

TABLE X-5.—SUMMARY OF STOCK STATUS OF HARVESTED SPECIES OF THE NORTH ATLANTIC REGION THAT ARE IMPINGED AND ENTRAINMENT—Continued

Stock (All are major stocks, with annual landings over 200,000 pounds)	Overfishing? (Is fishing mortality above threshold?)	Overfished? (Is stock size below threshold?)	Approaching overfished condition?
Atlantic haddock-Georges Bank .....	No .....	Rebuilding .....	No.
Atlantic herring .....	No .....	No .....	No.
Atlantic menhaden .....	No .....	No .....	Unknown.
Pollock .....	Unknown .....	Unknown .....	Unknown.
Red hake-Gulf of Maine/Northern Georges Bank .....	No .....	No .....	No.
Red hake-Southern Georges Bank/Middle Atlantic .....	No .....	.....	Unknown.
Silver hake-Gulf of Maine/Northern Georges Bank .....	Unknown .....	Rebuilding .....	No.
Silver hake-Southern Georges Bank/Middle Atlantic .....	Unknown .....	Yes .....	N/A.
Spot .....	Unknown .....	Unknown .....	Unknown.
Striped bass .....	No .....	No .....	Unknown.
Tautog .....	Yes .....	Undefined .....	Unknown.
Weakfish .....	Undefined .....	No .....	No.
Windowpane flounder-Gulf of Maine/Georges Bank .....	No .....	No .....	No.
Windowpane flounder-Southern New England/Middle Atlantic .....	No .....	No .....	Yes.
Winter flounder-Gulf of Maine .....	Unknown .....	Undefined .....	Unknown.
Winter flounder-Georges Bank .....	No .....	Rebuilding .....	No.
Winter flounder-Southern New England .....	No .....	No .....	No.

Source: Table 3 in NMFS (2002).

### 3. Impingement and Entrainment Losses Expressed as Age 1 Equivalents, Foregone Yield, and Production Foregone

At the outset, it should be noted that many of the species for which impingement and entrainment estimates are provided are presently at or near historic low levels of abundance. As a result, EPA's estimates of impingement and entrainment may reflect lower totals than would be produced by healthy populations. With ongoing fisheries

management efforts by federal and state government and fisheries management councils designed to increase fish populations, impingement and entrainment numbers may increase in the future. For example, NMFS has spent approximately \$150 million in the New England fishing vessel buy-back program to reduce fishing pressure on groundfish stocks. In addition, extensive fishing restrictions, habitat restoration projects, and other efforts are also being carried out to help rebuild groundfish stocks.

Table X-6 provides EPA's estimate of the annual age 1 equivalents, foregone fishery yield, and production foregone resulting from the impingement of aquatic species at facilities located on estuaries/tidal rivers in the North Atlantic Region. Table X-7 displays this information for entrainment. Table X-8 provides EPA's estimate of the annual age 1 equivalents, foregone fishery yield, and biological production foregone resulting from the impingement of aquatic species at ocean facilities in the North Atlantic Region.

TABLE X-6.—TOTAL ANNUAL IMPINGEMENT LOSSES FOR ALL ESTUARY/TIDAL RIVER FACILITIES IN THE NORTH ATLANTIC REGION EXPRESSED AS AGE 1 EQUIVALENTS, FOREGONE FISHERY YIELD, AND PRODUCTION FOREGONE

Species	Age 1 equivalents (#s)	Total yield (lbs)	Production foregone (lbs)
Alewife .....	164,315	0	15,240
American sand lance .....	3,288,738	0	9,226
Atlantic cod .....	19,771	6,506	20,031
Atlantic herring .....	619	138	161
Atlantic mackerel .....	121	30	33
Atlantic menhaden .....	25,320	3,239	6,078
Atlantic silverside .....	33,187	0	134
Bay anchovy .....	58,826	0	90
Bluefish .....	1,118	706	954
Butterfish .....	9,915	401	900
Cunner .....	14,593	73	954
Fourbeard rockling .....	18	0	2
Grubby .....	48,273	0	11,756
Hogchoker .....	790,907	0	7,293
Northern pipefish .....	13,040	0	71
Pollock .....	525	817	1,601
Radiated shanny .....	35	0	0
Rainbow smelt .....	22,041	46	655
Red hake .....	1,414	306	488
Rock gunnel .....	435	0	9
Scup .....	1,030	129	541
Searobin .....	1,683	99	559
Silver hake .....	81,196	31,094	81,393
Skate species .....	4,575	1,000	1,844