates that based on current trends, the Taos County population will be 35,732 by 2010. This is very close to the BBER projection for 2010 of 35,114. The Assessor's estimates a slightly higher growth rate over the next decade of 1.71% as opposed to the 1.53% predicted by BBER.

# **Economic Development Trends**

A primary driving force behind projecting population growth is the health and composition of the economy. For example, the current economy is partially responsible for the out-migration of young people who move seeking opportunities elsewhere. If the economy were to significantly change, it might allow for a portion of the young people to remain in Taos County. Similarly,

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any major developments or changes in the economic conditions of a planning region can significantly influence employment and the composition of the workforce. For example, the Taos Valley has seen a significant shift in its demographic makeup towards middle and retirement age individuals that are driving up demand for new homes, services and health care. Below is a brief analysis of water planning region economic trends.

### **Employment Trends**

The Town of Taos continues to be the primary economic engine of the region. Following national trends, the region has seen a shift towards more service and professional oriented occupations from a focus on mining and agriculture. The County has also seen a significant shift from wage and salary to self-employment. Self-employment accounted for 42% of all new employment from 1970 to 2000. The 1990 Census reported Taos County residents were employed primarily in wholesale and retail trade (23.5%), followed by professional and related services (19.7%) and construction (12.5%). The 2000 Census reported the highest percentages employed in management, professional services, and related occupations (31.5%), sales and office occupations (24.9%) and service occupations (24.9%). These are trends occurring throughout the United States, but also characteristic of the development of the New West economy.

Farming, agriculture, forestry, fishing, and hunting have remained small but steady percentages of the workforce over the past decade, primarily within with Picuris, Dixon, Tres Piedras, and Questa CCDs. Mining has declined from a major component of the work force to a minor 1.7% of the workforce since 1970. Government has decreased as a percentage of the total workforce, yet the number of government workers has nearly doubled. Government jobs remain critical to the more rural communities in the Picuris CCD, Taos Pueblo, Penasco CCD, and Tres Piedras CCD.

According to the Fourth Quarter 2005 *Taos Economic Report*, in 2005 the largest gross receipts generators were the retail trade, construction, other services, and food and accommodation services industries. Tourism was reported to account for nearly 10% of the total gross receipts activity, making it the fourth largest economic sector after retail trade, construction, and other services. This indicates the importance of tourism to the Taos County economy. In terms of covered wage and salary employment, in 2001 for Taos County, the NM Department of Labor reported the highest earnings in arts, entertainment, recreation, accommodation, and food service, followed by retail trade, health care and social assistance, information, and construction.

Based on interviews and research, it seems the regional economy is unlikely to make any significant changes in the current trend over at least the next thirty to forty years. However there are a few potential developments that might influence the pace of that trend. Economic development initiatives are currently targeted at expanding the local tourism market, supporting local entrepreneurs, and bringing in entry and mid-level employment. It is unlikely these jobs will significantly increase population through in-migration, instead creating opportunity for Taos County locals and thus potentially reducing out-migration. New developments include: two call centers recently located in Taos that will provide about 400 jobs over the next two to three years; an entrepreneurial mentorship initiative (Sirolli) targeting small business entrepreneurs providing

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assistance for business start-ups intended to generate new employment; a small manufacturing company that will employ twenty or more employees in Questa; a potential commercial plaza in Rinconada that will serve both tourist and locals; and finally approximately 460,000 square feet of commercial space in various phases of construction to be completed in the next decade in the Town of Taos and adjacent areas.

The tourism industry remains an important component of the entire Taos County region. In particular the Town of Taos, the Taos Ski Valley, and the Village of Red River are all working together on Destination Taos and the Enchanted Circle to improve and increase regional tourism. The Taos County tourism industry was negatively affected by 9/11, losing market share. These initiatives are a response in part to regain market share and increase economic benefits from the tourism industry. Additionally, there has been discussion, although no specific action, in developing the Taos Valley as a destination resort. This would involve the development of destination resort facilities such as the golf course, enhancing existing amenities, and constructing additional upscale hotels along the lines of the Santa Ana Hyatt Tamaya resort. Some smaller scale facilities have already been created. This type of effort could be stimulated by the Taos Pueblo engaging in an expansion of their casino, although there is no public discussion of this occurring. The expansion of tourism could potentially have the most significant impact on in-migration as most new residents are tourists first.

### The Residential Housing Market

The population increase in Taos, primarily in the Taos Valley, has created a healthy residential housing market evidenced by the increasing importance of the real estate and construction sectors to the local economy. Construction reported the second highest gross receipts earnings after retail trade in Taos County in 2005 and was the fourth most important employment sector. The trends in Taos County are quite common everywhere in the Rocky Mountain west as small mountain communities become highly desirable places for East and West Coast migrants seeking a less urban lifestyle. These migration patterns have driven up the costs of residential property, as well as boosted the construction and real estate industry, as demand for second and retirement homes continues to increase.

The 2000 Census estimated that there were 17,404 housing units in Taos County. The 2002 Census estimates indicate an increase to 17,870, an increase of 466 units or 233 units per year. The Taos County Assessor's office estimates that Taos County adds approximately 400 units of housing per year based on building permits, half of which are built homes and half of which are manufactured homes. In 2003, Kit Carson Electric Cooperative reported 21,800 electrical hookups in their service area, with an increase of 495 hooks-ups in 2004 for a total of 22,295 (some of which are commercial).

For the entire planning region, the 2000 Census shows a total of 18,173 residential units, a 43.6% change since 1990, an increase of 5,517 units. The most significant percent increases were, in order of magnitude, the West subregion, the North subregion, the Central subregion (particularly in Arroyo Hondo area), followed by the South subregion.

# TABLE ITaos County Water Planning RegionChange in Housing Units 1990 – 2000

Subregion	Percent Change	No. of Units Added
West	67.7%	500
North	35.5%	1,451
Central	28.7%	3,196
South	14.1%	370

Census 1990 & 2000

As the value of residential property around the Taos Valley Central subregion continues to rise, it will put increasing pressure on outlying communities to become more affordable bedroom communities. The Taos County Assessor reported that the median value of a home in the Taos Valley during the 4<sup>th</sup> quarter of 2004 was \$289,000. This contrasts with the reported value of homes in the 2000 Census at approximately \$150,000 indicating new home construction is more expensive. According to the Taos County Association of Realtors, as reported by Mark Cowan, median housing prices increased from \$151,000 in 1999 to \$228,000 in 2004, an increase of more than 50 percent.

Most affordable housing consists of manufactured homes on more rural residential lots in outlying areas. As the median price of a home in the Taos Valley continues to increase, this places pressure on areas outside of the Town of Taos and surrounding area to absorb those who work in Taos, but cannot afford to live there. To illustrate this, land that cost \$5,000 per acre ten to fifteen years ago in Questa has risen to about \$15,000 per acre. Similarly, land between the Rio Grande and the Tres Piedras and Carson areas has risen from \$500 to \$2,500 per acre.

Land and water availability will be the factors limiting growth in the future. Much of Taos County is public lands. Taos County has 551,791 acres under private ownership, approximately 38.2% of the total County. There are approximately 63,000 parcels in the County, of which nearly half are lots in the West subregion, the most rural and least developed. The remaining 33,000 properties range in size from 0.01 acre to 77,000 acres. The Taos Valley accounts for 18.2% of total acres in the County, or 102,400 acres.

# **Taos County Lodging, Second Homes and Condos**

Tourism, as mentioned above, is a significant driver of the economy. Part of the tourism water use is accounted for by measuring commercial utilization at hotels, motels, and B&Bs. Part of the tourism water use is accounted for by use in second homes, which are hooked up to the utility system or private wells. And a third component of water use is accounted for by consumption in condos, some of which are rented out to visitors. It is this latter condo use that is least

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understood and most likely to not be included in demographic data. In this section, we discuss lodging, second home, and condo trends in Taos County.

### Lodging

We examined occupancy in the more traditional lodging accommodations: hotels, motels, and B&Bs. In the town of Taos, there are 1,066 hotel and motel rooms and another 277 rooms in B&Bs, for a total of 1,343 rooms. In Taos Ski Valley, there are another 284 hotel and motel rooms, along with 40 rooms in B&Bs, for a total of 324 rooms. The occupancy rate for 2005 for Taos Town and Ski Valley was 51%.

Red River has 383 hotel and motel rooms and 4 rooms in B&Bs, for 387 rooms. Occupancy rate for 2005 was 49%.

There are 45 units in Sipapu, as well as a scattering of units in Questa and other locations.

### Second Homes

While there are no accurate data on the number of second homes in Taos County, we hear anecdotally that there are a growing number of such homes occupied on a seasonal basis. It is estimated that there are 480-500 homes in Red River occupied part time, some of which are rented out during part of the year. A majority of the 600 homes in the Upper Valley outside of the Town of Red River are also second homes. The U.S. Census does provide data on the number of homes that are vacant (as of the April census) and used for "seasonal, recreational, or occasional use." In 2000, there were 2,945 such homes within the County, including 283 within the Town of Taos. The number in the County had grown substantially from the figure of 1,127 in 1990, an increase of 161 percent.

### Condos

We also researched the number of condos that are rented out to guests by management companies on a regular basis. There are 34 rental condos in the Town of Taos, 133 in the Ski Valley, and 223 condos in Red River. This does not include condos that are rented about by individuals and not part of this database. As mentioned above, considerable growth is occurring in the number of condos in the Town of Taos (many of which will not be rentals) and in the Ski Valley (many of which will be rentals, including units being converted from lodges; of course, converted units will use essentially the same amount of water as condos as they did as lodge units).

### **Taos County Water Planning Region Population Projections**

Low and high growth scenarios were created to forecast the future population of the Taos County water planning regions between 2000 and 2050. Figure B below illustrates the population increase for the low and high population growth scenarios over the next fifty years.



FIGURE B Taos County Water Planning Region Population Projections 2000-2050

### Low Growth Scenario

The low growth projection for 2000 to 2050 assumes the growth rate will follow the existing trend at a slightly slower rate with the growth rate declining slowly each decade for a total population increase of 19,062. The region will grow from 2000 to 2010 by 5,163 people, between 2010 and 2020 the region will add 4,561 people, between 2020 and 2030 it will add 3,862 people, between 2030 and 2040 it will add 3,017, and by 2050 it will add 2,459.

This low growth rate assumes the growth in the region will continue along the current trends until 2020, although at a slower pace. This scenario assumes after 2020 that there will be no significant changes in the local or national economy, and that the immigration trend that began in the 1990's of people moving into the Rocky Mountain West will slow significantly after 2020. It also assumes the impact of the baby boomers on the economy will decrease after 2030 as their numbers begin to decline due to natural deaths. This scenario assumes growth control measures will be used to protect agricultural lands in some communities as well as to protect water resources.

	2000 - 2010	2010 - 2020	2020 - 2030	2030 - 2040	2040 - 2050
Low					
Annual Growth	1.53%	1.18%	0.90%	0.65%	0.50%
Rate					
Population at	36,647	41,208	45,070	48,087	50,546
end of decade					
High					
Annual Growth	2.66%	2.05%	1.55%	1.25%	1.00%
Rate					
Population at	40,936	50,146	58,483	66,219	73,147
end of decade					

TABLE JTaos County Water Planning Region Population Projections 2000-2050

### **High Growth Scenario**

The high growth projection for 2000 to 2050 assumes a total population increase of 41,663. The growth rate will also decrease each decade until 2040 at which point it will maintain a steady growth rate. The region will grow from 2000 to 2010 by 9,452 people, between 2010 and 2020 the region will add 9,210 people, between 2020 and 2030 it will add 8,337 people, between 2030 and 2040 it will add 7,736, and by 2050 it will add 6,928.

This scenario assumes the regional trend of the past decade will continue. The in-migration patterns that began in the 1980's into the Rocky Mountain West will continue over the next three decades creating a more significant shift in the local economy than the low scenario. The changes to the regional economy as a result will make Taos less dependent upon the tourism economy than it had been in the past, however, it also assumes the success of the destination resort concept. We believe that, of the two scenarios, the high scenario is the more likely to be achieved and that adequate water supplies should be secured to meet this scenario.

# **Taos County Water Planning Subregion Population Projections**

### **Central Subregion**

The Central subregion accounts for 66.17% of the total population of the water planning area. It includes the Town of Taos, Arroyo Seco, Taos Pueblo, Taos Ski Valley, Arroyo Hondo, Ranchos de Taos, and El Prado. The Central subregion, as the only urban center and primary economic driver, has accounted for nearly 81.0% of the planning region's growth during the past decade. As the primary economic center, it will continue to see the majority of the growth. However, increasing real estate prices, more than lack of developable land, will put increasing pressure on outlying subregions to absorb growth, particularly those seeking more affordable housing. Also potentially affecting growth will be the policies that develop as a result of the County going forward with a growth management plan.

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There are currently a number of residential and commercial developments in the works that will absorb growth in the Taos Valley over the next decade and possibly beyond. Some of this is part of a large and phased mixed-use development south of the Town of Taos in the Llano Quemado area. This area will be a primary growth area for the next ten to fifteen years. Growth is expected to occur in the vicinity of County Road 110. Additionally, the Town of Taos is looking at redevelopment potential, both commercially in the downtown district, as well as identifying infill lots for residential development. Condo construction has been strong, with 216 units planned or under construction in August 2005. Construction has been driven primarily by newcomers.

The Taos Ski Valley has a very small permanent population. It is unlikely this will change dramatically in the future. However, over the next twenty to thirty years, the Taos Ski Valley will maximize its build out potential. There are currently a number of condominium units under construction and the demand for them has outpaced the supply. In the future, there is reportedly an ability (given adequate infrastructure which could be a prohibiting factor) to double the number of residential units (from approximately 600 to 1000 units). There is additionally some potential for commercial development, although opportunity is limited due to the seasonal nature of the Taos Ski Valley. While there is a desire to expand to a year round economy in the Taos Ski Valley, opportunity is limited and it is unlikely that Taos Ski Valley will pursue the year round resort development that other ski valleys have successfully done. Instead some limited opportunity exists for expanding the conference and retreat market. Four new projects are creating 109 new units, a significant increase from the inventory of 125 condos at the end of 2004. Four other projects could result in the conversion or construction of another 145 units.

The northern part of the Central subregion including Arroyo Seco, El Prado, and particularly Arroyo Hondo, will continue to see growth. Land prices are expected to continue to rise. Demand for large lots with mountain views for larger homes will also continue to be high. As lots in the Central subregion become more expensive and undeveloped land less available, it could potentially put pressure on areas in the North subregion that are convenient to the Taos Valley.

	2000 - 2010	2010 - 2020	2020 - 2030	2030 - 2040	2040 - 2050
Low					
Annual Growth	1.85%	1.37%	1.00%	0.71%	0.54%
Rate					
Population at	25,016	28,665	31,677	34,015	35,909
end of decade					
High					
Annual Growth	3.08%	2.13%	1.54%	1.58%	1.11%
Rate					
Population at	28,207	34,838	40,590	45,541	50,876
end of decade					

TABLE KCentral Subregion Population Projections 2000-2050

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Table K shows the projected low and high rates of growth for the Central subregion from 2000 to 2050. The low growth projection for 2000 to 2050 assumes the Central subregion will continue to be the principal growth area receiving from 77.0% to 80.0% of all the growth throughout the fifty year period for a total increase in population of 15,075.

The high projection for 2000 to 2050 also assumes the Central subregion will be the center growth area; however, a larger percentage of the overall planning region growth will be distributed to the North subregion as the Central subregion begins to approach build out after 2030. The high growth scenario projects a total population increase of 30,042 in the Central subregion by 2050.

# West Subregion

The West subregion includes all the portion of Taos County west of the Rio Grande including the communities of Tres Piedras and Ojo Caliente. In addition to these two communities, this subregion includes areas on the mesa paralleling the Rio Grande Gorge that have become an inexpensive area for Taoseños to build despite the high costs of accessing water. This area also has two off-the-grid subdivisions that accounted for about one-tenth of the growth on the West subregion over the past decade. These subdivisions are a little less than half built out with a potential for 215 total home sites.

This subregion represents something of a puzzle in this analysis. It represents nearly 8.0% of the total growth for the planning region, has the highest growth rate, the largest percent change for both population and housing, the highest percent of out of state immigrants, yet there is very little aggregated data to determine where the growth is occurring or why.

The West subregion between 1990 and 2000 saw the population and number of housing units nearly double with an additional 500 people and 550 houses units. The growth rate was the highest of all the regions at 8.27% for the past decade. Interestingly, this region has a below average household occupancy rate, 1.8 persons per household. Additionally, according to the Census, slightly more than half of the West subregion residents who reported living in a different house in 1995 were moving from within Taos County, while a small percentage moved from other parts of New Mexico, and about 40 percent from out of state.

The economy of the West subregion is predominately tourism in the Ojo Caliente area and the Carson National Forest, mining north of Ojo Caliente, and ranching. For those residents living near the Rio Grande Gorge Bridge, the commute to the Taos Valley is less than twenty minutes and thus is directly linked to the Town of Taos. Because land in this area is inexpensive, it will most likely absorb an increasing number of Taoseños seeking more affordable housing in the future decades. However, wells are expensive and deep on the mesa, limiting development potential. A new well is being drilled on the west side to provide a supplemental source of water for households who wish to fill up water tanks at the well.

	2000 - 2010	2010 - 2020	2020 - 2030	2030 - 2040	2040 - 2050
Low					
Annual Growth	2.31%	1.20%	0.53%	0.39%	0.23%
Rate					
Population at	1,261	1,421	1,498	1,558	1,595
end of decade					
High					
Annual Growth	5.5%	4.00%	3.50%	2.50%	1.50%
Rate					
Population at	1,523	1,891	2,183	2,376	2,480
end of decade					

TABLE LWest Subregion Population Projections 2000-2050

Table L shows the projected low and high rates of growth for the West subregion from 2000 to 2050. The West subregion near the Town of Taos is assumed, in both the low and high scenarios, to grow the most during the period between 2000 and 2020 as the inexpensive land draws people seeking more affordable housing.

The low projection for 2000 to 2050 assumes a total increase in population of 592. This is much slower than the current trend and assumes some of the current residential development in the Central subregion will provide more affordable housing thus reducing the need to move to the West subregion.

The high projection for 2000 to 2050 assumes a total increase in population of 1,447. This scenario assumes that some growth will occur between 2000 and 2020 on the West subregion, but will slow after 2020 due to the limited availability of water and an increase in more affordable housing development in both the Central and the North subregions.

# North Subregion

The North subregion includes the Village of Questa and Town of Red River, as well as smaller communities such as San Cristobal, El Rito, Lama, and Costilla. The North subregion has experienced an 18.5% change in population and a nearly 54.5% change in housing units, adding nearly 2 housing units for every person (1,122 units to the 623 new people). The North subregion over the past decade accounted for 9.1% of the total planning region growth.

The Village of Questa and surrounding area has historically been economically driven by the MolyCorps Mine. However, with a shut down in 1996, the mine has been in low level molybdenum production and redirected its focus to reclamation. There are currently about 210 to 240 employees at the mine; this could grow due to increasing prices for molybdenum on the world market. A new solar panel manufacturing business is starting in Questa and will employ up to 25 employees.

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The Village of Questa, the area north of Questa, and El Rito have seen some residential growth, with people seeking less expensive land, spectacular mountain views, and a more rural lifestyle. The convenience of being only 25 miles from the Town of Taos might make this area more popular in the future, as prices continue to escalate beyond most Taoseños' reach.

The Town of Red River, a part of the Enchanted Circle tourism route, is an increasingly popular second home destination and summer/winter destination resort. Red River had a slightly lower growth rate than the Town of Taos and the County at 2.26% during the decade of 1990 to 2000. Red River itself has only accounted for 1.5% of the total regional growth during the past decade, although it might be slightly more if the upper valley were included. The current BBER estimate for the population is 489.

The Town of Red River is dependent upon the tourism economy employing up to 1,100 people during the high season, most of whom commute into the community. The second home market has been strong the past decade. The Town reportedly is adding about 5 to 10 new homes per year while the upper valley is adding 8 to 10 homes per year. These trends are expected to continue until full build out. The potential for growth in the Red River area is limited to about 400 acres, with more than half of that held by one person currently not interested in development. However, the Town is currently redeveloping and increasing lot density.

The North subregion is the area most likely to absorb growth from the Taos Valley over time due to its proximity, large amounts of undeveloped land, and beautiful mountain views. The North has accounted for about 9.0% of the growth in the previous decade and under both the low and high scenario is expected to absorb an increasing share, particularly in the area adjacent to the Central subregion and around the Village of Questa.

	2000 - 2010	2010 - 2020	2020 - 2030	2030 - 2040	2040 - 2050
Low					
Annual Growth	0.99%	0.96%	0.98%	0.74%	0.63%
Rate					
Population at	5,456	6,004	6,622	7,134	7,602
end of decade					
High					
Annual Growth	1.98%	2.34%	2.05%	2.12%	1.01%
Rate					
Population at	6,008	7,574	9,283	11,449	12,661
end of decade					

# TABLE MNorth Subregion Population Projections 2000-2050

In the low growth scenario the growth rate will remain steady around 1.0% for the next three decades, slowly growing as a bedroom community of Taos. The population will increase by 2050 by a total of 2,662 people. Water is a primary limiting factor in growth in this area.

In the high growth scenario, the growth rate will be closer to 2.0% and above for the next three decades, decreasing to 1.35% by 2040 and finally slowing by 2050. This projection assumes the Village of Questa is able to provide water to the area and supports a population increase of 7,721 by 2050.

# **South Subregion**

The South subregion includes the communities of Dixon (in Rio Arriba County), Picuris Pueblo, Penasco, Embudo, and Pilar. This area has seen moderate growth, increasing by nearly 200 people for a growth rate of 0.43% from 1990 to 2000. The areas of greatest growth were in the Penasco and Dixon areas. The South subregion during the past decade accounted for the smallest percentage of the total planning region's population increase at 2.8%.

The South subregion, while linked to the Taos economy, is different than all the other subregions in that it is also linked to the economies of Espanola, Santa Fe, and Los Alamos. This is evidenced by the fact that over half of the entire workforce drives 35 to 90 minutes and commutes out of the county they live in to work. However, this area is also unique in that many in this subregion still live a land-based lifestyle. Community forestry, agriculture, hunting, fishing and farming provide supplemental income for many in the Penasco and Dixon areas. Sipapu Ski Area, while a small resort, has become popular with middle class second home investors, although there is a limited amount of land available for second home development in this area. A significant shift in the past ten to fifteen years has been the increasing number of artists moving into Dixon, Rinconada, and Pilar. Rinconada has been identified as a potential site for the development of a retail plaza that could cater to both tourists and locals.

Migration into the South subregion indicates a slightly different trend than the other subregions in that it is receiving primarily intra-state and intra-county migrants. According to the 2000 Census, of the 30 percent of those in the Dixon CCD who reported living in a different house in 1995, 85.0% were moving either within the county or from somewhere else in New Mexico. Most likely New Mexicans are moving into the Dixon CCD for land that is less expensive than in either Santa Fe or Taos and the high quality of life, particularly for the arts and farming. In the Penasco CCD on the other hand, of the 19.0% who had lived in another house, half were intra-county movers with the remainder being from another state. The Picuris CCD also saw about half of the in-migration being from New Mexico and the rest being from out of state.

The South subregion had a significant increase in the number of housing units in comparison to the population growth, particularly in the Dixon and Pensaco areas which both added nearly twice the number of housing units as population. Penasco had a modest growth rate of 1.09% between 1990 and 2000 with a 9.9% change in population. However, there was a 24.9% change in housing units, adding 193 units. It is possible some of these were added in Sipapu which has a large number of units for seasonal and recreational use. Dixon had a slightly lower growth rate of less than 1.0%, adding 136 people. However, it saw a 20.9% change in housing units, adding 133 units.

	2000 - 2010	2010 - 2020	2020 - 2030	2030 - 2040	2040 - 2050
Low					
Annual Growth	0.43%	0.41%	0.30%	0.20%	0.11%
Rate					
Population at	4,914	5,119	5,273	5,379	5,440
end of decade					
High					
Annual Growth	1.00%	1.17%	0.96%	0.64%	0.39%
Rate					
Population at	5,199	5,843	6,427	6,852	7,129
end of decade					

TABLE NSouth Subregion Population Projections 2000-2050

The South subregion over the next three decades will see a slow increase in population. However, limited land and long commute times for work will prevent any high density development. This area will continue to see an increase in in-migration from both within Taos County as well as other New Mexico communities. Rising land prices in Dixon could impact the agricultural economy in the subregion, putting pressure on small scale farmers to sell. However, Rio Arriba County supports agricultural land preservation and will most likely work to minimize high density development in the Dixon area.

Table N shows the population projections for the South subregion. The low projection is a continuation of the current trend for the next twenty years, slowing after 2020. It assumes agricultural land will be protected from subdivisions and the land based economy will be preserved. The low growth scenario assumes a population increase of 733 people by 2050.

The high scenario assumes the area will grow over the next two decades at a faster rate, but land availability will eventually slow growth. This scenario assumes that development in the Taos, Dixon and Rinconada areas will support additional development in the Penasco area. The high growth scenario assumes an increasing growth rate until 2020 as the area absorbs growth. The total population will increase by 2,422 people by 2050.

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United States Census Bureau Housing Data Taos. 2000.

# **Individuals Interviewed:**

Person	Community or Organization
Brent Jaramillo	Village of Questa
Leroy Apodaca	Village of Questa
Judy Brunson	Town of Red River
Jake Pierce	Town of Red River
Johnny Brunson	Town of Red River
Gerald Nichols	Taos County
Allen Vigil	Taos County
Matt Foster	Town of Taos
Gayle Martinez	Taos Chamber of Commerce
Bill Stevens	Town of Taos
Mark Cowan	Mark Cowan & Associates
Chris Stag	Taos Ski Valley
Bruce Armstrong	Siete del Norte
Mark Schiller	La Jicarita News
Amy Lay	Earthships Biotecture
Eddie Dry	University of New Mexico and Red River
John Paul Bradley	Sipapu Ski Resort
Marcella Diaz	Somos Un Pueblo Unido
Jessica Gutierrez	Taos County
Dr. Mark Space	Superintendent, Taos Schools
Denise Davis	Consultant with Taos Schools Facilities Master Plan
Glenda Martinez	Department of Motor Vehicles, Taos

# **Additional Reference Tables and Figures:**

### Percentage of Population Growth for Incorporated Towns in Taos County 1970 to 2000

	1970-1980	1980-1990	1990-2000
Town of Taos	46.1%	28.2.0%	4.3%
Questa	5.5%	13.8%	2.3%
Red River	7.6%	1.5%	1.4%
Taos Ski Valley	na	na	0
<b>Balance of Taos County</b>	40.8%	54.7%	92.1%

### Percentage of Total Population Growth in Planning Subregions 1990 - 2000



### May 2006 Taos County Regional Water Plan Population Projections

	LOW GROWTH POPULATION PROJECTIONS Allocation of Percentage of Growth, Growth Rate, and Population Increase 2000 - 2050												
	Central North West South												
			% Pop		% Pop		% Pop						
Year	% Pop Growth	Population	Growth	Population	Growth	Population	Growth	Population					
2000	80.13%	20834	9.16%	4,940	7.86%	1,003	2.84%	4,707	31,484.00				
2010	81.0000%	25,016	10.0000%	5,456	5.0000%	1,261	4.0000%	4,914	36,647.00				
2020	80.0000%	28,665	12.0000%	6,004	3.5000%	1,421	4.5000%	5,119	41,208.00				
2030	78.0000%	31,677	16.0000%	6,622	2.0000%	1,498	4.0000%	5,273	45,070.00				
2040	77.5000%	34,015	17.0000%	7,134	2.0000%	1,558	3.5000%	5,379	48,087.00				
2050	77.0000%	35,909	19.0000%	7,602	1.5000%	1,595	2.5000%	5,440	50,546.00				

	Cer	ntral	N	orth		West	South		Subregion Average Growth Rate
	505		505	Growth	505		505		
Year	POP	Growth Rate	POP	Rate	POP	Growth Rate	POP	Growth Rate	
2000	20,834	3.18%	4,940	1.48%	1,003	8.27%	4,707	0.43%	2.55%
2010	25,016	1.8461%	5,456	0.9990%	1,261	2.3167%	4,914	0.4303%	1.5301%
2020	28,665	1.3709%	6,004	0.9605%	1,421	1.1990%	5,119	0.4101%	1.1799%
2030	31,677	1.0043%	6,622	0.9845%	1,498	0.5308%	5,273	0.2978%	0.8999%
2040	34,015	0.7147%	7,134	0.7488%	1,558	0.3957%	5,379	0.1985%	0.6501%
2050	35,909	0.5432%	7,602	0.6363%	1,595	0.2342%	5,440	0.1137%	0.5000%

### May 2006 Taos County Regional Water Plan Population Projections

### HIGH GROWTH POPULATION PROJECTIONS Allocation of Percentage of Growth, Growth Rate, and Population Increase 2000 - 2050

	Central		North		West		South		Total Pop
Year	% Pop Growth	Population	% Pop Growth	Population	% Pop Growth	Population	% Pop Growth	Population	
2000	80.13%	20,834	9.16%	4,940	7.86%	1,003	2.84%	4,707	31,484.00
2010	78.0000%	28,207	11.3000%	6,008	5.5000%	1,523	5.2000%	5,199	40,936.00
2020	72.0000%	34,838	17.0000%	7,574	4.0000%	1,891	7.0000%	5,843	50,146.00
2030	69.0000%	40,590	20.5000%	9,283	3.5000%	2,183	7.0000%	6,427	58,483.00
2040	64.0000%	45,541	28.0000%	11,449	2.5000%	2,376	5.5000%	6,852	66,219.00
2050	77.0000%	50,876	17.5000%	12,661	1.5000%	2,480	4.0000%	7,129	73,147.00

	Central		North			West	Sc	Region Average Growth Rate	
	505			Growth			505		
Year	POP	Growth Rate	POP	Rate	POP	Growth Rate	POP	Growth Rate	
2000	20,834	3.18%	4,940	1.48%	1,003	8.27%	4,707	0.43%	2.55%
2010	28,207	3.0760%	6,008	1.9767%	1,523	4.2644%	5,199	0.9981%	2.6601%
2020	34,838	2.1339%	7,574	2.3429%	1,891	2.1902%	5,843	1.1759%	2.0500%
2030	40,590	1.5400%	9,283	2.0556%	2,183	1.4452%	6,427	0.9565%	1.5499%
2040	45,541	1.1576%	11,449	2.1194%	2,376	0.8525%	6,852	0.6431%	1.2501%
2050	50,876	1.1138%	12,661	1.0116%	2,480	0.4289%	7,129	0.3972%	1.0000%

# Bureau of Census Place of Residence CCDs Census 2000

							Arro	уо								
	Dixon		Pena	SCO	Ρίςι	Picuris Hondo		Que	Questa Taos		Taos Pueblo		Tres Piedras			
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
<b>RESIDENCE IN 1995</b>																
Population 5 years																
and over	1,387	100	1,297	100	1,686	100	3,794	100	3,707	100	14,696	100	2,236	100	931	100
Same house in 1995	980	70.7	1,041	80.3	1,271	75.4	2,178	57.4	2,344	63.2	9,123	62.1	1,667	74.6	625	67.1
Different house in the																
U.S. in 1995	407	29.3	244	18.8	413	24.5	1,548	40.8	1,341	36.2	5,323	36.2	544	24.3	293	31.5
Same county	140	10.1	115	8.9	187	11.1	764	20.1	606	16.3	2,530	17.2	315	14.1	151	16.2
Different county	267	19.3	129	9.9	226	13.4	784	20.7	735	19.8	2,793	19	229	10.2	142	15.3
Same state	203	14.6	43	3.3	124	7.4	164	4.3	239	6.4	710	4.8	102	4.6	20	2.1
Different state	64	4.6	86	6.6	102	6	620	16.3	496	13.4	2,083	14.2	127	5.7	122	13.1
Elsewhere in 1995	0	0	12	0.9	2	0.1	68	1.8	22	0.6	250	1.7	25	1.1	13	1.4

Appendix F3

**Projected Water Use** 

Appendix F3. Lov	w- and High-Growth	Projections for	Subregions by	Use Category

	2000 Withdrawal	Growth		Withdrawal Projections (ac-ft)				
Use Category	ac-ft	Scenario	2010	2020	2030	2040	2050	Comment
North subregion								
Commercial (self-supplied)	41	Low	45	50	55	59	63	
		High	50	62	77	94	104	
Domestic (self-supplied)	195	Low	216	238	262	282	301	See Table 6-3
		High	238	300	367	453	501	
Industrial (self-supplied)	0	Low	0	0	0	0	0	
		High	5	6	8	10	11	Assumed minimal amount, projected using high-growth scenario
Irrigated Agriculture	29,142	Low	29,142	29,142	29,142	29,142	29,142	
		High	29,142	29,142	29,142	29,142	29,142	
Livestock (self-supplied)	30	Low	30	30	30	30	30	
		High	60	60	60	60	60	Double based on new slaughter house, closer to 1980 levels
Mining (self-supplied)	3,094	Low	3,094	3,094	3,094	3,094	3,094	
		High	7,387	7,387	7,387	7,387	7,387	Moly Corps at 1975 level (24 hours/day) F. Martinez, personal
								comm with Amy Lewis 6/12/06)
Power (self-supplied)	0	Low	0	0	0	0	0	
		High	10	13	15	19	21	
Public Water Supply	894	Low	987	1,086	1,198	1,291	1,375	
		High	1,087	1,370	1,680	2,072	2,291	See Table 6-2
Reservoir Evaporation	1,610	Low	1,610	1,610	1,610	1,610	1,610	perennial only
	1,764	High	1,764	1,764	1,764	1,764	1,764	intermittent and perennial
North Total	35,006							
Central subregion								
Commercial (self-supplied)	349	Low	419	480	530	570	601	
		High	472	583	680	763	852	
Domestic (self-supplied)	1,135	Low	1,363	1,562	1,726	1,854	1,957	See Table 6-3
		High	1,537	1,899	2,212	2,482	2,772	
Industrial (self-supplied)	3	Low	3	3	4	4	4	•
		High	3	4	5	6	6	
Irrigated Agriculture	41,400	Low	65,032	65,032	65,032	65,032	65,032	Karla McCall + Pueblo
		High	65,032	68,975	72,918	78,399	78,399	Karla McCall + Pueblo HIA (increase has to come from existing rights)
Livestock (self-supplied)	45	Low	45	45	45	45	45	OSE + Pueblo
		High	89	89	89	89	89	Double based on new slaughter house, closer to 1980 levels
Mining (self-supplied)	0	Low	0	0	0	0	0	, The second sec
		High	10	12	14	16	18	Assumed minimal amount, projected using high-growth scenario
Power (self-supplied)	0	Low	0	0	0	0	0	
		High	10	12	14	16	18	Assumed minimal amount, projected using high-growth scenario
Public Water Supply	1,560	Low	1,873	2,147	2,371	2,547	2,689	See Table 6-2
		High	2,112	2,609	3,040	3,410	3,810	
Reservoir Evaporation	804	Low	804	804	804	804	804	perennial only
	956	High	956	956	956	956	956	intermittent and perennial
Central Total	45,296							

	2000 Withdrawal	Growth	Withdrawal Projections (ac-ft)					
Use Category	ac-ft	Scenario	2010	2020	2030	2040	2050	Comment
South subregion								
Commercial (self-supplied)	19	Low	20	20	21	21	22	2
× 11 /		High	20	23	26	27	28	3
Domestic (self-supplied)	223	Low	233	242	250	255	258	See Table 6-3
		High	242	277	304	324	338	8
Industrial (self-supplied)	0	Low	0	0	0	0	0	
		High	10	11	13	13	14	Assumed minimal amount, projected using high-growth scenario
Irrigated Agriculture	17,104	Low	17,104	17,104	17,104	17,104	17,104	
		High	17,104	17,104	17,104	17,104	17,104	
Livestock (self-supplied)	30	Low	30	30	30	30	30	
		High	60	60	60	60	60	Double, closer to 1980 levels
Mining (self-supplied)	0	Low	0	0	0	0	0	
		High	5	6	6	7	7	Assumed minimal amount, projected using high-growth scenario
Power (self-supplied)	0	Low	0	0	0	0	0	
		High	5	6	6	7	7	Assumed minimal amount, projected using high-growth scenario
Public Water Supply	308	Low	322	335	345	352	356	See Table 6-2
		High	335	383	421	449	467	
Reservoir Evaporation	229	Low	229	229	229	229	229	perennial only
	251	High	251	251	251	251	251	intermittent and perennial
South Total	17,913							
West subregion								
Commercial (self-supplied)	28	Low	35	39	41	43	44	
		High	42	52	60	66	68	
Domestic (self-supplied)	85	Low	106	120	126	132	134	See Table 6-3
		High	129	160	184	201	209	
Industrial (self-supplied)	0	Low	0	0	0	0	0	
		High	10	12	14	16	16	Assumed minimal amount, projected using high-growth scenario
Irrigated Agriculture	206	Low	206	206	206	206	206	
		High	206	206	206	206	206	8
Livestock (self-supplied)	10	Low	10	10	10	10	10	Double, closer to 1980 levels
		High	20	20	20	20	20	
Mining (self-supplied)	0	Low	0	0	0	0	0	
		High	5	6	7	8	8	Assumed minimal amount, projected using high-growth scenario
Power (self-supplied)	0	Low	0	0	0	0	0	
		High	5	6	7	8	8	Assumed minimal amount, projected using high-growth scenario
Public Water Supply	53	Low	67	75	79	82	84	See Table 6-2
		High	80	100	115	125	131	
Reservoir Evaporation	603	Low	603	603	603	603	603	perennial only
	1,657	High	1,657	1657	1657	1657	1657	intermittent and perennial
West Total	984							