RTD-229
Methodology for Estimating Population of Delta Region Subsistence Fishing From Fishing License Data

## Assumptions:

- Each Delta sportfishing licensee fished just once during the year, equal to 1 "person-angler." (It is likely, however, that resident licensed anglers will fish more than once a year; that means the daily estimate of person-anglers in Table 2, is in actuality higher on any given day for fishing.)
- Each Delta person-angler represents one household, and that fish caught and kept by that person-angler feeds a single household.
- The population of Delta counties' licensees mirrors the Delta counties' population and income distribution, poverty rate, etc.
- All Delta licensees living in distressed communities are members of environmental justice communities.
- All person-anglers living in distressed communities in Delta counties are licensed to fish.

Table 1
Delta Counties' Fishing Licenses, 2014

| County | Total, All 2014 <br> Fishing <br> Licenses | Total <br> Sportfishing <br> Licenses (Res) |
| :--- | ---: | ---: |
| Contra Costa | 77,669 | 36,085 |
| Sacramento | 124,692 | 60,161 |
| San Joaquin | 64,863 | 30,571 |
| Solano | 42,203 | 17,893 |
| Yolo | 18,388 | 8,694 |
| Total Delta Counties' Licenses | $\mathbf{3 2 7 , 8 1 5}$ | 153,404 |
| State Total, 2014 | $\mathbf{2 , 5 3 7 , 0 9 7}$ | $\mathbf{9 9 0 , 4 7 7}$ |
| Delta Counties, Percent of | $\mathbf{1 2 . 9 \%}$ | $\mathbf{1 5 . 5 \%}$ |
| State Total |  |  |

Source: RTD-234; Restore the Delta.

Table 2
Estimate of Delta Counties' Licensees Living in Distressed Communities

|  | Total <br> Sportfishing | Percent of <br> Population in <br> Distressed Zip <br> Codes | Estimated Delta <br> County <br> Cicenses (Res) <br> Living in Dicensees <br> Communities |
| :--- | ---: | ---: | ---: |
| Contra Costa | 36,085 | $11 \%$ | 3,969 |
| Sacramento | 60,161 | $8 \%$ | 4,813 |
| San Joaquin | 30,571 | $43 \%$ | 13,146 |
| Solano | 17,893 | $8 \%$ | 1,431 |
| Yolo | 8,694 | $8 \%$ | 696 |
| Total Delta Counties | $\mathbf{1 5 3 , 4 0 4}$ | NA | $\mathbf{2 4 , 0 5 5}$ |
| Estimated Daily Delta Counties' Daily person-anglers from | $\mathbf{6 6}$ |  |  |
| Distressed Communities |  |  |  |

Source: California Department of Fish and Wildlife, License Statistics, Sales by County, accessible July 21, 2016; Economic Innovations Group; Restore the Delta.
"NA" means "not available."
Note: Contra Costa County's percent of population in distressed zip codes was reported by EIG as 0 percent, with an overall distress score of 8.1 , indicative of a well-off county. However, Antioch (Distress score = 77.0) and Pittsburg (Distress score 67.6) both have relatively high distress scores for Contra Costa communities, implying that the Contra Costa population in distressed zip codes is not zero. (Richmond zip codes also have high distress scores.) It seemed reasonable to at least assume for this analysis that Contra Costa County's population in distressed communities was at least the same as that for California, 11 percent.

