

**Table 31. Other Uses of Irrigation Water: 2003 and 1998**

[Excludes abnormal and horticultural specialty farms. For meaning of abbreviations and symbols, see introductory text]

| Geographic area                                    | Prevent freeze damage |                        | Crop cooling to delay early budding or blooming, or to reduce heat stress |                        | Leaching to remove salts from soil |                    |
|--|-----------------------|------------------------|---|------------------------|------------------------------------|--------------------|
|  | Farms                 | Acres applied          | Farms   | Acres applied          | Farms                              | Acres applied      |
| U.S. TOTAL . . . . . 2003 . . . . . 1998 . . . . . | 14,531<br>12,902      | 1,432,532<br>1,556,218 | 6,954<br>7,325  | 1,005,165<br>1,759,926 | 1,368<br>985                       | 497,529<br>366,765 |
| <b>2003 DATA</b>                                   |                       |                        |   |                        |                                    |                    |
| Alabama  | 26                    | 108                    | 4   | 340                    | -                                  | -                  |
| Alaska   | -                     | -                      | -   | -                      | -                                  | -                  |
| Arizona  | 104                   | 9,846                  | 69  | 44,771                 | 151                                | 88,314             |
| Arkansas   | 101                   | 303                    | 64  | 53,055                 | 22                                 | 4,640              |
| California   | 4,980                 | 746,894                | 2,386   | 220,378                | 869                                | 303,873            |
| Colorado   | 3                     | 1,710                  | 108   | 14,582                 | 8                                  | 2,520              |
| Connecticut  | 43                    | 275                    | 2   | (D)                    | -                                  | -                  |
| Delaware   | 2                     | (D)                    | -   | -                      | -                                  | -                  |
| Florida  | 2,492                 | 379,520                | 307   | 42,571                 | 5                                  | (D)                |
| Georgia  | 21                    | 1,392                  | 18  | 10,062                 | -                                  | -                  |
| Hawaii   | -                     | -                      | 8   | 8                      | 3                                  | (D)                |
| Idaho  | 114                   | 53,759                 | 143   | 47,164                 | 48                                 | 18,630             |
| Illinois   | -                     | -                      | 62  | 27,003                 | -                                  | -                  |
| Indiana  | 47                    | 714                    | 23  | 4,029                  | -                                  | -                  |
| Iowa   | 35                    | 141                    | 58  | 1,521                  | 8                                  | 8                  |
| Kansas   | 13                    | 10,608                 | 90  | 25,599                 | -                                  | -                  |
| Kentucky   | 14                    | 56                     | 66  | 1,173                  | -                                  | -                  |
| Louisiana  | 56                    | 1,158                  | 25  | 11,125                 | -                                  | -                  |
| Maine  | 52                    | 1,939                  | 76  | 469                    | -                                  | -                  |
| Maryland   | 7                     | 33                     | 1   | (D)                    | -                                  | -                  |
| Massachusetts                                      | 421                   | 12,175                 | 310   | 7,484                  | -                                  | -                  |
| Michigan   | 329                   | 7,686                  | 150   | 17,666                 | 2                                  | (D)                |
| Minnesota  | 135                   | 1,492                  | 47  | 4,396                  | -                                  | -                  |
| Mississippi  | -                     | -                      | 38  | 22,525                 | -                                  | -                  |
| Missouri   | -                     | -                      | 40  | 12,771                 | -                                  | -                  |
| Montana  | 4                     | 397                    | 180   | 66,454                 | 4                                  | 480                |
| Nebraska   | 18                    | 2,268                  | 37  | 29,507                 | -                                  | -                  |
| Nevada   | 83                    | 360                    | 88  | 2,981                  | 22                                 | 6,105              |
| New Hampshire                                      | 19                    | 98                     | 18  | 73                     | -                                  | -                  |
| New Jersey   | 58                    | 4,321                  | 60  | 3,776                  | -                                  | -                  |
| New Mexico   | 120                   | 6,207                  | 61  | 15,952                 | 43                                 | 3,761              |
| New York   | 114                   | 1,464                  | 30  | 507                    | 2                                  | (D)                |
| North Carolina                                     | 156                   | 7,628                  | 42  | 2,582                  | 32                                 | 1,240              |
| North Dakota                                       | 2                     | (D)                    | 18  | 4,502                  | 2                                  | (D)                |
| Ohio   | 101                   | 460                    | 35  | 140                    | 3                                  | 15                 |
| Oklahoma   | 114                   | 1,054                  | 29  | 6,010                  | -                                  | -                  |
| Oregon   | 1,020                 | 25,838                 | 471   | 27,897                 | 6                                  | 3,372              |
| Pennsylvania                                       | 228                   | 1,103                  | 118   | 440                    | -                                  | -                  |
| Rhode Island                                       | 7                     | 150                    | 6   | 115                    | -                                  | -                  |
| South Carolina                                     | 150                   | 1,104                  | 2   | (D)                    | -                                  | -                  |
| South Dakota                                       | -                     | -                      | 10  | 4,878                  | -                                  | -                  |
| Tennessee  | 55                    | 319                    | 21  | (D)                    | -                                  | -                  |
| Texas  | 31                    | 4,140                  | 282   | 109,116                | 46                                 | 17,448             |
| Utah   | 123                   | 1,578                  | 17  | 1,326                  | 34                                 | 12,605             |
| Vermont  | 10                    | 38                     | 15  | (D)                    | -                                  | -                  |
| Virginia   | 4                     | 312                    | 25  | 1,765                  | -                                  | -                  |
| Washington   | 2,708                 | 97,495                 | 1,047   | 111,949                | 26                                 | 1,602              |
| West Virginia                                      | 6                     | 24                     | -   | -                      | -                                  | -                  |
| Wisconsin  | 355                   | 31,941                 | 184   | 31,126                 | -                                  | -                  |
| Wyoming  | 50                    | 13,992                 | 63  | 12,170                 | 32                                 | 4,104              |
| <b>Water Resources Areas</b>                       |                       |                        |   |                        |                                    |                    |
| WRA 01 New England                                 | 549                   | 14,668                 | 413   | 8,199                  | -                                  | -                  |
| WRA 02 Mid-Atlantic                                | 364                   | 6,223                  | 216   | 5,549                  | 2                                  | (D)                |
| WRA 03 South Atlantic-Gulf                         | 2,845                 | 389,752                | 378   | 58,329                 | 37                                 | 12,940             |
| WRA 04 Great Lakes                                 | 457                   | 11,850                 | 198   | 23,673                 | 2                                  | (D)                |
| WRA 05 Ohio  | 163                   | 809                    | 135   | 8,030                  | 3                                  | 15                 |
| WRA 06 Tennessee                                   | 16                    | 127                    | 10  | 1,405                  | -                                  | -                  |
| WRA 07 Upper Mississippi                           | 422                   | 30,978                 | 302   | 53,732                 | -                                  | -                  |
| WRA 08 Lower Mississippi                           | 183                   | 1,624                  | 115   | 94,376                 | 17                                 | 4,140              |
| WRA 09 Souris-Red-Rainy                            | 45                    | 179                    | 33  | 2,537                  | -                                  | -                  |
| WRA 10 Missouri                                    | 85                    | 17,121                 | 466   | 134,244                | 44                                 | 4,562              |
| WRA 11 Arkansas-White-Red                          | 131                   | 3,174                  | 128   | 50,057                 | 5                                  | 500                |
| WRA 12 Texas-Gulf                                  | 14                    | 2,020                  | 277   | 98,068                 | 41                                 | 6,734              |
| WRA 13 Rio Grande                                  | 75                    | 7,341                  | 42  | 4,270                  | 54                                 | 16,955             |
| WRA 14 Upper Colorado                              | 50                    | 10,896                 | 19  | 3,206                  | 14                                 | (D)                |
| WRA 15 Lower Colorado                              | 178                   | 11,326                 | 71  | 45,513                 | 164                                | 89,974             |
| WRA 16 Great Basin                                 | 132                   | 458                    | 96  | 3,813                  | 41                                 | 15,880             |
| WRA 17 Pacific Northwest                           | 3,655                 | 169,815                | 1,658   | 189,328                | 69                                 | 19,602             |
| WRA 18 California                                  | 5,167                 | 754,171                | 2,389   | 220,828                | 872                                | 306,795            |
| WRA 19 Alaska                                      | -                     | -                      | -   | -                      | -                                  | -                  |
| WRA 20 Hawaii                                      | -                     | -                      | 8   | 8                      | 3                                  | (D)                |

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**Table 31. Other Uses of Irrigation Water: 2003 and 1998 - Con.**

[Excludes abnormal and horticultural specialty farms. For meaning of abbreviations and symbols, see introductory text]

| Geographic area                                    | Application of livestock waste |                    | Wildlife or water-fowl habitat |                 | Other purposes |                    |
|--|--------------------------------|--------------------|--------------------------------|-----------------|----------------|--------------------|
|  | Farms                          | Acres applied      | Farms                          | Acres applied   | Farms          | Acres applied      |
| U.S. TOTAL . . . . . 2003 . . . . . 1998 . . . . . | 2,968<br>2,054                 | 444,627<br>255,365 | 4,587<br>(NA)                  | 610,029<br>(NA) | 3,337<br>2,518 | 467,124<br>210,193 |
| <b>2003 DATA</b>                                   |                                |                    |                                |                 |                |                    |
| Alabama  | 26                             | 1,402              | -                              | -               | 12             | 290                |
| Alaska   | -                              | -                  | -                              | -               | -              | -                  |
| Arizona  | 4                              | (D)                | 74                             | 199             | 18             | 3,914              |
| Arkansas   | 185                            | 8,280              | 743                            | 156,279         | 31             | 15,735             |
| California   | 1,142                          | 222,133            | 934                            | 173,722         | 1,812          | 222,989            |
| Colorado   | 27                             | 6,438              | 109                            | 12,455          | 84             | 16,960             |
| Connecticut  | -                              | -                  | -                              | -               | 2              | (D)                |
| Delaware   | 9                              | 432                | -                              | -               | 3              | 300                |
| Florida  | 23                             | 7,050              | 4                              | 608             | 1              | (D)                |
| Georgia  | 97                             | 15,980             | 22                             | 451             | 25             | 2,786              |
| Hawaii   | 2                              | (D)                | 11                             | 46              | 18             | 206                |
| Idaho  | 55                             | 11,131             | 461                            | 16,708          | 8              | 7,405              |
| Illinois   | 27                             | 2,494              | 5                              | 868             | 4              | 1,900              |
| Indiana  | 25                             | 3,957              | 1                              | (D)             | 21             | 21                 |
| Iowa   | -                              | -                  | 14                             | 315             | 3              | 592                |
| Kansas   | 89                             | 15,268             | 22                             | 80              | 27             | 11,496             |
| Kentucky   | 9                              | 675                | 2                              | (D)             | 10             | 476                |
| Louisiana  | 19                             | 3,358              | 235                            | 57,812          | 93             | 34,606             |
| Maine  | -                              | -                  | 2                              | (D)             | 3              | 100                |
| Maryland   | 7                              | 889                | 7                              | 31              | 24             | 240                |
| Massachusetts                                      | -                              | -                  | -                              | -               | 46             | 1,686              |
| Michigan   | 19                             | 2,018              | 78                             | 572             | 30             | 7,818              |
| Minnesota  | 9                              | 1,001              | 7                              | 2,828           | 4              | 840                |
| Mississippi  | 2                              | (D)                | 110                            | 23,224          | 4              | 940                |
| Missouri   | 161                            | 9,262              | 57                             | 5,207           | -              | -                  |
| Montana  | 4                              | 1,920              | 306                            | 13,144          | 56             | 9,390              |
| Nebraska   | 5                              | 6,055              | 19                             | 380             | 169            | 43,026             |
| Nevada   | 2                              | (D)                | 87                             | 13,650          | -              | -                  |
| New Hampshire                                      | -                              | -                  | 2                              | (D)             | -              | -                  |
| New Jersey   | -                              | -                  | -                              | -               | 50             | 208                |
| New Mexico   | 15                             | 3,958              | 100                            | 3,338           | 5              | 120                |
| New York   | 7                              | 2,392              | -                              | -               | 3              | 222                |
| North Carolina                                     | 494                            | 33,831             | -                              | -               | 108            | 216                |
| North Dakota                                       | 1                              | (D)                | 4                              | 12              | 4              | 60                 |
| Ohio   | 4                              | 404                | -                              | -               | 3              | 135                |
| Oklahoma   | 81                             | 10,463             | 4                              | 562             | 11             | 1,210              |
| Oregon   | 150                            | 22,280             | 97                             | 34,919          | 73             | 18,642             |
| Pennsylvania                                       | 42                             | 475                | 3                              | 6               | 73             | 508                |
| Rhode Island                                       | -                              | -                  | 4                              | 4               | 1              | (D)                |
| South Carolina                                     | 31                             | 1,835              | 12                             | 220             | 10             | 100                |
| South Dakota                                       | 10                             | 2,406              | 23                             | 23              | 2              | (D)                |
| Tennessee  | 12                             | 1,689              | 22                             | 148             | -              | -                  |
| Texas  | 108                            | 24,320             | 270                            | 19,969          | 144            | 37,642             |
| Utah   | 3                              | 360                | 178                            | 9,616           | 130            | 4,851              |
| Vermont  | -                              | -                  | -                              | -               | -              | -                  |
| Virginia   | 4                              | 80                 | 58                             | 580             | 10             | 100                |
| Washington   | 47                             | 9,866              | 255                            | 4,993           | 152            | 5,830              |
| West Virginia                                      | -                              | -                  | -                              | -               | -              | -                  |
| Wisconsin  | -                              | -                  | 7                              | 364             | 40             | 8,521              |
| Wyoming  | 11                             | 8,140              | 238                            | 56,546          | 10             | 3,340              |
| <b>Water Resources Areas</b>                       |                                |                    |                                |                 |                |                    |
| WRA 01 New England                                 | -                              | -                  | 8                              | 32              | 52             | 1,939              |
| WRA 02 Mid-Atlantic                                | 62                             | 1,876              | 65                             | 611             | 163            | 1,578              |
| WRA 03 South Atlantic-Gulf                         | 642                            | 60,303             | 40                             | 2,315           | 156            | 3,942              |
| WRA 04 Great Lakes                                 | 32                             | 5,410              | 78                             | 572             | 39             | 9,635              |
| WRA 05 Ohio  | 35                             | 3,955              | 4                              | 18              | 27             | (D)                |
| WRA 06 Tennessee                                   | 34                             | 1,495              | 18                             | 18              | 2              | (D)                |
| WRA 07 Upper Mississippi                           | 59                             | 6,836              | 14                             | 1,255           | 45             | 9,693              |
| WRA 08 Lower Mississippi                           | 128                            | 8,588              | 1,026                          | 220,403         | 128            | 51,281             |
| WRA 09 Souris-Red-Rainy                            | 2                              | (D)                | 6                              | 2,825           | -              | -                  |
| WRA 10 Missouri                                    | 155                            | 28,068             | 336                            | 43,425          | 249            | 63,380             |
| WRA 11 Arkansas-White-Red                          | 297                            | 34,828             | 176                            | 32,332          | 53             | 27,164             |
| WRA 12 Texas-Gulf                                  | 104                            | 22,330             | 237                            | 11,315          | 135            | 25,630             |
| WRA 13 Rio Grande                                  | 13                             | 3,238              | 60                             | 2,650           | 75             | 8,230              |
| WRA 14 Upper Colorado                              | 1                              | (D)                | 311                            | 44,479          | 58             | 4,135              |
| WRA 15 Lower Colorado                              | 4                              | (D)                | 172                            | 1,702           | 92             | 4,950              |
| WRA 16 Great Basin                                 | 4                              | 720                | 105                            | 20,257          | -              | -                  |
| WRA 17 Pacific Northwest                           | 250                            | 42,321             | 977                            | 42,948          | 232            | 29,137             |
| WRA 18 California                                  | 1,144                          | 223,089            | 943                            | 182,826         | 1,813          | 225,729            |
| WRA 19 Alaska                                      | -                              | -                  | -                              | -               | -              | -                  |
| WRA 20 Hawaii                                      | 2                              | (D)                | 11                             | 46              | 18             | 206                |