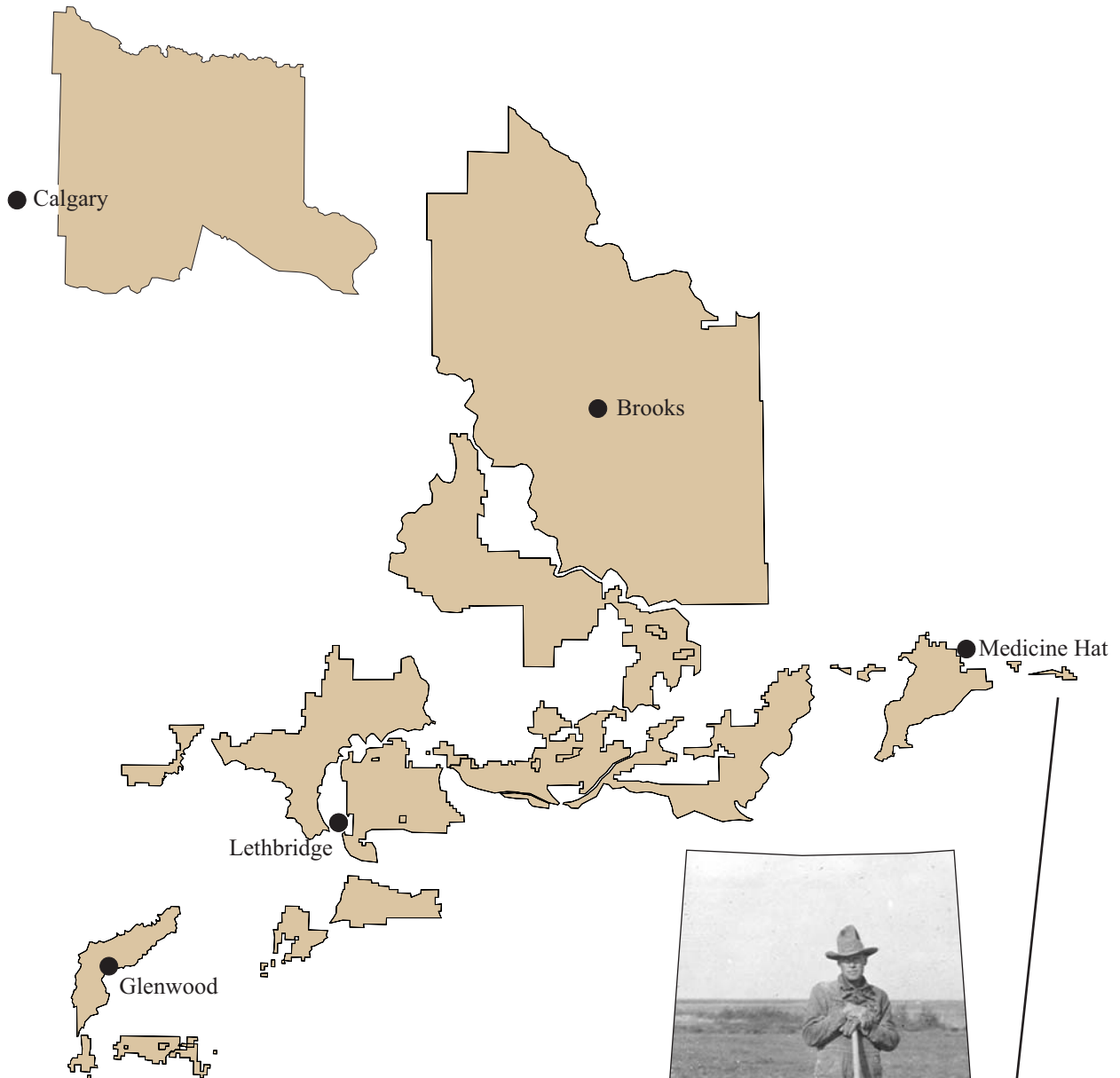


Alberta Irrigation Information 2003



**ALBERTA IRRIGATION INFORMATION
For The Year 2003**



**Irrigation Branch
Irrigation Development Section**

May 2004

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INTRODUCTION

This report is prepared by Alberta Agriculture, Food and Rural Development; Irrigation Branch. The purpose of this booklet is to provide a statistical overview of pertinent irrigation data relating primarily to the thirteen irrigation districts situated in southern Alberta.

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Table 1. DETAILS OF CROPS GROWN WITHIN THE THIRTEEN IRRIGATION DISTRICTS
2003

CROP TYPE	AID		BRD		ED		LD		LND		MID		MVID		RCID		RID		SHMRD		TD		UID		WID		TOTAL ACRES	
	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year	assessed and covered this year	assessed and covered but not irrigated this year		assessed and covered this year
CEREALS	Barley	105	67	1,128	63,357	5,965	206	2,332	2,332	270	1,397	108	439	12,276	439	17,276	439	4,345	439	4,345	284	284	2,262	3,531	3,244	1,314	1,314	21,355
	Barnyard			14,590	1,347	4,410		4,410	4,410	210	41,337		210	343	210	343	210	41,337	175	41,337				1,231	3,244	250	66,461	
	Feed Spring Wheat			14,697	20,160	4,177		4,177	4,177	684	60,632		200	1,935	200	1,935	200	60,632	642	60,632	202	202	1,800	1,166	1,353	3,060	88,744	
	Feed Winter Wheat			1,650	3,896	1,602		1,602	1,602	440	755		108	226	440	226	440	755	139	755			45	77	1,190	83	5,294	
	Eye Wheat			20,279	1,877	1,600		1,600	1,600	187	1,233			14	1,233	14	1,233	60	1,233	60	1,233						1,543	
	Winter Wheat			20,627	4,658	1,395		1,395	1,395	215	215			75	120	75	120	3,013	89	3,013			386			30	6,039	
FORAGES	Alfalfa - two cuts	1,013		63,357			127								752			420									6,039	
	Alfalfa - one cut			23,268	3,164	3,164		3,164	3,164	150	5,670		39	11,623	400	11,623	400	13,243	896	13,243	371	371	5,176	375	23,732	3,068	174,700	
	Barnyard			1,775	1,775	1,775		1,775	1,775	50	302			4,871	120	4,871	120	13,249	56	13,249	202	202	596	230	9,715	1,064	86,113	
	Barley (single)			3,399	3,399	3,399		3,399	3,399	125	1,100			765	15	765	15	6,070	60	6,070	17	17	1,391				4,188	
	Barley (single) (interseeded)			4,561	4,561	4,561		4,561	4,561	130	1,579			1,688		1,688		6,070	60	6,070	17	17	1,391				4,188	
	Corn Silage			2,271	5,544	3,544		3,544	3,544	396	396			290		290		6,070	60	6,070	17	17	1,391				36,020	
	Crackling			1,177	1,177	1,177		1,177	1,177	296	296			296		296		6,070	60	6,070	17	17	1,391				31,502	
	Maize			85	85	85		85	85	85	85			85		85		85	85	85	85	85	85					370
	Maize (interseeded)			284	1,059	451		451	451	451	451			707		707		2,135	222	2,135	194	194	1,696					2,366
	Sorghum/Sudan Grass			15,390	154	5,735		5,735	5,735	226	226			137		137		3,840	7	3,840	74	74	4,296	1,125	6,812	7,827	1,498	
Timothy Hay			7,565	7,499	8,548		8,548	8,548	226	226			15		15		15,520	2,031	15,520	342	342	4,296	1,125	6,812	7,827	1,498		
OLE SEEDS	Flax			15,023	15,023	15,023		15,023	15,023	50	1,258			460		460		35,336	25	35,336	145	145	1,611	3,173	3,458	1,637	6,043	
	Mustard			2,422	2,422	2,422		2,422	2,422	75	1,024			454		454		3,338	20	3,338	102	102	123				1,698	
	Canary Seed			1,821	1,821	1,821		1,821	1,821	15	277			70		70		404	20	404	102	102	117				2,277	
	Canary Seed			1,024	1,024	1,024		1,024	1,024	158	158							129	93	129	100	100					441	
SPECIALTY	Chick Peas			2,649	2,649	2,649		2,649	2,649	341								27,279	122	27,279	313	313	5,199				49,549	
	Dry Peas			600	600	600		600	600	121								1,643	33	1,643	50	50					4,171	
	Fresh Corn (sweet)			1,520	1,520	1,520		1,520	1,520	15								52	62	52	3,846						4,228	
	Green Seed			289	289	289		289	289	45								90	20	90	1,671							3,016
	Hemp			26	26	26		26	26	334								390	13	390	17	17					645	
	Letts			291	291	291		291	291	19								364	9	364	10	10					214	
	Market Gardens			74	74	74		74	74	7								1,624	8	1,624	59	59					1,700	
	Onions			6	6	6		6	6	238								238	9	238	59	59					250	
	Potatoes			10,417	2,385	236		236	236	46								19,317	17	19,317	103	103						53,591
	Seed Potatoes			261	261	261		261	261										89	89	89							349
OTHER	Small Fruit			11,233	868	868		868	868	239								9,816	4	9,816	429	429					28,891	
	Strawberry			9	9	9		9	9	40								152	89	152	139	139					421	
	Rubus			446	446	446		446	446									109	842	109	416	416					319	
	Summer Fallow			2,388	3,511	2,388		2,388	2,388	4783								331	234	331	234	234	86				6,196	
Total assessment for crops		2,388	3,511	29,586	282,981	282,981	4,783	162,738	162,738	15,573	143,520	3,210	302	11,151	4,034	46,304	37,214	37,214	8,128	12,393	82,892	22,650	34,425	67,540	23,103	0	1,325,238	

Table II. SUMMARY OF CROPS GROWN WITHIN THE THIRTEEN IRRIGATION DISTRICTS
2003

CROPS	IRRIGATION DISTRICTS													TOTAL ASSESSMENT ROLL ACRES
	AID	BRID	EID	LID	LNID	MID	MVID	RCID	RID	SMRID	TID	UID	WID	
CEREALS	887 24.6%	71,978 33.5%	68,138 24.1%	206 4.3%	38,622 23.5%	6,504 35.5%	234 6.3%	0 0.0%	17,304 37.4%	129,793 34.9%	22,013 26.7%	11,221 32.6%	27,067 28.0%	393,967 29.7%
FORAGES	2,710 75.0%	65,675 30.6%	177,810 62.8%	4,557 95.7%	108,125 65.8%	10,139 55.3%	3,221 86.8%	1,150 100.0%	25,792 55.7%	131,484 35.3%	29,051 35.2%	17,906 52.0%	58,594 60.6%	636,214 48.0%
OIL SEEDS	0 0.0%	24,664 11.5%	15,431 5.5%	0 0.0%	7,833 4.8%	1,283 7.0%	15 0.4%	0 0.0%	2,350 5.1%	40,388 10.9%	1,881 2.3%	4,223 12.3%	4,975 5.1%	103,043 7.8%
SPECIALTY CROPS	3 0.1%	40,202 18.7%	19,245 6.8%	0 0.0%	4,235 2.6%	334 1.8%	0 0.0%	0 0.0%	816 1.8%	65,415 17.6%	26,919 32.6%	447 1.3%	4,491 4.6%	162,107 12.2%
OTHER	11 0.3%	12,066 5.6%	2,337 0.8%	0 0.0%	5,473 3.3%	60 0.3%	242 6.5%	0 0.0%	42 0.1%	5,034 1.4%	2,698 3.3%	625 1.8%	1,519 1.6%	30,107 2.3%
TOTAL ASSESSMENT ROLL ACRES	3,611	214,585	282,961	4,763	164,288	18,320	3,712	1,150	46,304	372,114	82,562	34,422	96,646	1,325,438

PREPARED BY: ALBERTA AGRICULTURE, FOOD AND RURAL DEVELOPMENT, IRRIGATION BRANCH, LETHBRIDGE

Table III. ON-FARM IRRIGATION METHOD SUMMARY
 Alberta Irrigation Districts - 2003
 (acres covered by an irrigation system)

IRRIGATION METHOD	AID	BRID	EID	LID	LNID	MID	MVID	RCID	RID	SMRID	TID	UID	WID	Individual Method Total	Total Acres Covered	
PIVOT SPRINKLER	Pivot High Pressure	374	66,960	39,814	822	8,580	3,600	40	10,957	10,793	14,213	6,900	29,006	192,059		
	Pivot High Pressure - Corner arm		5,403	3,188		4,575			567	1,451	2,320		100	17,604		
	Pivot Medium Pressure			3,868		506				3,061				7,435		
	Pivot Medium Pressure - Corner Arm									154				154	770,747	
	Pivot Low Pressure		50,580	79,890		29,917	3,490		4,994	213,168	27,204	3,938	20,605	433,786		
	Pivot Low Pressure - Corner Arm		9,238	5,769		53,204			657	35,992	9,573	141	297	114,871		
	Linear - High Pressure			8		873			100	130	176			1,287		
	Linear - Low Pressure	15.8%	130	1,588	17.3%	131	60.6%	0.0%	139	1,174	389	66.9%		52.9%	3,551	60.3%
	percent of total		65.2%	47.4%			38.7%		39.7%	74.0%			51.0%		60.3%	
	WHEEL MOVE	998	19,168	35,918	832	23,782	7,042	118		18,614	63,952	19,217	3,039	12,876	205,556	297,878
Wheel Move - Two Laterals									2,777	12,576	3,957	346	2,283	92,322		
Wheel Move - Four Laterals	42.3%	20,076	14,251	26.4%	35,407	225	3.4%	0.0%	48.8%	21.3%	28.8%	15.7%	15.9%	23.3%	23.3%	
percent of total		19.3%	17.7%		36.7%	39.7%										
GRAVITY		7,450	67,007	135	339	3,724		547	1,267	458	600	94		81,621		
Gravity - Developed - No Control																
Gravity - Developed - Controlled		16,788	13,713	175	1,215			568	1,587	776	1,385	2,253	240	38,700	198,498	
Gravity - Undeveloped - Flood	501	6,822	16,584	2,091	1,272		3,392		1,242	13,411	1,350	4,741	26,522	77,928		
Gravity - Undeveloped - Subsurface								55	70	4			120	249		
percent of total	21.2%	15.3%	34.4%	50.4%	1.8%	20.4%	96.6%	96.7%	9.5%	4.1%	4.1%	32.9%	28.1%	15.5%	15.5%	
OTHER																
Volume Gun - Stationary										143	10		230	383		
Volume Gun - Traveller		35	346		143					201	46		1,134	1,905		
Solid Set (underground sprinkler)			8		516				95	216			247	1,082		
Hand Move (sprinkler above ground)	488	323	1,009	284	841	218			695	1,578	103	96	989	6,624	11,088	
Micro - Spray - Sprinkler					40				42	28	15		83	208		
Micro - Drip - Trickle									7	79			800	886		
Other Application Use	20.7%		0.5%	6.0%	1.0%	1.2%	0.0%	0.0%	1.9%	0.6%	0.2%	0.4%	3.6%	0	0.9%	
percent of total		0.2%												0.9%	0.9%	

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Figure 1. Irrigated Crop Mix

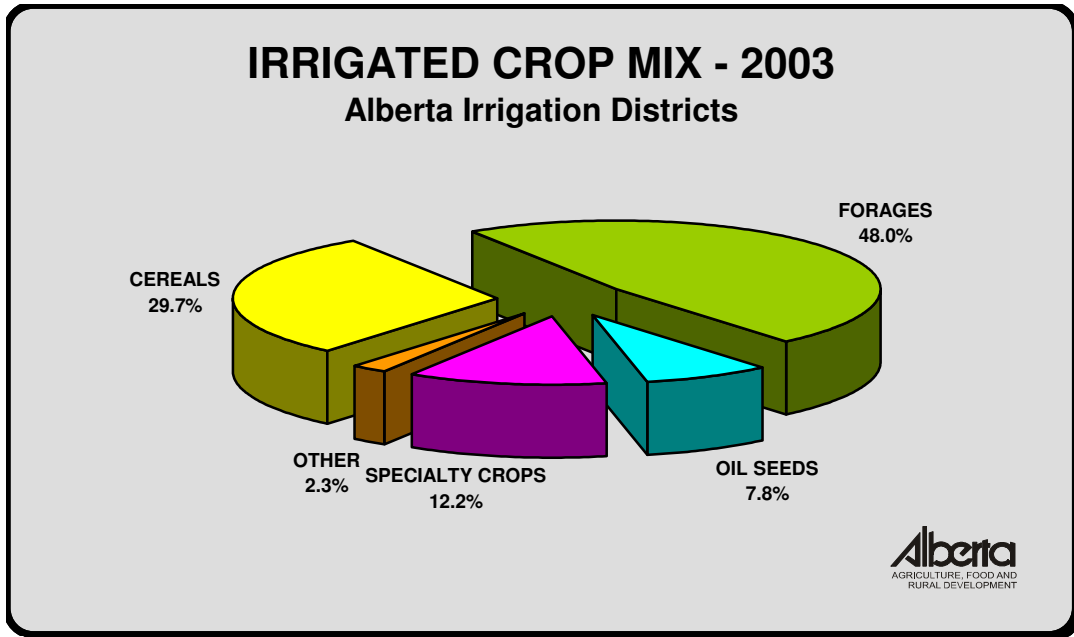


Figure 2. On-Farm Irrigation Method Mix

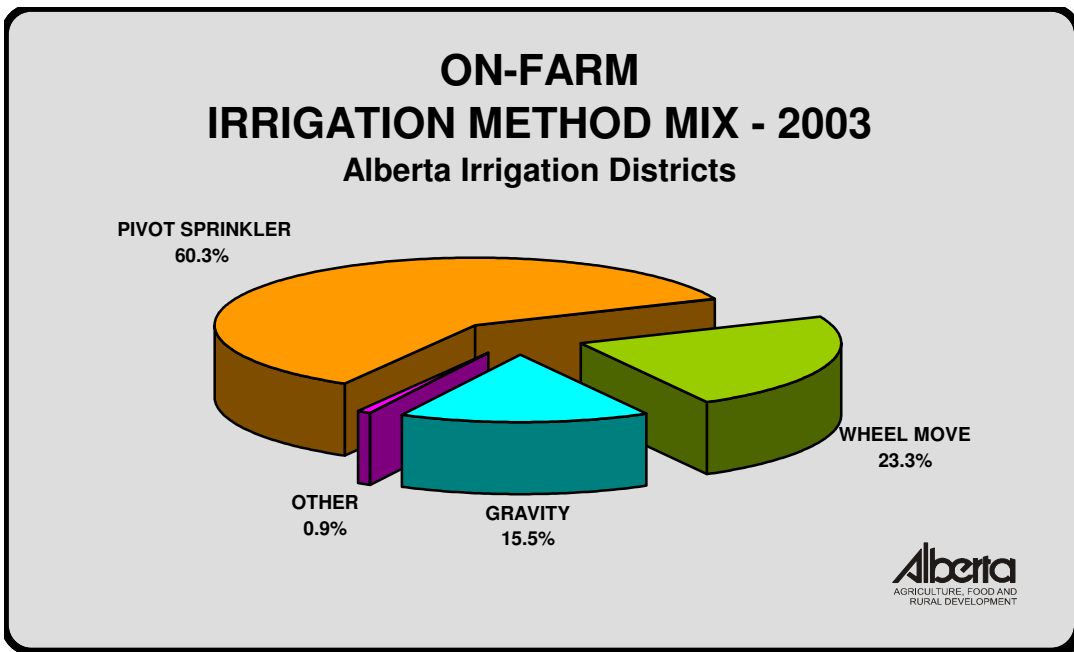


Table IV. ASSESSMENT ROLL ACRES WITHIN THE THIRTEEN IRRIGATION DISTRICTS

YEAR	AID	BRID	EID	LID	LNID	MID	MVID	RCID	RID	SMRID	TID	UID	WID	TOTAL
1970	6,673	23,783	199,729	4,523	89,360	8,506	3,719	2,068	20,847	197,540	57,484	33,353	44,006	691,591
71	6,548	24,071	200,459	4,343	89,883	8,105	3,719	2,068	20,349	199,572	59,172	33,353	43,949	695,591
72	3,131	24,196	202,225	4,305	89,379	9,042	3,719	2,068	20,269	204,051	59,833	33,353	43,899	699,470
73	3,081	26,756	205,481	4,305	98,206	9,182	3,719	2,068	20,647	216,136	61,692	33,353	43,919	728,545
74	3,081	118,741	207,245	4,421	105,958	9,077	3,717	2,068	23,257	237,244	63,823	34,034	44,219	856,885
1975	3,081	131,764	212,982	4,430	108,106	8,871	3,720	2,068	26,920	252,019	62,692	33,358	45,311	895,322
76	3,081	139,665	219,405	4,430	109,629	9,069	3,720	2,069	28,350	262,231	66,423	33,358	52,190	933,620
77	3,081	147,795	224,967	4,430	111,735	9,480	3,720	1,319	31,626	274,301	68,178	33,617	68,549	982,798
78	3,104	153,120	227,202	4,431	111,947	10,737	3,717	1,776	31,570	284,151	68,815	33,651	71,603	1,005,824
79	3,104	150,160	227,254	4,477	111,924	10,797	3,710	1,776	31,524	287,329	69,828	33,546	74,525	1,009,954
1980	3,104	164,889	229,110	4,477	112,562	10,797	3,710	1,776	33,681	293,126	70,368	33,544	76,029	1,037,173
81	3,096	174,641	230,553	4,457	113,845	10,963	3,710	1,776	35,385	299,548	70,819	33,417	79,633	1,061,843
82	3,127	179,613	239,651	4,423	114,919	11,647	3,710	1,716	39,130	301,446	71,529	33,383	81,864	1,086,158
83	2,916	181,174	244,099	4,440	116,745	12,357	3,710	1,776	39,148	313,728	72,623	33,448	81,480	1,107,644
84	3,051	183,529	244,243	4,440	117,869	13,047	3,710	1,776	41,729	319,712	72,971	33,534	82,974	1,122,585
1985	3,399	185,034	246,658	4,460	118,883	14,218	3,710	1,319	44,990	328,063	73,063	33,854	84,245	1,141,896
86	3,444	189,202	247,804	4,460	126,307	14,579	3,690	1,210	44,950	331,493	73,314	34,336	83,924	1,158,713
87	3,444	190,263	249,372	4,479	128,867	14,885	3,690	1,210	44,407	334,285	73,654	34,450	85,405	1,168,411
88	3,435	192,424	252,432	4,709	131,565	15,030	3,690	1,210	44,196	339,091	73,602	34,615	86,198	1,182,197
89	3,500	194,977	256,353	4,729	133,620	15,569	3,700	1,210	44,144	342,451	74,898	34,818	87,242	1,197,211
1990	3,500	199,980	260,523	4,742	135,632	15,099	3,728	1,210	44,044	349,849	74,568	34,769	88,480	1,216,124
91	3,527	201,070	263,889	4,762	137,719	16,665	3,728	1,210	44,305	350,108	77,740	34,687	88,112	1,227,522
92	3,519	202,499	269,462	4,800	139,688	16,391	3,734	1,210	44,279	351,393	78,177	34,868	87,949	1,237,969
93	3,519	204,466	270,008	4,780	138,095	16,775	3,737	1,210	44,229	353,039	78,412	34,772	87,453	1,240,495
94	3,519	205,983	272,024	4,780	141,517	16,785	3,727	1,210	44,219	353,466	78,629	34,438	86,725	1,247,022
1995	3,519	207,652	273,848	4,780	143,608	17,908	3,727	1,210	43,678	356,618	78,676	34,428	86,942	1,256,594
96	3,519	209,560	276,405	4,760	147,241	18,169	3,727	1,210	44,315	358,399	79,069	34,506	87,258	1,268,138
97	3,519	209,686	279,966	4,760	150,843	18,300	3,713	1,210	44,810	360,659	79,788	34,353	86,284	1,277,891
98	3,519	210,690	280,573	4,769	153,365	18,300	3,722	1,210	45,533	360,780	80,455	34,352	86,771	1,284,039
99	3,609	211,152	281,107	4,769	154,886	18,300	3,722	1,210	45,751	367,161	81,984	34,352	88,131	1,296,134
2000	3,609	210,352	281,720	4,763	157,825	18,300	3,722	1,210	45,888	369,771	82,257	34,329	87,236	1,300,982
01	3,611	209,927	281,710	4,763	163,878	18,300	3,712	1,210	46,235	370,925	82,261	34,329	87,924	1,308,785
02	3,611	214,279	282,516	4,763	163,870	18,300	3,712	1,210	46,304	371,319	82,284	34,423	96,512	1,323,103
03	3,611	214,585	282,961	4,763	164,288	18,320	3,712	1,150	46,304	372,114	82,562	34,422	96,646	1,325,438

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Notes: - BRID increased 94,000 acres in 1974 with the amalgamation of the BRID and the Bow River Project (Federal).
 - Assessment roll acres include "irrigation", "terminable" and "annual" acres. Only "irrigation" and "terminable" acres are considered in district expansion limits.

Table V. ACRES ACTUALLY IRRIGATED WITHIN THE THIRTEEN IRRIGATION DISTRICTS

YEAR	AID	BRID	EID	LID	LNID	MID	MVID	RCID	RID	SMRID	TID	UID	WID	TOTAL	
1911										47,000			500	47,500	
12										76,200			500	76,700	
13										76,200			2,600	78,800	
14			7,806							76,200			8,448	92,454	
1915			7,806							76,200			512	84,518	
16			1,497							71,281			859	73,637	
17			9,605							91,780			3,657	105,042	
18			24,440							102,900			25,191	152,531	
19			43,460							112,569			31,908	187,937	
1920		4,240	60,762							60,893	2,000		4,083	131,978	
21		9,400	88,299							75,550	10,352		33,618	217,219	
22		9,509	93,375							75,558	13,122		49,752	241,316	
23		11,249	42,928		6,963					72,345	3,625		3,074	140,184	
24		9,720	84,200		29,991					71,700	13,051	5,264	24,297	238,223	
1925		13,252	72,994		43,628					81,110	13,472	10,000	5,384	239,840	
26		13,467	74,401		56,395					78,399	14,385	10,026	19,561	266,634	
27		810	7,921		10,012	1,235				20,365	576	41	1,273	42,233	
28		19,373	45,677		33,436	800			6,800	21,153	3,171	2,577	3,892	136,879	
29		29,260	78,610		61,231	4,000			6,634	25,713	10,094	3,102	37,394	256,038	
1930		31,207	89,913		70,007	5,161			7,000	67,004	19,322	5,847	41,570	337,031	
31		29,803	90,724		70,408	3,400	300		9,000	68,089	19,914	12,983	47,593	352,214	
32		26,379	90,651		41,842	4,000	800		10,000	68,000	18,998	11,500	8,680	280,850	
33		22,440	96,019		62,416	4,000	1,168		12,000	70,000	18,854	10,500	40,812	338,209	
34		22,705	101,566		54,200	4,000	1,950		13,000	70,000	18,490	10,000	31,131	327,042	
1935		25,257	143,997		73,022	4,000	3,000		13,000	70,000	19,471	12,000	19,109	382,856	
36		27,170	111,781		62,790	4,000	2,900		13,000	75,274	19,123	18,000	44,614	378,652	
37		30,817	124,645		70,020	4,000	3,500		13,000	72,250	21,296	17,500	50,866	407,894	
38		34,614	133,928		73,297	4,000	3,500		12,000	75,749	20,880	10,000	35,775	403,743	
39		36,874	141,688		56,712	3,700	3,200		12,000	76,492	18,485	10,500	11,647	371,298	
1940		37,906	146,211		72,492	3,700	3,000		13,000	76,639	21,391	10,500	20,134	404,973	
41		35,312	156,501		63,575	3,700	3,400		14,000	76,579	15,103	11,000	20,144	399,314	
42		37,946	166,453		31,102	3,700	3,400		10,000	57,575	14,108	12,000	9,194	345,478	
43		35,143	168,496		67,777	3,500	3,254		12,000	75,707	20,935	12,000	7,666	406,478	
44		37,266	167,094	526	75,927	3,500	3,400		12,000	75,725	21,325	13,000	20,000	429,763	
1945		38,838	167,100	1,000	57,126	3,500	3,300		12,000	75,766	21,218	13,000	20,000	412,848	
46		42,251	166,328	1,300	64,894	3,500	3,000		12,000	76,013	21,222	13,500	19,000	423,008	
47		43,611	168,580	1,300	57,343	3,500	3,500		12,000	110,848	19,141	7,453	20,000	447,276	
48		44,160	172,894	1,500	55,374	3,500	3,700		12,000	76,351	17,720	2,970	12,000	402,169	
49		46,975	177,084	1,500	72,807	3,500	3,300		12,000	70,117	21,533	19,228	26,345	454,389	
1950		36,508	180,000	2,500	78,721	3,500	3,300		12,000	77,674	21,864	9,758	23,100	448,925	
51		24,283	183,316	941	21,979	3,500	100		12,000	83,682	8,739	1,869	1,000	341,409	
52		40,416	149,289	941	35,314	3,500	3,350		12,000	86,297	21,251	6,072	700	359,130	
53		40,000	114,776	980	37,409	5,000	3,392	1,100	13,000	76,624	22,503	8,894	500	324,178	
54		40,000	187,612	254	58,745	7,000	3,392	2,100	16,000	102,266	27,224	10,333	1,500	456,426	
1955		40,000	190,976	423	31,753	7,000	3,132	1,500	16,000	81,100	20,530	10,115	5,000	407,529	
56		109,400	191,568	852	31,588	7,000	2,773	1,800	15,500	98,647	21,009	11,082	6,000	497,219	
57		55,374	189,792	2,779	51,809	7,000	2,733	1,685	16,000	116,713	21,579	15,886	7,000	488,350	
58		56,995	188,928	1,542	51,916	7,000	2,760	1,500	15,500	123,440	22,854	11,032	9,870	493,337	
59	360	54,514	188,721	1,542	46,459	7,000	2,789	405	15,800	155,155	25,426	17,761	9,930	525,862	
1960		440	71,392	189,761	1,542	71,006	5,000	2,789	200	15,200	179,477	29,448	16,536	12,000	594,791
61	1,800	80,603	189,421	1,542	73,637	6,000	2,760	200	18,300	157,300	30,747	23,095	23,000	608,405	
62	2,177	83,259	190,866	4,187	73,317	7,000	2,760	200	18,500	155,500	36,029	28,465	30,000	632,260	
63	2,315	87,267	192,324	4,511	63,000	7,250	2,789	200	18,500	170,000	33,902	27,012	25,000	634,070	
64	2,523	86,034	193,381	4,511	70,575	7,500	2,789	200	18,000	170,000	39,015	19,376	24,000	637,904	
1965		2,523	44,507	194,824	4,511	22,778	3,000	2,789	1,500	15,000	165,000	26,005	9,805	2,750	494,992
66		2,523	40,423	195,905	4,523	19,196	4,000	2,789	1,050	16,000	165,000	25,904	12,725	3,100	493,138
67		2,523	71,936	196,549	4,523	47,962	5,000	2,789	1,250	17,000	160,000	38,235	11,866	12,870	572,503
68		2,523	82,876	198,352	4,523	56,993	4,400	2,789	900	15,200	154,336	45,420	10,109	10,000	588,421
69		2,523	79,980	198,248	4,523	35,902	4,500	2,789	900	15,000	124,879	45,980	10,228	13,500	538,952
1970		2,523	77,580	199,729	4,523	49,783	5,000	2,789	1,000	15,000	134,982	50,094	15,019	15,000	573,022
71		2,424	81,018	166,219	4,343	60,207	5,500	2,789	1,100	15,000	149,444	52,185	14,417	16,000	570,646
72		2,400	82,928	175,915	4,305	58,817	5,750	2,000	675	15,000	147,884	52,470	11,061	17,000	576,205
73		2,400	98,185	183,279	4,305	80,995	5,600	3,720	800	15,000	176,120	58,826	22,233	19,000	670,463
74		2,424	108,021	188,657	4,305	90,085	6,000	3,737	700	18,000	190,017	60,981	11,710	22,000	706,637
1975		2,400	116,155	179,095	4,430	92,850	6,000	3,000	600	21,500	171,883	44,606	4,952	34,036	681,507
76		2,400	125,380	201,438	4,600	96,661	9,070	2,910	700	22,680	213,085	59,116	13,355	39,824	791,219
77		2,500	131,492	208,785	4,430	97,829	7,000	2,000	350	30,000	232,072	64,115	15,000	43,525	839,098
78		2,400	127,236	204,192	4,430	93,562	6,000	2,775	578	31,060	198,755	56,940	8,671	33,329	769,928
79		2,500	133,517	213,837	4,476	100,487	8,000	2,900	623	31,264	249,232	62,635	13,899	46,570	869,940
1980		2,500	134,493	212,524	4,476	95,979	8,000	2,900	600	19,137	251,914	63,202	12,607	43,986	852,318
81		2,500	140,300	216,200	4,476	90,552	8,650	2,783	0	19,462	259,564	66,206	15,064	28,389	854,146
82		1,200	152,144	216,620	3,000	104,533	8,500	3,154	650	25,169	268,916	67,305	10,054	41,996	903,241
83		1,200	168,461	231,125	3,000	108,141	9,000	3,154	650	28,055	288,969	68,474	12,734	46,638	969,601
84		1,200	173,334	238,000	3,000	102,301	10,200	3,154	600	34,728	300,071	69,847	12,313	46,638	995,386
1985		2,933	174,087	244,763	3,664	114,635	13,000	3,184	700	36,286	305,560	70,133	12,620	49,666	1,031,231
86		2,933	174,903	246,916	3,600	113,663	13,000	3,184	700	36,008	307,875	69,928	13,146	48,000	1,033,856
87		2,200	178,482	245,514	4,076	119,562	12,400	3,321	700	36,008	305,964	69,413	12,526	46,984	1,037,150
88		2,500	173,400	241,494	3,900	124,555	13,436	3,100	500	36,496	316,223	69,581	14,536	52,950	1,052,671
89		1,962	181,106	249,623	3,900	127,330	13,555	2,000	0	35,766	323,400	70,278	11,693	52,153	1,072,766
1990		2,446	183,147	253,261	4,500	127,439	14,000	2,500	0	36,911	338,274	73,329	11,523	49,000	1,096,330
91		2,473	182,932	246,083	4,200	130,989	15,000	2,880	650	32,847	319,745	73,169	11,548	48,300	1,070,816
92		2,519	182,543	256,342	4,200	131,305	15,240	2,880	0	36,788	324,477	74,229	15,499	43,889	1,089,911
93		0	184,463	259,778	0	67,565	0	0	0	0	262,718	66,158	0	40,00	

Table VI. IRRIGATION DISTRICTS ANNUAL WATER RATES
(\$ per assessed acre per year)

YEAR	AID	BRID	EID	LID	LNID	MID	MVID	RCID	RID	SMRID	TID	UID	WID
1982	\$2.50	\$6.50	\$6.50	\$5.00	\$12.00	\$6.00	\$3.00	\$3.00	\$6.25	\$12.00	\$10.75	\$3.25	\$6.30
83	\$5.00	\$9.00	\$6.75	\$8.00	\$12.50	\$6.00	\$5.20	\$3.00	\$6.50	\$12.00	\$11.00	\$3.25	\$6.50
84	\$6.00	\$10.00	\$7.00	\$8.00	\$12.50	\$6.00	\$5.20	\$3.00	\$6.50	\$12.00	\$11.00	\$3.25	\$6.75
1985	\$6.00	\$10.00	\$7.00	\$7.50	\$12.50	\$6.00	\$5.20	\$4.00	\$6.50	\$12.00	\$11.00	\$3.25	\$7.25
86	\$6.00	\$10.00	\$7.25	\$7.50	\$12.50	\$6.00	\$5.20	\$6.00	\$6.50	\$13.00	\$11.00	\$3.25	\$7.47
87	\$6.00	\$10.00	\$7.50	\$7.50 + pipeline surcharge	\$12.50 + pipeline surcharge	\$6.00	\$5.20	\$6.00	\$6.50	\$13.00	\$11.00	\$3.25	\$7.47
88	\$7.00 + pipeline surcharge	\$10.00	\$7.50	\$8.00 + pipeline surcharge	\$12.50 + pipeline surcharge	\$6.00	\$5.20	\$6.00	\$6.50	\$13.00	\$12.00	\$3.25	\$7.70
89	\$7.00 + pipeline surcharge	\$10.00	\$8.00	\$8.00 + pipeline surcharge	\$13.50 + pipeline surcharge	\$6.00	\$6.20	\$6.00	\$6.50	\$13.25	\$12.00	\$3.50	\$8.00
1990	\$8.00 + pipeline surcharge	\$10.00	\$8.50	\$8.00 + pipeline surcharge	\$13.50 + pipeline surcharge	\$6.00	\$6.20	\$6.00	\$6.50	\$14.00	\$12.00	\$3.75	\$11.00
91	\$8.00 + pipeline surcharge	\$10.00	\$8.50	\$7.00 + pipeline surcharge	\$13.50 + pipeline surcharge	\$6.00 + pipeline surcharge	\$6.20	\$6.00	\$6.50	\$14.00	\$12.00	\$4.00	\$13.00
92	\$8.00 + pipeline surcharge	\$11.00	\$8.50	\$7.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$6.00 + pipeline surcharge	\$6.20	\$6.00	\$6.50	\$14.00	\$12.00	\$4.25	\$13.50
93	\$8.00 + pipeline surcharge	\$11.00	\$8.50	\$7.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$6.00 + pipeline surcharge	\$6.20	\$6.00	\$6.50	\$14.25	\$12.00	\$4.50	\$13.50 + pipeline surcharge
94	\$8.00 + pipeline surcharge	\$12.00	\$8.50	\$7.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$6.50 + pipeline surcharge	\$6.20	\$6.00	\$7.00	\$15.25	\$12.00	\$4.50	\$14.75 + pipeline surcharge
1995	\$8.00 + pipeline surcharge	\$13.00	\$8.50	\$8.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$7.00 + pipeline surcharge	\$8.00	\$8.50	\$7.00	\$16.15	\$12.00	\$4.50	\$14.75 + pipeline surcharge
96	\$8.00 + pipeline surcharge	\$13.00	\$8.50	\$8.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$7.00 + pipeline surcharge	\$8.00	\$8.50	\$7.50	\$16.15	\$12.00	\$6.50	\$15.25 + pipeline surcharge
97	\$8.00 + pipeline surcharge	\$13.00	\$7.50	\$8.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$7.00 + pipeline surcharge	\$8.00	\$8.50	\$7.50	\$16.15	\$12.00	\$6.75	\$15.25 + pipeline surcharge
98	\$8.00 + pipeline surcharge	\$13.50	\$7.50	\$8.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$7.50 + pipeline surcharge	\$8.00	\$8.50	\$8.50	\$16.65	\$12.00	\$7.00	\$16.25 + pipeline surcharge
99	\$8.00 + pipeline surcharge	\$14.50	\$7.50	\$8.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$7.50 + pipeline surcharge	\$8.00	\$8.50	\$8.50	\$17.00	\$12.00	\$7.25	\$16.25 + pipeline surcharge
2000	\$8.00 + pipeline surcharge	\$14.50	\$7.50	\$8.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$7.50 + pipeline surcharge	\$8.00	\$8.50	\$8.50	\$17.50	\$12.00	\$7.50	\$16.25 + pipeline surcharge
01	\$8.00 + pipeline surcharge	\$14.50	\$7.50	\$8.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$7.50 + pipeline surcharge	\$8.00	\$8.50	\$8.50	\$17.90	\$11.00	\$7.50	\$16.25 + pipeline surcharge
02	\$8.00 + pipeline surcharge	\$14.50	\$7.50	\$8.00 + pipeline surcharge	\$14.00 + pipeline surcharge	\$7.50 + pipeline surcharge	\$8.00	\$6.00	\$8.50	\$16.90	\$11.00	\$7.75	\$16.25 + pipeline surcharge
03	\$9.00 + pipeline surcharge *	\$15.00	\$7.50**	\$10.00 + pipeline surcharge *	\$14.00 + pipeline surcharge *	\$8.00 + pipeline surcharge *	\$8.00	\$13.58	\$8.50	\$17.90	\$11.00	\$8.25	\$16.25 + pipeline surcharge *

Note: - * The districts charge an additional levy for acres serviced by a pressure pipeline.

- AID - \$2.00 per acre for pipeline delivery in township 2
- \$3.00 per acre for pipeline delivery in township 3
- LID - \$3.00 per acre for pipeline delivery
- LNID - \$0.12 per psi for pressure up to and including 40 psi
- \$0.25 per psi for pressure above 40 psi
- MID - \$1.00 per 10 psi for pressure
- WID - \$0.26 per psi for pressure

** The Eastern Irrigation District waived the irrigation rate for irrigated acres in 2003 in recognition of the local BSE related agricultural economic impacts.

**Table VII. CROPS GROWN WITHIN THE BLOOD TRIBE
IRRIGATION PROJECT (BTIP)
2003**

CROP TYPE		B.T.I.P.	
		licensed and covered by an irrigation system	
		Irrigated this year	Not developed or irrigated
CEREALS	Barley		691
	CPS Wheat	565	
	Durum	1,869	
	Grain Corn		
	Hard Spring Wheat	1,487	2,244
	Malt Barley		
	Oats		106
	Rye		
	Soft Wheat		
	Winter Wheat		
FORAGES	Alfalfa - Two cuts	250	
	Alfalfa - Three cuts		
	Alfalfa Hay		1,629
	Alfalfa Silage		
	Barley Silage		
	Barley Silage (underseeded)		
	Brome Hay		
	Corn Silage		
	Grass Hay		
	Green Feed	2,822	
	Milk Vetch		
	Native Pasture		
	Oats Silage		
	Sorghum/Sudan Grass		
	Tame Pasture		
Timothy Hay	7,572		
Tritcale Silage			
OIL SEEDS	Canola	2,947	1,159
	Flax		
	Hyola		
	Linola		
	Mustard		
SPECIALTY CROPS	Alfalfa Seed		
	Canary Seed		
	Caraway Seed		
	Carrots		
	Dill		
	Dry Beans		
	Dry Peas		
	Faba Beans		
	Fresh Corn (sweet)		
	Fresh Peas		
	Grass Seed	868	
	Hemp		
	Lawn Turf		
	Lentils		
	Market Gardens		
	Mint		
	Monarda		
	Nursery		
	Onions		
	Potatoes		
Safflower			
Seed Potatoes			
Small Fruit			
Sugar Beets			
Sunflower			
OTHER	Miscellaneous		
	Non Crop		
	Summer Fallow		
	Unknown (not reported)		
Total Development		18,380	5,829
Total Licenced Acres		24,209	

Table VIII. ALBERTA IRRIGATION DISTRICTS ANNUAL IRRIGATION DIVERSIONS
2003

OLDMAN RIVER BASIN													BOW RIVER BASIN				
DISTRICT	AID	LID	LNID	MID	MVID	RCID	RID	SMRID	TID	UID	BRID	EID	WID	TOTALS			
WATER LICENCE SOURCE	diversion from Belly River	diversion from Belly River	diversion from Oldman River	diversion from SMRID main canal	diversion from Belly River	diversion from Gros Ventre Ck. and Ross Ck.	diversion from SMRID main canal	diversion from Belly, Waterton and St. Mary Rivers	diversion from SMRID main canal	diversion from Belly and Waterton Rivers	diversion from Bow River	diversion from Bow River	diversion from Bow River				
EXPANSION LIMITS (acres)	3,560	4,770	177,000	18,300	4,240	1,210	46,500	372,000	82,200	34,400	211,000*	311,000	95,000	1,361,180			
WATER LICENCE ALLOCATION (acre ft.)	9,000	12,000	317,000	34,000	8,000	3,000	81,000	722,000	158,000	67,510	450,000	762,000	160,400	2,783,910			
YEAR	VOLUME OF WATER DIVERTED (acres ft.)																
1976			154,844	7,600	1,981	36,414	338,188	86,330	14,988	309,000	565,100	153,222	1,668,677				
77			169,436	14,300	2	48,317	423,509	122,209	31,050	304,600	572,100	182,008	1,822,531				
78			85,934	3,900	2,488	12,848	202,066	35,303	10,620	204,268	387,100	102,959	1,047,487				
79			138,630	9,500	5,561	24,521	303,097	94,736	23,517	262,593	542,846	138,630	1,545,631				
1980			134,576	8,100	0	19,944	340,254	94,588	17,754	287,892	546,586	136,198	1,586,262				
81			132,955	5,910	264	22,162	379,075	103,427	12,242	307,452	577,969	106,630	1,655,986				
82			142,683	9,404	3,551	27,697	332,337	91,988	19,133	281,000	481,258	129,712	1,516,773				
83			190,790	9,800	1,354	14,955	361,537	97,674	24,078	313,897	590,299	146,737	1,701,121				
84			177,543	14,106	67	17,544	492,674	101,643	25,093	322,335	657,640	162,140	1,970,785				
1985			184,029	13,457	4,250	27,302	425,583	95,751	24,193	337,409	655,188	158,897	1,943,406				
86	5,020	8,500	182,408	13,515	3,212	22,045	406,536	101,597	20,106	309,580	680,592	131,333	1,883,688				
87	4,074	6,858	181,597	11,761	3,180	40,559	426,434	96,621	19,958	639,928	129,712	1,838,948					
88	4,392	5,644	181,597	11,761	1,321	55,411	563,621	121,688	30,462	389,186	730,274	171,868	2,331,477				
89	6,910	9,398	222,943	23,414	256	34,540	504,255	78,396	18,372	301,442	605,148	122,416	1,884,988				
1990	3,754	5,328	192,136	16,196	3,290	32,000	467,244	98,572	16,133	380,907	689,178	128,091	2,033,127				
91	3,556	4,468	184,840	16,521	2,662	30,702	391,634	94,956	17,003	334,792	629,872	147,547	1,860,328				
92	2,170	11,216	137,008	12,261	4,118	32,070	441,745	101,122	16,628	336,782	625,650	135,387	1,856,253				
93	2,126	1,824	61,775	5,792	3,300	13,574	218,375	59,278	8,107	210,340	423,551	114,309	1,125,339				
94	4,110	4,319	180,000	8,073	758	28,328	415,162	103,028	16,827	364,126	559,476	132,104	1,819,636				
1995	1,802	1,548	110,200	2,180	208	17,600	385,290	79,818	7,710	302,305	602,098	116,254	1,627,874				
96	4,035	4,892	209,600	15,539	2,660	45,527	498,483	127,436	10,832	398,182	615,478	117,065	1,989,814				
97	6,051	5,193	193,574	7,337	1,529	38,043	466,000	115,582	20,364	343,428	572,151	116,740	1,887,752				
98	4,674	5,331	160,800	13,514	2,323	33,834	424,700	116,300	14,895	303,965	636,500	142,367	1,862,729				
99	3,485	11,415	179,987	20,800	2,499	42,960	411,532	105,208	20,900	296,524	426,768	88,410	1,614,208				
2000	6,000	11,240	245,976	30,160	6,700	58,202	540,200	140,046	37,200	417,897	675,000	156,400	2,325,021				
01	3,952	7,593	275,475	17,109	6,814	40,207	461,200	94,770	27,526	413,780	685,000	160,000	2,193,426				
02	2,938	9,835	109,704	11,940	3,033	23,552	543,600	53,324	21,283	562,000	149,577	149,577	1,824,327				
03	4,598	7,964	187,518	18,020	5,889	49,723	466,800	86,725	32,500	279,798	459,700	128,700	1,727,935				
Percent of Licence (2003)	51.1%	66.4%	59.2%	53.0%	73.6%	0.0%	61.4%	64.7%	54.9%	48.1%	62.2%	60.3%	80.2%	62.1%			
Avg. Volume	4,129	6,636	167,342	12,536	3,482	31,806	415,433	96,621	20,374	316,234	585,306	134,372	1,790,951				

PREPARED BY: ALBERTA AGRICULTURE, FOOD AND RURAL DEVELOPMENT, IRRIGATION BRANCH

Notes: -Data is obtained from Water Survey of Canada (WSC), Alberta Environment and Irrigation Districts annual reports.
 -MID has another turnout which diverts water from the St. Mary Project Headworks Canal. There is no data recorded at this site.
 -RCID has a second supply from Ross Creek, but data has not been consistently recorded at that location.
 -*This expansion limit for BRID will increase in the future by 21,000 acres as a result of a plebiscite vote in March, 2004.

Figure 3. IRRIGATION DISTRICTS ANNUAL DIVERSIONS

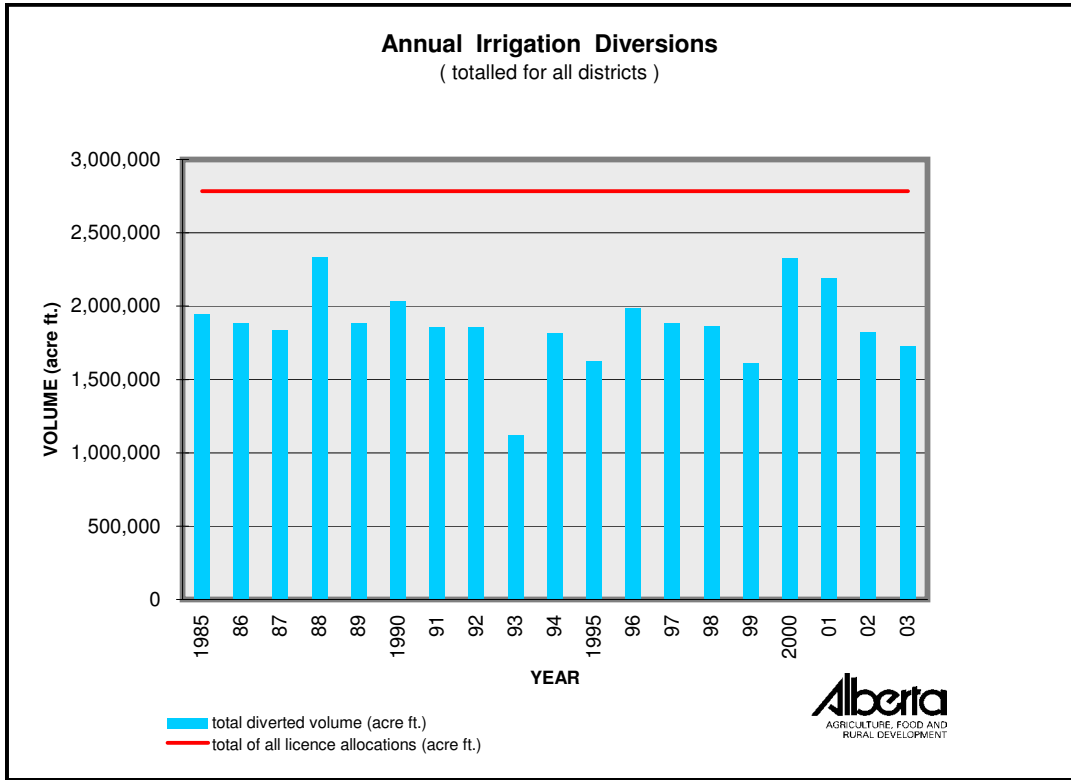


Table IX. CONVEYANCE INFRASTRUCTURE BY TYPE OF WORKS
Rehabilitated and Un-rehabilitated - 2003

Irrigation District	REHABILITATED												UN-REHABILITATED		Total Conveyance Works (km)
	Membrane-Lined Canals		Pipelines - Closed		Pipelines - Open		Concrete - Lined		Earth Canals		Un-Rehabilitated Canals		Length (km)	% of District Works	
	Length (km)	% of District Works	Length (km)	% of District Works	Length (km)	% of District Works	Length (km)	% of District Works	Length (km)	% of District Works	Length (km)	% of District Works			
AID	0.1	0.3%	15.6	47.4%	0.1	0.3%	0.0	0.0%	1.9	5.8%	15.2	46.2%			33
BRID	172.2	16.0%	243.9	22.7%	16.5	1.5%	37.5	3.5%	225.7	21.0%	379.3	35.3%			1075
EID	262.4	13.5%	582.2	29.9%	36.9	1.9%	0.0	0.0%	242.2	12.4%	821.8	42.2%			1946
LID	2.2	3.7%	17.1	28.6%	0.4	0.7%	0.0	0.0%	22.0	36.9%	18.0	30.2%			60
LNID	53.1	7.8%	219.9	32.3%	18.1	2.7%	53.4	7.8%	72.7	10.7%	264.0	38.8%			681
MID	1.2	1.2%	48.6	47.9%	1.2	1.2%	0.4	0.4%	36.9	36.4%	13.1	12.9%			101
MVID	0.0	0.0%	9.9	25.6%	1.7	4.4%	0.0	0.0%	17.8	46.0%	9.3	24.0%			39
RCID	1.3	6.5%	0.0	0.0%	1.5	7.5%	0.0	0.0%	9.4	47.0%	7.8	39.0%			20
RID	2.4	1.0%	84.2	35.0%	7.6	3.2%	0.0	0.0%	101.5	42.2%	44.6	18.6%			240
SMRID	73.5	4.1%	653.2	36.4%	19.3	1.1%	113.6	6.3%	457.1	25.5%	478.2	26.6%			1795
TID	58.7	17.8%	146.2	44.2%	12.3	3.7%	15.8	4.8%	72.4	21.9%	25.3	7.7%			331
UID	15.4	6.5%	42.7	17.9%	27.2	11.4%	0.2	0.1%	52.5	22.0%	100.7	42.2%			239
WID	34.2	3.2%	46.7	4.3%	30.2	2.8%	5.1	0.5%	143.5	13.3%	821.9	76.0%			1082
Total	677	8.9%	2,110	27.6%	173	2.3%	226	3.0%	1,456	19.1%	2,999	39.3%			7641
Headworks Owned by Alberta Environment (AENV) (km)															
Total Length of Conveyance System in Southern Alberta (km)															7961

NOTE: Rehabilitated infrastructure includes those works re-constructed through:
- the Irrigation Rehabilitation Program (IRP)
- Alberta Environment's headworks improvement program
- Individual district O & M program

Table X. Alberta Potato Acreage

(seeded acres)

Year	Process	Seed	Table	Total
1990	15,383	5,117	7,882	28,382
91	12,300	5,735	6,509	24,544
92	9,700	5,515	6,970	22,185
93	13,115	5,850	6,115	25,080
94	13,210	7,390	6,075	26,675
1995	13,450	7,400	5,765	26,615
96	13,870	8,485	5,085	27,440
97	12,225	9,430	5,025	26,680
98	12,800	10,250	5,100	28,150
99	24,616	10,886	4,698	40,200
2000	32,563	12,037	4,331	48,931
01	34,877	12,595	3,883	51,355
02	37,296	14,644	3,241	55,181
03	40,960	13,690	4,125	58,775

Notes: - data is obtained from the Potato Growers of Alberta
- the above acreage is from the whole province of Alberta, but does not include the potato acreage from market gardens of less than 5 acres
- 45,000 acres from the 2003 total are irrigated

Table XI. Alberta Vegetable Acreage

(seeded acres)

Year	Carrots	Corn	Peas
1995	62	3,884	3,163
96	58	3,869	2,775
97	95	3,044	3,125
98	100	2,818	2,983
99	65	2,442	2,646
2000	79	2,577	2,563
01	90	3,992	3,967
02	145	3,712	4,053
03	87	4,329	4,534

Notes: - data is obtained from the Alberta Vegetable Growers (Processing)
- processing is defined as canned or frozen vegetables for human consumption
- all acres are irrigated

Table XII. IRRIGATION DISTRICT RESERVOIRS

2003

Location	Reservoir	Live storage (dam3)	Live storage (acre-feet)
Bow River Irrigation District	Badger	53,650	43,494
	H reservoir	2,220	1,800
	Lost Lake	5,050	4,094
	Scope	19,740	16,003
Eastern Irrigation District	Cowoki Lake	19,735	16,000
	Crawling Valley	130,500	105,797
	J reservoir	615	500
	Kitsim	26,520	21,500
	Lake Newell	320,215	259,600
	One Tree	2,345	1,901
	Rock Lake	9,250	7,500
	Rolling Hills	46,000	37,292
	Snake Lake	18,230	14,779
	Tilley "A"	33,300	26,996
Tilley "B"	38,235	30,997	
Lethbridge Northern Irrigation District	Park Lake	740	600
	Picture Butte	1,600	1,297
	Vandenburg	114	93
Raymond Irrigation District	Corner Lake	495	400
	Craddock	615	500
	Factory Lake	370	300
St. Mary River Irrigation District	Bullshead	125	101
	Chin	190,330	154,300
	Cross Coulee	2,590	2,100
	Forty Mile	86,345	70,000
	Murray	30,590	24,800
	North East	2,095	1,698
	Raymond	1,600	1,297
	Sauder	37,745	30,600
	Seven Persons	1,355	1,099
	Sherburne Lake	10,625	8,614
Stafford	23,315	18,900	
Yellow Lake	n/a	n/a	
Taber Irrigation District	Fincastle	3,085	2,501
	Horsefly Lake	9,250	7,499
	Taber Lake	6,415	5,200
United Irrigation District	Cochrane Lake	3,100	2,513
Western Irrigation District	Chestermere Lake	5,180	4,200
	Langdon	7,895	6,400
Blood Tribe Irrigation Project	Mokowan	6,000	4,864
Total		1,157,179	938,130

Note: - all resevoirs are off-stream storage sites

Table XIII. PROVINCIALY OWNED AND OPERATED RESERVOIRS
2003

Source Supply for:	Reservoir	Live storage (dam ³)	Live storage (acre-feet)
Bow River Irrigation District	Little Bow	21,078	17,088
	McGregor	351,059	284,604
	Traverse	104,638	84,830
Lethbridge Northern Irrigation District	Keho	95,635	77,531
	Oldman River *	490,180	397,390
Ross Creek Irrigation District	Cavan	4,625	3,750
Mountain View, Leavitt, Aetna	Payne	8,690	7,045
St. Mary Project (SMRID, MID, TID, RID)	Jensen	19,000	15,403
	Milk River Ridge	127,297	103,200
	St Mary *	369,310	299,400
	Waterton *	111,196	90,147
Diversions Outside of Irrigation Districts	Chain Lakes	14,679	11,900
	Little Bow River *	62,700	50,831
	Pine Coulee	51,000	41,346
	Women's Coulee	362	293
Total		1,831,449	1,484,759

Note: - * denotes on-stream storage reservoir

**Table XIV. HYDROELECTRIC PLANTS ASSOCIATED WITH
WATER DISTRIBUTION WORKS**
2003

Location	Owner	Capacity (megawatts)
Oldman Reservoir	ATCO Electric	32.0
Waterton Reservoir	Canadian Hydro	2.8
Belly River Chute	Canadian Hydro	3.0
St. Mary Reservoir	Canadian Hydro	2.5
Taylor Coulee Chute (Jensen Reservoir)	Canadian Hydro	12.7
Raymond Reservoir	Irrican	20.5
Chin Chute (Chin Reservoir)	Irrican	11.0
SMRID main canal drops #4, #5 and #6*	Irrican	7.0

Note: -* to be commissioned in 2004

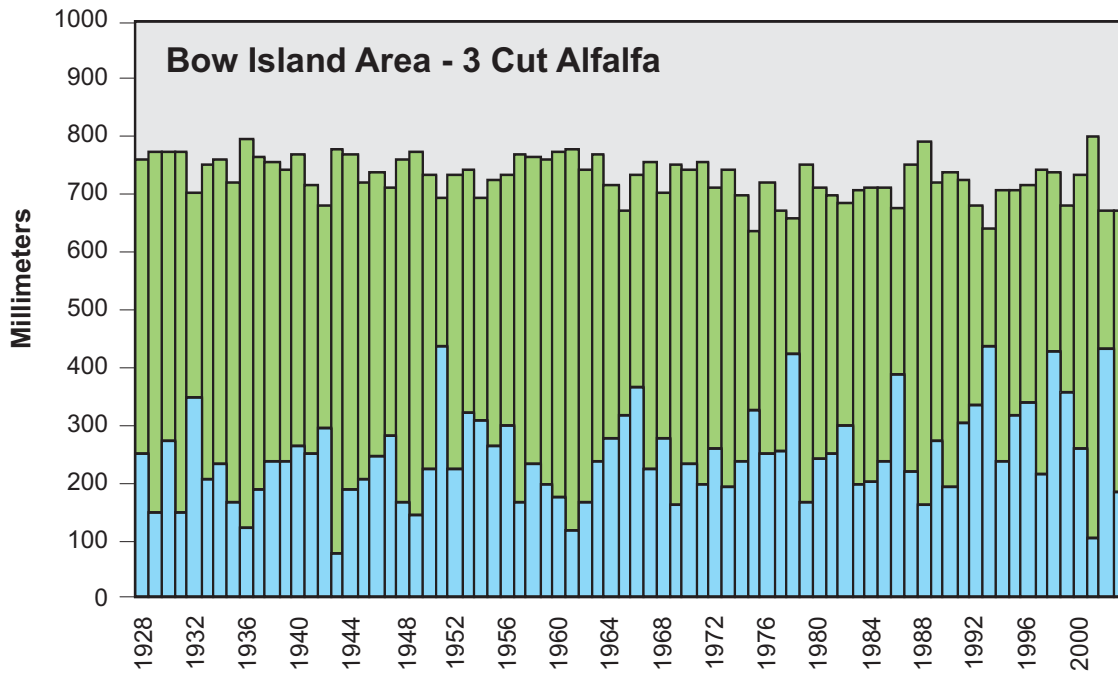
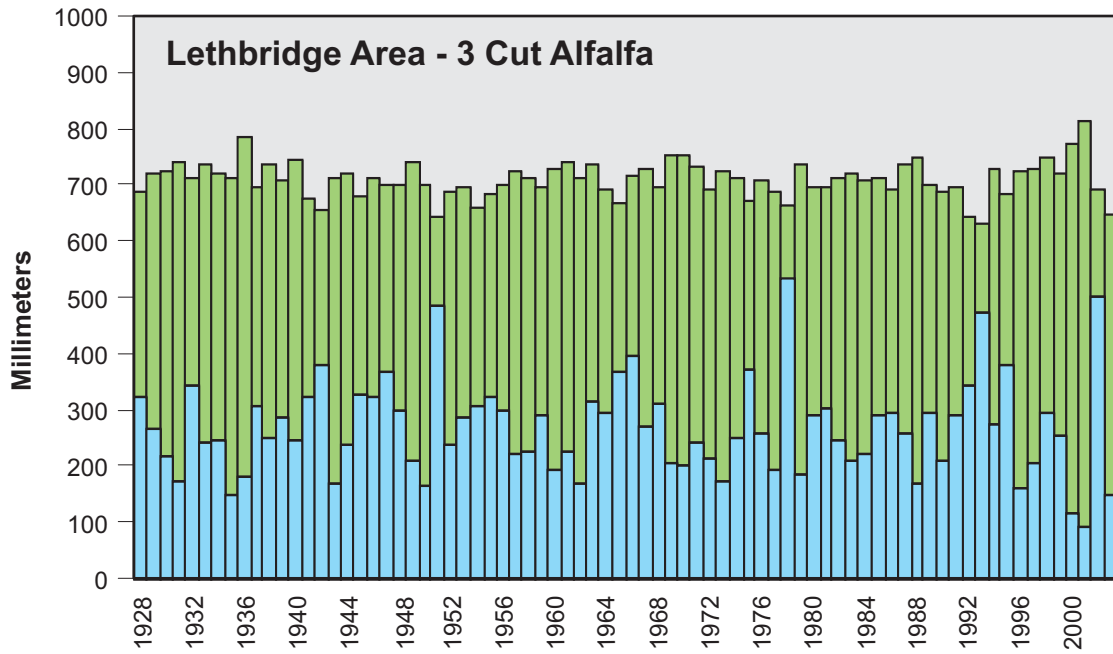
Table XV. PRIVATE WATER LICENCES FOR IRRIGATION IN ALBERTA

There are 2,840 individual irrigation projects, outside of the 13 irrigation districts, irrigating approximately 285,276 acres of farmland in Alberta. These projects vary in size from 1 acre to over several thousand acres of agricultural or horticultural production. Each of these projects is licensed to an individual or a group of producers. The agricultural feasibility of these projects is reviewed by Alberta Agriculture and the licensing is regulated by Alberta Environment.

RIVER BASIN	Total Acres Irrigated	No. of Licences 1 to 100 ac.	No. of Licences 101 to 300 ac.	No. of Licences over 300 ac.
ATHABASCA RIVER	2,501	44	7	1
MILK RIVER	19,388	101	46	15
NORTH SASKATCHEWAN RIVER	28,364	331	58	15
PEACE RIVER	3,517	77	8	0
SOUTH SASKATCHEWAN RIVER				
- Bow River	27,444	155	62	16
- Little Bow River	21,302	115	44	16
- Lower Oldman River	14,508	18	26	12
- Red Deer River	40,639	416	84	19
- South Saskatchewan River	44,789	533	85	22
- Upper Oldman River	7,638	65	21	4
- Waterton / Belly / St. Mary Rivers	53,771	140	71	22
- Willow Creek	21,415	118	63	10
TOTAL (2004)	285,276	2,113	575	152
<u>Year</u>				
2003	283,254	2,108	571	149
2002	275,599	2,100	567	141
2001	272,353	2,085	558	143
2000	277,826	2,076	555	140
1999	257,258	1,863	509	137
1998	255,192	1,884	501	138
1997	253,868	1,893	486	129

Notes: - upper Oldman reach is defined as upstream of the Belly River confluence
- lower Oldman reach is defined as downstream of the Belly River confluence
- 25,000 acres from the Waterton / Belly / St. Mary Rivers category is for the Blood Tribe Agricultural Project
- does not include irrigation licences issued to irrigation districts in southern Alberta
- data is obtained from Alberta Environment
- licence authorization as of January 2004

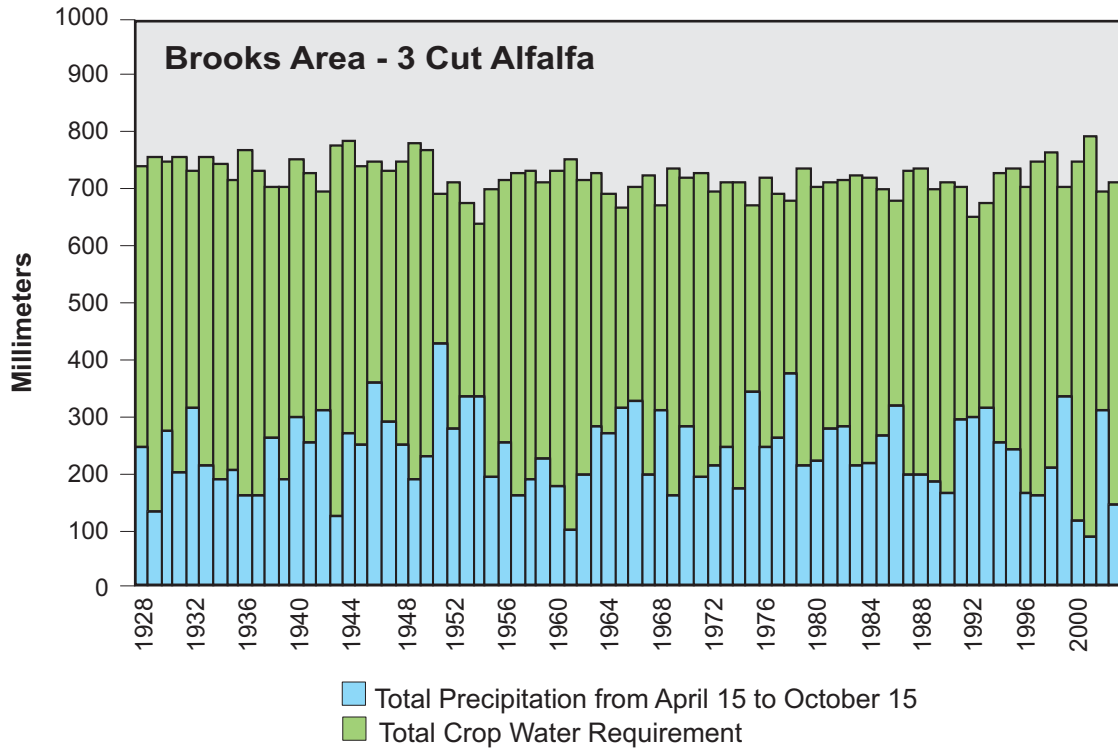
Figure 4. IRRIGATION REQUIREMENT



■ Total Precipitation from April 15 to October 15
■ Total Crop Water Requirement

NOTE: The high water use, 3 cut alfalfa is used in these examples because this crop's annual growing season closely coincides with the annual irrigation season. The difference between the total crop water requirement and total precipitation is the NET irrigation requirement.

Figure 5. IRRIGATION REQUIREMENT



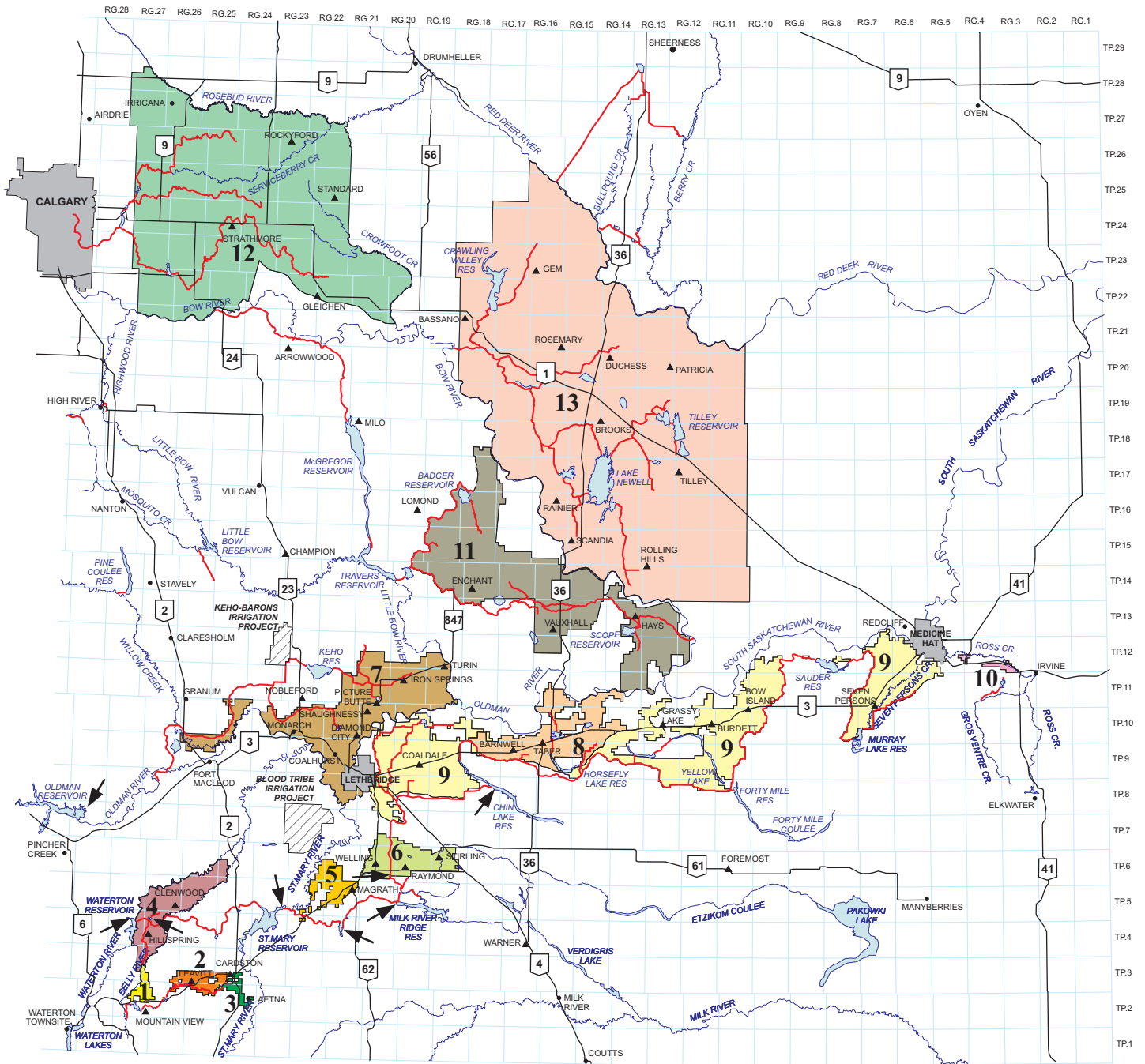
NOTE: The high water use, 3 cut alfalfa is used in these examples because this crop's annual growing season closely coincides with the annual irrigation season. The difference between the total crop water requirement and total precipitation is the NET irrigation requirement.

Table XVI. RAINFALL IN SOUTHERN ALBERTA

(from April 15 to Oct. 15)

AREA	MAXIMUM RAINFALL (mm)	MINIMUM RAINFALL (mm)	AVERAGE RAINFALL (mm)	RAINFALL 2003 (mm)
Lethbridge	534 (1978)*	92 (2001)*	269	148
Bow Island	439 (1993)*	77 (1943)*	248	183
Brooks	430 (1951)*	83 (2001)*	237	142

Note: - *year of rainfall event



- 1 Mountain View Irrigation District
- 2 Leavitt Irrigation District
- 3 Aetna Irrigation District
- 4 United Irrigation District
- 5 Magrath Irrigation District
- 6 Raymond Irrigation District
- 7 Lethbridge Northern Irrigation District
- 8 Taber Irrigation District
- 9 St. Mary River Irrigation District
- 10 Ross Creek Irrigation District
- 11 Bow River Irrigation District
- 12 Western Irrigation District
- 13 Eastern Irrigation District

- ▲ Communities receiving irrigation water
- Communities not receiving irrigation water
- Hydroelectric plants associated with water distribution works
- Main canals

There are 13 irrigation districts in Southern Alberta providing water to 1,323,438 assessed acres of farmland. The infrastructure within these irrigation districts is comprised of approximately 7,961 kilometers of conveyance system, of which 321 kilometers are owned and operated by Alberta Environment.

Alberta's Irrigation Districts