

SIZEWELL NUCLEAR POWER STATIONS ANNUAL FISH IMPINGEMENT CALCULATIONS
BASED ON DATA TAKEN FROM SIZEWELL C DCO DOCUMENT 6.3 Vol 2 Chapter 22 Appendix 22D
(Appendix C : Predicted Sizewell B (SZB) Annual Impingement from 2009-2013 data)

Data from DCO document		TASC Calculations					
Common name	Latin name	Protected Species	SZB Mean	% of total	cumulative %	Sizewell C (SZC) Estimate (*)	SZB +SZC 2035-2055
Sprat	Sprattus sprattus		4,132,631	51.77%	51.77%	10,579,535	14,712,166
Herring	Clupea harengus	Blackwater Herring protected	968,431	12.13%	63.91%	2,479,183	3,447,614
Whiting	Merlangius merlangus		759,928	9.52%	73.43%	1,945,416	2,705,344
Bass	Dicentrarchus labrax	Protected	831,330	10.41%	83.84%	2,128,205	2,959,535
Goby, Sand	Pomatoschistus minutus		429,478	5.38%	89.22%	1,099,464	1,528,942
Sole, Dover	Solea solea		152,588	1.91%	91.13%	390,625	543,213
Dab	Limanda limanda		152,887	1.92%	93.05%	391,391	544,278
Anchovy	Engraulis encrasicolus		114,981	1.44%	94.49%	294,351	409,332
Mullet, Thin-lipped grey	Liza ramada		101,370	1.27%	95.76%	259,507	360,877
Pipefish, Nilsson's	Syngnathus rostellatus		47,202	0.59%	96.35%	120,837	168,039
Pout	Trisopterus luscus		61,610	0.77%	97.12%	157,722	219,332
Weever, lesser	Trachinus vipera		39,332	0.49%	97.61%	100,690	140,022
Rockling, 5-bearded	Ciliata mustela		16,766	0.21%	97.82%	42,921	59,687
Hooknose	Agonus cataphractus		16,881	0.21%	98.04%	43,215	60,096
Flounder	Platichthys flesus		14,451	0.18%	98.22%	36,995	51,446
Goby, Transparent	Aphia minuta		19,967	0.25%	98.47%	51,116	71,083
Plaice	Pleuronectes platessa		19,954	0.25%	98.72%	51,082	71,036
Cod	Gadus morhua		13,865	0.17%	98.89%	35,494	49,359
Smelt, Cucumber	Osmerus eperlanus		14,033	0.18%	99.07%	35,924	49,957
Sea snail, Common	Liparis liparis		4,843	0.06%	99.13%	12,398	17,241
Pilchard	Sardina pilchardus		7,925	0.10%	99.23%	20,288	28,213
Dragonet	Callionymus lyra		5,302	0.07%	99.29%	13,573	18,875
Dogfish, Lesser spotted	Scyliorhinus canicula		3,266	0.04%	99.33%	8,361	11,627
Gurnard, Tub	Trigla lucerna		3,382	0.04%	99.38%	8,658	12,040
Ray, Thornback	Raja clavata		3,154	0.04%	99.42%	8,074	11,228
Pipefish, Greater	Syngnathus acus		3,902	0.05%	99.46%	9,989	13,891
Stickleback, 3-spined	Gasterosteus aculeatus		4,448	0.06%	99.52%	11,387	15,835
Starry smooth-hound	Mustelus asterias		2,683	0.03%	99.55%	6,868	9,551
Witch	Glyptocephalus cynoglossus		4,287	0.05%	99.61%	10,975	15,262
Sandeel, Common	Ammodytes tobianus		3,714	0.05%	99.65%	9,508	13,222
Scaldfish	Arnoglossus laterna		1,740	0.02%	99.68%	4,454	6,194
Goby, Black	Gobius niger		2,184	0.03%	99.70%	5,591	7,775
Eel	Anguilla anguilla	Protected	1,469	0.02%	99.72%	3,761	5,230
Sandeel, Greater	Hyperoplus lanceolatus		1,256	0.02%	99.74%	3,215	4,471
Scad	Trachurus trachurus		3,013	0.04%	99.78%	7,713	10,726
Shad, Twaite	Alosa fallax	Protected	1,435	0.02%	99.79%	3,674	5,109
Lamprey, River	Lampetra fluviatilis	Protected	1,162	0.01%	99.81%	2,975	4,137
Pipefish, Snake	Entelurus aequoreus		2,618	0.03%	99.84%	6,702	9,320
Bullrout	Myoxocephalus scorpius		1,085	0.01%	99.85%	2,778	3,863
Brill	Scophthalmus rhombus		1,267	0.02%	99.87%	3,244	4,511
Goby, Rock	Gobius paganellus		2,019	0.03%	99.90%	5,169	7,188
Smelt, Sand	Atherina boyeri		705	0.01%	99.90%	1,805	2,510
Mackerel	Scomber scombrus		530	0.01%	99.91%	1,357	1,887
Solenette	Buglossidium luteum		600	0.01%	99.92%	1,536	2,136
Blenny, Tompot	Blennius gattorugine		1,012	0.01%	99.93%	2,591	3,603
Sole, Lemon	Microstomus kitt		576	0.01%	99.94%	1,475	2,051
Sea scorpion, long-spined	Taurulus bubalis		395	0.00%	99.94%	1,011	1,406
Goby, Painted	Pomatoschistus pictus		815	0.01%	99.95%	2,086	2,901
Butterfish	Pholis gunnellus		194	0.00%	99.96%	497	691
Mullet, Red	Mullus surmuletus		333	0.00%	99.96%	852	1,185
Viviparous blenny	Zoarces viviparus		397	0.00%	99.97%	1,016	1,413
Poor cod	Trisopterus minutus		342	0.00%	99.97%	876	1,218
Garfish	Belone belone		269	0.00%	99.97%	689	958
Gurnard, Grey	Eutrigla gurnardus		251	0.00%	99.98%	643	894
Wrasse, Corkwing	Crenilabrus melops		234	0.00%	99.98%	599	833
Sea snail, Montagu's	Liparis montagu		282	0.00%	99.98%	722	1,004
Rockling, Northern	Ciliata septentrionalis		156	0.00%	99.98%	399	555
Tadpolefish	Raniceps raninus		156	0.00%	99.99%	399	555
Saithe	Pollachius virens		156	0.00%	99.99%	399	555
John Dory	Zeus faber		78	0.00%	99.99%	200	278
Turbot	Psetta maxima		109	0.00%	99.99%	279	388
Wrasse, Ballan	Labrus bergylta		118	0.00%	99.99%	302	420
Lumpsucker	Cyclopterus lumpus		97	0.00%	99.99%	248	345
Mullet, Thick-lipped grey	Crenimugil labrosus		91	0.00%	99.99%	233	324
Sea bream, Black	Spondyliosoma cantharus		74	0.00%	100.00%	189	263
Norway bullhead	Micrenophrys lilljeborgii		53	0.00%	100.00%	136	189
Wrasse, Cuckoo	Labrus mixtus		67	0.00%	100.00%	172	239
Rockling, 4-bearded	Enchelyopus cimbricus		39	0.00%	100.00%	100	139
Pipefish, Deep-snouted	Syngnathus typhle		41	0.00%	100.00%	105	146
Rockling, Bigeye	Gaidropsarus macrophthalmus		23	0.00%	100.00%	59	82
Sea Trout	Salmo trutta		30	0.00%	100.00%	77	107
Rockling, Shore	Gaidropsarus mediterraneus		28	0.00%	100.00%	72	100
Pout, Norway	Trisopterus esmarkii		26	0.00%	100.00%	67	93
Goby, Crystal	Crystallogobius linearis		14	0.00%	100.00%	36	50
Sand sole	Pegusa lascaris		13	0.00%	100.00%	33	46
Pollack	Pollachius pollachius		13	0.00%	100.00%	33	46
Shad, Allis	Alosa alosa	Protected	11	0.00%	100.00%	28	39
Totals			<u>7,982,167</u>			<u>20,434,349</u>	<u>28,416,516</u>

(*) Based on a multiplier of 2.56 which has been calculated as follows:-
 Sizewell B cooling water intake 51.5 cumecs
 Sizewell C cooling water intake 131.86 cumecs
 Sizewell C's intake is therefore 2.56 (131.86/51.5) times greater than Sizewell B

ALL FIGURES IN THIS TABLE REPRESENT ANNUAL IMPINGEMENT FIGURES.
 THE 28,416,516 TOTAL FOR COMBINED SZB AND SZC MUST THEREFORE BE
 MULTIPLIED BY 20 TO ARRIVE AT THE ESTIMATED GROSS NUMBER OF FISH
 IMPINGEMENTS WHILE BOTH PLANTS ARE EXPECTED TO OPERATING AT
 THE SAME TIME (2035-2055) = 568,330,320