Table 19 shows N losses as a function of county and crop. Nitrogen applied is a function of the rate and number of acres. Generally, excess N was applied to corn, cotton, and soybeans whereas insufficient N was applied to hay, cereal crops. Patterns of N use, however, varied based on county.

**Table 19. N Losses by County as Calculated in NLEW**

| County | Crop | N Applied | N Needed | Excess N | N Lost | % of Applied N Lost |
|---|---|---|---|---|---|---|
| **Beaufort** | **Corn** | 1294 | 1201 | 151 | 593 | 45.8 |
| | **Cotton** | 1091 | 1080 | 404 | 660 | 60.5 |
| | **Soybean, DC** | 38 | 32 | 6 | 19 | 50.5 |
| | **Soybean, FS** | 22 | 0 | 22 | 14 | 63.3 |
| | **Tobacco** | 914 | 880 | 69 | 289 | 31.6 |
| | **Winter wheat** | 566 | 797 | 45 | 276 | 48.7 |
| **Edgecombe** | **Corn** | 2242 | 2055 | 441 | 1008 | 45.0 |
| | **Cotton** | 1365 | 1391 | 121 | 590 | 43.2 |
| | **Oats** | 54 | 491 | 0 | 10 | 19.3 |
| | **Rye** | 953 | 1504 | 0 | 500 | 52.5 |
| | **Soybean, DC** | 55 | 0 | 55 | 53 | 95.7 |
| | **Soybean, FS** | 69 | 0 | 69 | 57 | 83.0 |
| | **Sweet potato** | 432 | 450 | 0 | 432 | 40.0 |
| | **Tobacco** | 575 | 717 | 0 | 165 | 28.8 |
| | **Winter wheat** | 130 | 1200 | 0 | 72 | 55.0 |
| **Franklin** | **Corn** | 652 | 464 | 188 | 241 | 36.9 |
| | **Cucumber** | 825 | 1020 | 0 | 403 | 48.9 |
| | **Hay** | 1062 | 1867 | 69 | 241 | 22.7 |
| | **Sorghum** | 806 | 910 | 194 | 406 | 50.3 |
| | **Soybean, DC** | 104 | 74 | 31 | 60 | 57.3 |
| | **Soybean, FS** | 162 | 0 | 162 | 125 | 77.3 |
| | **Tobacco** | 465 | 453 | 84 | 179 | 38.5 |
| | **Winter wheat** | 1258 | 1170 | 187 | 628 | 50.0 |
| **Granville** | **Hay** | 106 | 612 | 0 | 9 | 8.1 |
| | **Oats** | 580 | 739 | 0 | 241 | 41.6 |
| | **Soybean, DC** | 0 | 0 | 0 | 0 | NA |
| | **Soybean, FS** | 0 | 0 | 0 | 0 | NA |
| | **Tobacco** | 773 | 985 | 2 | 262 | 33.9 |
| | **Winter wheat** | 228 | 416 | 0 | 38 | 16.7 |
| **Halifax** | **Corn** | 554 | 676 | 7 | 150 | 27.1 |
| | **Cotton** | 1080 | 1034 | 178 | 353 | 32.7 |
| | **Soybean, FS** | 59 | 0 | 59 | 41 | 69.1 |
| | **Sweet potato** | 376 | 409 | 0 | 352 | 93.4 |
| | **Tobacco** | 383 | 593 | 0 | 133 | 34.6 |
| | **Winter wheat** | 1271 | 1886 | 0 | 245 | 19.3 |