

Revision History: Memorandum to File from Patricia Turney dated October 18, 2007
- Subject: *2006 San Juan River Basin Acreage Inventory*

MEMORANDUM

October 18, 2007

TO: File
FROM: Patricia Turney, NMISC Staff
SUBJECT: 2006 San Juan River Basin Acreage Inventory

This memorandum summarizes the subject inventory's methodology, collected field data, and analysis. NMISC gratefully acknowledges the assistance of the Navajo Nation in allowing the field data collection efforts to proceed on the Nation's lands.

Inventory Methodology and Collected Field Data

NMISC staff developed cultivated field delineations from U.S. Geological Survey DOQQs from the most recent National Aerial Photography Program photography available, the majority of which was flown in 1996-97. NMISC contractors Garda Stock and Thelma Yazzie collected crop type and irrigation method information for each parcel and indicated boundary changes where appropriate. In January 2007, DOQQs based on aerial photography flown in 2005 and 2006 became available from the New Mexico Geospatial Data Acquisition Coordination Committee. NMISC staff re-mapped field data from the 2006 inventory to the new DOQQ base. The ArcInfo database and its associated metadata are available from the author.

NMISC contractors and staff identified the following irrigated crops and other acreage in the Basin during the summer of 2006.

Alfalfa	High density single grass
New alfalfa	Low density mixed grass
Turfgrass	Trees, fruit
Grapes	Trees, other
Corn	Sorghum
Wheat	Oats
Garden	Fallow
Potatoes	Plowed ground
Pumpkins	Cleared land
Melons	Wild native vegetation
Grapes	

NMISC staff aggregated the acres found irrigated as follows for purposes of comparing 2006 data with earlier years of inventory level data.

2006 Crop	Aggregated Crop
Alfalfa, New alfalfa	Alfalfa
Lawn, Turf grass	Sod
Corn, Sorghum	Corn/Sorghum
Garden, Pumpkins, Potatoes, Melons	Misc. Vegetables
High-density single grass	Pasture
Low-density mixed grass	Pasture
Trees	Orchard
Grapes	Orchard
Wheat, Oats	Small Grains
Fallow/irrigated	Distributed across irrigated small grains, pasture, alfalfa
Plowed/irrigated	Distributed across irrigated small grains, pasture, alfalfa
Not marked, no access, cleared land, plowed ground with no irrigation status	Distributed across all categories, including not irrigated

Inventory Data Analysis

Data analysis is contained in the following tables and figure.

- Table 1 lists and describes the hydrologic units and the irrigation areas within each unit.
- Table 2 lists the acreage distribution for the 2006 inventory.
- Figure 1 shows the extent of the San Juan River Basin 2006 inventory.

For analysis purposes, all irrigated plowed parcels and all irrigated fallow parcels were distributed across the irrigated crop categories of small grains, pasture and alfalfa based on the overall cropping pattern for these categories in each irrigation area.

Of the approximately ~~19,000~~ ^{23,000 plus} acres targeted for field data collection, 641 acres were not field-checked, 9 acres were classified as cleared land with no associated irrigation status (i.e., flood, sprinkler, drip or not irrigated) and 362 acres were classified as plowed ground with no associated irrigation status. For analysis purposes, NMISC staff distributed these 1,015 acres across all acreage categories, including not irrigated acreage, based on the overall cropping pattern for each irrigation area within which they were found. Parcels found not irrigated and categorized as “wild native vegetation” or “grass, mixed varieties, low density (including native grasses)” were not included in the categorical distribution and are not included in Table 2. These categories in a non-irrigated state represent natural vegetation that may include both native and introduced species, which grows without benefit of intentional cultivation.

Table 2 acreage data also includes golf courses and residential yards not supplied from municipal water supply systems and not field-checked during the inventory. Golf course acres are directly computed from DOQQ aerial photography and other information sources as described in Memorandum to File dated October 24, 2005, entitled *Golf Course Watering in the San Juan Basin*. Residential yard acres are estimated as described in Memorandum to File dated September 10, 1997, entitled *Residential Yard Watering in the San Juan Basin*.

**Table 1. Irrigation Areas in the San Juan River Basin in New Mexico
By Hydrologic Unit**

Unit	Description of hydrologic drainage	Irrigation areas in unit
1	Navajo River, Pine River, and San Juan River above Navajo Dam	Above Navajo Dam
2	Animas River above the Animas River at Farmington gage	Animas River
3	San Juan River below Navajo Dam and above the San Juan River at Farmington gage (excluding Unit 2)	Above Archuleta, Citizen's Ditch, Archuleta Ditch, Turley Ditch, Hammond area (1), NIIP Blocks 1, 4, 5, 8 (5%), Echo (2)
4	La Plata River above La Plata River near Farmington gage	Upper La Plata (3), La Plata River
5	Chaco River above the mouth	Chaco River, NIIP blocks 3 (89%), 7 (26%) & 8 (84%)
6	San Juan River below the San Juan River at Farmington gage and above the San Juan River at Shiprock gage (excluding Units 4 and 5)	Farmington Glade (4), Farmers Mutual Ditch (5), Jewett Valley, Fruitland, Hogback-East (6), Cambridge, NIIP Blocks 2, 6, 3 (11%), 7 (74%) & 8 (11%)
7	San Juan River below the San Juan River at Shiprock gage (excluding Unit 8)	Hogback-West (7), Cudei
8	Whiskey Creek drainage, Red Wash	Whiskey Creek, Red Wash

Notes:

- 1) Includes Hammond Project and acreage with private water rights exclusive from the Hammond Project.
- 2) Includes only that portion of acreage served by any ditch diversion from the Animas River for which return flow occurs below the Animas River at Farmington gage or to the San Juan River above the mouth of the Animas River
- 3) Includes only acreage served by diversions from the La Plata River above the La Plata River at Stateline gage. The Enterprise Ditch serves lands in this area and in Colorado.
- 4) Includes only acreage served by diversion from Animas River for which return flow occurs to the San Juan River below the San Juan River at Farmington gage.
- 5) Diversion serving this area is from Animas River below the Animas River at Farmington gage and is supplemented by diversion from the San Juan River below the San Juan River at Farmington gage.
- 6) Includes only that portion of the Hogback Project above Shiprock.
- 7) Includes only that portion of the Hogback Project below Shiprock, including the Hogback Extension, which is served by diversion from the San Juan River above the San Juan River at Shiprock gage.
- 8) The Whiskey Creek drainage includes the Crystal, New Mexico area that drains to Chinle Wash. Its confluence with the San Juan River is located below Bluff, Utah. The Red Wash confluence with the San Juan River is located in New Mexico just east of the Arizona-New Mexico state line.

Table 2

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IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total	
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod		
ANIMAS 2006 Hydrologic Unit 2	Alfalfa hay	Flood	1125.4								1125.4
	Alfalfa, new	Flood	0.0								0.0
	Corn, grain	Flood		32.1							32.1
	Corn, silage	Flood		34.7							34.7
	Misc. vegetables	Flood			50.3						50.3
	Pasture, native	Flood									
	Pasture, improved	Flood					2119.7				2119.7
	Turfgrass, cool season	Flood					128.9				128.9
	Misc. fruit orchards	Flood					39.8				39.8
	Vineyards	Flood					0.0				0.0
	Christmas trees	Flood					2.1				2.1
	Misc. field crops	Flood									
	Spring small grain	Flood							12.0		12.0
	Winter small grain	Flood							0.0		0.0
	Total Flood-Irrigated			1125.4	66.8	50.3	41.8	2248.5	12.0	181.0	3725.8
Includes golf course watering	Alfalfa hay	Sprinkler	557.4								557.4
	Alfalfa, new	Sprinkler	0.0								0.0
	Misc. vegetables	Sprinkler			5.0						5.0
	Pasture, native	Sprinkler					406.3				406.3
	Pasture, improved	Sprinkler					167.8				167.8
	Turfgrass, cool season	Sprinkler							291.6		291.6
	Spring small grain	Sprinkler							0.0		0.0
	Winter small grain	Sprinkler							0.0		0.0
	Misc. fruit orchards	Sprinkler					1.8				1.8
	Total Sprinkler-Irrigated			557.4	0.0	5.0	1.8	574.1	0.0	291.6	1429.8
	Misc. fruit orchards	Drip					1.2				1.2
	Vineyards	Drip					0.0				0.0
	Total Drip-Irrigated			0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2
	Alfalfa hay	Not irrigated									0.0
	Fallow	Not irrigated									0.0
Spring small grain	Not irrigated									0.0	
Winter small grain	Not irrigated									0.0	
Turfgrass, cool season	Not irrigated									0.0	
Misc. fruit orchards	Not irrigated									0.0	
Plowed	Not irrigated									0.0	
Total Not Irrigated										311.9	
Total Irrigated Acres			1682.8	66.8	55.2	44.9	2822.6	12.0	472.5	5156.8	
Percentage of total irrigated acres			32.6%	1.3%	1.1%	0.9%	54.7%	0.2%	9.2%		
Total Acres										5468.7	

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IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total	
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod		
ECHO AREA 2006 Hydrologic Unit 3	Alfalfa hay	Flood	66.4	0.0	0.0	0.0	0.0	0.0	0.0	66.4	
	Corn, grain	Flood								0.0	
	Misc. vegetables	Flood			12.7					12.7	
	Pasture, native	Flood					91.2			91.2	
	Pasture, improved	Flood					0.0			0.0	
	Misc. field crops	Flood							0.0	0.0	
	Turfgrass, cool season	Flood							0.0	0.0	
	Misc. fruit orchards	Flood				22.7				22.7	
	Christmas trees	Flood				4.4				4.4	
	Spring small grain	Flood							0.0	0.0	
	Winter small grain	Flood							0.0	0.0	
	Vineyards	Flood				0.0				0.0	
	Total Flood-irrigated			66.4	0.0	12.7	27.1	91.2	0.0	3.2	200.6
	Alfalfa hay	Sprinkler		65.6							65.6
	Corn, grain	Sprinkler			0.0						0.0
Misc. vegetables	Sprinkler				0.0					0.0	
Pasture, native	Sprinkler					37.2				37.2	
Pasture, improved	Sprinkler					40.5				40.5	
Turfgrass, cool season	Sprinkler								21.5	21.5	
Misc. fruit orchards	Sprinkler								0.0	0.0	
Spring small grain	Sprinkler								0.0	0.0	
Winter small grain	Sprinkler								0.0	0.0	
Total Sprinkler-irrigated			65.6	0.0	0.0	0.0	77.7	0.0	21.5	164.8	
Misc. fruit orchards	Drip					0.0				0.0	
Vineyards	Drip					0.0				0.0	
Total Drip-irrigated						0.0				0.0	
Alfalfa hay	Not irrigated									0.0	
Fallow	Not irrigated									0.0	
Spring small grain	Not irrigated							2.8		2.8	
Plowed	Not irrigated									0.0	
Total Not irrigated								2.8		30.6	
Total Irrigated Acres			132.0	0.0	12.7	27.1	168.9	0.0	24.7	365.4	
Percentage of total irrigated acres			36.1%	0.0%	3.5%	7.4%	46.2%	0.0%	6.8%		
Total Acres										396.0	

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IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total	
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod		
FARMINGTON GLADE 2006 Hydrologic Unit 6	Alfalfa hay	Flood	0.0								0.0
	Corn, grain	Flood		15.7							15.7
	Misc. vegetables	Flood			0.3						0.3
	Pasture, native	Flood					27.7	0.0			27.7
	Pasture, improved	Flood									0.0
	Turgrass, cool season	Flood									0.0
	Misc. fruit orchards	Flood				6.7					6.7
	Corn, grain	Flood		7.0							7.0
	Christmas trees	Flood				0.0					0.0
	Spring small grains	Flood									0.0
	Winter small grains	Flood									0.0
	Total Flood-irrigated			0.0	22.8	0.3	6.7	27.7	0.0	0.0	57.5
	Alfalfa hay		Sprinkler								
	Corn, grain		Sprinkler								
	Misc. vegetables		Sprinkler								
Pasture, native		Sprinkler									
Pasture, improved		Sprinkler									
Turgrass, cool season		Sprinkler									
Misc. fruit orchards		Sprinkler								8.2	
Spring small grains		Sprinkler								8.2	
Winter small grains		Sprinkler								8.2	
Total Sprinkler-irrigated			0.0	0.0	0.0	0.0	0.0	0.0	8.2	8.2	
Misc. fruit orchards		Drip								0.0	
Vineyards		Drip								0.0	
Total Drip-irrigated			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Corn, grain		Not irrigated								0.0	
Fallow		Not irrigated								52.3	
Misc. fruit orchards		Not irrigated								7.1	
Plowed		Not irrigated								0.0	
Total Not irrigated										59.4	
Total Irrigated Acres			0.0	22.8	0.3	6.7	27.7	0.0	8.2	65.7	
Percentage of total irrigated acres			0.0%	34.7%	0.5%	10.2%	42.2%	0.0%	12.5%		
Total Acres										125.1	

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IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod	
UPPER LA PLATA 2006										
Hydrologic Unit 4	Alfalfa hay	Flood	0.8	0.0						0.8
	Corn, grain	Flood								0.0
	Misc. vegetables	Flood								0.0
	Pasture, native	Flood								0.0
	Pasture, improved	Flood								0.0
	Turfgrass, cool season	Flood								0.0
	Misc. fruit orchards	Flood								0.0
	Christmas Trees	Flood								0.0
	Spring small grains	Flood								0.0
	Winter small grains	Flood								0.0
	Total Flood-irrigated		0.8	0.0	0.0	0.0	0.0	0.0	0.0	2.1
	Alfalfa hay	Sprinkler	31.5							31.5
	Alfalfa hay	Sprinkler	16.0							16.0
	Misc. vegetables	Sprinkler								0.0
	Pasture, native	Sprinkler								0.0
	Pasture, improved	Sprinkler								0.0
	Turfgrass, Cool season	Sprinkler								0.0
	Spring small grains	Sprinkler								0.0
	Winter small grains	Sprinkler								0.0
	Misc. fruit orchards	Sprinkler								0.0
	Total Sprinkler-irrigated		47.4	0.0	0.0	0.0	0.0	0.0	0.0	1.5
	Misc. fruit orchards	Drip								0.0
	Vineyards	Drip								0.0
	Misc. vegetables	Drip								0.0
	Total Drip-irrigated									0.0
	Alfalfa hay	Not irrigated								0.0
	Corn, grain	Not irrigated								0.0
	Fallow	Not irrigated								0.0
	Spring small grains	Not irrigated								0.0
	Winter small grains	Not irrigated								0.0
	Total Not irrigated									0.0
	Total Irrigated Acres		48.3	0.0	0.0	0.0	0.0	0.0	0.0	34.6
	Percentage of total irrigated acres		55.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%
	Total Acres									132.1

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IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total	
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod		
ARCHULETA DITCH 2006	Alfalfa hay	Flood	0.0								0.0
	Alfalfa, new	Flood									0.0
	Misc. vegetables	Flood									0.0
	Pasture, native	Flood									0.0
	Pasture, improved	Flood									0.0
	Turfgrass, cool season	Flood									0.0
	Spring small grain	Flood									0.0
	Winter small grain	Flood									0.0
	Corn, grain	Flood									0.0
	Total Flood-irrigated			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Alfalfa hay	Sprinkler	12.8								12.8
	Corn, grain	Sprinkler		0.0							0.0
Misc. vegetables	Sprinkler			0.0						0.0	
Pasture, native	Sprinkler					0.0				0.0	
Pasture, improved	Sprinkler					0.0				0.0	
Turfgrass, cool season	Sprinkler					0.0				0.0	
Spring small grain	Sprinkler							0.0		0.0	
Winter small grain	Sprinkler							0.0		0.0	
Total Sprinkler-irrigated			12.8	0	0	0	0	0	0	12.8	
Misc. fruit orchards	Drip									0.0	
Misc. vegetables	Drip									0.0	
Total Drip-irrigated										0.0	
Alfalfa hay	Not irrigated									0.0	
Fallow	Not irrigated									13.5	
Misc. fruit orchards	Not irrigated									0.0	
Total Not Irrigated										13.5	
Total Irrigated Acres			12.8	0.0	0.0	0.0	0.0	0.0	0.0	12.8	
Percentage of total irrigated acres			100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Total Acres										26.3	

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IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total	
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod		
CITIZENS DITCH 2006 Hydrologic Unit 3	Alfalfa hay	Flood	272.5								272.5
	Alfalfa, new	Flood	2.2								2.2
	Corn, grain	Flood		4.3							4.3
	Misc. vegetables	Flood			12.8						12.8
	Pasture, native	Flood					820.9				820.9
	Pasture, improved	Flood					21.8				21.8
	Turfgrass, cool season	Flood							85.4		85.4
	Spring small grain	Flood							0.0		0.0
	Winter small grain	Flood							0.0		0.0
	Misc. fruit orchards	Flood				1.6					1.6
	Vineyards	Flood				0.2					0.2
	Total Flood-irrigated			274.7	4.3	12.8	1.8	842.7	0.0	85.4	1221.6
	Alfalfa	Sprinkler	537.3								537.3
	Alfalfa, new	Sprinkler	0.0								0.0
	Corn, grain	Sprinkler		0.0							0.0
Misc. vegetables	Sprinkler			2.8						2.8	
Pasture, native	Sprinkler					846.3				846.3	
Pasture, improved	Sprinkler					8.5				8.5	
Spring, small grain	Sprinkler							0.0		0.0	
Winter, small grain	Sprinkler							0.0		0.0	
Turfgrass, cool season	Sprinkler							85.0		85.0	
Misc. fruit orchards	Sprinkler				19.1					19.1	
Christmas trees	Sprinkler				0.0					0.0	
Total Sprinkler-irrigated			537.3	0.0	2.8	19.1	854.9	0.0	85.0	1499.1	
Vineyards	Drip					0.0				0.0	
Misc. vegetables	Drip				0.0					0.0	
Misc. fruit orchards	Drip					0.0				0.0	
Total Drip-irrigated			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Misc. fruit orchards	Not irrigated									1.0	
Fallow	Not irrigated									80.2	
Alfalfa hay	Not irrigated		4.6							4.6	
Plowed	Not irrigated									0.0	
Total Not Irrigated										85.8	
Total Irrigated Acres			811.9	4.3	15.6	20.9	1697.6	0.0	170.4	2720.7	
Percentage of total irrigated acres			29.8%	0.2%	0.6%	0.8%	62.4%	0.0%	6.3%		
Total Acres										2806.5	

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IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total	
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod		
TURLEY DITCH 2006 Hydrologic Unit 3	Alfalfa hay	Flood	70.1								70.1
	Corn, grain	Flood		0.0							0.0
	Misc. vegetables	Flood			0.0						0.0
	Pasture, native	Flood					48.9				48.9
	Pasture, Improved	Flood					0.0				0.0
	Turfgrass, cool season	Flood					0.0		1.1		1.1
	Misc. field crops	Flood									0.0
	Misc. fruit orchards	Flood				0.0					0.0
	Spring small grains	Flood									0.0
	Winter small grains	Flood									0.0
	Total Flood-irrigated			70.1	0.0	0.0	0.0	48.9	0.0	1.1	120.0
	Alfalfa hay		Sprinkler	46.2							46.2
	Corn, grain		Sprinkler		0.0						0.0
	Misc. vegetables		Sprinkler			0.0		16.8			16.8
	Pasture, native		Sprinkler					0.0			0.0
	Pasture, Improved		Sprinkler								0.0
	Turfgrass, cool season		Sprinkler							0.0	0.0
	Spring small grains		Sprinkler								0.0
	Winter small grains		Sprinkler								0.0
	Misc. fruit orchards		Sprinkler				0.0				0.0
Total Sprinkler-irrigated			46.2	0.0	0.0	0.0	16.8	0.0	0.0	63.0	
Misc. fruit orchards		Drip				0.0				0.0	
Vineyards		Drip				0.0				0.0	
Total Drip-irrigated						0.0	0.0			0.0	
Alfalfa hay		Not irrigated								0.0	
Fallow		Not irrigated								1.7	
Misc. fruit orchards		Not irrigated								0.0	
Plowed		Not irrigated								0.0	
Total Not irrigated										1.7	
Total Irrigated Acres			116.3	0.0	0.0	5.4	65.6	0.0	1.1	188.4	
Percentage of total irrigated acres			61.7%	0.0%	0.0%	2.9%	34.8%	0.0%	0.6%		
Total Acres										190.1	

Table 2

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IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total		
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod			
HAMMOND AREA 2006	Hydrologic Unit 3											
	Alfalfa hay	Flood	62.9									62.9
	Alfalfa, new	Flood	0.0									0.0
	Misc. vegetables	Flood			3.2							3.2
	Pasture, native	Flood										11.2
	Pasture, improved	Flood										15.1
	Turfgrass, cool season	Flood										66.8
	Misc. fruit orchards	Flood				2.2						2.2
	Spring small grains	Flood								0.0		0.0
	Winter small grains	Flood								0.0		0.0
	Total Flood-irrigated		62.9	0.0	3.2	2.2	26.3		0.0	66.8	161.3	
	Alfalfa hay	Sprinkler	1862.2								1862.2	
	Alfalfa, new	Sprinkler	0.0								0.0	
	Turfgrass, cool season	Sprinkler									16.7	
	Corn, grain	Sprinkler		0.0							0.0	
	Misc. vegetables	Sprinkler			4.1						4.1	
	Pasture, native	Sprinkler									1108.1	
	Pasture, improved	Sprinkler									72.0	
	Misc. field crops	Sprinkler									0.0	
	Misc. fruit orchards	Sprinkler				8.8					8.8	
	Misc. Christmas trees	Sprinkler				0.0					0.0	
	Spring small grains	Sprinkler							20.5		20.5	
	Winter small grains	Sprinkler							0.0		0.0	
	Total Sprinkler-irrigated		1862.2	0.0	4.1	8.8	1180.2		20.5	16.7	3092.6	
	Misc. fruit orchards	Drip				0.0					0.0	
	Vineyards	Drip				0.0					0.0	
	Total Drip-irrigated					0.0					0.0	
	Alfalfa hay	Not irrigated									0.0	
	Fallow	Not irrigated									0.0	
	Plowed	Not irrigated									0.0	
	Total Not Irrigated										223.5	
	Total Irrigated Acres		1925.1	0.0	7.3	11.0	1206.5		20.5	83.5	3253.9	
	Percentage of total irrigated acres		59.2%	0.0%	0.2%	0.3%	37.1%		0.6%	2.6%		
	Total Acres										3477.4	

Table 2

9/8/2008

IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS							Total	
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod		
FARMERS MUTUAL DITCH 2006 Hydrologic Unit 6	Alfalfa hay	Flood	1142.9								1142.9
	Alfalfa, new	Flood	49.6								49.6
	Corn, grain	Flood		10.5							10.5
	Corn, silage	Flood		37.7							37.7
	Misc. vegetables	Flood			10.3						10.3
	Pasture, native	Flood					542.0				542.0
	Pasture, improved	Flood					0.0				0.0
	Corn, grain	Flood		6.2							6.2
	Turfgrass, cool season	Flood							61.5		61.5
	Misc. fruit orchards	Flood				10.0					10.0
	Vineyards	Flood				0.0					0.0
	Christmas Trees	Flood				0.0					0.0
	Spring small grains	Flood							0.0		0.0
	Winter small grains	Flood							0.0		0.0
	Total Flood-irrigated			1192.6	54.4	10.3	10.0	542.0	0.0	61.5	1870.6
Includes golf course watering	Alfalfa hay	Sprinkler	94.6								94.6
	Alfalfa, new	Sprinkler	0.0								0.0
	Corn, grain	Sprinkler		0.0							0.0
	Misc. vegetables	Sprinkler			0.0						0.0
	Pasture, native	Sprinkler					5.9				5.9
	Pasture, improved	Sprinkler					0.0				0.0
	Turfgrass, cool season	Sprinkler							121.1		121.1
	Misc. fruit orchards	Sprinkler				0.3					0.3
	Spring small grains	Sprinkler						0.0			0.0
	Winter small grains	Sprinkler						0.0			0.0
	Total Sprinkler-irrigated			94.6	0.0	0.0	0.3	5.9	0.0	121.1	221.8
	Misc. fruit orchards	Drip					0.0				0.0
	Vineyards	Drip					0.0				0.0
	Misc. vegetables	Drip					0.0				0.0
	Total Drip-irrigated					0.0					0.0
Alfalfa hay		Not irrigated					0.0			0.0	
Winter small grain		Not irrigated								0.0	
Fallow		Not irrigated								0.0	
Misc. fruit orchards		Not irrigated								143.9	
Plowed		Not irrigated								8.5	
Total Not Irrigated										152.4	
Total Irrigated Acres			1287.1	54.4	10.3	10.3	547.9	0.0	182.6	2092.5	
Percentage of total irrigated acres			61.5%	2.6%	0.5%	0.5%	26.2%	0.0%	8.7%		
Total Acres										2244.9	

Table 2

9/8/2008

IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	Sod	Total	
JEWETT VALLEY 2006 Hydrologic Unit 6	Alfalfa hay	Flood	541.3							541.3	
	Alfalfa, new	Flood	11.1							11.1	
	Corn, grain	Flood		0.0						0.0	
	Corn, silage	Flood		6.3						6.3	
	Misc. vegetables	Flood			0.4					0.4	
	Pasture, native	Flood					178.2			178.2	
	Pasture, improved	Flood					0.0			0.0	
	Misc. field crops	Flood							5.1	5.1	
	Turfgrass, cool season	Flood								0.0	
	Misc. fruit orchards	Flood				0.2				0.2	
	Christmas Trees	Flood				0.0				0.0	
	Spring small grains	Flood							0.0	0.0	
	Winter small grains	Flood							0.0	0.0	
	Total Flood-irrigated			552.4	6.3	0.4	0.2	178.2	0.0	5.1	742.6
	Alfalfa hay	Sprinkler	14.3								14.3
	Alfalfa, new	Sprinkler	0.0								0.0
	Corn, grain	Sprinkler		0.0							0.0
	Misc. vegetables	Sprinkler			0.0						0.0
	Pasture, native	Sprinkler					0.0				0.0
	Pasture, improved	Sprinkler					0.0				0.0
Turfgrass, cool season	Sprinkler						0.0			0.0	
Misc. fruit orchards	Sprinkler				0.0					0.0	
Winter small grains	Sprinkler							0.0		0.0	
Total Sprinkler-irrigated			14.3	0.0	0.0	0.0	0.0	0.0	0.0	106.7	
Misc. fruit orchards	Drip									0.0	
Vineyards	Drip									0.0	
Misc. vegetables	Drip									0.0	
Total Drip-irrigated										0.0	
Alfalfa hay	Not irrigated						0.0			0.0	
Corn, grain	Not irrigated									0.0	
Fallow	Not irrigated									0.0	
Winter small grains	Not irrigated									52.6	
Spring small grains	Not irrigated									0.0	
Plowed	Not irrigated									0.0	
Total Not irrigated										52.6	
Total Irrigated Acres			566.7	6.3	0.4	0.2	178.2	0.0	0.0	863.6	
Percentage of total irrigated acres			65.6%	0.7%	0.0%	0.0%	20.6%	0.0%	0.0%	12.9%	
Total Acres										916.2	

Table 2

9/8/2008

IRRIGATION AREA	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS						Total		
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains		Sod	
CAMBRIDGE 2006 Hydrologic Unit 6	Alfalfa hay	Flood	15.1							15.1	
	Corn, grain	Flood		9.0						9.0	
	Misc. vegetables	Flood			2.8					2.8	
	Pasture, native	Flood					21.0			21.0	
	Pasture, improved	Flood					0.0			0.0	
	Turfgrass, cool season	Flood								0.0	
	Spring small grains	Flood								0.0	
	Winter small grains	Flood								0.0	
	Orchard/Grapes	Flood								0.0	
	Total Flood-irrigated			15.1	9.0	2.8	0.0	21.0	0.0	0.0	48.0
	Alfalfa hay	Sprinkler									0.0
	Corn, grain	Sprinkler									0.0
	Misc. vegetables	Sprinkler									0.0
	Pasture, native	Sprinkler									0.0
	Pasture, improved	Sprinkler									0.0
Turfgrass, cool/season	Sprinkler									0.0	
Spring small grains	Sprinkler									0.0	
Winter small grains	Sprinkler									0.0	
Total Sprinkler-irrigated										0.0	
Orchard/Grapes	Drip									0.0	
Misc. vegetables	Drip									0.0	
Total Drip-irrigated										0.0	
Alfalfa hay	Not irrigated						0.0			0.0	
Corn, grain	Not irrigated									0.0	
Fallow	Not irrigated									0.0	
Spring small grain	Not irrigated									0.0	
Winter small grain	Not irrigated									0.0	
Plowed	Not irrigated									0.0	
Total Not irrigated										0.0	
Total Irrigated Acres			15.1	9.0	2.8	0.0	21.0	0.0	0.0	48.0	
Percentage of total irrigated acres			31.5%	18.7%	5.9%	0.0%	43.8%	0.0%	0.0%		
Total Acres										48.0	

Table 2

9/8/2008

IRRIGATION AREA CUDEI 2006 Hydrologic Unit 7	CIR CROP	IRRIGATION METHOD	AGGREGATED CROPS						Total
			Alfalfa	Corn/Sorghum	Misc. Vegetables	Orchard	Pasture	Small Grains	
	Alfalfa hay	Flood	91.1						91.1
	Corn, grain	Flood		74.2					74.2
	Misc. vegetables	Flood			17.5				17.5
	Pasture, native	Flood					82.5		82.5
	Pasture, improved	Flood					0.0		0.0
	Turgrass, cool season	Flood						0.0	0.0
	Misc. fruit trees	Flood				0.5			0.5
	Christmas Trees	Flood				0.0			0.0
	Spring small grains	Flood						0.0	0.0
	Winter small grains	Flood						0.0	0.0
	Total Flood-irrigated		91.1	74.2	17.5	0.5	82.5	0.0	0.0
	Alfalfa hay	Sprinkler							0.0
	Corn, grain	Sprinkler							0.0
	Misc. vegetables	Sprinkler							0.0
	Pasture, native	Sprinkler							0.0
	Pasture, improved	Sprinkler							0.0
	Turgrass, cool season	Sprinkler							0.0
	Misc. fruit trees	Sprinkler							0.0
	Spring small grains	Sprinkler							0.0
	Total Sprinkler-irrigated								0.0
	Misc. fruit trees	Drip							0.0
	Vineyards	Drip							0.0
	Misc. vegetables	Drip							0.0
	Total Drip-irrigated								0.0
	Fallow	Not irrigated							0.0
		Not irrigated							118.3
		Not irrigated							0.0
		Not irrigated							0.0
		Not irrigated							0.0
	Total Not irrigated								118.3
	Total Irrigated Acres		91.1	74.2	17.5	0.5	82.5	0.0	0.0
	Percentage of total irrigated acres		34.3%	27.9%	6.6%	0.2%	31.0%	0.0%	0.0%
	Total Acres								384.0