GLENN COUNTY WATER ADVISORY COMMITTEE

Glenn County Department of Agriculture 720 North Colusa St., Willows, CA 95988 Phone: 530.934.6501 FAX: 530.934.6503 Email: <u>wateradv@countyofglenn.net</u> Website: <u>http://www.glenncountywater.org/</u>

AGENDA

MEETING DATE: TIME: PLACE: Wednesday February 18, 2009 1:30 p.m. Glenn-Colusa Irrigation District 344 East Laurel Street Willows, CA 95988

I. <u>INTRODUCTIONS:</u>

Water Advisory Committee Members:

David Alves	Princeton-Codora-Glenn Irrigation District
Jack Baber	Reclamation District No. 1004
Mark Lohse	BOS District 5 Private Pumpers
Gene Clark	Reclamation District No. 2106
Ted Trimble	Western Canal Water District
Larry Domenighini	Glenn County Farm Bureau
Leigh McDaniel	Glenn County Supervisor
Wade Danley	Kanawha Water District
Donnan Arbuckle	Resource Conservation District
Ken Sullivan	Orland Unit Water Users Association
Larry Maben	BOS District 3 Private Pumpers
Mike Vereschagin	Orland-Artois Water District
Del Reimers	West Colusa Basin Private Pumpers
Vacant	East Corning Basin Private Pumpers
Thad Bettner	Glenn-Colusa Irrigation District
Bob Coruccini	Willow Creek Mutual Water Company
Jere Schmitke	City of Orland
Elwood Weller	Provident Irrigation District
Vacant	Stony Creek Water District
Vacant	West Corning Basin Private Pumpers
Joel Mann	Glide Water District
Rosanna Marino	City of Willows

Technical Advisory Committee Members:

Lance Boyd	South
Kelly Staton	Department of Water Resources
Allen Fulton	UC Cooperative Extension
Randy Murphy	Planning and Public Works Agency
Kevin Backus	Environmental Health
Ben Pennock	Central
Mark Black	Agricultural Commissioner
Andrew Farrar	East
George Wilson	North

II. <u>APPROVAL OF MINUTES:</u>

Approval of the Minutes from the meeting of December 9, 2008.

III. <u>AGENDA ITEMS:</u>

A. Public Comment:

Any person wanting to address the Water Advisory Committee on any item <u>NOT ON</u> <u>TODAY'S AGENDA</u> may do so at this time. The Water Advisory Committee will not be making decisions or determinations on items brought up during Public Comment.

B. **Discussion and/or Action Items:**

- 1. Continue Discussion on Strategic Planning for Water Resources.
 - 1) Fee Process Development
 - 2) Evaluate Water Transfer Guidelines
- 2. Winter Groundwater Levels.
 - 1) January DWR Measurements.
 - 2) Well Count by Section Maps
- 3. Groundwater Replenishment Discussion
- 4. Butte County Lower Tuscan Recharge Research Project.
- 5. Drought Water Bank Comment letter to DWR
- 6. Water Supply Forecasts.
- 7. Draft Salmon/Sturgeon Biological Opinion

C. Communications:

NRCS – Agricultural Water Enhancement Program

D. Member Reports:

At this time WAC members are encouraged to discuss upcoming or ongoing activities that may be of interest to the committee.

IV. <u>NEXT MEETINGS:</u>

The next Water Advisory Committee meeting will be scheduled today.

The next TAC meeting will be scheduled at a later date.

GLENN COUNTY WATER ADVISORY COMMITTEE

Glenn County Department of Agriculture

720 North Colusa St., P.O. Box 351, Willows, CA 95988

Phone: (530) 934-6501 Fax: (530) 934-6503

E-mail: wateradv@countyofglenn.net Web Page: www.glenncountywater.org

MINUTES

Meeting Date:	December 9, 2008

Time: 1:30 pm

Place: Glenn-Colusa Irrigation District 344 East laurel Street Willows, CA 95988

Water Advisory Committee Members Present:

Donnan Arbuckle	Resource Conservation District
Thad Bettner	Glenn-Colusa Irrigation District
Larry Domenighini	Glenn County Farm Bureau
Keith Hansen	Glenn County Supervisor
Mark Lohse	BOS District 5 P P
Larry Maben	BOS District 3 Private Pumpers
Joel Mann	Glide Water District
Rosanna Marino	City of Willows
Del Reimers	West Colusa Basin P P
Jere Schmitke	City of Orland
Ken Sullivan	OUWUA
Ted Trimble	Western Canal Water District
Elwood Weller	Provident Irrigation District

Water Advisory Committee Members Absent:

David Alves	PCGID
Jack Baber	Reclamation District No. 1004
Gene Clark	Reclamation Dist # 2106 & 1004
Bob Coruccini	Willow Creek Mutual Water Co.
Wade Danley	Kanawha Water District

Craig Vereschagin	East Corning Basin P P
Mike Vereschagin	Orland-Artois Water District

Technical Advisory Committee Members Present:

Lance Boyd	PID/PCGID
Andrew Farrar	East Area
Kelly Staton	Department of Water Resources
Ben Pennock	Central Area
Kevin Backus	Glenn Co. Environmental Health
George Wilson	North Area

Others in Attendance:

John AmaroGlenn CTina BrothersWAC/TEugene Massa Jr.CBDDLester MessinaGlenn CDan RamosCapay FRachelle ValverdeGCID

Glenn Co. BOS WAC/TAC Secretary CBDD Glenn Co. Dept. of Agriculture Capay Rancher GCID

- I. <u>INTRODUCTIONS:</u> Those in attendance introduced themselves.
- II. <u>APPROVAL OF MINUTES:</u> The minutes from October 28, 2008 meeting were approved as mailed.
- III. <u>AGENDA ITEMS:</u>
 - A. Public Comment: None.

B. Discussion & Action Items:

1. Continued Discussion on Strategic Planning for Water Resources – Ted mentioned there was pretty good discussion at the last meeting. It was agreed to bring it back for additional discussion. Lester informed the WAC that the packet was presented to the Glenn County Board of Supervisors on November 4, 2008. Due to not having all Board of Supervisors present it was continued to a latter date. Lester handed out the packet that was presented to the BOS and reminded everyone that it basically outlines options for ways of funding a strategic planning process for water resources outside the general fund. It was mentioned by a surface water irrigation district that he would like more information in writing on identifying levels of benefit which would not duplicate efforts already established.

After a lengthy discussion of the options a motion was made to write a letter in support of the BOS moving forward with countywide water resource planning however the WAC is requesting the BOS to fund this program through the General Fund. All were in agreement. Ted will write the letter and Lester is willing to present it at the BOS meeting on December 16, 2008.

Larry asked to request from the county information regarding current expenditures on water resources and an idea of projected expenditures. To give us an idea of what are the cost now, what man power is needed and the money for data loggers that needs replaced and continue to update our monitoring neeeds. Lester mentioned that information will be part of the discussion at the BOS meeting. Ted suggested getting those figures after the BOS meeting.

2. TAC Report on Fall Groundwater Levels-Lester passed out two maps with the 2007 & 2008 Fall Sacramento Valley Groundwater Elevations along with DWR's fall groundwater contours for comparison. Lester mentioned these were presented at a Tehama County water resource meeting last week. Kelly provided some explanation on the map data. The data showed that all water levels in Glenn County have dropped 4 feet from last fall.

Lester passed out a spread sheet and reviewed it with the WAC regarding fall BMO's. Locally we have BMO's in two Private Pumper areas that utilize fall measurements for some of their BMO compliance and were measured in the late part of October 2008. Two of the wells are in Sub-area 9 are in Stage 2 and one well located at Lohse Mill is at a Stage 3. Lester explained that a stage 3 alert may be rescinded only if the spring measurements indicate that the groundwater surface elevation recovers to the previously established average spring BMO level. All three wells in Sub-area 10 are in stage 2 however they are close to being stage 3. This issue was discussed at the last TAC meeting and it was determined that we do not have enough information to come up with any level of adaptive management. The last time water levels were at these levels, it took 5 years to recover. Ben mentioned the need to look at trends of crops being planted. Lester is going to review the crop reports at the Ag Dept over the last ten years to figure out how much crops have increased because we need good data to make good decisions. Ben also mentioned the need for other data like population change and demand trends, etc. Lester pointed out that these are things that need to be done routinely and will be part of future water resource planning efforts.

These wells will be re-assessed in the spring.

- **3.** Addition Item/Sub-Area Map-At the sub-committee meeting for nominating a new WAC chairman, the committee requested a map showing all the sub areas and who was the WAC representative for that area. The maps were provided and discussed.
- C. Communications: None.
- D. Member Reports: None.

The next WAC Meeting is scheduled for February 10, 2009 at 1:30 pm. Subsequently it has been changed to February 18, 2009, same location.

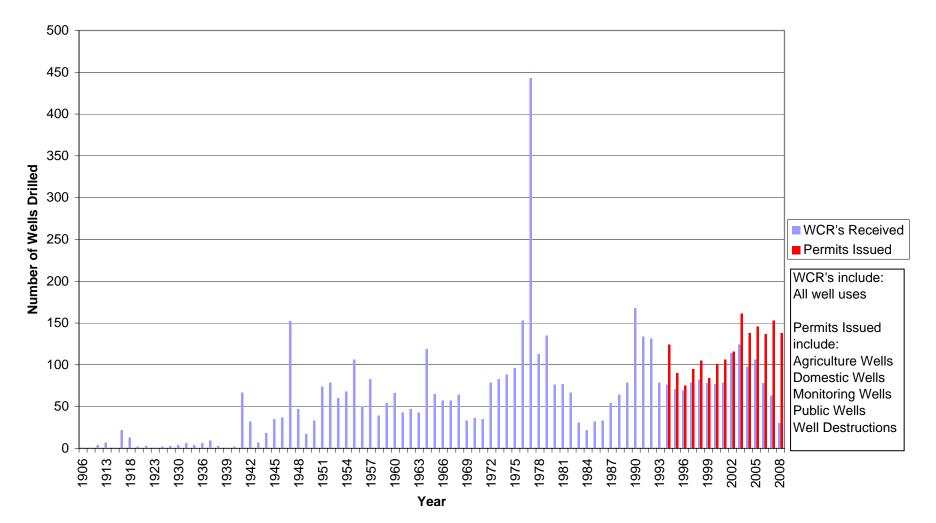
The next TAC Meeting at this date has not been scheduled.

Adjourned at 3:30 pm.

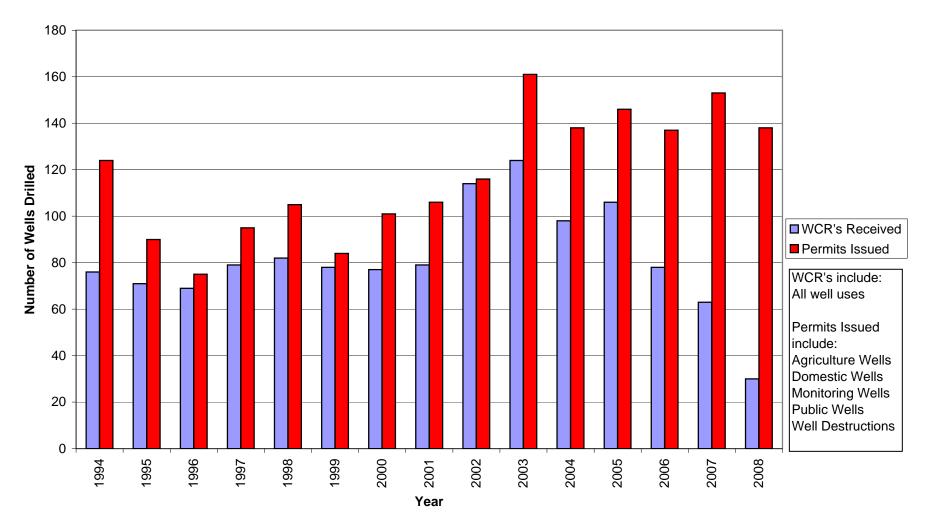
Sincerely submitted by,

Tina Brothers WAC/TAC Secretary

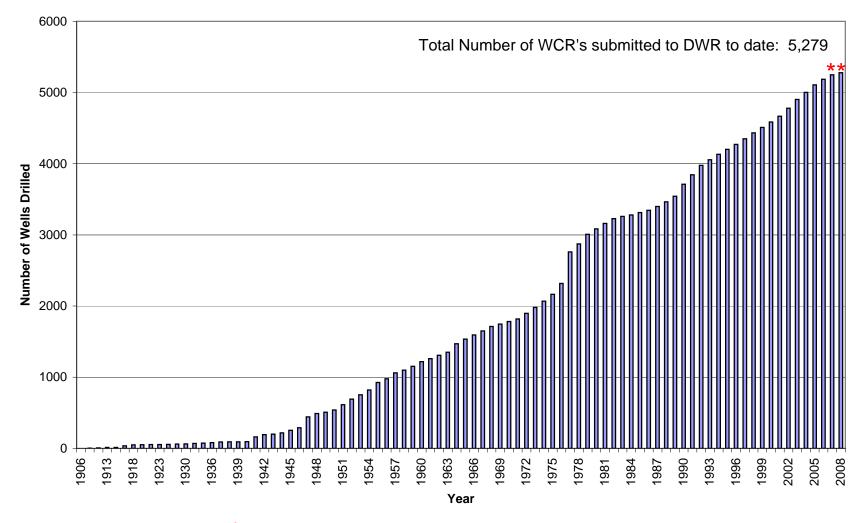
Number of Well Completion Reports Filed with DWR per Year vs Number of Permits Issued by Glenn County per Year



Number of Well Completion Reports Filed with DWR per Year vs Number of Permits Issued by Glenn County per Year



GLENN COUNTY Cumulative Number of Well Completion Reports Filed per Year



*Does not account for an average 250 day lag-time for WCR 's submitted to DWR

GLENN COUNTY

CHANGE IN GROUNDWATER ELEVATION

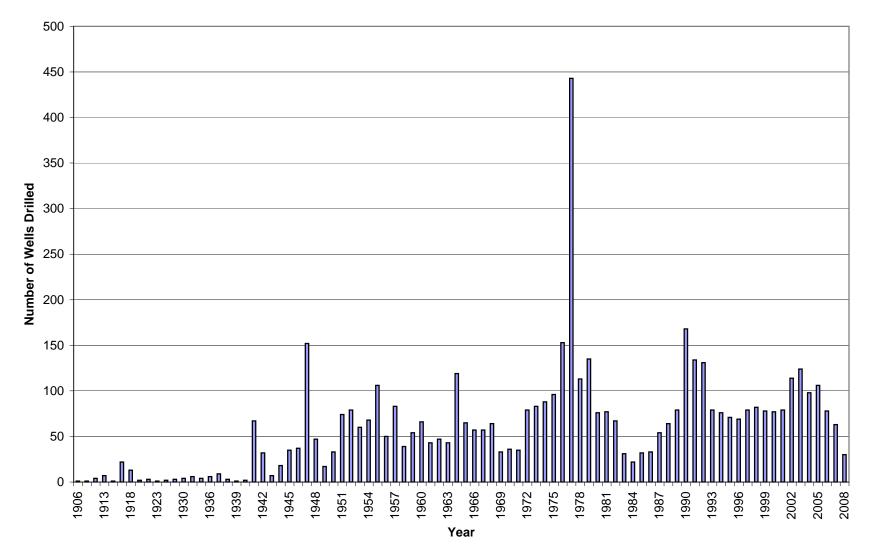
January 2008 to January 2009

GWE* Change Statistics by Well Depth										
	All Well Depths	0 - 200	201 - 600	601 - 1500	Unknown					
Glenn				-						
Max Increase In GWE (ft)	1.7	1.7	0	0	N/A					
Max Decrease In GWE (ft)	-16.5	-11.1	-16.1	-16.5	N/A					
Avg GWL Change (ft)	-4.5	-3	-3.9	-6.6	N/A					
Total Wells	78	24	29	25	N/A					

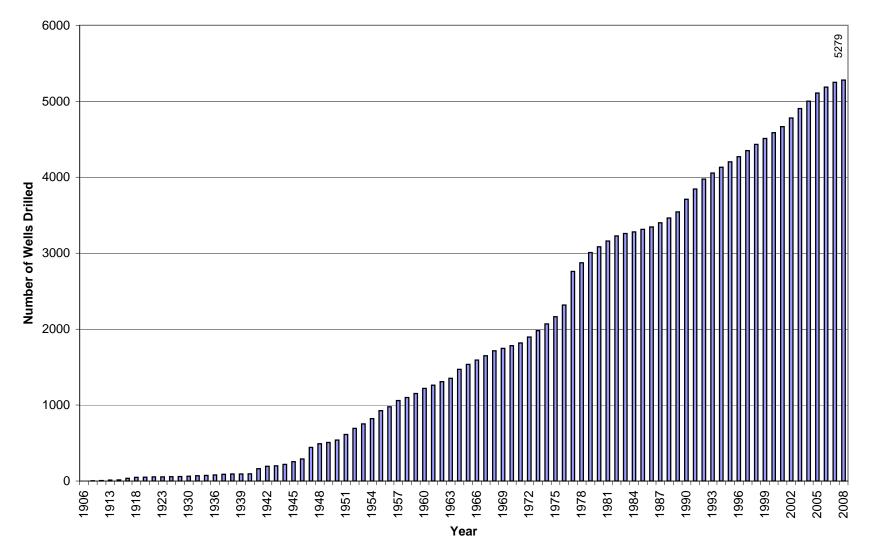
Depth Statistics by Well Depth										
	All Well Depths	0 - 200	201 - 600	601 - 1500	Unknown					
Glenn										
Maximum Well Depth (ft-bgs)	1380	192	578	1380	N/A					
Minimum Well Depth (ft-bgs)	71	71	201	629	N/A					
Avg Well Depth (ft-bgs)	474	115	396	911	N/A					
Total Wells	78	24	29	25	N/A					

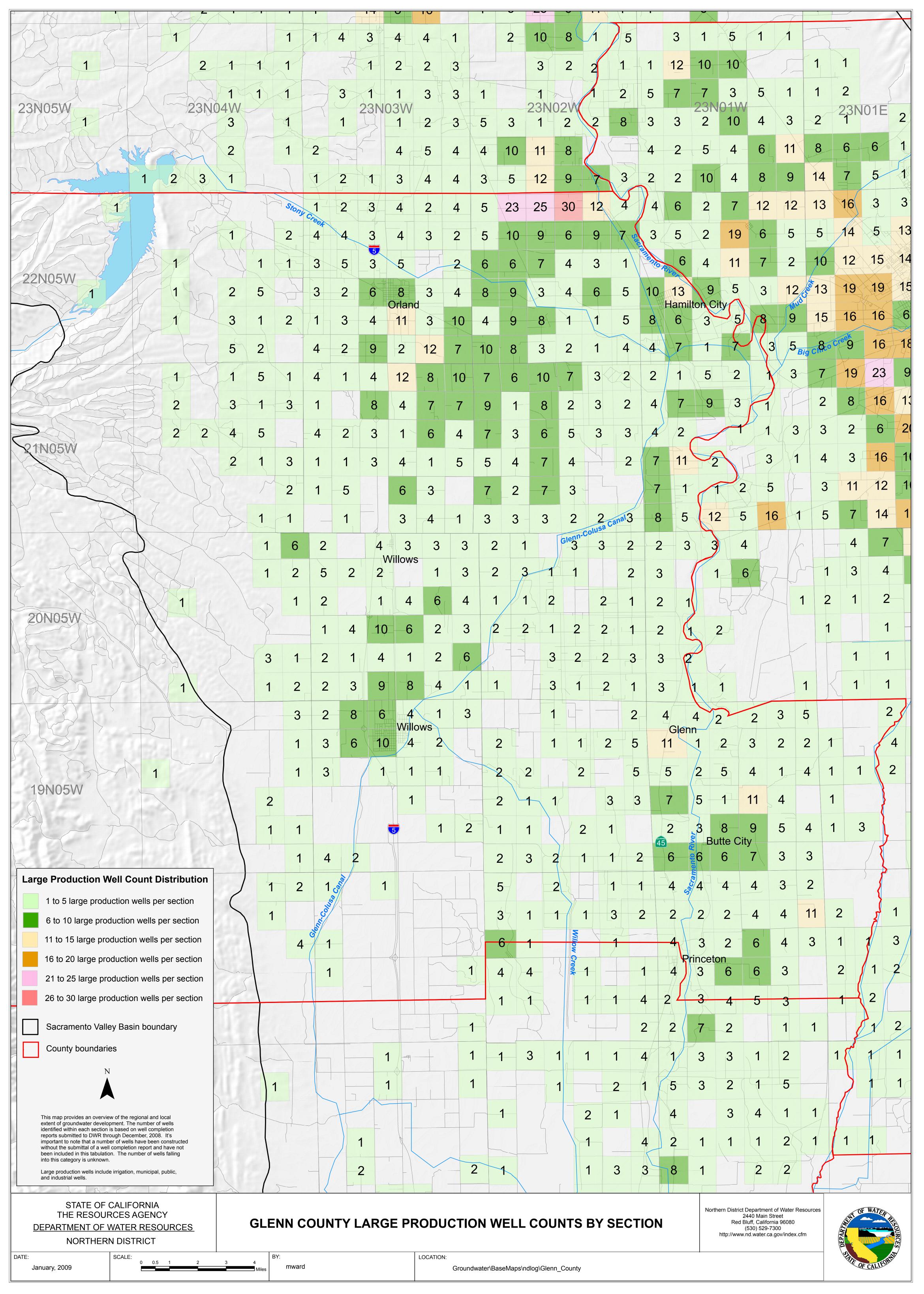
	GWE	* Change Sta	tistics by Wel	l Use		Well Counts by Well Use, Depth						
	All Well Uses	Domestic	Irrigation	Observation	Other			All Well Depths	0 - 200	201 - 600	601 - 1500	Unknown
Glenn							Glenn				-	
Max Increase In GWE (ft)	1.7	N/A	0	1.7	N/A		Domestic	0	0	0	0	0
Max Decrease In GWE (ft)	-16.5	N/A	-8.5	-16.5	N/A		Irrigation	4	0	0	4	0
Avg GWE Change (ft)	-4.5	N/A	-5.5	-4.5	N/A		Observation	74	24	29	21	0
Total Wells	78	N/A	4	74	N/A		Other	0	0	0	0	0
*GWE: Groundwat	GWE: Groundwater Elevation						Total Wells	78	24	29	25	0

GLENN COUNTY Number of Well Completion Reports Filed per Year

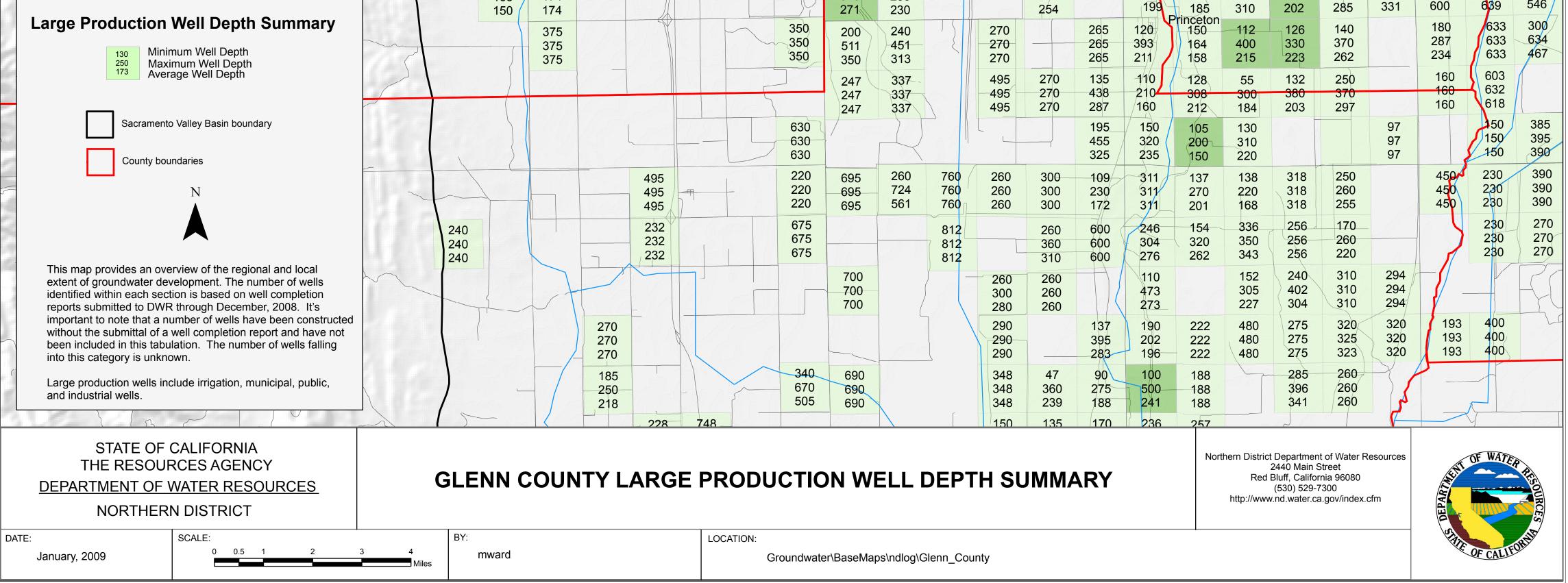


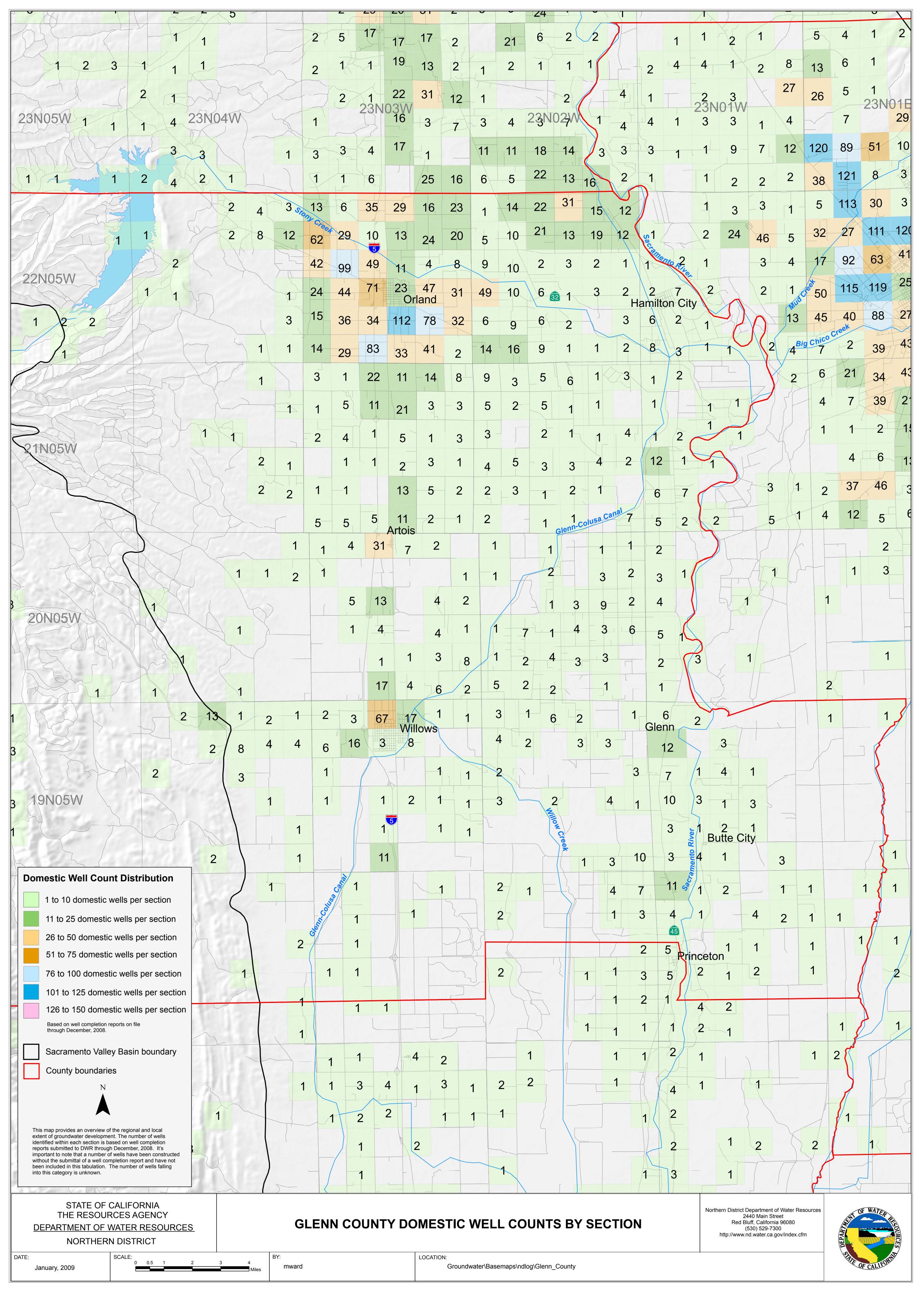
GLENN COUNTY Cumulative Number of Well Completion Reports Filed per Year



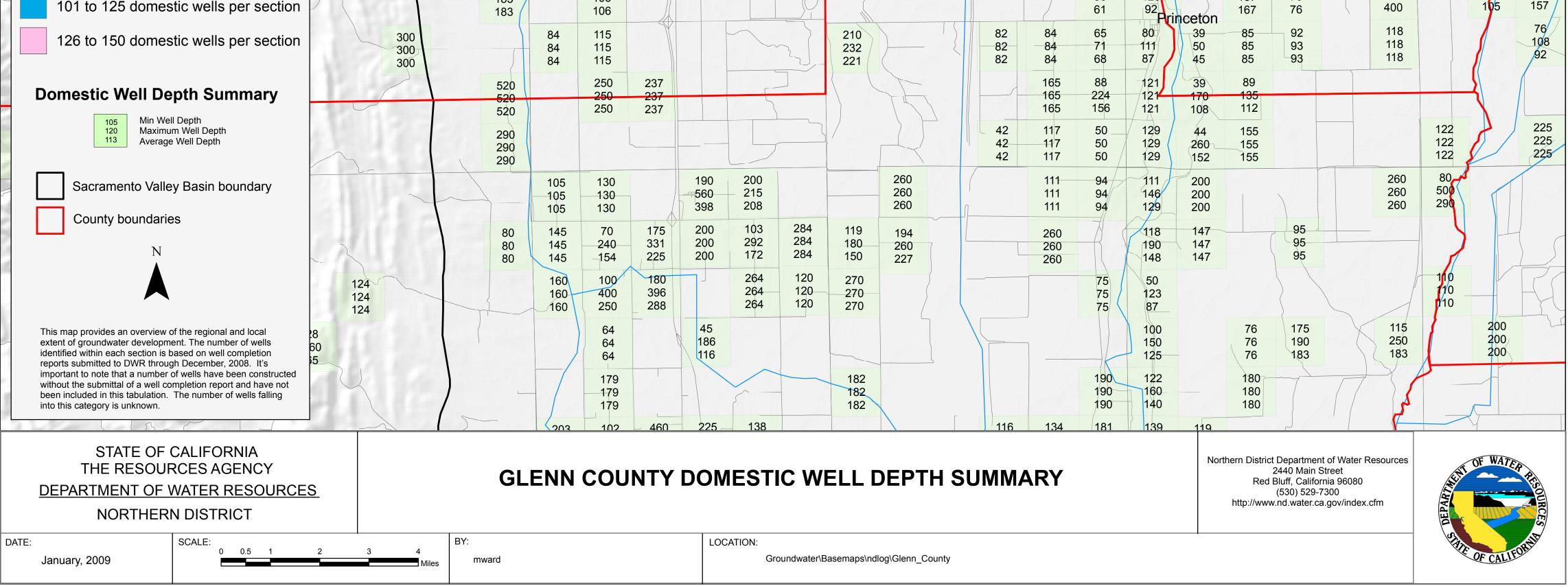


510 661 526	580 480 540	292 214 173	172 347	158 135 465 409	260 267	724
880 880 880	600 320 600 320 600 320 600 320	232156115118532270204316380232154213	350 243 350 416 350 330	52 36 125 100 450 127 125 615 153 60 125 266	173 668 372 265 668 665 214 668 536	510 355 510 355 510 355
493 580 520 493 580 520	570 630 570 630	162 125 106 162 180 195	118 155	120 64 52 250 224 98 120 250	320 <u>136</u> <u>143</u> <u>135</u> 320 <u>550</u> <u>730</u> <u>695</u>	180 700 180 700
493 580 520 580 580 580 580 580 580	570 630 720 540 720 540	162 153 151 440 450 103 64 570 450 103 395	131	395 33 270	320 277 559 593 175 355 132 131 530 582 770 654	180 700 85 135 550 185 565 135 550 380
23N0520	720 540 720 540 250	570 450 103 395 520 450 103 247 185 230 390 394	170 250 145 250 131 175 285		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	287 135 550 283 224 320 568 158 300
200 200 643	250 250	185 380 400 185 380 397	295 330 325 213 250 307	225 383 123 160 225 315 117 98	165 450 340 742 141 297 224 554	586 710 595 158 554 468 552 582 158 472 153 174 185 192 177 165
610 670 640	215184215230215207	285 263 520 500 395 382	540 376 391	124 100 337 391 191 217	162500111131301585670730229543444441	133 174 180 420 452 165 702 685 590 420 452 165 501 552 410 274 324 165
247 200 78 620 247 350 265 620 247 275 181 620	210 210 210 210	265212204176310212250400288212221297		68 125 45 85 380 210 220 180 214 164 145 146	146161101180520648650665333405347478	12525075150300560717700705700700560527589499-337514560
210 210	Stony 168	161 180 140 100 218 275 357 290	200 220 80 400 420 460	54 84 77 255 420 470 1320 645	84 200 510 140 190 480 510 805	5015074179123402725725675580455428284407466400338414
210 202 202 202	150 140 215 371	190 218 224 195 57 100 131 67 140 460 460 360	235 96 127	177 223 276 379 61 170 140 68 550 455 325 218	135 325 510 348 207 145 920 115 1050 410 1000 550	33 145 137 72 197 145 207 510 670 680 640 580
295	183 250 760 170 110	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	490 246 222 295 200 95	239 295 219 124 124 246 168 105	560 226 960 228 151 138 125	148 261 415 448 373 258 72 142 130 115 143 75 305 510 600 300 661 764
295 295 154 360 632	760 170 227 760 170 171 488 200	312 495 506 174 367 277 130 100 21 52	467 430 318 381 303 209 144 94 58	349 490 540 105 235 359 396 105 139 103 102 340	205 235 695 179 185 278 120 49 215 145	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
22N05154 360 360 360 360 676	780 669 631 464	1301002152250440534160190213241124	212 302 520	400 436 522 360 242 228 246 351	400 311 308 510 258 229 246 240 Hamilton City	717 647 425 580 530 506 207 215 225 231 373
330 330 330 330 630	664 340 370 664 344 370 664 342 370	160 80 66 152 340 260 170 300 269 171 108 204) <u>320 331 440</u>	150140378105415140378400317140378302	93 75 380 180 320 263 575 695 168 169 453 303	54 60 65 97 80 185 655 602 450 685 532 641 332 261 191 307 295 464
338 468	489 520 150 345	152 65 88 46 156 324 90 323	160 112 112 470 300 394	220 130 140 95 540 310 140 350	110 78 272 94 285 500 272 475 164 298 272 216	150 115 52 166 173 77 186 485 610 625 610 592 172 218 272 503 393 254
450 450 450 645 645	505 249 540 460 255 764 460 705	154 147 89 172 128 180 100 120 128 317 580 410	0 200 162 140	180 200 172 140 575 375 400 285	400 341 147 150 436 341 295 200	80 450 165 110 85 174 80 665 710 623 600 690 50 665 710 623 600 690
450 645 540 600 545 620	624460461540235652540490652	128 236 237 213 80 124 115	3 429 254 281 5 155 112 361	369 300 291 213 210 168 160 303	41834119017511512012080440410450286	665 145 133 63 10 665 340 655 605 70
545 620 543 609 470 550 399	540 490 652 540 395 652 260 150	420 321 400 208 211 238 220 206 200 285	6 256 238 361	415 278 280 453 293 223 203 378 115 84 220 222	10 10 100 100 293 190 241 149 119 148 149	665 243 330 247 391 223 390 480 620 255 17
480 580 610 475 565 521	593 -410 473 310	645 655 200 795 433 384 200 522	5 600 335 870 2 331 239 480	446 438 330 340 261 243 286 269	250 291 82 180 220 82 82	223 430 590 625 615 56 223 407 550 623 496 32 163 920 214 250 185 15
21N05V	490 170 92 490 900 92 490 603 92	362 189 175 160 362 690 443 160 362 399 319 160	0 535 588 495	195 120 180 360 480 230 270 333 205	81 89 125 380 300 234 222 181 180	340 920 650 590 673 61 238 920 385 423 503 42
	410 160 459 160 435 160	156 226 280 945 520 350 534 359 323	530 261	180 150 400 265 334 204	98207188106366207188200232207188153	162 134 75 84 23 367 300 502 475 60 272 240 227 196 44
	180 430 180 430	545 156 80 545 535 542	2 500 110 140 2 500 388 335	200 127 190 162 380 257 300 anal720	50 114 60 110 385 515 326 260	643897617685193453893656456606218638921849426845
	180 430 262 190 390 262 630 660		2 500 268 212 80 242 220 18 80 451 465 18	5 Gle180 163 150	127 189 205 360	160 97 606 620
	262413525750412250	449 197 3 440 340 5	45381343186022018018	5 215 264 228 0 210 180 285	296 244 236 385 59 257 175	421 495 375 650 425 375 701 660
695	750 524 620 750 468 381 605 570	600 450 5	60 294 222 26 60 268 201 21 22 213 340 25	0 210 180 291	189 257 410 129 257 360 420 74 420	375 683 578 325 420 315 700
695 695	605 805 605 688	400 750 22 400 474 1	273 250 340 25 87 230 340 25	190 165 147 5 185 150 147	430 74 425 74	325 705 315 840 325 563 315 770 200 500 500
20N05W	734 734 734	645 600 600 2	210 230 190 18 244 355 290 20 227 272 240 19	5 180 165 250 260	95290301176290592136290447	200 500 200 500 200 500 200 500
HAR HAN	160492460230492700183492580	181 350 303 2	227 142 260 289 244 222	180155155298620201185394347178170354	89 104 370 520 193 812	206 109 206 109 206 109 206 109
	150240385150388544	240 81 74 725 336 345 2	50 120 110 250 120 110 185 120 110	191 460 320 220 315 460 363 220	100 75 276 75	905 115 217 905 115 217 905 115 217 905 115 217
	150 314 465 400 282 706 390	167 210 188	230 205 230 240	237 460 342 220 385 80 385 290	159 75 52 55 193 27 270 274 250 40	905 115 217 30 112 110 84 03 370 650 110
	572 336 231 192	274 463 292 Willows 95 87 300	230 225 190 230	385 185 185 450 144 118	152 172 222 32 36 385 120 44	17 279 255 97 48 362 112 355 200
	231 372 231 254 307 100	226 426 506 3	560 270 375 250 450 240 210	185 450 305 345 185 450 225 222 30 360 60	92 385 175 49	16 385 545 355 313 91 374 329 355 259 '2 300 166 245 400 200
150 150 150 150	307 100 307 405 307 265	560 570 560 570 560 570	450 450 250 20 20	60 370 227 45 365 140	188 176 310 30 130 147 175 130	00 300 442 245 400 292 80 300 343 245 400 246
Large Production Well Count Distribution	95 110 103	560 560 560	247 2	401751601564017516527240175163198	148 420 132 5	85 180 160 60 450 160 54 347 160
1 to 5 large production wells per section	140 20 140 20		212 240 250 2	50 400 170 50 430 170 50 415 170	180 336 452 4	303861203751379058047637536595456287375282
6 to 10 large production wells per section	200 165 200 610	300 684	290 2 290 2	40 260 250 260 175 80 300 250 260 190	5 102 132 124 8 330 422 480 4	32 170 242 60 460 435
11 to 15 large production wells per section	200 389 630 176 324	492 230	290 2 254	60 280 250 260 183 200 190 10	162 244 259 2 3 150 96 98 1	65 311 334 20 72 100 382 112 300
16 to 20 large production wells per section	630 310 324 630 243 324 801 801 801	230	500- 323 109 2	290 190 10 245 190 10 260 390 280 250 18	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	66 95 200 132 70 188 300 173
21 to 25 large production wells per section 26 to 30 large production wells per section	801 801	그런 김만영심 [고프/	240 2 190 2	260 390 280 256 260 260 390 280 252 22	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	165 355 360 350 173 146 198 290 325 173
	125 0 174 165 174 150 174		235 2 315 2 271 2	230 254 230 254 230 254 230 254	260 225 330	112204219600639470460330420600689692202285331600639546





209 244 159 160 24 244 302 230 24 244 231 197 24 244 231 197 24 255 260 255 260 255 255 255 255 255 255 255 25	0 200 190 0 200 190 5 256 0 256 8 256 4 82	284 04VV	130 1 215 2 173 1 94 1 160 1 127 1 1 1 1 1	20 72 20 260 36 122 25 180 25 180 25 180 25 180 25 180 30 150 23 30	80 32 264 172 127 103 80 72 191 153 132 118 87 55 283 190 166 117 124 107	205 143 240 245 243 243 88 100 125 100 107 100 88 205 175 205 113 205 98 132 200 145	150 106 120 40 267 118 180 86 67 80 125 80 96 80 135 88 125 123	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	90 135 137 136 48 96 160 96 113 96 71 31 190 145	97 420 97 420 97 420 97 420 101 100 138 197 113 148 72 195 134 23 135 80 135 95	62 140 200 140 131 140 116 120 116 120 116 120 116 120 120 165 147 102 160 160 160	281 222 102 113 210 275 158 193 83 115 250 315 143 161 160	$\begin{array}{c cccc} 70 & 146 \\ 305 & 146 \\ 208 & 146 \\ \hline 122 & 125 \\ 196 & 125 \\ 163 & 125 \\ \hline 163 & 125 \\ \hline 112 & 123 \\ 232 & 123 \\ 184 & 123 \\ \end{array}$	137 180 159 E 125 357
195 155 254	4 143 100 89 209 140 147 113		170 135 1 170 233 1 170 233 1 170 176 1	30 100 30 160 30 126	180 122 64 136 240 136 137 136	150 139 78 165 133	146 105 80 57 167 195 128 124	96 60 60 50 145 110 104 83	117 68 120 75 200 250 157 153	13589105123105123105123	131 160 102 115 155 163 126 142	173 105 48 210 275 143 138	148 172	260 151 245 217 195
56 80 51 16 56 80 51 23 56 80 51 12		100 100 100	275 2	25 100 25 147 25 124	75 250 144	62 92 140 340 110 169	76 76 160 180 120 126	52 45 262 208 132 104	116 49 130 49 123 49	118 118 118	113 105 150 156 132 131	6 180 <u>320</u> 163 147	260 250 141 187	254 218
		110 70 160 180 135 104			40 52 260 323 130 144	51180500180127180	40 54 172 208 106 120	36 51 200 266 118 112	40 120 85	35 35 35	100 87 210 118 168 107	90 70 90 195 90 130	336 200	125 165 147
120 16	65 65 65	80 120 210 264 145 156	255 330	55 64 15 205 59 136	52 24 160 185 112 114	68 56 250 88 132 71	6060216200124109	40 36 155 180 97 90	40 152 180 152 76 152	98 124 111	60 51 150 210 133 133			48 290 122
	108		66 330	40 <u>62</u> 287 <u>240</u>	64 92 323 170	60 64 125 180	43 56 205 127	88 43 188 80	160 160 129	132 75 138 75 75	105 174 146	1 152 230	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	72 325 136
	116 40 130 40 130	T	140 72	27 132 68 52 20 210	124 131 Orland 28 34 120 200	94 130 39 32 178 185	109 92 52 40 190 120	125 62 68 139 68 221	160 129 76 55 104 90	35 125 207 140	117	7 108 55 0 108 37	45 40 7 265 335	22 310 131
58 250 140	40 130		87 88	27 106 48 40 250 240	89 115 48 11 195 300	90 107 52 52 190 125	108 81 60 60 60 210 170	140 158	90 73 93 54 300 192	136 Hamilton City 120 165 130 165	159	87 44	85 33 0 379 400	14
58 280 285 58 265 213 0 315 315		200 200	287 147 100 110	13 122 46 60	99 126 51 60	109 96 84 32	116 130 40 60	149 164 170	164 129 107 85	125 165 42 133	40 80	144 12 54 12	6 152 129 5 220 40	122 32 300
D 315 D 315		200 200 141		260 178 26 113 180 52	320 280 121 149 60 44	112 150 98 98 70 112	225 330 124 126 72 80	164 170 164 170 64 50	110 170 109 114 104 152	127 133	40 22 40 15	0 104 Big C15 54 70	4 230 136 0 34 39	121 80
	FT F	141 141	130 115	180 215 180 112	160 350 127 152	136 270 95 161	212 259 141 155	190 50 114 50	150 152 129 152	2 88 2 87	80	150 64 102 19 5		130
	Z.			156 28 417 170 239 107	48 140 325 210 108 182	56 80 170 230 127 173	15260154322153143	160 134 160 134 160 134 160 134	90 90 90	50 50	80 80		0 184 192 3 136 121	
	450 450 450	308 308 308	45 102 74	116 228 210 228 174 228	76120500120241120	102 104 160 154 139 122	152 160 156	80 72 80 72 80 72	68 60 150 60 106 60	100 13	0 <u>109</u> 0 109 0 109		30 1 51 230	
ZTINU5W		132 200 166	116	215 132 215 132 215 132	115104130175123145	215100215400215188	63 68 325 120 143 90	103 52 155 197 120 119		4 81 11 5 81 11 9 81 11			11237200240155119	
		156 195 176	177 161 345 161	100	80 89 192 200	100 111 128 176	94 80 100 80	105 75 144 75	5	0 42 25 97		125 100 1	51 50 56 85 209 210 68 158 135	82
	7 7	176	261 161 140 466	100 54 140 171 200	130 124 48 96	114 144 128 60	97 80 60	125 75 64 64				35 85 1	00 90 60 80 389 130 40 162 103	
			234 135 210	117 169 Art 96 76	225 135 154 116 OIS 51	128 88 148		64 Glenn-Colusa Ca 92	78 1	00	55	125 85 1 86 85 1	7:	
		125 190	135 210 135 210 197 132	200 280 142 151	273 176 164 168	148 148 180 145	70 70 95	92	78 1	05 03 55 102		96	99	
		125190125190125190	197 132 320 132 259 132			180 145 180 145	102	2 76 70	125 123	65 102 60 102	F	96 96	86 9	02 6
6 24 9 000000000000000000000000000000000000	220 220 220			9570320374227192	80 150 115	140 150 145	87 87 87 87	7 138 120) 86 1	52 00 80	56 56 56		67 67 67	
20N05W		237 237 237		124 81 124 210 124 163	60 218 122	135 115 135 115 135 115	145 76	6 62 50 5 137 110 5 98 80) 150	65 61 95 61 82 61				
AND EN	100			160 160	15065150201150115	92 214 153 110	125 25		B 0	90 <u>73</u> 100 <u>120</u>	85 85			50 50 50
53	142 142	280 280		160 115 398 196	92 60 160 135 134 95	85 90 92 184	101 48 153 73	8 16	0	95 90 97 97	85		98 200	
20	142	280 0 255 135	200 175	155 37	76 172	89 152 98 78 98 179	84 56	116 886	0144	97 81 50				155
	210 26 187 20 10		200 300 200 238 132 90	195 390 177 177 56 210	250 172 163 172 IOWS 52	98 117	7 84 9	195	144 144 2	110 95 93 73 50	65		86 86	155
P0 75 22	28	5 240 200 3 159 184	170 230 149 156	240 258 165 229	205 150	19!	5 230 4 145	127 13	35 04	150 88	82 76			
	86 140 113	55 85 65	186 186 186		36 36 36	180 101 180 21 180 159			102 145 129	47 86 80 86 58 86	53 90 88 90 71 90			
19N05W		74 74 74	100 100 100	220 220 220	216 180 320 180 268 180	113 82 11 <u>3 20</u> 113 14	2 10	53 08 11	47 50 45 50 13 50	40 60 160 88 92 77	100591008510076			
92 92 Domestic Well Count Distril	bution		135 135	132 132 132 132	358 358 358	120 120 120				34 80 108 80 64 80	91 140 140 140 116 140		0	
1 to 10 domestic wells per s	23	0	135 200 200	160 210	000			<u> </u>	146 187	56 246 158 93	Butte City 119 119	34 68 52		270 270 270
11 to 25 domestic wells per	r section		200	195 230	133	17	5 182	114 T	124 114 117 48		80 90	52 73 115 73 115	170 170	270 160 160
26 to 50 domestic wells per	11/2	90 90	Solution of the second se	230 230 270	133	22 19 2(8 182		180 152 147 115 109 128	116 🔗 108	90 85 78	73 115	170	160
51 to 75 domestic wells per 76 to 100 domestic wells per			Ser.	270 270	195 195	20	07		109 148 109 139	152 45 126 45	78 90 84	156 156 156 156	180 180	157
101 to 125 domestic wells p		Set in	180 185 183	106 106 106					36 86 61	50 128 92 Princeton	167 76 167 76 167 76	400 400 400	105/ 105 105	157 157 157



County of

Mark D. Black, Agricultural Commissioner Sealer of Weights & Measures

lenn

Department of Agriculture

Jean S. Miller, Assistant Agricultural Commissioner Sealer of Weights & Measures

SENT VIA EMAIL

January 16, 2009

Mike Hendrick Senior Environmental Scientist Department of Water Resources 901 P Street, 4th Floor Sacramento, CA 95814

Re: Addendum to the Environmental Water Account Program for the 2009 Drought Water Bank

Dear Mr. Hendrick:

I would like to take the opportunity to provide comments on the Department of Water Resources (DWR) Addendum to the Environmental Water Account Program Environmental Impact Statement/Environmental Impact Report (EWA EIR/EIS) for the 2009 Drought Water Bank (DWB). Glenn County's (County) interest is the same as other regional Counties in being confident that the 2009 Drought Water Bank has the least amount of impact upon the community, our agricultural economy, and our environment. At the same time there is a level of frustration brought on from there not being clearly defined roles and responsibilities of all parties intended to participate in such an important program.

In my opinion, the Addendum is not consistent with the existing EWA EIS/EIR in addressing the potential impacts and/or mitigating factors in a manner that would be suitable for the level of environmental review required by the County. There also seems to be poor communications regarding these issues between the Project Agencies, buyers, sellers, and Counties where proposed programs are intended to take place, which increases the level of frustration.

Additionally, the Addendum includes incomplete data for acre feet amounts that willing sellers for the 2009 DWB will provide. We recommend that the documents be finalized to increase our confidence that this will be a transparent process and we can all get these times of drought behind us and hopefully be more prepared in the future.

Sincerely

Cc:

Lester Messina

Water Resource Coordinator

Teresa Geimer Dan McManus Bob Niblack

720 N. Colusa Street P.O. Box 351 Willows, CA 95988
 Phone:
 (530) 934-6501

 Fax:
 (530) 934-6503

 Email:
 agcommr@countyofglenn.net

GLENN COUNTY WATER TRANSFER GUIDELINES

Part 1: Background

The Preliminary Plan for Groundwater and Coordinated Water Management (Plan) was approved by the Glenn County Water Advisory Committee (WAC) in 2004 and adopted by the Glenn County Board of Supervisors (Board) in May 2006. Items presented in the Plan identified the "next steps" that should be undertaken as components of a program to facilitate the management of water resources by local entities within Glenn County. Below is the text from the Plan as Item G) Evaluate Water Transfer Guidelines:

Evaluate Water Transfer Guidelines

Glenn County, by virtue on its physical and hydrologic setting and foresight of its residents in the past, enjoys an enviable water supply situation in relation to many counties in California. The fact that water transfers within and/or outside the county can be considered is a fortunate circumstance. As stewards of the water resources available to Glenn County the resource should be managed to meet the needs of Glenn County, the Sacramento Valley, and California, to the extent practicable. Water law and guidelines or parameters for water use exist. It would be helpful to the community to have guidelines documented that represent established water law and water use parameters that represent the basis for particular types of water transfers.

Types of water transfers that should be considered include:

- Surface water with groundwater substitution.
- Surface water with fallowing.
- Groundwater.

To the extent water transfers are configured consistent with adopted guidelines, there should be no need for discussion of a mitigation fund or third party impacts. Having water transfer guidelines in place can facilitate the management of water resources within the county.

At the March 11, 2008 WAC meeting a motion was made to begin the process of evaluating transfer guidelines with the intent of developing a clear policy that will be agreeable to all parties.

A presentation was made to the Board on August 5, 2008 discussing the need for the development of a strategic planning process. From that meeting the Department was directed to bring forward practical options that would be necessary to achieve the objectives presented. The first goal of this process would be to identify a secure and sustainable funding source.

A proposal was submitted to the Board on November 4, 2008 that provided some background in methods that can be put in place to provide secure funding. As you are aware, this proposal was not popular and did create some level of concern regarding the intentions of the Department and staff. The Board decided to revisit the proposal presentation on a later date when all supervisors would be present. On December 16, 2008 the presentation was brought back to the Board and open discussion followed. As a result of that presentation the Board directed staff to begin the process of developing sustainable funding sources. Of the options identified, two were selected to move forward in the short term that would not require a Proposition 218 "Engineers Report". They are: 1) Additional well permit fees for domestic and agricultural well installation, with consideration for other existing permitted activities, and 2) A per acre foot fee on groundwater substitution and a dollar per acre fee on land fallowing programs associated with out-of-County transfers. Discussion on Option 1 is not relevant to this document and will be addressed at a later date.

At this time, neither of the options currently being considered would provide a sustainable funding source as requested pursuant to Minute Order 31 of the December 16 Board meeting. In the future it is anticipated that a County-wide Benefit Assessment may be recommended to be adopted by the citizens of the County.

The option that discussed placing a fee on transfers was presented as:

Water transfer fees consist of fees that the County imposes on out-of-County groundwater or groundwater substitution transfers. The benefits of water transfer fees are:

- 1. The County's groundwater management activities include reviewing water transfer environmental documentation and enforcing the Basin Management Objectives during water transfers. Consequently, the County incurs groundwater management costs as a result of water transfers, so it is fair that transfer fees are used to offset these costs.
- 2. If the County will offer clear transfer guidelines and monitoring services as part of the transfer fee, it will simplify transfers for water districts within the County and bring business to the County.
- 3. Transfer fees should be paid by the buyer, so cost would not be passed on to local participants.

The drawbacks of water transfer fees are:

- 1. The amount of revenue that could be generated from imposing fees on water transfers is unknown and will probably fluctuate from year to year.
- 2. Imposing a water transfer fee without providing clear benefits could encourage buyers to seek transfers from other Counties, potentially driving business away from the County.

Current Requirements

Currently the minimum requirements for reporting from County Code 20.03 are:

20.03.110 (E). The Water Advisory Committee shall collect the following data from any district (and) or person engaged in a groundwater substitution program or groundwater export program: the weekly amounts of groundwater extracted from each well, the precise location of the wells, all pumping and non-pumping groundwater level

measurements made during the groundwater substitution period, the time periods during which the groundwater substitution program will occur, and all required environmental documentation. It shall be the responsibility of the district and (or) person involved in the groundwater substitution program to provide this information to the Water Advisory Committee including any monetary costs of providing such data.

These requirements are very basic and they are in place from the efforts of a dedicated group of County citizens committed to preserving their water rights.

Conflict Resolution

Incorporated in to County Code 20.03 is the procedure for all water users in the county to register abnormal groundwater level reports for the purposes of determining its cause. The process begins when a report is received and reviewed by the Technical Advisory Committee who then prepares an initial investigation report and notifies the local subwatershed Water Advisory Committee member(s). Local groundwater information is assembled and committee representatives make site visits, collect and assemble additional data, and prepare and present their findings and recommendations to the Water Advisory Committee for action. County Code 20.03 and the adopted Basin Management Objective (BMO) concept have provisions for the County's authority to intervene in a tiered fashion that include the implementation of an adaptive management program or the cessation of pumping from wells involved in substitution programs or other agricultural wells.

Monitoring

Incorporated into these water transfer guidelines will be program specific components of the Sacramento Valley Water Resource Monitoring, Data Collection, and Evaluation Framework (developed by the Department of Water Resources, DWR) and the Preliminary Plan Comprehensive Groundwater Monitoring Plan (Glenn County). The Framework document was developed in 2007 by the DWR staff with valuable assistance from a panel of local and regional water resource scientists and engineers that have a vast knowledge of the region. The Comprehensive Groundwater Monitoring Plan was completed in 2007 as part of an AB 303 Local Groundwater Assistance grant with the work performed by Wood Rodgers Inc. Specific monitoring requirements will be identified, discussed, and agreed upon by the County and sellers. Every effort will be made to design program monitoring which is intended to gather information that will be beneficial to overall water resource planning and designed in a manner that promotes sound coordinated water management activities.

Mitigation

All water transfers require a mitigation plan that needs to address factors that may arise as a result of the transfer. The level of detail in the mitigation plan will be a factor in determining the success of the transfer. The County will assume the lead role for conflict resolution. Specific mitigation factors will be identified, discussed, and agreed upon by the County and sellers. Every effort will be made to design a mitigation plan that is intended to adequately address responsibility, response, finances, and methods of avoiding third party impact or injury.

Legal Principles to be Addressed as Part of the Water Transfer

California laws contain numerous protections that apply to water transfers. However, there are three fundamental principles that typically apply: (1) no injury to other legal users of water, (2) no unreasonable affects to fish, wildlife or other in-stream beneficial uses of water, and (3) no unreasonable affects on the overall economy or the environment in the counties from which the water is transferred. The Project Agencies will not support or participate in any water transfer where these basic principles have not been adequately addressed.

Part 2: Guidelines and Principles

The following water transfer principles and guidelines are the most recent version (August 2008) developed by State and Federal Project Agencies, the DWR and the Bureau of Reclamation (USBR). In some instances, transfers can be developed between buyers and sellers outside of an organized program sponsored by DWR and USBR, where they become their own Project Agencies. Glenn County will consider adopting this edited version to be specific to Glenn County based upon thorough review by its WAC and TAC. Their input will be incorporated into the following guidelines prior to adoption:

Glenn County, in collaboration with Project Agencies, recognizes the importance of local leadership in making decisions on how best to manage their local and regional water resources. Accordingly, the County and these agencies will work cooperatively with local water associations, their member agencies, other regional local governments in the Sacramento Valley, and others to assure that local interests have the opportunity to manage their resources in a manner that meets their local objectives. Sellers will be required to contact the County Board of Supervisors and inform them of their intent to sell water for transfer out of the county as soon as discussions on commitments are negotiated.

Before suppliers voluntarily sell and transfer water out of the county, it is recommended that supplies be made available for others in the county. There needs to be assurance that critical local water needs are met before water is transferred out of the county. The project agencies will work with local water agencies and associations and other local interests in the Sacramento Valley and other regions to assure that supplies are reasonably available to meet local needs in those regions.

Glenn County believes strategies for making water supplies available need to be locally driven and developed in cooperation with local public leaders. It is expected that the Project Agencies will respect the right of individual local water entities determining the best way in which local water purveyors can make water available for local, regional, and statewide use. Such local programs shall be in compliance with all applicable laws, including local ordinances. California law recognizes transfers as a beneficial use of water and protects the underlying water rights involved in a transfer.

Water transfers in Glenn County are to be made without injuring other legal water users and without unreasonably affecting fish, wildlife, or other in-stream beneficial uses, and shall be designed to avoid unreasonable effects on the overall economy or the environment in the county. No more than 20 percent of the crop land can participate in transfers unless additional evaluations are conducted related to both the economic and environmental impacts. Investment of local income from water transfers typically goes back into normal business operations and improvements of local water supply systems. Coordination with the transferring water district, and, as necessary, county government representatives to help identify actions that may become necessary if the cumulative economic effects of water transfers in those counties appear to the Project Agencies to reach unreasonable levels. Water transfer programs need to establish effective mechanisms to ensure that injury to other legal water users is identified and avoided or mitigated. In addition, evaluations of possible economic and environmental effects of the transfer at the countywide level need to be identified. Real-time monitoring programs will be developed to trigger corrective actions that help avoid possible impacts as they may develop. This is especially important for groundwater substitution transfers in where a well defined mitigation program is required that specifies the actions the Seller will take, to prevent injury from occurring.

Actions to develop additional supplies for water users need to be implemented in a manner that is compatible with ongoing environmental protection and restoration programs. Examples of such programs include the Ecosystem Restoration Program and the Central Valley Project Improvement Act implementation efforts as well as any local actions to protect environmental resources. In fulfilling its obligations, the Project Agencies recognize that it must represent the interests of all parts of the State, both those areas needing additional supplies and those that can make supplies available.

Types of Water in Glenn County That Can Be Transferred

Groundwater Substitution – Reduction in surface water use which is offset with additional groundwater pumping. A groundwater substitution transfer generally consists of the following components:

- The location and characteristics of the wells that will be pumped
- The volume and schedule of transfer-related groundwater pumping
- Monitoring plan designed to assess the effects of the transfer

• Mitigation measures to alleviate possible injury issues

When developed, Project Agencies will review and evaluate groundwater substitution transfer proposals to determine whether they meet the following objectives:

- Transfer will have no significant unmitigated environmental effects
- Potential adverse effects to other legal users of water are minimized
- Proposal provides a process for review and response to reported third party effects
- Proposal shows that a monitoring and mitigation strategy is in place prior to the transfer
- Transfer operations will result in providing the agreed upon amount of transferable water

Before beginning transfer operations, the water transfer proponent will develop a groundwater substitution transfer proposal and provide it to the Project Agencies and the County. The proposal will include a detailed description of any transfer-related changes to water management operations and a description of the facilities used in the operation. The details of the proposed water management operations will be included as contractual commitments in the water purchase agreement with the seller or agent of the seller. The proposal shall include a description of the following program components:

- Surface water source that will be replaced by groundwater pumping
- Location and construction details of wells that will be pumped
- Schedule and volume of water to be pumped
- Baseline from which the additional pumping will be measured
- Method of measuring and reporting the volume of water pumped
- Monitoring program
- Mitigation measures

The seller will be responsible for assessing and mitigating significant adverse effects resulting from the transfer within the transfer source area. In addition to the details of the water transfer operations, the seller's proposal shall provide an assessment of potential adverse effects due to transfer-related operations.

Cropland idling/Crop Shifting – Reduction in surface water use resulting from a reduction in the evapotranspiration (ETAW) of applied water to agricultural crops that would have occurred in the absence of the water transfer. (See section titled "Water Transfers Based on Crop Shifting and Idling for DWR's 2009 Drought Water Bank and Bureau of Reclamation's Water Acquisition Program" for ETAW values of crops.)

Types of Water Transfers Not Allowable

Direct Pumping of Groundwater – Water Code Section 1220 establishes significant barriers to the export of groundwater outside the Sacramento Valley. The Project Agencies are not interested in facilitating the direct transfer of groundwater from one area to another.

Transfers that Injure Legal Users of Water or Cause Unreasonable Effects to the Environment – Water transfers that simply reclassify existing stream flows from one category to another, making these flows no longer available to historic downstream users, have the potential to injure other legal users of water and cause harm to the environment. Water transfers should focus on either making new surface flows available or reducing surface water use in such a way as to expand the availability of surface water resources for use by others.

Long-Term Transfers - Arrangements for long-term programs related to cropland idling may be developed if the situation arises. This documentation will determine the number of years acceptable for such a program is intended to help protect the local farm economy and to avoid some environmental impacts.

Environmental Documentation

In some water transfer instances, programmatic CEQA/NEPA environmental review will be considered adequate if it meets all the requirements of the Project Agencies legal requirements to the extent they assure that the proposed transfers and related actions are in compliance with applicable federal and state laws to prevent unreasonable environmental impacts. In instances of groundwater substitution, a greater level of site specific review may be required.

Verification and Reporting

Verification of the actions taken to make water available in a crop shifting or cropland idling program will be conducted by the Project Agencies and participating districts and provides the information to Glenn County staff. Sellers must allow access to fields by staff for verification purposes. Water transfers are based on estimates of water made available through cropland idling/ shifting. A mutually agreeable program needs to be developed for each proposed transfer that allows for monitoring of appropriate field data that can be used to verify the water that was actually made available by the transfer action(s) and to modify future guidelines if warranted. Accurate reporting of the activities undertaken as part of a crop shifting and cropland idling program is an essential provision of any water transfer program agreement. Reporting is the responsibility of the seller and needs to be acceptable to the Project Agencies. Reporting requirements will be

outlined in the contracting process and communicated to Glenn County staff.

Part 3: Proposed Water Transfer Fees

Water transfer fees being developed will be consistent with the adopted Glenn County Groundwater Management Plan (Ordinance 1115) adopted in February 2000 (codified as County Code 20.03) and local irrigation and water district policies. As a result of actions by the Board, it is now necessary for the County to impose fees on out-of-County groundwater substitution transfers and out-of-County land fallowing transfers. The benefits of these types of water transfer fees are necessary because the County will incur groundwater management costs as a result of some types of transfers. The County's groundwater management activities include reviewing environmental documentation, performing additional monitoring, and if necessary, enforcement of the Ordinance. So, as a result, it is only fair that transfer fees cover those costs. It is the County's responsibility to offer clear transfer guidelines and monitoring services to justify any transfer fee. Transfer fees will be paid by the buyer with no added cost to participants. Imposing an excessive water transfer fee without providing clear benefits could encourage buyers to seek transfers from other Counties, potentially driving business away from the County. These fees are in no way to considered part of any level of mitigation for third party impact or injury.

Protection of Water Rights

California law protects the underlying water rights of those parties who wish to transfer a portion of their surface water supply to others. California Water Code Section 1745 et seq. protects the underlying water rights from forfeiture for water transfers. Any water transfer agreement between the buyer and seller for water purchases needs to expressly recognize the legal protections afforded the seller's underlying water rights in a water transfer.

Trust Fund

All funds received by the County from these transfers will be placed in a special trust fund and utilized only for groundwater and coordinated water management activities in the County.

Proposed Fess Are As Follows:

Substitution

For each acre foot of groundwater extracted in the County that is replacing an acre foot of surface supply that is not utilized in the County or District there will be a fee of **\$5.00 per acre foot** surcharge paid to the County by the buyer.

Fallowing

For each acre of ground fallowed, that is associated with an out-of-County transfer of surface supply that is not utilized in the County, there will be a fee of **\$1.00 per acre foot** surcharge paid to the County by the buyer.

Option Fees

Option fees and dates are usually developed by the buyer and the seller during their negotiations. When an option date and option fee to purchase water is determined by the buyer and the seller, and the buyer exercises the option, there will be a **\$1.00 per acre** foot surcharge paid to the County by the buyer, regardless of the ability of the buyer to receive the water from a completed transfer.