

Radiological Habits Survey: Hinkley Point, 2024

Cefas contract C8490

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1. Key Points

- The last habits survey completed around the Hinkley Point nuclear site was in 2017. At the time of publishing, the 2017 Hinkley Point report could be accessed via <u>https://www.cefas.co.uk/services/surveys/habits/</u>.
- In 2024, the terrestrial and direct radiation survey areas changed compared with 2017, as they were based on the Hinkley Point A, B and C sites, instead of A and B. This resulted in a new approximate site centre used to determine the terrestrial survey area and a new nuclear licensed site boundary used to determine the direct radiation survey area.
- No commercial fisheries were identified in the survey area. Only one commercial fisherman was identified in 2017, but by 2024, they had stopped fishing commercially.
- The most notable changes in occupancy rates over intertidal substrates were an increase over sand and stones, and decreases over mud, over sand, and on a boat on mud. Occupancy rates over salt marsh was identified in 2024.
- The collection and consumption of samphire and Porphyra from the aquatic survey area were identified in 2024. Conversely, the collection and consumption of molluscs was not identified.
- Beef cattle were identified grazing on salt marsh within the aquatic survey area, and this beef was consumed.
- People were not identified living on boats at Watchet Harbour in 2024.
- Three beekeepers were identified with hives in the survey area. The honey was consumed by the beekeepers, their families and friends, and was sold to the public.
- In 2024, the most notable increases in the consumption rates of terrestrial foods were for pig meat, wild/free foods, and honey, whilst the most notable decreases were for milk, cattle meat, poultry, eggs, rabbits/hares, and wild fungi.
- In 2024, the consumption of venison was identified, and the consumption of goat meat was not identified.
- The direct radiation survey area was sparsely populated; therefore, the area was extended from 1 km typically used in habits surveys to 1.1 km.
- No residential or commercial properties were located within the 0 0.25 km and >0.25 – 0.5 km zones. Therefore, no indoor occupancy rates were identified for these zones.

2. Summary

This report presents the results of a survey conducted in 2024 to determine the habits and consumption patterns of people living, working, and pursuing recreational activities in the vicinity of the Hinkley Point A, B and C sites. The Hinkley Point C site was included in the survey because the reactors are planned to be fuelled before the next habits survey is conducted. These nuclear power stations are adjacent to each other and for the purposes of this survey they are considered together as a single site. The site discharges liquid radioactive wastes into the Bristol Channel, gaseous radioactive wastes via stacks to the atmosphere, and contains sources of direct radiation. Areas likely to be most affected by the discharges and sources of radiation were defined as the aquatic survey area for liquid discharges, the terrestrial survey area for the deposition from gaseous discharges, and the direct radiation survey area are also applicable to inhalation and external exposure arising from gaseous discharges from the site.

The following potential exposure pathways were investigated:

- The consumption of food from the aquatic survey area.
- Activities and occupancy over intertidal substrates.
- The handling of fishing gear and sediment.
- Activities and occupancy in and on water.
- The use of seaweed as fertiliser or animal feed.
- The consumption of food from the terrestrial survey area.
- The use and destination of produce originating from the survey areas.
- The consumption and use of groundwater and surface water in the terrestrial survey area.
- Activities and occupancy within the direct radiation survey area.
- Any new or unusual exposure pathways.

Information was collected from members of the public by means of interviews and the data obtained for 432 individuals are presented and discussed. High rates of consumption, occupancy over intertidal substrates and handling of sediment and fishing gear are identified using established methods comprising (a) a 'cut-off' to define the high-rate group and (b) 97.5th percentiles. The rates identified can be used in dose assessments. Additionally, profiles of integrated habits data are presented specifically for use in 'total dose' assessments.

The aquatic survey area

The aquatic survey area (Figure 5) was defined as the intertidal areas along the Somerset coast from Blue Anchor in the west, to Brean Down in the east, and the Bristol Channel up to 9 km offshore. The tidal estuary of the River Parrett as far upstream as Bridgwater, and the tidal estuary of the River Brue as far upstream as the New Clyce Bridge were included in the survey area.

No commercial fisheries were identifed in the survey area. Only one commercial fisherman was identified in 2017, but by 2024, they had stopped fishing commercially. It was reported that the fish population in Bridgwater Bay had decreased significantly in recent years and it was no longer viable as a commercial fishery.

Activities taking place on intertidal areas included angling, setting nets, playing, wildfowling, dog walking, bait digging, walking, metal detecting, rock pooling, fossil hunting, beachcombing, litter collecting, tending livestock, camping, boat maintenance, sitting on the beach, and collecting limpets. Additionally, people were identified undertaking marsh warden duties, ecological fieldwork, geological fieldwork, environmental activities, ecological surveys, beach warden duties, nature warden duties, lifeguard duties, and rescue duties. During the previous habits survey in 2017, people were identified living on a boat at Watchet Harbour, but in the 2024 survey no houseboats were identified.

Activities taking place in and on water included paddleboarding, canoeing, rowing, rafting, kayaking, sailing, powerboating, water skiing, being on a boat, swimming, paddling, boat angling, teaching boating activities, and undertaking hovercraft rescue duties.

The collection of seaweed and samphire for consumption was identified within the survey area. People were identified collecting Porphyra at Stolford and samphire at Steart Marshes for consumption.

Beef cattle were identified grazing on the salt marsh at Steart Marshes and were reared for human consumption.

The terrestrial survey area

The terrestrial survey area (Figure 6) covered the land within 5 km from the centre of the combined Hinkley Point site. The land in the terrestrial survey area is primarily agricultural. Interviews were conducted at 16 working farms, where beef, store cattle, suckler beef, cows' milk, lamb, chicken and pork were produced. Oilseed rape and wheat were also produced for human consumption. Grass (for silage), maize, barley, oilseed rape, linseed and wheat were grown for animal feed. One smallholding was identified in the area which produced lamb, chicken eggs and duck eggs.

One allotment site was identified within the terrestrial survey area where a wide variety of fruit and vegetables were grown. A small number of private gardens were also identified growing produce. Three beekeepers were identified who kept hives in the survey area and

the consumption of honey was recorded. Game shooting was identified taking place on farmland and pheasant, pigeon, rabbits and venison were consumed. Wild foods including blackberries, mushrooms, hazelnuts, elderflowers and sloes were collected and consumed.

Foods from the terrestrial survey area were consumed from the following 16 food groups: green vegetables; other vegetables; root vegetables; potato; domestic fruit; milk; cattle meat; pig meat; sheep meat; poultry; eggs; wild/free foods; rabbits/hares; honey; wild fungi; venison. The mean consumption rates for the adult high-rate groups were above the national adult mean consumption rates that are used for comparison in habits surveys for the following 12 food groups: green vegetables; other vegetables; root vegetables; potato; domestic fruit; milk; cattle meat; pig meat; sheep meat; sheep meat; eggs; wild/free foods; not vegetables; potato; domestic fruit; milk; cattle meat; pig meat; sheep meat; eggs; wild/free foods; honey.

The human consumption of borehole water was identified at a single farm. Livestock were drinking mains water, borehole water, well water, and had access to streams.

The nuclear site operators were asked about the potential transfer of contamination off-site by wildlife since radionuclides could enter the food chain or contaminate the environment through this pathway. The site representatives reported that it was highly unlikely that wildlife could enter controlled areas and did not consider this pathway to be a risk.

The direct radiation survey area

The direct radiation survey area (Figure 7) covered the land and sea within 1.1 km of the combined nuclear licensed site boundaries of the Hinkley Point A, B and C sites. The occupancy data collected from the direct radiation survey area are also applicable to inhalation and external exposure pathways arising from gaseous discharges from the site.

The occupancy rates were analysed in zones according to the distance from the nuclear licensed site boundary. The zones were 0 - 0.25 km, >0.25 - 0.5 km and >0.5 - 1.1 km. No residential properties were identified in the 0 - 0.25 km and >0.25 - 0.5 km zones. Therefore, there were no indoor occupancy rates. The highest outdoor and total occupancy rates in the 0 - 0.25 km zone were for an angler, and in the >0.25 - 0.5 km zone were for an individual working. The highest indoor, outdoor and total occupancy rates were for residents in the >0.5 - 1.1 km zone.

Gamma dose rates were measured indoors and outdoors at most of the properties where interviews were conducted in the direct radiation survey area. Background readings were taken over grass at distances beyond 5 km from the approximate site centre of the Hinkley Point A, B and C sites. Of the 6 measurements taken indoors and the 9 measurements taken outdoors at locations within the direct radiation survey area, no readings were higher than the maximum background reading.

Comparisons with the previous survey

Comparisons for adults were made with the results from the previous Hinkley Point habits survey in 2017. Reasons for changes in the consumption and occupancy rates were identified for certain pathways and these are presented in Section 10 of the report.

For the consumption of foods from the aquatic survey area, the main differences in 2024 were that the mean consumption rate decreased significantly for crustaceans, the consumption of molluscs was not identified, and the consumption of salt marsh grazed cattle meat was identified (Figure 1).



Figure 1. Comparison between 2017 and 2024 mean rates for the high-rate groups for aquatic foods

There were significant changes in occupancy over intertidal substrates in 2024 (Figure 2). The most noteworthy changes in 2024 were an increase in occupancy over sand and stones, and decreases in occupancy over mud, over sand, on a boat on mud, and handling fishing gear. Occupancy over salt marsh was identified in 2024 but not in 2017.



Figure 2. Comparison between 2017 and 2024 mean rates for the high-rate groups for occupancy over intertidal substrates, and handling pathways

The most notable changes in the consumption of terrestrial foods in 2024 were the decreases in consumption rates of poultry, eggs, and milk compared with 2017 (Figure 3). The consumption of goat meat was not identified in 2024, and the consumption of venison was identified in 2024.



Figure 3. Comparison between 2017 and 2024 mean consumption rates for the high-rate groups for terrestrial foods

The changes in the maximum occupancy rates in the direct radiation area included an increase in the outdoor and total rates in the 0 - 0.25 km and the >0.25 - 0.5 km zones (Figure 4).



Figure 4. Comparison between 2017 and 2024 maximum direct radiation occupancy rates

Habits survey information for consideration when selecting samples and measurements for the Environment Agency and Food Standards Agency monitoring programmes

The foods and intertidal locations identified in the 2024 Hinkley Point habits survey could be used to assist in the selection of samples and measurements for future monitoring programmes. The foods that were either consumed in the largest quantities in their food groups, or were the only food in their food group, are presented in Section 12.2. These foods could be considered for sample selection for the Food Standards Agency monitoring programme. The current environmental monitoring programme conducted for the Environment Agency adequately covers the Hinkley Point area and no changes are suggested.

3. Introduction

Members of the public might be exposed to radiation as a result of the operations of the Hinkley Point A and B nuclear licensed sites, either through the permitted discharges of liquid or gaseous radioactive wastes into the local environment, or from radiation emanating directly from the site. The Hinkley Point A, B and C sites are adjacent to each other, and for the purpose of this survey are considered together as a single site. This report provides information on activities carried out by members of the public in the vicinity of the Hinkley Point nuclear licensed site, which may influence their radiation exposure. This study has been funded by the Environment Agency (EA), the Food Standards Agency (FSA) and the Office for Nuclear Regulation (ONR) in order to support their respective roles in protecting the public from exposure to radiation.

UK policy on the control of radiation exposure has long been based on the recommendations of the International Commission on Radiological Protection (ICRP), which embody the principles of justification of practices, optimisation of protection and dose limitation. Radiological protection of the public is based on the concept of a 'representative person'. ICRP (2007) recommendations use the term 'representative person' for assessing doses to members of the public. It is defined as 'an individual receiving a dose that is representative of the more highly exposed individuals in the population'. The 'representative person' concept is considered equivalent to the previously used 'critical group'.

3.1. Regulatory framework

In England, the EA regulates the discharges of radioactive waste under Environmental Permitting (England and Wales) Regulations 2016 (UK Parliament, 2016). These regulations transpose parts of the revised EU Basic Safety Standards (BSS) Directive 2013/59/Euratom (EC, 2014) which embody the recommendations of the ICRP, particularly ICRP 103 (ICRP, 2007). The revised BSS Directive was adopted in 2013 to consolidate and update existing Euratom provisions for protection against the harmful effects of ionising radiation, by replacing 5 existing Directives and a Commission Recommendation into 1 Directive covering occupational, medical and public exposure (EC, 2014). Installation and operation of certain prescribed activities can only occur on sites if they are licensed under the Nuclear Installations Act 1965 (as amended) (NIA 65) (UK Parliament, 1965). The ONR has implemented this legislation and is also responsible for regulating, under the lonising Radiations Regulations 2017 (IRR 17) (UK Parliament, 2017), the exposure of the public to direct radiation from the operations occurring on these sites.

Appropriate discharge limits are set by the EA, after wide-ranging consultations that include the FSA. The FSA is responsible for ensuring that any radioactivity present in food

does not compromise food safety and that permitted discharges of radioactivity do not result in unacceptable doses to consumers via the food chain. The FSA also ensures that public radiation exposure via the food chain is within UK acceptable limits (1 mSv).

3.2. Radiological protection framework

Dose standards for the public are embodied in the national policy (UK Parliament, 2012; BEIS, 2018), in guidance from the International Atomic Energy Agency (IAEA), in the Basic Safety Standards for Radiation Protection (IAEA, 1996) and in European Community legislation in the EU BSS Directive 2013/59/Euratom (EC, 2014). The public dose standards were incorporated into UK law under IRR 17. The requirement to observe the conditions laid down in the BSS in England and Wales is incorporated in Environmental Permitting (England and Wales) Regulations 2016 (UK Parliament, 2016). These require that the environment agencies ensure, wherever applicable, that:

- All public radiation exposures from radioactive waste disposals are kept As Low As Reasonably Achievable (ALARA), with social and economic factors being taken into account
- The sum of all exposures from authorised practices does not exceed the dose limit of 1 mSv a year
- The dose received from any new source does not exceed 0.3 mSv a year
- The dose received from any single site does not exceed 0.5 mSv a year

The dose limit of 1 mSv per year to the public from all anthropogenic sources other than medical applications is also the recommendation made by the ICRP (ICRP, 2007).

The UK environment agencies are also required to ensure that the dose estimates are as realistic as possible for the population as a whole and for reference groups of the population. They are required to take all necessary steps to identify the reference groups of the population, considering the effective pathways of transmission of radioactive substances. Guidance on the principles underlying prospective radiological assessments (for assessments of potential future doses) were provided by the National Dose Assessment Working Group (NDAWG), which consisted of representatives of UK Government Bodies and other organisations with responsibilities for dose assessments (EA, SEPA, DoENI, NRPB and FSA, 2002). NDAWG also published principles underlying retrospective radiological assessment (for assessments of doses already received from past discharges) (Allott, 2005) and possible methods of carrying out these assessments using the data from combined habits surveys (Camplin and others, 2005). NDAWG agreed that the optimal method for performing retrospective dose assessments would be to use habits profiles (profiling method) as described in Camplin and others (2005). This approach was adopted in Radioactivity in Food and the Environment (RIFE) publications, (for example: EA, FSA, FSS, NRW, NIEA and SEPA, 2024) Radioactivity in food and the

<u>environment (RIFE) report - GOV.UK</u>. NDAWG published reports on the collection and use of habits survey data in retrospective and prospective dose assessments (NDAWG, 2005; NDAWG, 2012); the principles described in these reports are consistent with those used here. The UK environment agencies, UK Health Security Agency (formerly, Public Health England) and the FSA jointly produced an update of the 2002 interim guidance and principles for assessing prospective doses (EA, SEPA, NIEA, HPA and FSA, 2012).

4. The survey

4.1. Site activity

The Hinkley Point nuclear site is located on the Somerset coast in south-west England, approximately 12 km from Bridgwater. Hinkley Point A has 2 Magnox reactors that ceased generating electricity in 2000. De-fuelling was completed in 2004, and the station is currently undergoing decommissioning. The station is managed and operated by Nuclear Restoration Services (NRS) on behalf of the Nuclear Decommissioning Authority (NDA). Hinkley Point B has 2 advanced gas-cooled reactors (AGRs) that ceased generating electricity in 2022, and the site has now entered the de-fuelling phase. The station is owned and operated by EDF Energy Nuclear Generation Ltd. Upon completion of de-fuelling the site ownership and operations will be transferred to the NDA and NRS, respectively. The 2 Hinkley Point C European Pressurised Reactors (EPRs) are under construction and are expected to start generating electricity in 2030. The Hinkley Point C site is owned and operated by NNB Generation Company (HPC) Limited.

Under the radioactive substances provisions of Environmental Permitting (England and Wales) Regulations 2016 (UK Parliament, 2016), NRS, EDF Energy Nuclear Generation Ltd, and NNB Generation Company (HPC) Limited are permitted to undertake radioactive substances activities at the Hinkley Point A, B and C sites, respectively. This includes permission to discharge gaseous radioactive wastes via approved outlets to the atmosphere and liquid radioactive wastes via outfalls into the Bristol Channel. The sites are licensed for the purposes of operating certain activities prescribed under the Nuclear Installations Act, 1965 (as amended). The sites contain sources of direct radiation. Details of the amounts of gaseous and liquid radioactive waste discharged are published in the RIFE reports (for example: EA, FSA, FSS, NRW, NIEA and SEPA, 2024) <u>Radioactivity in food and the environment (RIFE) report - GOV.UK</u>.

At the time of the habits survey, Hinkley Point C was under construction with approximately 12,000 workers visiting the site per year. The Hinkley Point C ancillary area adjacent to the Hinkley Point C nuclear licensed site covers approximately 25% of land located within the direct radiation survey area. The coast path was closed on the seaward side of the Hinkley Point site and had been diverted inland.

4.2. Survey objectives

The Centre for Environment, Fisheries & Aquaculture Science (Cefas) completed the Hinkley Point habits survey in 2024 under contract to the EA, the FSA, and the ONR. The aim of the survey was to obtain comprehensive information on the habits of the public that might lead to their exposure to radiation via gaseous discharges, liquid discharges and direct radiation from the Hinkley Point nuclear licensed site.

Specifically, investigations were conducted into the following:

- The consumption of food from the aquatic survey area.
- Activities and occupancy over intertidal substrates.
- The handling of fishing gear and sediment.
- Activities and occupancy in and on water.
- The use of seaweed as fertiliser or animal feed.
- The consumption of food from the terrestrial survey area.
- The use and destination of produce originating from the survey areas.
- The consumption and use of groundwater and surface water in the terrestrial survey area.
- Activities and occupancy within the direct radiation survey area.
- Any new or unusual exposure pathways.

Additionally, information on the potential transfer of contamination off-site by wildlife was obtained from the nuclear site operators.

4.3. Survey areas

The geographic extent of potential effects of radioactivity will differ in relation to its pathway, whether liquid discharges, deposition from gaseous discharges, or direct radiation. Therefore, different survey areas were defined to cover each of these 3 main possible sources of exposure. These were an aquatic survey area relating to liquid discharges, a terrestrial survey area relating to deposition from gaseous discharges, and a direct radiation survey area relating to ionising radiation emanating directly from the Hinkley Point nuclear licensed site.

The aquatic survey area (Figure 5) covered the intertidal areas along the coast of Somerset from Blue Anchor to Brean Down, including the tidal estuaries of the River Parrett and the River Brue, and the Bristol Channel up to 9 km offshore.

The terrestrial survey area (Figure 6) covered all land and freshwater bodies within 5 km of the combined site centre (National Grid Reference: ST 207 458), to encompass the main areas of potential deposition from gaseous discharges.

The direct radiation survey area is shown in Figure 7. The area was defined as all land and sea within 1.1 km of the combined nuclear licensed site boundary, split into 3 zones, which were 0 - 0.25 km, >0.25 - 0.5 km and >0.5 - 1.1 km. The direct radiation survey area was sparsely populated; therefore, the area was extended from 1 km typically used in habits surveys to 1.1 km. The occupancy data collected from the direct radiation survey area is also applicable to inhalation and external exposure pathways arising from gaseous discharges from the site.

The same aquatic survey area was used in the previous habits survey conducted by Cefas in the Hinkley Point area, which was in 2017 (Greenhill and others, 2018). In 2024, the terrestrial and direct radiation survey areas changed compared with 2017, as they were now based on the Hinkley Point A, B and C sites, instead of A and B. This has resulted in a new approximate site centre used to determine the terrestrial survey area and a new nuclear licensed site boundary used to determine the direct radiation survey area.



Figure 5. The Hinkley Point aquatic survey area

Note: The newly formed Steart Marshes is spelled differently to the village and intertidal areas of Stert.



Figure 6. The Hinkley Point terrestrial survey area



Figure 7. The Hinkley Point direct radiation survey area

4.4. Conduct of the survey

As part of the pre-survey preparation, the EA, the FSA and the ONR were contacted to identify any additional site-specific requirements. Information relating to the activities of people in the aquatic and the terrestrial survey areas was obtained from internet searches, Ordnance Survey maps and from previous habits surveys undertaken around the Hinkley Point nuclear licensed site. People with local knowledge of the survey area were contacted for information relevant to the various exposure pathways. These included representatives from a parish council who provided access to an allotment site, wildfowling clubs who provided contacts for local wildfowlers, and the EA who provided details of elver fishing permits.

The fieldwork was carried out from the 1st to the 9th August 2024 using survey techniques consistent with the previous Hinkley Point habits survey report (Greenhill and others, 2018). During the fieldwork, a meeting was held between members of the survey team and representatives from NRS, EDF Energy Nuclear Generation Ltd, and NNB Generation Company (HPC) Limited. The discussion provided details about current site activities, local information, potential exposure pathways, activities in the area, and the potential for transfer of contamination off-site by wildlife.

The following information was obtained during the meeting:

- Routine site operations were being undertaken at the time of the survey at the Hinkley Point A, B and C sites.
- No changes had been made to the nuclear licensed site boundaries of the Hinkley Point A and B sites since 2017. Hinkley Point C was not included in the 2017 survey.
- No changes had been made to the locations of sources of direct radiation since 2017. However, a new Interim Storage Facility has been developed on the south side of the Hinkley Point A site and will be used from 2025. Hinkley Point B may use this facility in the future.
- The Hinkley Point B site is expected to begin decommissioning in 2026. The ownership of the site will transfer to the NDA and the operations will be managed by NRS when decommissioning begins.
- The current date expected for fuel to arrive at Hinkley Point C is 2028.
- It is highly unlikely that wildlife could enter controlled areas at the nuclear power stations and this was not considered by the site operators to be a risk. Control measures taken to limit the possibility that contamination is transferred off-site by wildlife include secure fencing and discouraging the nesting of seagulls on the site with falconry, spikes and a dog patrol.

- Information about potential exposure pathways and activities in the survey areas included angling locations and activities in the direct radiation area.
- Changes to the area around the site since 2017 included:
 - The EDF visitor centre was located adjacent to the Hinkley Point B site but was relocated to Cannington in September 2021.
 - Commercial fishing was no longer undertaken within the aquatic survey area.

Interviews were conducted with individuals who were identified in the pre-survey preparation and others that were identified during the fieldwork. These included, for example, people spending time on intertidal substrates, farmers, allotment holders, beekeepers and people spending time within the direct radiation survey area. Interviews were used to establish individuals' consumption, occupancy and handling rates relevant to the aquatic, terrestrial and direct radiation survey areas. Any other information of possible use to the survey was also obtained. Gamma dose rate measurements were taken over intertidal substrates in the aquatic survey area, and indoors and outdoors at most properties in the direct radiation survey area where interviews were conducted. Background gamma dose rate measurements were taken using multiple Thermo RadEye GX Survey Meters, each connected to a compensated Geiger-Müller tube.

For practical and resource reasons, the survey did not involve the whole population in the vicinity of the Hinkley Point nuclear licensed site, but targeted subsets or groups, chosen in order to identify those individuals potentially most exposed to radiation pathways. However, it is possible that even within a subset or group there may have been people not interviewed during the survey. Therefore, to aid interpretation, the number of people for whom data were obtained in each group has been calculated as a percentage of the estimated complete coverage for that group (where it was possible to make such an estimate). The results are summarised in Table 25. These 'groups' are described and quantified, and the numbers of people for whom data were obtained are given as percentages of the totals. For certain groups, such as anglers, it can be virtually impossible to calculate the total number of people who undertake the activity in the survey area because it is difficult to quantify visitors from outside the area or occasional visitors during the year. Based on the most recent UK Office of National Statistics residential data for electoral wards (www.ons.gov.uk) there were approximately 1,440 people living in the terrestrial survey area, although information was obtained from a significantly smaller number of residents. The survey did not include employees or contractors at the nuclear licensed sites while they were at work. This is because dose criteria applicable to these people whilst at work and the dose assessment methods (IRR 17) are different from those for members of the public. However, data were collected for employees and contractors while outside work if these people were encountered during the survey.

People were initially questioned about their habits relating to the survey area that their first identified activity occurred in and, where possible, they were also asked about their habits relating to the other 2 survey areas. For example, people in the terrestrial survey were initially questioned because it was known that they grew or produced significant quantities of terrestrial foodstuffs. However, they were also asked about habits that might lead to exposure to liquid discharges or direct radiation. During interviews with representatives from organisations such as local businesses, it was not possible to collect data for all pathways (for example, consumption of local foods) for each person. In these cases, enquiries were limited to data relating to the primary reason for the interview. For example, in the case of a business within the direct radiation survey area, the occupancy rates for the employees.

5. Methods for data analysis

5.1. Data recording and presentation

Data collected during the fieldwork were recorded in logbooks. On return to the laboratory, the data were examined, and any notably high rates were double-checked, where possible, by way of a follow-up phone call. In cases where follow-up phone calls were not possible (for example: interviewees who wished to remain anonymous), the data were either checked for reasonableness or accepted at face value. The raw data were entered into a data capture application and then uploaded to a habits survey database where each individual for whom information was obtained was given a unique identifier (Person ID number) to assist in maintaining data quality and traceability.

Where generalised data for groups of people were collected, such as occupancy rates in the direct radiation survey area for employees at businesses, only a limited number of representative individuals were included in the data entered into the database.

The results of the individuals' consumption, occupancy and handling rates collected during the survey were grouped and presented in tables with the high-rate group members indicated in bold, and with the calculated mean rates for the high-rate group and 97.5th percentile rates. The consumption rates, occupancy rates and handling rates for all groups are presented in Annex 1 for adults, Annex 2 for children and Annex 3 for infants, with the high-rate group members indicated in bold.

If accurate, quantifiable data cannot be obtained from interviews but pathways are known to exist, it is sometimes necessary to provide estimated habits data for use in dose assessments. In this series of habits survey reports such data is presented in Annex 4. It was not necessary to estimate data for the Hinkley Point survey, but Annex 4 is included in this report to maintain consistency of presentation through the series of reports.

5.2. Data conversion

During the interviews, people could not always provide consumption rates in kilograms per year for food or litres per year for milk. In these circumstances, interviewees were asked to provide the information in a different format. For example, some estimated the size and number of items (for example: eggs) consumed per year, whereas others gave the number of plants in a crop or the length and number of rows in which the crop was grown per year. The habits survey database converted these data into consumption rates (kg y⁻¹ for food and I y⁻¹ for milk) using a variety of conversion factors. These factors included produce weights (Hessayon, 1990 and 1997; Good Housekeeping, 1994), edible fraction data researched by Cefas, and information supplied by the Meat and Livestock Commission.

5.3. Rounding and grouping of data

The consumption and occupancy data in the text of this report are rounded to 2 significant figures, except for values less than 1.0, which are rounded to one decimal place. This method of presentation reflects the authors' expert judgement on the accuracy of the methods used. In the tables and annexes, the consumption rate data are presented to one decimal place. Occasionally, this rounding process causes the computed values (row totals, mean rates and 97.5th percentiles), which are based on un-rounded data, to appear slightly erroneous. Consumption rates less than 0.05 kg y⁻¹ are presented to 2 decimal places in order to avoid the value of 0.0 kg y⁻¹. External exposure data are quoted as integer numbers of hours per year.

For the purpose of data analysis, foodstuffs were aggregated into food groups as identified in Table 26. Specific food types relevant to this survey are presented in the subsequent tables. The data are structured into groups when it is reasonable to assume that consistent concentrations or dose rates would apply within the group. For example, when considering terrestrial food consumption, all types of root vegetables are grouped together in a food group called root vegetables. For external exposure over intertidal sediments, occupancy over the same substrate (for example: mud) are grouped together.

Data were structured into age groups because different dose coefficients (the factors which convert intakes of radioactivity into dose) can apply to different ages. The names used for the age groups, based on the recommendations in ICRP 103 (ICRP, 2007), are shown in Table 1.

Name of age group	Age range in group
Infant	0 to 5 years old
Child	6 years old to 15 years old
Adult	16 years old and over

Table 1. Names of age groups and range of ages within each age group

For direct radiation pathways, the data were grouped into distance zones from the nuclear site boundary as a coarse indication of the potential dose rate distribution due to this source of exposure. The bands used in this report were: 0 - 0.25 km; >0.25 - 0.5 km; >0.5 - 1.1 km. These distance bands are also useful when assessing exposure to gaseous discharges.

5.4. Approaches for the identification of high rates

The habits data have been analysed to identify high rates of consumption, occupancy and handling, which can be used in radiological assessments. Two approaches have been used.

Firstly, the 'cut-off' method described by Hunt and others (1982) was used. With the 'cutoff' method, the appropriate high rate was calculated by taking the arithmetic mean of the values between the maximum observed rate and one third of the maximum observed rate. In this report, the term 'high-rate group' is used to represent the individuals derived by the 'cut-off' method. The mean of the high-rate group was calculated for each food group, intertidal substrate and handling pathway identified in the survey.

Secondly, the 97.5th percentile rate was calculated for each group. The use of percentiles accords with precedents used in risk assessments of the safety of food consumption described in MAFF (1996). It should be noted that the interviewees in this study are often selected and, therefore, the calculated percentiles are not based on random data.

Mean and 97.5th percentile consumption rates for adults, based on national statistics, are provided as a baseline for comparison with the observed rates. The rates based on national statistics are referred to as generic rates in this report and have been taken from Byrom and others (1995).

The mean rates for the high-rate groups for children's and infants' consumption, occupancy over intertidal substrates and handling pathways, have been calculated. However, if there are cases where few child or infant observations are identified, an alternative approach can be used for assessments to estimate the mean rates for the high-rate groups for children and infants by applying scaling ratios to the mean rates for the high-rate groups for adults as described in Dewar (2013). Ratios for this purpose for the

consumption and occupancy of intertidal substrates pathways, based on generic 97.5th percentile rates, are provided in Annex 5. The age ranges within the age groups in Annex 5 do not correspond exactly with the age ranges within the age groups used throughout the rest of this report, but these ratios are the best available data for estimating child rates and infant rates from adult rates. Adult to child and adult to infant ratios are not available for handling pathways.

For use in assessments of prenatal dose, consumption and occupancy rates are provided in Annex 6 for women of childbearing age. The age range used in this report for women of childbearing age is 15 - 44 years old, which is based on the classification used by the Office of National Statistics (www.ons.gov.uk).

For the direct radiation pathway, the maximum occupancy rates are used instead of calculating the mean occupancy rates and 97.5th percentile rates. This is due to the complex nature of the direct radiation dose rates, which are dependent on both the distance and direction from the primary sources of direct radiation on site (the spatial extent). Additional factors include the local geography and geology, as well as other structures, which can provide additional shielding between these sources on site and the local receptor points for direct radiation. For simple (cautious) dose assessment of direct radiation, it is appropriate to use the maximum dose and occupancy rates.

5.5. Profiles of habits survey data for use in 'total dose' assessments

The survey data have been analysed to produce profiles of consumption and occupancy rates according to the method described by Camplin and others, 2005. The profiles for adults are used to assess 'total dose' integrated across all pathways of exposure in the RIFE reports (for example: EA, FSA, FSS, NRW, NIEA, and SEPA, 2024) <u>Radioactivity in food and the environment (RIFE) report - GOV.UK</u>.

Matrices of profiles for adults, children, infants and women of childbearing age are presented in Annex 7, Annex 8, Annex 9 and Annex 10. Within each matrix, the means for the high-rate groups, as determined by the 'cut-off' method, are emboldened and presented on the diagonal. Except for the direct radiation pathway, the figures across the rows are the means of the consumption and occupancy rates for the other pathways for the individuals within that profile. For the direct radiation pathway, the figure denotes the proportion of the individuals within that profile who spend time within the direct radiation survey area.

5.6. Data quality

To ensure the quality of the data collected during the survey fieldwork and presented in the report, the following procedures have been employed:

- Experienced scientific staff were used for the fieldwork and data analysis. They had been trained in the techniques of interviewing and obtaining data for all pathways that were relevant to the survey. Where individuals offered information during interview that was considered unusual, they were questioned further in order to double-check the validity of their claims.
- Where possible, interviewees were contacted again to confirm the results of the initial interview if, when final consumption or occupancy rates were calculated, observations were found to be high in relation to our experience of other surveys. Local factors were considered in these cases.
- Data were processed in a purpose-built habits survey database using a consistent set of conversion factors.
- Data were stored in a database in order to minimise transcription and other errors.
- Draft reports were reviewed by the EA, FSA and ONR.
- Final reports were only issued when the EA, FSA and ONR were entirely satisfied with the format and content of the draft reports.

6. Aquatic radiation pathways

6.1. Aquatic survey area

The aquatic survey area (Figure 5) covered the intertidal areas along the coast of Somerset from Blue Anchor in the west, to Brean Down in the east, and the Bristol Channel up to 9 km offshore. The tidal estuary of the River Parrett as far upstream as Bridgwater, and the tidal estuary of the River Brue as far upstream as the New Clyce Bridge were included in the survey area. The same aquatic survey area was used in the previous habits survey in 2017.

Bridgwater Bay covers most of the survey area. The shore between Blue Anchor and Stert Point is a mixture of sand, mud, stones and rocky reefs. Vast expanses of mud and sand flats from Stert Flats extend several kilometres and are exposed at low tide throughout this area. The shore between Burnham-on-Sea and Brean Down is predominantly sand. Activities were limited at some locations due to the strong tides and the soft mud and sand. The River Parrett and River Brue are the 2 main rivers that flow into the survey area and the banks of these rivers are predominantly soft mud and salt marsh. The Bridgwater Bay National Nature Reserve (NNR) covers the intertidal area from Lilstock to Burnham-on-Sea and includes the lower reaches of the River Parrett and is a designated Site of Special Scientific Interest (SSSI). The Wildfowl & Wetland Trust at Steart Marshes is located on the southern part of the Steart peninsula.

The aquatic survey area is described in detail below from west to east.

Blue Anchor and Watchet

Blue Anchor is a large beach comprising mainly sand with areas of sand and stones. The beach is backed by a large sea wall for approximately 1 km. Car parking was available along the length of a coastal road that runs parallel with the shore and the landward side of the road was lined with caravan parks. Due to the easy road access, the beach was frequently visited by people who were dog walking, angling, bait digging, metal detecting, walking, sitting on the beach and by families playing on the beach. Nature wardens were also undertaking activities at Blue Anchor to engage with members of the public. Angling was undertaken from the sea wall at high tide. The fixed nets on the lower shore that were used by a hobby fisherman in previous years were reported to still be used. The shore between Blue Anchor and Watchet was predominantly sand, stones, mud and rocky reefs.

The coastal town of Watchet was popular with tourists. Watchet is composed of 2 beaches and a harbour. The west beach (Figure 8), comprising rock, sand and stones, is accessed via a public slipway. A large tidal pool and rocky scars were exposed at low tide which were popular with families who were rock pooling. It was reported that hobby fishermen were operating fixed nets at low tide on the west beach. The east beach could be accessed via steps and was less popular as it had large rocky scars covered in algae. Activities identified taking place on intertidal areas at the beaches included rock pooling, beachcombing, angling, litter collecting, walking, sitting on the beach, playing, and undertaking environmental activities and ecological surveys.



Figure 8. Watchet (west beach)

Watchet Harbour is located between the 2 beaches and comprises an inner and outer harbour. The outer harbour is tidal, and the inner harbour (Figure 9) is partially tidal due to a mechanism which maintains a minimum water level. Dredging has not been completed in recent years resulting in sediment build-up and preventing the mechanism from functioning correctly. A marina with approximately 200 berths for sail boats, angling boats and cruisers is located in the inner harbour. However, only 50 berths were used at the time of the survey due to the build-up of sediment. In 2024, all boats moored in the marina were resting on mud at low tide. A public slipway in the outer harbour was used to launch boats.

Charter fishing boats and a boat owners association were based at Watchet Marina. The members of the association were boat angling or pleasure cruising within the survey area and reported that most members operate a catch and release policy. Members were also identified undertaking boat maintenance in the marina. A youth group was based at the west pier and regularly used the inner and outer harbour to complete activities including canoeing, paddleboarding, rowing, kayaking, sailing and powerboating.


Figure 9. Watchet inner harbour

Helwell Bay, Doniford, St Audrie's Bay and Kilve

The shore from Watchet to Doniford is backed by shale and limestone cliffs. Car parking was limited at Doniford since private land bordered the shore, but the beach could be accessed via Helwell Bay (Figure 10). The coast path is tidal washed between Helwell Bay and Doniford. The shore between these locations was mud, sand and stones with rocky reefs. The beach was popular with local people and people on holiday at the nearby caravan park. Dog walking, sitting on the beach, camping, playing, beachcombing, litter collecting, and undertaking geological tours, geological surveys and fossil walks were identified at Helwell Bay and Doniford.

St Audrie's Bay is stones on the upper shore and sand on the lower shore with rocky reefs. The beach was backed by cliffs and was only accessible through a holiday park. The area was popular with anglers and dog walkers.

The shore from St Audrie's Bay to Kilve is backed by cliffs and was not easily accessible. East Quantoxhead Beach was the only section of shore that could be accessed between these locations. Dog walking and undertaking geological fieldwork were the only activities identified taking place at this beach. Kilve is located approximately 0.5 km east of East Quantoxhead Beach and is a well-known location for collecting fossils. There is road access to Kilve and parking close to the beach. The upper shore is predominantly stones, and the lower shore is rocky reefs with areas of mud and sand. Activities identified taking place at these locations include dog walking, playing, and undertaking environmental activities, geological fieldwork and fossil walks.



Figure 10. Helwell Bay

Lilstock, Shurton Bars and Hinkley Point

Lilstock is predominantly stones on the upper shore with rocks, mud and sand on the lower shore (Figure 11). A small car park, located approximately 200 metres from the beach, was used by people who walked to Lilstock beach via a private track. Lilstock was popular with anglers, and people dog walking, metal detecting, wildfowling and undertaking environmental activities. Many people were walking along the clifftop coast path which was not tide washed.

The shore between Lilstock and Hinkley Point, known locally as Shurton Bars, is backed by cliffs and comprises stones, sand, mud and rocky reefs. Activities identified being undertaken at Shurton Bars included angling, dog walking, walking and fossil hunting. The shore at Hinkley Point is backed by sea defence boulders and is predominantly sand and stones with areas of mud and sand, and rocky reefs on the lower shore. People were using the shore in front of the Hinkley Point site for activities including angling, wildfowling, walking, and undertaking environmental activities. An area of Bridgwater Bay, close to Hinkley Point, is an 'excepted' area for wildfowling, which does not require a permit. It was reported that this area is popular with local wildfowling clubs. The coast path in front of the Hinkley Point sites was closed at the time of the survey and was diverted inland due to the construction of the Hinkley Point C site.



Figure 11. Lilstock

Stolford to Stert Point

The shore at Stolford (Figure 12) comprises mud, sand, stones and rocky outcrops, and is backed by sea defence boulders. People were observed walking along the coast path on a raised bank at the top of the shore, which was not tide washed. Hobby fishermen were identified operating fixed nets offshore at Stolford. A small amount of Porphyra was collected for consumption from the Stolford area. Other activities identified taking place on the beach included angling, collecting limpets, dog walking, playing, undertaking nature warden duties, walking and wildfowling.

The shore between Stolford and Stert Point is sand with areas of mud, sand and stones, which is backed by salt marsh. Stert Point is located at the tip of a peninsula at the mouth of the River Parrett. To the north and west of Stert Point a vast expanse of mud and sand flats called Stert Flats is exposed at low tide.



Figure 12. Stolford

River Parrett

The River Parrett is tidal for approximately 40 km inland. Two public footpaths run along the top of the riverbank of the River Parrett, one on the western bank from Steart Marshes to Bridgwater and one on the eastern bank from Burnham-on-Sea to Dunball. Steart Marshes was created by the Wildfowl & Wetlands Trust in partnership with the EA. In 2014, the sea wall was breached to allow Steart Marshes to flood on a high tide. The nature wardens at Steart Marshes were identified spending time on the salt marsh areas completing environmental activities and collecting small quantities of samphire for consumption. Livestock were identified grazing on the salt marsh at Steart Marshes as part of a new fenceless farming method. Wildfowling was popular along the River Parrett with members of 2 clubs who were regularly spending time on the mud and salt marsh at low tide.

Combwich Wharf is located on the western bank of the River Parrett in Combwich Village. A boat club lease an area of the wharf to store their boats and access a private slipway. Additionally, members of the club moor their boats on the muddy banks of a small inlet next to the wharf. The wharf was refurbished as part of the Hinkley Point C construction project in 2017, and some of the privately-owned boats that were moored in the area were moved to dry dock or temporarily relocated to Watchet Harbour. The members of the club were able to access the wharf upon completion of the refurbishment in 2019. In addition to boat angling and sailing, the club has expanded their activities in recent years to include gig rowing, water skiing and jet skiing. Members of the club were undertaking activities on the River Parrett between Bridgwater and Burnham-on-Sea.

River Brue

The River Brue joins the mouth of the River Parrett and is tidal up to the sluice gates at New Clyce Bridge in Highbridge. The river has a large tidal range and steep, soft mud banks with areas of salt marsh. A public footpath spans the length of the riverbank from Burnham-on-Sea to Highbridge, but the footpath is not tide washed.

A motor boat and sailing club was located at the mouth of the River Brue. The moorings were on the soft mud banks (Figure 13) and the sail boats rested on mud at low tide. Members of the club were sailing and pleasure cruising on the River Brue, River Parrett and between Burnham-on-Sea and Watchet. Members of the club were also gig rowing from the River Brue to Combwich. Boats were moored in the river upstream as far as New Clyce Bridge. A boat yard with a private slipway was also located downstream from New Clyce Bridge.



Figure 13. River Brue

Burnham-on-Sea

Burnham-on-Sea is a popular seaside town located to the north of the River Brue. The beach is sand with mud and sand flats on the lower shore (Figure 14). The coastal road provides good access to the beach and car parking was available along the seafront. A

coastal sea defence wall backs the length of the beach. The Royal National Lifeboat Institution (RNLI), the coastguard and a hovercraft search and rescue centre (Burnham Area Rescue Boat) were based in the vicinity of a public slipway that was used to launch small boats, dinghies and jet skis. The area around the slipway was popular with families playing and sitting on the beach. Other activities identified taking place at Burnham-on-Sea included angling, dog walking, metal detecting, walking, and undertaking beach warden duties, lifeguard duties and rescue duties.



Figure 14. Burnham-on-Sea

Berrow, Brean and Brean Down

The sandy beach continues north of Burnham-on-Sea for approximately 11 km, encompassing the areas of Berrow, Brean and Brean Down. The beaches at Berrow (Figure 15) and Brean are firm sand on the mid to upper shore. Due to the large tidal range, soft mud and sand flats are exposed at low tide and extend several kilometres offshore. A coastal road, lined with holiday camps and caravan sites, runs parallel with the shore from Berrow to Brean. The beaches at Berrow and Brean are easily accessed and in the summer months members of the public are permitted to park their vehicles on the beaches. The beaches were popular with tourists and locals who were angling, bait digging, dog walking, walking, playing, metal detecting, and undertaking lifeguard duties and environmental activities. Beach wardens patrolled the beaches regularly throughout the year. At the northernmost part of the aquatic survey area, Brean Down is a rocky headland with steep cliffs that extend approximately 2 km offshore.



Figure 15. Berrow Beach

6.2. Commercial fisheries

No commercial fisheries were identified in the survey area in 2024. It was reported that the fish populations in Bridgwater Bay had decreased significantly in recent years and it was no longer viable to fish commercially.

Elver fishing was taking place along the banks of the River Parrett where freshwater entered the tidal river and it was particularly popular on the banks of the river in and around Bridgwater. The fishermen caught elvers using dip nets with long handles while standing on the muddy river banks. Fifty-four elver fishing licences were issued in 2024 by the EA for the River Parrett and River Brue, which had decreased from 140 licences issued at the time of the last habits survey in 2017. The elver fishing season extends from the middle of February to the end of April, depending on the environmental conditions. The consumption of elvers was not identified during the survey.

6.3. Destination of seafood originating from the aquatic survey area

In 2024, elvers were sold in the UK for stocking aquaculture farms and restocking rivers where eel stocks have declined.

6.4. Hobby fishing and angling

In this report, the term 'hobby fishing' is used to describe recreational fishing on a small scale with gear such as nets or pots. It is usually carried out by fishermen who do not have commercial fishing licences and therefore it is illegal to offer the catch for sale. Hobby fishermen were undertaking small amounts of stake netting at Stolford for a range of sea fish including Dover sole, grey mullet, thornback ray and bass. The catch was consumed by the fishermen and their families. It was reported that other hobby fishermen were operating fixed nets on the shore at Blue Anchor and Watchet.

Two angling charter boats based at Watchet Harbour were reported operating within the survey on a regular basis. Boat angling was popular in the survey area and many private angling boats were kept at Watchet Harbour, Combwich Wharf and along the River Brue, or launched from the ramps and slipways at these locations.

Shore angling was identified throughout the survey area, and the most popular locations were Lilstock, Stolford and Burnham-on-Sea. Angling was also popular on the promenade at Blue Anchor and the harbour arm at Watchet. Two tackle shops organised separate shore angling matches with up to 50 attendees once per month within the survey area. It was reported that the fish species caught within the aquatic survey area have changed in the last 5 years. The catch is now predominantly dogfish and rays which most anglers did not consume. The main species consumed by anglers were bass and cod.

6.5. Wildfowling

Two wildfowling clubs were identified with members who shot wildfowl in the survey area. The clubs had the rights to shoot in 2 areas within the Bridgwater Bay NNR. These areas were near the mouth of the River Parrett and close to Hinkley Point. The area used for wildfowling close to Hinkley Point is an 'excepted' area, which does not require a permit. The members of one of the clubs were also wildfowling on the muddy banks along the River Parrett between Combwich and Dunball. The wildfowling season is from September to February. The species being shot included Canada goose, mallard, wigeon, teal and pigeon. The wildfowl were consumed by the wildfowlers and their families.

6.6. Other pathways

Livestock grazing on salt marsh areas have potential to be affected by liquid discharges due to sea to land transfer. Therefore, consumption of meat from livestock grazed on salt marsh is included in this report as a potential aquatic exposure pathway. Livestock were identified grazing on the newly established salt marsh areas at Steart Marshes and salt marsh beef was being consumed. The salt marsh beef was sold online as part of a 'farm to box' scheme.

It was reported that dredging will be undertaken at Watchet Harbour to remove the build-up of sediment in the inner harbour. At the time of the previous habits survey in 2017, the dredging had ceased, which led to a build-up of sediment in parts of the inner basin and some of the boats were resting on the mud at low tide. In 2024, all boats moored in the harbour were resting on mud at low tide.

In 2017, people were identified living on a boat at Watchet Harbour, but no houseboats were identified in 2024.

Several people collected small quantities of samphire for their consumption from Steart Marshes. Porphyra was also being collected from the shore at Stolford and was consumed. The collection of seaweed for use as fertiliser was not identified in 2024.

6.7. Food consumption data

Consumption data for locally produced foodstuffs potentially affected by liquid discharges are presented from Table 27 to Table 31 for adults and Table 32 to Table 37 for children and infants. The mean consumption rates for the high-rate groups and the observed 97.5th percentile rates, calculated as described in Section 5.4, are given at the foot of each table.

Adults' consumption rates

The people consuming the greatest quantities of food from the aquatic survey area were anglers and farming families.

Table 2 presents a summary of the adults' consumption rates for the following food groups: sea fish; crustaceans; wildfowl; marine plants/algae; salt marsh grazed cattle meat. The table includes the mean consumption rates for the high-rate groups and the observed 97.5th percentile rates. For comparison, the table also includes mean consumption rates and 97.5th percentile consumption rates for sea fish and crustaceans based on national data, which are referred to as 'generic' data in this report. No generic consumption rates are available for wildfowl, marine plants/algae and salt marsh grazed cattle meat.

	Food group									
	Sea fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat					
Number of observations	22	8	8	7	16					
Number of high-rate consumers	3	8	2	7	16					
Observed maximum for the high-rate group (kg y ⁻¹)	46.2	2.0	7.1	1.0	15.0					
Observed minimum for the high-rate group (kg y ⁻¹)	21.3	2.0	7.1	0.6	7.5					
Observed mean for the high-rate group (kg y ⁻¹)	32.5	2.0	7.1	0.7	10.0					
Observed 97.5 th percentile (kg y ⁻¹)	37.8	2.0	7.1	1.0	15.0					
Generic mean (kg y ⁻¹)	15.0	3.5	Not determined	Not determined	Not determined					
Generic 97.5 th percentile (kg y ⁻¹)	40.0	10.0	Not determined	Not determined	Not determined					

 Table 2. Summary of adults' consumption rates of foods from the aquatic survey area

The predominant species of sea fish consumed by adults were cod, bass and Dover sole, with smaller quantities of flounder, grey mullet, lesser spotted dogfish, thornback ray and whiting. The sea fish were caught throughout the aquatic survey area. Of the sea fish consumed by the 3 people in the high-rate group, the percentage breakdown of species (rounded to the nearest 5%) was 60% cod, 35% bass and 5% Dover sole.

The only species of crustacens consumed by adults was brown shrimp, which were caught at Stolford.

The main species of wildfowl consumed by adults were Canada goose, mallard, and pigeon, with smaller quantities of teal. These were shot on the banks along the River Parrett and on the shore near Hinkley Point. Of the wildfowl consumed by the 2 people in the high-rate group, the percentage breakdown of species (rounded to the nearest 5%) was 70% Canada goose, 15% mallard and 15% pigeon.

The main species of marine plants/algae consumed by adults was samphire and Porphyra. These were collected from the shore at Stolford and Steart Marshes. Of the marine plants/algae consumed by the 7 people in the high-rate group, the percentage breakdown of species (rounded to the nearest 5%) was 60% samphire and 40% Porphyra.

Beef was consumed from cattle grazed on the salt marsh at Steart Marshes.

Children's and infants' consumption rates

Table 3 and Table 4 presents a summary of children's and infants' consumption rates of foods originating from the aquatic survey area. Children were identified consuming crustaceans, wildfowl and salt marsh grazed cattle meat. Infants were identified consuming sea fish, crustaceans and salt marsh grazed cattle meat. The tables include the mean consumption rates for the high-rate group and the observed 97.5th percentile rates. No generic rates have been determined for the child or infant age groups.

Table 3. Summary of children's consumption rates of foods from the aquatic surveyarea

		Food grou	р
	Crustaceans	Wildfowl	Salt marsh grazed cattle meat
Number of observations	1	2	3
Number of high-rate consumers	1	2	3
Observed maximum for the high-rate group (kg y ⁻¹)	1.5	1.1	8.2
Observed minimum for the high-rate group (kg y ⁻¹)	1.5	0.8	6.0
Observed mean for the high-rate group (kg y ⁻¹)	1.5	1.0	7.5
Observed 97.5 th percentile (kg y ⁻¹)	Not applicable	1.1	8.2

Table 4. Summary of infants' consumption rates of foods from the aquatic survey area

		Food group	
	Sea fish	Crustaceans	Salt marsh grazed cattle meat
Number of observations	1	3	1
Number of high-rate consumers	1	3	1
Observed maximum for the high-rate group (kg y ⁻¹)	3.2	1.0	4.0
Observed minimum for the high-rate group (kg y-1)	3.2	1.0	4.0
Observed mean for the high-rate group (kg y ⁻¹)	3.2	1.0	4.0
Observed 97.5 th percentile (kg y ⁻¹)	Not applicable	1.0	Not applicable

6.8. Occupancy over intertidal substrates

Occupancy rates over intertidal areas for adults, children and infants are presented in Table 38, Table 39 and Table 40, respectively. It should be noted that there is often more than one substrate at one named location and that substrates at a given location are prone to change over time. Activities were assigned to the predominant substrate over which they were taking place.

Adults' occupancy rates over intertidal substrates

Table 5 presents a summary of the adults' occupancy rates over intertidal substrates in the aquatic survey area. The table includes the mean occupancy rates for the high-rate groups and the observed 97.5th percentile rates.

Table 5. Summary of adults' intertidal occupancy rates

		Intertidal substrate										
	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud			
Number of observations	14	32	8	46	21	82	48	39	5			
Number of people in the high-rate group	11	3	6	2	11	14	1	3	2			
Maximum of the high-rate group (h y ⁻¹)	400	322	26	581	400	1043	626	315	730			
Mean of the high-rate group (h y-1)	387	290	17	421	378	536	626	215	730			
Observed 97.5 th percentile (h y ⁻¹)	400	315	24	242	400	781	115	179	730			

The activities undertaken by people in the adult high-rate groups for occupancy over the following intertidal substrates included:

- For mud: undertaking ecological fieldwork and setting nets at Stolford.
- For mud and sand: dog walking and playing at Stolford; bait digging at Berrow Beach and Brean Beach.
- For mud, sand and stones: dog walking, fossil hunting and walking at Shurton Bars.
- For rock: angling at Kilve, Shurton Bars and Hinkley Point.
- For salt marsh: dog walking and undertaking ecological fieldwork at Steart Marshes.
- For sand:
 - o angling, dog walking, bait digging, metal detecting, playing and undertaking beach warden duties at Berrow Beach.
 - o angling, walking, dog walking, sitting on the beach and playing at Blue Anchor.
 - o angling, dog walking, metal detecting, playing and undertaking beach warden duties at Brean Beach.

- o angling, metal detecting, dog walking and undertaking beach warden duties at Burnham-on-Sea.
- For sand and stones: dog walking at Helwell Bay.
- For stones: angling at Stolford and Lilstock; dog walking at Stert Flats.
- For boat on mud: boat maintenance at Watchet Harbour.

Children's occupancy rates over intertidal substrates

Table 6 presents a summary of the children's occupancy rates over intertidal substrates in the aquatic survey area. The table includes the mean occupancy rates for the high-rate groups and the observed 97.5th percentile rates.

Table 6. Summary of children's intertidal occupancy rates

		Intertidal substrate										
	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones					
Number of observations	7	1	13	2	8	14	14					
Number of people in the high-rate group	7	1	11	2	8	12	8					
Maximum of the high-rate group (h y ⁻¹)	24	26	16	10	60	38	32					
Mean of the high-rate group (h y ⁻¹)	11	26	15	10	39	38	32					
Observed 97.5 th percentile (h y ⁻¹)	22	Not applicable	16	10	60	38	32					

The activities undertaken in the child age group high-rate groups for occupancy over each of the intertidal substrates were:

- For mud and sand: playing at Stolford.
- For mud, sand and stones: dog walking and fossil hunting at Shurton Bars.
- For rock: angling and rock pooling at Watchet.
- For salt marsh: playing at Steart Marshes.

- For sand: playing at Blue Anchor, Berrow Beach and Brean Beach.
- For sand and stones: playing and camping at Helwell Bay and Doniford.
- For stones: angling at Lilstock and Stolford.

Table 7. Summary of infants' intertidal occupancy rates

		ntertidal substra	ite
	Mud and sand	Sand	Sand and stones
Number of observations	5	3	1
Number of people in the high-rate group	5	1	1
Maximum of the high-rate group (h y-1)	24	60	2
Mean of the high-rate group (h y-1)	15	60	2
Observed 97.5 th percentile (h y ⁻¹)	24	58	Not applicable

The activities undertaken in the infant age group high-rate groups for occupancy over each of the intertidal substrates were:

- For mud and sand: playing at Stolford.
- For sand: playing at Blue Anchor.
- For sand and stones: walking at Watchet.

6.9. Gamma dose rate measurements

Gamma dose rate measurements were taken over 6 intertidal substrates. All measurements were taken at a height of 1 metre above the substrate. The results are presented in Table 41 and are summarised in Table 8.

Table 8. Summary of gamma dose rate measurements taken over intertidal substrates

	Substrate										
	Mud	Mud and sand	Rock	Sand	Sand and stones	Stones					
Number of measurements taken	1	2	1	6	3	2					
Minimum gamma dose rate at 1 metre ^a (µGy h ⁻¹)	0.062	0.078	0.068	0.059	0.066	0.064					
Maximum gamma dose rate at 1 metre ^a (µGy h ⁻¹)	0.062	0.084	0.068	0.087	0.093	0.070					

<u>Notes</u>

^a These measurements have not been adjusted for background dose rates.

For comparison, natural background rates across the UK have been estimated at 0.05 μ Gy h⁻¹ over sandy substrates, 0.07 μ Gy h⁻¹ over mud and over salt marsh, and 0.06 μ Gy h⁻¹ over other substrates (EA, FSA, FSS, NRW, NIEA and SEPA, 2024).

6.10. Handling of fishing gear and sediment

Handling fishing gear (nets and pots) that has become entrained with fine sediment particles, or handling sediment while undertaking activities such as bait digging or mollusc collecting, can potentially give rise to skin exposure from beta radiation. Doses to the skin are considered within the dose limitation system (ICRP, 1992).

Fishing gear can also be a source of gamma exposure due to occupancy in the vicinity of the gear. However, this pathway is minor compared with the exposure received during occupancy over intertidal areas and it has therefore been omitted from the report.

Handling of angling equipment (rod and line) was not considered to be a significant pathway. Therefore, as in previous surveys, data were not collected for this pathway.

Handling rates of fishing gear and sediment for adults are presented in Table 42. Handling rates of sediment for children are presented in Table 43. No children were identified handling fishing gear. No infants were identified handling sediment or fishing gear.

Adults' handling rates of fishing gear and sediment

Table 9 presents a summary of the handling rates of fishing gear and sediment for adults. The table includes the mean handling rates for the high-rate groups and the observed 97.5th percentile rates.

Table 9. Summary of adults' handling rates

	Handling a	activity
	Handling fishing gear	Handling sediment
Number of observations	3	10
Number of people in the high-rate group	1	1
Maximum of the high-rate group (h y ⁻¹)	253	313
Mean of the high-rate group (h y ⁻¹)	253	313
Observed 97.5 th percentile (h y ⁻¹)	240	266

The activities undertaken by people in the high-rate groups for handling included:

- For handling fishing gear: netting at Stolford
- For handling sediment: bait digging at Berrow Beach and Brean Beach.

Children's handling rates of sediment

Table 10 presents a summary of the handling rates of sediment for children. The table includes the mean handling rates for the high-rate groups.

Table 10. Summary of children's handling rates

	Handling sediment
Number of observations	1
Number of people in the high-rate group	1
Maximum of the high-rate group (h y-1)	1
Mean of the high-rate group (h y ⁻¹)	1
Observed 97.5 th percentile (h y ⁻¹)	Not applicable

The activity undertaken by the only child identified handling sediment was collecting limpets at Stolford.

6.11. Water based activities

Activities taking place in or on water can lead to ingestion of water and/or inhalation of spray. These pathways are generally considered to be of minor radiological importance in comparison with other exposure pathways such as the consumption of foods produced in the vicinity of a nuclear site. However, relevant data have been collected for consideration in dose assessments.

For habits surveys, activities involving a high likelihood of an individual ingesting water are classified as activities 'in water'. All other water-based activities are classified as activities 'on water'.

Occupancy rates for in and on water activities in the aquatic survey area are presented in Table 44 for adults, Table 45 for children and Table 46 for infants. Where generic data for groups of people were collected, for example, members of sailing clubs, only representative examples have been included in the data presented.

Activities in water

The activities identified taking place in water in the aquatic survey area were jet skiing, kayaking, paddleboarding, water skiing and swimming. Kayaking, paddleboarding, water skiing and jet skiing are classified as 'in water' activities since they are likely to lead to the ingestion of seawater. Thirty-four observations were recorded for adults, 12 were recorded for the child age group and one was recorded for the infant age group. The highest occupancy rate for adults was 130 h y⁻¹ for an individual who was jet skiing along the River Parrett and at Burnham-on-Sea. The highest occupancy rate for the child age group was 110 h y⁻¹ for a group of children who were undertaking a range of activities at Watchet. The only occupancy rate identified for the infant age group was 20 h y⁻¹ for an infant who was swimming at Stolford.

Activities on water

The activities taking place on water in the aquatic survey area were rafting, sailing, powerboating, canoeing, rowing, boat angling, pleasure cruising, being on a boat, paddling, teaching boating activities and undertaking hovercraft rescue duties. Ninety-three observations were recorded for adults, 21 were recorded for the child age group and 2 were recorded for the infant age group. The highest occupancy rate for adults was 550 h y⁻¹ for an individual who was sailing and rowing along the River Brue and at Burnham-on-Sea. The highest occupancy rate for the child age group was 280 h y⁻¹ for children undertaking a range of activities at Watchet. The highest occupancy rate for the infant age group was 30 h y⁻¹ for 2 infants who were boat angling with their family in Bridgwater Bay.

7. Terrestrial radiation pathways

7.1. Terrestrial survey area

The terrestrial survey area (Figure 6) covered the land and freshwater bodies within 5 km of the Hinkley Point site centre (National Grid Reference: ST 207 458). In 2024, the terrestrial survey area changed compared with 2017, as it was based on the Hinkley Point A, B and C sites, instead of A and B. This resulted in a new approximate site centre used to determine the terrestrial survey area

The land in the terrestrial survey area is primarily agricultural. The Hinkley Point C construction site is located south-west of the Hinkley Point nuclear licensed site. The main population centre is the village of Stogursey, which is situated to the south-west of the Hinkley Point site. The villages Burton, Shurton and Knighton are also located to the south-west. The village of Stolford is located to the east of the site and the villages of Stockland Bristol, Otterhampton and Coultings are located to the south-east of the site.

Interviews were conducted at 16 working farms and one smallholding in the Hinkley Point terrestrial survey area. The farms and smallholding produced the following: cows' milk, beef cattle, suckler beef, store cattle, sheep, lambs, pigs, chickens, chicken eggs, duck eggs, wheat, oilseed rape, linseed and arable crops.

The production of wheat and oilseed rape for human consumption was identified in the survey area. Grass (for silage), maize, barley, oilseed rape, linseed and wheat were grown for animal feed. Farmers, smallholders and their families were consuming their own produce including beef, lamb, milk, pork, chicken eggs and duck eggs.

One allotment site was located within the terrestrial survey area. A wide variety of fruit and vegetables were grown on the allotment. Produce was also grown in a small number of private gardens.

Three beekeepers were identified with a total of 34 hives in the survey area. These hives were located on both farmland and private land. The average production of honey per hive ranged between 8.0 kg y⁻¹ to 25 kg y⁻¹. The honey was consumed by the beekeepers, their families and friends, and was sold to the public.

Wild foods that were collected from within the survey area and consumed included blackberries, elderflowers, hazelnuts, sloes and mushrooms. Game shooting was identified taking place on farmland in the terrestrial survey area, where pheasants, pigeons, rabbits and deer were shot and consumed. The human consumption of borehole water was identified. Livestock were identified drinking mains water, borehole water, well water and some had access to streams.

7.2. Destination of food originating from the terrestrial survey area

The destination of foods produced in the survey area included the following:

- Beef cattle were sold at livestock markets, a food processing company, and to supermarkets.
- Lambs were sold to livestock markets and a food processing company.
- Pigs were sold (butchered) online.
- Poultry were sold to a national hatchery.
- Milk was sold for national distribution.
- Wheat was sold to milling companies for national distribution.
- Oilseed rape was sold to grain merchants.

7.3. The potential transfer of contamination off-site by wildlife

The nuclear site operators were asked for information about the potential transfer of contamination off-site by wildlife, since radionuclides could enter the food chain or contaminate the environment through this pathway. It is highly unlikely that wildlife could enter controlled areas and this was not considered by the site operators to be a risk. Control measures taken to limit the possibility that contamination is transferred off-site by wildlife include secure fencing and discouraging the nesting of seagulls on the site with falconry, spikes and a dog patrol.

7.4. Food consumption data

Consumption data for locally produced foodstuffs potentially affected by deposition of gaseous discharges are presented from Table 47 to Table 62 for adults and Table 63 to Table 75 for children and infants. The mean consumption rates for the high-rate groups and the observed 97.5th percentile rates, calculated as described in Section 5.4, are given at the foot of each table.

In order to provide information relevant to monitoring and assessments studies, the consumption rate data collected during the survey were analysed to indicate the percentage that each food type contributed to each food group. The data are summarised in Table 76.

Adults' consumption rates

Consumption of locally produced foods was identified in the following 16 food groups: green vegetables; other vegetables; root vegetables; potato; domestic fruit; milk; cattle meat; pig meat; sheep meat; poultry; eggs; wild/free foods; rabbits/hares; honey; wild fungi; venison. The consumption of foods from the goat meat food group was identified in 2017, but not in 2024.

Table 11 presents a summary of the adults' consumption rates for the foods consumed from the terrestrial survey area. The table includes the mean consumption rates for the high-rate groups and the observed 97.5th percentile rates. For comparison, the table also includes mean consumption rates and 97.5th percentile consumption rates based on national data, which are referred to as 'generic' data in this report.

		Food group														
	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/ hares	Honey	Wild fungi	Venison
Number of observations	34	34	25	18	33	28	16	2	8	8	26	19	8	19	4	4
Number of high-rate consumers	13	4	10	8	8	18	7	2	8	8	14	4	8	5	4	4
Observed maximum for the high-rate group (kg y ⁻¹ or I y ⁻¹)	27.2	77.0	28.5	125.0	45.4	414.6	62.5	20.9	15.0	3.1	33.9	7.5	0.3	5.3	0.2	10.0
Observed minimum for the high-rate group (kg y ⁻¹ or I y ⁻¹)	10.7	25.7	10.5	50.0	24.9	182.5	20.9	15.6	7.5	1.8	11.9	2.5	0.3	2.7	0.2	10.0
Observed mean for the high-rate group (kg y ⁻¹ or I y ⁻¹)	16.8	51.4	17.3	87.5	30.6	282.0	49.4	18.2	9.5	2.4	17.7	5.0	0.3	4.3	0.2	10.0
Observed 97.5 th percentile (kg y ⁻¹ or I y ⁻¹⁾	27.2	77.0	28.5	125.0	36.3	381.1	62.5	20.7	15.0	3.1	33.9	7.5	0.3	5.3	0.2	10.0
Generic mean* (kg y ⁻¹ or I y ⁻¹)	15.0	20.0	10.0	50.0	20.0	95.0	15.0	15.0	8.0	10.0	8.5	7.0	6.0	2.5	3.0	Not determined
Generic 97.5 th percentile* (kg y ⁻¹ or I y ⁻¹)	45.0	50.0	40.0	120.0	75.0	240.0	45.0	40.0	25.0	30.0	25.0	25.0	15.0	9.5	10.0	Not determined

Table 11. Summary of adults' consumption rates of foods from the terrestrial survey area

<u>Notes</u>

*Generic rates based on data from Byrom and others, 1995.

The observed mean consumption rate for the high-rate group was greater than the generic 97.5th percentile consumption rate for other vegetables, milk and cattle meat. Twelve of the mean consumption rates for the high-rate groups exceeded the generic mean consumption rates. These were for green vegetables, other vegetables, root vegetables, potato, domestic fruit, milk, cattle meat, pig meat, sheep meat, eggs, wild/free food and honey. Five of the observed 97.5th percentile consumption rates exceeded the generic 97.5th percentile consumption rates, which were for other vegetables, potato, milk, cattle meat and eggs. No generic data have been determined for the venison food group.

Children's and infants' consumption rates

Eleven individuals in the child age group and 4 individuals in the infant age group were identified consuming foods from the terrestrial survey area.

Table 12 presents a summary of children's consumption rates and Table 13 presents a summary of infants' consumption rates. The tables include the mean consumption rates for the high-rate groups and the observed 97.5th percentile rates. No generic data have been determined for the child and infant group. In the child age group, no consumption of foods from the following food groups was identified: root vegetables; potato; pig meat; sheep meat; eggs; wild fungi. In the infant age group, no consumption of foods from the following food groups was identified: root vegetables; potato; domestic fruit; milk; cattle meat; pig meat; sheep meat; sheep meat; poultry; eggs; wild/free foods; rabbits/hares; wild fungi; venison.

	Food group											
	Green vegetables	Other vegetables	Domestic fruit	Milk	Cattle meat	Poultry	Wild/free foods	Rabbits /hares	Honey	Venison		
Number of observations	1	1	2	3	2	1	3	1	5	1		
Number of high-rate consumers	1	1	2	3	2	1	2	1	3	1		
Observed maximum for the high-rate group (kg y ⁻¹ or I y ⁻¹)	0.6	1.1	31.0	199.1	37.5	1.8	7.5	0.3	6.8	10.0		
Observed minimum for the high-rate group (kg y ⁻¹ or I y ⁻¹)	0.6	1.1	31.0	199.1	37.5	1.8	7.5	0.3	2.7	10.0		
Observed mean for the high- rate group (kg y ⁻¹ or I y ⁻¹)	0.6	1.1	31.0	199.1	37.5	1.8	7.5	0.3	4.1	10.0		
Observed 97.5 th percentile (kg y ⁻¹ or I y ⁻¹)	Not applicable	Not applicable	31.0	199.1	37.5	Not applicable	7.5	Not applicable	6.4	Not applicable		

Table 12. Summary of children's consumption rates of foods from the terrestrial survey area

	Food group						
	Green vegetables	vegetablesOther vegetables3333					
Number of observations	3	3	1				
Number of high-rate consumers	3	3	1				
Observed maximum for the high-rate group (kg y ⁻¹)	0.4	0.8	0.3				
Observed minimum for the high-rate group (kg y ⁻¹)	0.4	0.8	0.3				
Observed mean for the high-rate group (kg y ⁻¹)	0.4	0.8	0.3				
Observed 97.5 th percentile (kg y ⁻¹)	0.4	0.8	Not applicable				

Table 13. Summary of infants' consumption rates of foods from the terrestrial survey area

8. Direct radiation pathways

8.1. Direct radiation survey area

The direct radiation survey area (Figure 7) covered the land and water within 1.1 km of the Hinkley Point nuclear licensed site boundary, which delineates the external boundary of the Hinkley Point A, B and C nuclear sites. In 2024, the direct radiation survey area changed compared with 2017, as it was based on the Hinkley Point A, B and C sites, instead of A and B. This resulted in a new nuclear licensed site boundary used to determine the direct radiation survey area. The survey area was split into 3 zones, which were 0 - 0.25 km, >0.25 - 0.5 km and >0.5 - 1.1 km from the Hinkley Point nuclear licensed site boundary. The direct radiation survey area was sparsely populated; therefore, the area was extended from 1 km typically used in habits surveys to 1.1 km. The occupancy data collected from the direct radiation survey area are also applicable to inhalation and external exposure pathways arising from gaseous discharges from the site.

The Hinkley Point site is located on the coast and the northern half of the direct radiation survey area covered the waters and intertidal areas of the Bristol Channel between Shurton Bars and Stolford. The coast path had been diverted inland around the boundary of the Hinkley Point A, B and C sites due to the Hinkley Point C construction.

The land within the direct radiation survey area is predominantly agricultural. Farmers who lived outside of the direct radiation survey area were identified farming the land within the survey area. An area currently being used for ancillary purposes for the construction of Hinkley Point C is located adjacent to the Hinkley Point C site and spans across all zones to the south and south-west. Three villages with small numbers of residential properties were located in the survey area: Shurton to the south; Wick to the south-east; Stolford to the east. An area of common land at Wick Moor spanned the coastline between Stolford and Hinkley Point and was used by farmers to graze their livestock throughout the year.

8.2. Residential activities

The direct radiation survey area was sparsely populated with only 18 properties located in the area. No residential properties were located within the 0 - 0.25 km zone and >0.25 - 0.5 km zone. Interviews were conducted at 9 residences in the >0.5 - 1.1 km zone.

At the time of the survey, temporary accommodation comprising 15 buildings were located south of the Hinkley Point site in the >0.5 - 1.1 km zone. The accommodation was being used to house approximately 500 transient workers. This accommodation is expected to be removed before the start of commercial operation, which is anticipated in 2030.

Estimated occupancy data for two people living in the temporary accommodation have been included in the data analysis.

8.3. Leisure activities

Walking and dog walking were identified taking place along footpaths within the direct radiation survey area. The coast path had been diverted inland around the boundaries of the Hinkley Point A, B and C sites and was popular with locals. The beaches at Shurton Bars, Hinkley Point and Stolford were located in the direct radiation survey area. The beach at Shurton Bars was used by people who were dog walking, walking, fossil hunting and paddling. The beaches at Hinkley and Stolford were used by wildfowlers and for environmental activities. A concrete track which runs along the coast from Stolford to Hinkley Point was used by anglers to access the rocky reefs at Hinkley Point.

The EDF visitor centre which was previously located adjacent to the Hinkley Point B site relocated to Cannington in September 2021. Tours of Hinkley Point B are no longer given to the public, however, bus tours are provided for the Hinkley Point C site and were reported to be popular.

8.4. Commercial activities

The direct radiation survey area included a limited number of commercial activities in all zones. The land in the direct radiation survey area is predominantly agricultural and farming was identified taking place across the 0 - 0.25 km zone and the >0.25 - 0.5 km zone. Farm workers were identified farming in both the 0 - 0.25 km zone and the >0.25 - 0.5 km zone. One business with 6 employees was located in the >0.5 - 1.1 km zone.

The construction area for Hinkley Point C occupied approximately 25% of the total land within the direct radiation survey area. The activities of the Hinkley Point A, B and C site employees and contractors while at work were not considered in the direct radiation survey, as radiation workers are subject to different radiation protection criteria.

8.5. Occupancy rates

Table 77 presents indoor, outdoor and total occupancy data for adults and children. An analysis of the data by distance zones and occupancy rates is shown in Table 78. A summary of occupancy rates in the direct radiation survey area is presented in Table 14. Where generic data for groups of people were collected, for example, employees of businesses, only representative examples have been included in the presented data.

	Zone			
	0 - 0.25 km	>0.25 - 0.5 km	>0.5 - 1.1 km	
Number of observations	14	10	37	
Highest indoor occupancy (h y-1)	-	-	8445	
Highest outdoor occupancy (h y ⁻¹)	521	600	2009	
Highest total occupancy (h y-1)	521	600	8628	

Table 14. Summary of direct radiation occupancy rates

0 – 0.25 km from the nuclear licensed site boundary

Occupancy data for 14 individuals in the 0 - 0.25 km zone were included in the analysis. The observations were for 4 anglers, one wildfowler and 9 people undertaking shore activities with nature wardens. The highest outdoor and total occupancy rates were for anglers. No indoor activities were identified at the time of the survey as there were no residences or businesses in the area.

>0.25 – 0.5 km from the nuclear licensed site boundary

Occupancy data for 10 individuals in the >0.25 - 0.5 km zone were included in the analysis. The observations were for 9 employees and one person who was walking between Stolford and Hinkley Point. One employee also spent time fossil hunting, dog walking and paddling at Shurton Bars within the >0.5 – 1.1 km zone. The highest outdoor and total occupancy rates were for employees. No indoor activities were identified at the time of the survey as there were no residences or businesses in the area.

>0.5 – 1.1 km from the nuclear licensed site boundary

Occupancy data for 37 individuals in the >0.5 - 1.1 km zone were included in the analysis. The observations were for 15 residents, 2 Hinkley Point C contractors living in temporary accommodation (estimated rates), 8 dog walkers, 8 employees, 3 people walking, and one person who was fossil hunting and paddling. The highest indoor, outdoor and total occupancy rates were for residents.

8.6. Gamma dose rate measurements

Gamma dose rates were measured indoors and outdoors at most properties where interviews were conducted in the Hinkley Point direct radiation survey area. Where possible, outdoor measurements were taken approximately 5 to 10 metres from the nearest building and over grass. Gamma dose rate measurements were taken over grass at locations further than 5 km from the site centre to obtain background dose rates. All measurements were taken at a height of 1 metre above the substrate using multiple Thermo RadEye GX Survey Meters, each connected to a compensated Geiger-Müller

tube. The indoor and outdoor measurements have not been adjusted for background dose rates. The results are presented in Table 79 and are summarised in Table 15.

Table 15. Summary of gamma dose rate measurements taken in the direct radiation	on
survey area	

Substrate	Number of measurements taken	Minimum gamma dose rate at 1 metre (µGy h ⁻¹)	Maximum gamma dose rate at 1 metre (μGy h ⁻¹)	
Indoor measurements ^a				
Concrete	5	0.065	0.083	
Wood	1	0.080	0.080	
Outdoor measurements ^a				
Concrete	1	0.071	0.071	
Grass	8	0.070	0.083	
Background measurements				
Grass	3	0.065	0.095	
Notos				

<u>Notes</u>

^a These measurements have not been adjusted for background dose rates.

Of the six measurements taken indoors and the 9 measurements taken outdoors at locations within the direct radiation survey area, no readings were higher than the maximum background reading.

The gamma dose rates can be compared with readings taken by the Radiological Response and Emergency Management System (RREMS) programme, which continuously monitors radiation levels at a network of 91 fixed monitors and a number of mobile monitors distributed throughout the UK (www.gov.uk). The nearest RREMS station to Hinkley Point was at Liscombe, which was approximately 35 km away. The ambient (background) gamma dose rates at Liscombe during the survey period ranged from 0.07 μ Gy h⁻¹ to 0.17 μ Gy h⁻¹. All readings taken at the time of the survey were below or within the range observed for the RREMS system.

9. Uses of habits data for dose assessments

9.1. Combined pathways

In determining habits data for the purposes of assessing radiological doses to the public, it may be necessary to consider a combination of pathways. Data are provided in Annex 1, Annex 2 and Annex 3 for adults, children and infants, respectively so that the full effect of combining pathways can be assessed for individual observations, given the concentrations and dose rates for a particular assessment. The rates for individuals in the high-rate

groups are emboldened. In some circumstances, it will be possible to make simplifying assumptions and define the consumption and external exposure rates appropriate to a series of potential high-rate groups.

The most extensive combinations of pathways for adult dose assessment are shown in Table 81. Each of the 36 combinations shown in Table 81 represents an actual individual (or individuals) from Annex 1 who has positive data (irrespective of the magnitude), for each pathway marked with a cross. Other individuals from Annex 1 have combinations that are not listed in Table 81 because they have fewer pathways and a dose assessment for them would be adequately covered by one of the 36 listed combinations.

9.2. Prenatal dose assessment

Dose assessment of prenatal children was introduced routinely for the first time in the Radioactivity in Food and the Environment report for 2005 (EA, EHS, FSA and SEPA, 2006), following the publication of recommendations by the Radiation Protection Division of the UKHSA (formerly, Health Protection Agency) (National Radiological Protection Board, 2005). The adopted approach is to use the consumption and occupancy data for women of childbearing age in order to calculate the potential dose to prenatal children. Therefore, consumption and occupancy data collected during the Hinkley Point habits survey for women of childbearing age are presented in Annex 6. The Office of National Statistics classifies women to be of childbearing age if they are between 15 and 44 years old (www.ons.gov.uk); this age range has been used in Annex 6. It was not possible to collect ages for all female observations during the habits survey. However, these females with unknown ages have been included in Annex 6 as they might be women of childbearing age.

9.3. 'Total dose' assessment

The UK environment agencies and the FSA have considered ways of using habits data to estimate 'total dose' retrospectively. The adopted approach is to use the adult consumption and occupancy data collected in each habits survey to create a matrix with a series of habits profiles for each site. The National Dose Assessment Working Group (NDAWG) considered this approach for assessing retrospective total doses (Camplin and others, 2005) and agreed that using habits profiles is an appropriate approach. The method used to estimate total dose integrated across pathways is provided in the RIFE reports (for example: EA, FSA, FSS, NRW, NIEA and SEPA, 2024) Radioactivity in food and the environment (RIFE) report - GOV.UK.

The relevant matrix for the adults' profiled habits data is shown in Annex 7. Additionally, profiles have been created for the child and infant age groups, and for women of childbearing age. These are shown in Annex 8, Annex 9 and Annex 10 respectively. Most

of the groups used for the pathways in the matrices are exactly analogous to the groups used throughout this habits survey report, although the names used are slightly different, for example 'Fruit – Domestic' rather than 'Domestic fruit'. However, in order to increase the robustness of the 'total dose' assessments, some of the groups that are used throughout the rest of this report have been amalgamated together for use in the matrices. These are indicated in the notes at the foot of each matrix, where applicable. The 'Plume pathways' are related to inhalation and external exposure arising from gaseous discharges and use the total of the individuals' indoor and outdoor occupancy rates for each of the direct radiation zones. The 'Direct' pathway is expressed as the proportion of the profile members who are exposed to direct radiation.

10. Comparisons with the previous survey

The results from this 2024 survey are compared below with results from the last combined habits survey undertaken at Hinkley Point in 2017. The aquatic survey area in the 2024 survey was the same as those in the 2017 survey. In 2024, the terrestrial and direct radiation survey areas changed compared with 2017, as they were based on the Hinkley Point A, B and C sites, instead of A and B. This resulted in a new approximate site centre used to determine the terrestrial survey area and a new nuclear licensed site boundary used to determine the direct radiation survey area. The comparison of occupancy rates in the direct radiation area is for all age groups combined. All other comparisons are for adults only.

10.1. Aquatic survey area

The activities identified in the aquatic survey area in 2024 were similar to those identified in 2017. However, commercial fishing was not identified being undertaken in 2024.

The main species of sea fish consumed by the adult high-rate group in 2024 and 2017 were cod and bass. The main species of crustaceans consumed by the adult high-rate group in 2024 and 2017 was brown shrimp. The only species of molluscs consumed by the high-rate group in 2017 was whelks, whereas in 2024, the consumption of molluscs was not identified. The main species of wildfowl consumed by the adult high-rate group in 2017 were mallard, pintail, wigeon and teal, whereas in 2024, the main species were Canada goose, mallard and pigeon. In 2024 and 2017, the main species of marine plants/algae consumed by the adult high-rate group were samphire and Porphyra. The consumption of salt marsh grazed beef was identified in 2024, but not in 2017.

A comparison between the consumption of aquatic foods in 2017 and 2024 is presented in Table 16.

2017			2024			
Food group	Number in high- rate group	Maximum consumption rate (kg y ⁻¹)	Mean consumption rate for the high-rate group (kg y ⁻¹)	Number in high- rate group	Maximum consumption rate (kg y ⁻¹)	Mean consumption rate for the high-rate group (kg y ⁻¹)
Sea fish	12	75.6	45.1	3	46.2	32.5
Crustaceans	5	20.6	11.7	8	2.0	2.0
Molluscs	2	0.7	0.7	Not identified	Not identified	Not identified
Wildfowl	4	4.8	3.8	2	7.1	7.1
Marine plants/algae	6	1.0	0.8	7	1.0	0.7
Salt marsh grazed cattle meat	Not identified	Not identified	Not identified	16	15.0	10.0

Table 16. Comparison between 2017 and 2024 consumption rates of aquatic foodgroups for adults

The number of people in the high-rate group for sea fish consumption, and the quantities of fish consumed, had decreased significantly in 2024 compared with 2017. Many of the anglers who were interviewed in 2024 survey stated that they were predominantly catching and releasing sea fish rather than taking it for consumption. Additionally, it was reported by 2 angling associations that the fish species predominantly caught by anglers had changed in recent years to species which are less likely to be consumed, for example dogfish.

In 2017, one commercial fisherman was operating in the survey area, whose catch included brown shrimps and whelks, which were consumed by the fisherman and their family. By 2024 they had stopped fishing commercially. This change in fishing habits resulted in a significant reduction in the consumption of brown shrimp (crustacean food group), and no whelks (mollusc food group) were consumed in 2024.

The consumption of Porphyra and samphire was identified in 2017 and 2024, and similar consumption rates were identified in both years.

The consumption of beef from cattle grazed on salt marsh was identified in 2024 but not in 2017.

The consumption of wildfowl increased in 2024, but no specific reasons were identified for the change in consumption.

For intertidal occupancy in both 2017 and 2024, occupancy over intertidal substrates for adults was recorded over mud; mud and sand; mud, sand and stones; rock; sand; sand

and stones; stones; boat on mud. Occupancy over salt marsh was identified in 2024, but not in 2017.

The following activities were undertaken by the individuals in the adult high-rate groups for occupancy over intertidal substrates:

- In 2017: attending nets, dog walking, collecting samphire, angling, bait digging, collecting seaweed, working, rock pooling, walking, beachcombing, birdwatching, and living on a boat, and undertaking search and rescue duties, beach warden duties and lifeguard duties.
- In 2024: angling, dog walking, playing, walking, setting nets, bait digging, fossil hunting, sitting on the beach, metal detecting, boat maintenance, and undertaking beach warden duties and ecological fieldwork.

The only activities identified undertaken by individuals in the high-rate group for fishing gear and handling sediment, in 2017 and 2024, were handling nets and bait digging, respectively.

A comparison between the 2017 and 2024 data for adult occupancy over intertidal substrates and handling pathways is shown in Table 17.

	2017			2024		
Intertidal substrate or handling pathway	Number in high- rate group	Maximum occupancy or handling rate (h y ⁻¹)	Mean occupancy or handling rate for the high-rate group (h y ⁻¹)	Number in high- rate group	Maximum occupancy or handling rate (h y ⁻¹)	Mean occupancy or handling rate for the high-rate group (h y ⁻¹)
Mud	1	912	912	11	400	387
Mud and sand	23	546	238	3	322	290
Mud, sand and stones	3	365	203	6	26	17
Rock	3	326	248	2	581	421
Salt marsh	Not identified	Not identified	Not identified	11	400	378
Sand	6	2450	1723	14	1043	536
Sand and stones	29	447	246	1	626	626
Stones	21	390	191	3	315	215
Boat on mud	3	2878	2615	2	730	730
Handling fishing gear	1	912	912	1	253	253
Handling sediment	2	166	135	1	313	313

Table 17. Comparison between 2017 and 2024 intertidal occupancy rates and handling rates of fishing gear and sediment for adults

In 2024, the mean intertidal occupancy rate for the adult high-rate group increased significantly over rock, and sand and stones. Additionally, in 2024, the mean intertidal occupancy rate for the adult high-rate group decreased significantly over mud; mud, sand and stones; sand; boat on mud. Occupancy over mud and sand and over stones for the adult high-rate group increased slightly in 2024. Occupancy over salt marsh was identified in 2024, but not in 2017.

Occupancy over mud decreased because the commercial fisherman previously identified operating in the area in 2017 had stopped fishing. A range of activities were identified in 2024 over salt marsh, compared with no activities identified in 2017, because a new wetland reserve with areas of salt marsh had been created since 2017. The activities included undertaking ecological fieldwork, tending livestock, nature warden duties and collecting samphire. The significant decrease in occupancy over sand in 2024 was because a mobile café identified at Brean Beach in 2017 was no longer operating, as well as beach wardens who had reduced the amount of time they spent on the shore in 2024. In 2017, there were people living on a boat at Watchet Harbour but in 2024 this was no longer taking place. The highest occupancy rate for boat on mud in 2024 was for anglers undertaking boat maintenance.

The mean rates for the adult high-rate groups for handling fishing gear significantly decreased in 2024 compared to 2017. The decrease in handling rates for fishing gear was attributed to a commercial fisherman handling nets in 2017 who has since retired. The mean rates for the adult high-rate groups for handling sediment significantly increased in 2024 compared with 2017, due to the identification of an individual bait digging at Brean Beach and Berrow Beach.

For activities taking place in water in the aquatic survey area, the maximum adult occupancy rate was 20 h y⁻¹ in 2017 for 2 people kayaking, which increased in 2024 to 130 h y⁻¹ for an individual jet skiing along the River Parrett and Burnham-on-Sea.

For activities undertaken on the water in the aquatic survey area, the maximum adult occupancy rate was 5800 h y⁻¹ in 2017 for 2 people living on a boat at Watchet Harbour. In 2024, the maximum adult occupancy rate increased to 550 h y⁻¹ for an individual who was sailing and rowing along the River Brue and Burnham-on-Sea.

10.2. Terrestrial survey area

Activities in the terrestrial survey area in 2024 were broadly similar to those in 2017. The principal types of farm produce within the area continued to be cows' milk, beef, lamb and pork. The growing of fruit and vegetables in gardens and on an allotment site, beekeeping and the collection of wild/free foods and game shooting on farmland were identified in both surveys.

The mean consumption rates for the adult high-rate groups for terrestrial food groups from the 2017 and 2024 surveys are shown in Table 18.

Table 18. Comparison between 2017 and 2024 mean consumption rates (kg y ⁻¹ or
I y ⁻¹) for the adult high-rate groups for terrestrial food groups

Food group	2017	2024
Green vegetables	19.4	16.8
Other vegetables	65.3	51.4
Root vegetables	27.6	17.3
Potato	67.1	87.5
Domestic fruit	40.7	30.6
Milk	364.1	282.0
Cattle meat	68.8	49.4
Pig meat	12.3	18.2
Sheep meat	9.2	9.5
Poultry	19.6	2.4
Eggs	41.5	17.7
Wild/free foods	3.0	5.0
Rabbits/hares	1.1	0.3
Honey	1.1	4.3
Wild fungi	1.8	0.2
Venison	Not identified	10.0
Goat meat	3.4	Not identified

In 2024, compared to 2017, the mean consumption rates for the adult high-rate group increased in the following food groups: potato; pig meat; sheep meat; wild/free foods; honey. In 2024 the mean consumption rates for the adult high-rate groups decreased in the following food groups: green vegetables; other vegetables; root vegetables; domestic fruit; milk; cattle meat; poultry; eggs; rabbits/hares; wild fungi. The most significant increases in the consumption rates were for pig meat and honey, whilst the most significant decreases were for milk, cattle meat, poultry, eggs, rabbits/hares and wild fungi. In 2024, the consumption of venison was identified, and the consumption of goat meat was not identified.

The increased consumption rate of pig meat in 2024 was due to 2 individuals previously identified in 2017 consuming more pork. The increased consumption rate of honey in 2024 was due to a newly identified beekeeper who was consuming large quantities of honey. In 2024, the consumption rate of poultry significantly decreased due to a poultry farm that had ceased operation since 2017. The significant decrease in the consumption rate of eggs in 2024 was due to the identification of individuals consuming unusually high quantities of chicken eggs and duck eggs in 2017, who were not identified in 2024. The smallholders producing goat meat for consumption in 2017 were producing lambs in 2024. No specific reasons were identified for the other changes in consumption rates.

The human consumption of groundwater was identified in 2017 and 2024. In 2017, livestock were drinking mains water, borehole water, spring water and had access to streams. However, in 2024, livestock were drinking mains water, borehole water, well water and had access to streams.

10.3. Direct radiation survey area

Activities identified in the direct radiation survey area in 2017 and 2024 were similar and included people residing, working and undertaking recreational activities. The direct radiation survey area was sparsely populated; therefore, the area was extended from 1 km typically used in habits surveys to 1.1 km. In 2024, the direct radiation survey area changed compared with 2017, as it was based on the Hinkley Point A, B and C sites, instead of A and B. This resulted in a new nuclear licensed site boundary used to determine the direct radiation survey area. A comparison between the 2017 and 2024 direct radiation occupancy rates for all age groups combined, by zone, is presented in Table 19.

	2017	2024
<u>0 - 0.25 km</u>		
Highest indoor occupancy	-	-
Highest outdoor occupancy	209	521
Highest total occupancy	209	521
<u>>0.25 - 0.5 km</u>		
Highest indoor occupancy	-	-
Highest outdoor occupancy	34	600
Highest total occupancy	34	600
<u>>0.5 - 1.1 km</u>		
Highest indoor occupancy	8277	8445
Highest outdoor occupancy	1469	2009
Highest total occupancy	8682	8628

Table 19. Comparison between 2017 and 2024 direct radiation occupancy rates (h y⁻¹) for all age groups

The maximum occupancy rates across multiple zones had increased in 2024 compared with 2017. In 2024 and 2017, no residential properties were identified in the 0 – 0.25 km and >0.25 – 0.5 km zones. Therefore, there were no indoor occupancy rates. The highest outdoor and total occupancy rate in the 0 – 0.25 km zone increased significantly in 2024 for an individual who was angling at Hinkley Point. The maximum outdoor and total occupancy rate in the >0.25 – 0.5 km zone increased significantly in 2024 due to the identification of an employee working in the area. The highest indoor, outdoor and total occupancy rates in the >0.5 – 1.1 km zone were for residents. The maximum outdoor occupancy rate in the >0.5 – 1.1 km zone increased in 2024 due to the identification of a resident spending large amounts of time in their garden and walking in the direct radiation
survey area. No specific reasons were identified for the changes in indoor and total maximum occupancy rates in the >0.5 - 1.1 km zone.

In 2017, a nature warden was identified spending time within the nuclear licensed site boundary to complete nature warden duties. In 2024, the nature warden duties were undertaken by contractors of the Hinkley Point site. Hinkley Point A, B and C site contractors were not considered in the direct radiation survey while at work, as radiation workers are subject to different radiation protection criteria.

Indoor Outdoor Location 2024 2017 2024 2017 **Residence 2** 0.072 0.069 0.070 0.070 Residence 4 0.060 0.065 0.066 0.076 **Residence 5** Not recorded 0.069 0.054 0.071 Residence 6 0.072 0.083 0.070 0.074 **Residence 8** 0.061 0.071 0.070 0.076

Table 20. Comparison between 2017 and 2024 gamma dose rates (µGy h⁻¹)

<u>Notes</u>

These measurements have not been adjusted for background dose rates. The locations correspond to those in Table 79.

When compared with 2017, 3 indoor readings were higher in 2024, and one was lower. Four outdoor readings taken in 2024 were higher, compared with 2017, and one was the same.

11. Main findings

The survey investigated 3 potential sources of public radiation exposure from the Hinkley Point site, which were:

- Discharges of liquid radioactive waste into the Bristol Channel
- Discharges of gaseous radioactive waste to the atmosphere
- Emissions of direct radiation

Information was obtained by conducting interviews with members of the public including, for example, anglers, people spending time on intertidal substrates, farmers, allotment holders, beekeepers and people spending time within the direct radiation survey area. These people were targeted because their diet and habits may cause them to be exposed to radioactivity from the site. However, it should be noted that the most exposed people can only be defined with the outcome of a dose assessment. Data for 432 individuals are presented in this report. All consumption rates recorded are only for foods produced,

collected or caught from within the aquatic and terrestrial survey areas as defined in Section 4.3. The consumption and occupancy rates in this section are presented to 2 significant figures.

11.1. Aquatic survey area

The mean consumption rates for the adult high-rate groups (as defined in Section 5.4) for the separate aquatic consumption pathways for foods potentially affected by liquid discharges were:

- 33 kg y⁻¹ for sea fish
- 2.0 kg y⁻¹ for crustaceans
- 7.1 kg y⁻¹ for wildfowl
- 0.7 kg y⁻¹ for marine plants/algae
- 10 kg y⁻¹ for salt marsh grazed cattle meat

The predominant foods consumed by the people in the adult high-rate groups were:

- For sea fish: cod and bass
- For crustaceans: brown shrimp
- For wildfowl: Canada goose, mallard and pigeon
- For marine plants/algae: samphire and Porphyra
- For salt marsh grazed cattle meat: salt marsh grazed beef

The use of seaweed as animal feed or fertiliser was not identified.

The mean occupancy rates for the adult high-rate groups over the separate intertidal substrates were:

- 390 h y⁻¹ for mud
- 290 h y⁻¹ for mud and sand
- 17 h y⁻¹ for mud, sand and stones
- 420 h y⁻¹ for rock
- 380 h y⁻¹ for salt marsh
- 540 h y⁻¹ for sand
- 630 h y⁻¹ for sand and stones
- 220 h y⁻¹ for stones
- 730 h y⁻¹ for boat on mud

The mean rates for the adult high-rate groups for handling were:

- 250 h y⁻¹ for handling fishing gear (nets)
- 310 h y⁻¹ for handling sediment

The maximum adult occupancy rates for water-based activities were:

- 130 h y⁻¹ for 'in water'
- 550 h y⁻¹ for 'on water'

Individuals in the child and infant age groups were recorded consuming aquatic foods and undertaking activities in the aquatic survey area.

11.2. Terrestrial survey area

The mean consumption rates for the adult high-rate groups for the separate consumption pathways for foods potentially affected by gaseous discharges were:

- 17 kg y⁻¹ for green vegetables
- 51 kg y⁻¹ for other vegetables
- 17 kg y⁻¹ for root vegetables
- 88 kg y⁻¹ for potato
- 31 kg y⁻¹ for domestic fruit
- 280 l y⁻¹ for milk
- 49 kg y⁻¹ for cattle meat
- 18 kg y⁻¹ for pig meat
- 9.5 kg y⁻¹ for sheep meat
- 2.4 kg y⁻¹ for poultry
- 18 kg y⁻¹ for eggs
- 7.5 kg y⁻¹ for wild/free foods
- 0.3 kg y⁻¹ for rabbits/hares
- 4.3 kg y⁻¹ for honey
- 0.2 kg y⁻¹ for wild fungi
- 10 kg y⁻¹ for venison

The consumption of terrestrial foodstuffs was also recorded for individuals in the child and infant age groups.

The human consumption of borehole was identified. Livestock were drinking mains water, borehole water, well water and had access to streams.

11.3. Direct radiation survey area

The highest indoor, outdoor and total occupancy rates recorded for each zone were:

0 – 0.25 km zone

- No indoor activities identified
- 520 h y⁻¹ for the outdoor occupancy rate
- 520 h y⁻¹ for the total occupancy rate

>0.25 – 0.5 km zone

- No indoor activities identified
- 600 h y⁻¹ for the outdoor occupancy rate
- 600 h y⁻¹ for the total occupancy rate

>0.5 – 1.1 km zone

- 8400 h y⁻¹ for the indoor occupancy rate
- 2000 h y⁻¹ for the outdoor occupancy rate
- 8600 h y⁻¹ for the total occupancy rate

In the 0 – 0.25 km zone, the highest outdoor and total occupancy rate was for an angler. The highest outdoor and total occupancy rate was for an employee in the >0.25 – 0.5 km zone. No indoor occupancy rates were identified in the 0 – 0.25 km and >0.25 – 0.5 km zones. The highest indoor, outdoor and total occupancy rates were for residents in the >0.5 – 1.1 km zone.

12. Habits survey information for consideration in the selection of samples and measurements for monitoring programmes

Habits surveys provide site-specific information on the consumption of locally produced foods and the location and types of activities which may affect the public's exposure to radiation. This information can be used to help in the selection of samples and

measurements for the monitoring programmes by identifying foods that are consumed at high rates and the locations where people spend significant amounts of time.

In England and Wales, the monitoring programme for radioactivity in food is undertaken by the FSA, and the monitoring programme for radioactivity in the environment is conducted by the EA. The results of these programmes are published annually in the RIFE reports (for example: EA, FSA, FSS, NRW, NIEA and SEPA, 2024) <u>Radioactivity in food and the environment (RIFE) report - GOV.UK</u>.

In 2013 the FSA completed a public consultation to review the way that they monitor radioactivity in food (FSA, 2012 and 2013). The outcome of the consultation was to implement a revised monitoring programme in 2014, with reductions in sampling and analysis of some foods that were considered to represent a very low radiological risk.

12.1. Summary of the monitoring programmes for Hinkley Point

The 2023 monitoring programmes relevant to the Hinkley Point area included the samples and measurements listed in Table 21 to Table 23. The location names, foods and substrate classifications are taken directly from RIFE 29 (EA, FSA, FSS, NRW, NIEA and SEPA, 2024) <u>Radioactivity in food and the environment (RIFE) report - GOV.UK</u>. Some of the samples and measurements taken for the monitoring programmes may be from outside the survey areas used for the 2024 Hinkley Point habits survey.

Table 21. Aquatic food and environmental samples used in the RIFE 29 monitoring	g
programme	

Sample	Location
Grey Mullet	Stolford
Shrimps	Stolford
Limpets	Stolford
European Oyster	Stolford
Seaweed	Pipeline
Sediment	Pipeline
Sediment	Stolford
Sediment	Stert Flats
Sediment	River Parrett
Sediment	River Parrett Central 2
Sediment	Weston-super-Mare
Sediment	Burnham-on-Sea
Sediment	Kilve
Sediment	Helwell Bay
Sediment	Blue Anchor Bay
Seawater	Pipeline

Table 22. Gamma dose rate measurements over intertidal	substrates used in the
RIFE 29 monitoring programme	

Location	Substrate
Weston-super-Mare	Mud and sand
Weston-super-Mare	Sand
Burnham-on-Sea	Mud and sand
Burnham-on-Sea	Sand
River Parrett	Mud
River Parrett Bridgwater Central 2	Mud
River Parrett Bridgwater Central 2	Mud and salt marsh
Stert Flats	Mud
Stert Flats	Mud and sand
Stolford	Mud
Stolford	Mud and rock
Pipeline	Rock and mud
Pipeline	Sand and rock
Kilve	Rock and sand
Kilve	Sand and stones
Helwell Bay	Rock and sand
Helwell Bay	Sand and rock
Blue Anchor Bay	Sand and rock
Blue Anchor Bay	Sand and shingle

Table 23. Terrestrial samples used in the RIFE 29 monitoring programme

Sample	Location
Milk	-
Blackberries	-
Honey	-
Wheat	-
Grass	Gunter's Grove
Grass	Wall Common
Freshwater	Durleigh Reservoir
Freshwater	Ashford Reservoir

12.2. Information from the 2024 Hinkley Point habits survey for use in the selection of samples and measurements for monitoring programmes

Food Standards Agency monitoring

The following foods presented in Table 24 were either consumed in the largest quantities in their food groups or were the only food in their food group and could be considered for potentially selecting samples for the FSA monitoring programme.

Table 24. Foods considered for potentially selecting samples for the FSA monitoring programme

Food	Food Group
Cod	Sea fish
Brown shrimp	Crustaceans
Canada goose	Wildfowl
Samphire	Marine plants/algae
Salt marsh grazed beef	Salt marsh grazed cattle meat
Cabbage	Green vegetables
Tomato	Other vegetables
Onion	Root vegetables
Potato	Potato
Apple	Domestic fruit
Cows' milk	Milk
Beef	Cattle meat
Pork	Pig meat
Lamb	Sheep meat
Pheasant	Poultry
Chicken egg	Egg
Blackberry	Wild/free foods
Rabbit	Rabbits/hares
Honey	Honey
Mushroom	Wild fungi
Venison	Venison

Environment Agency monitoring

The current environmental monitoring programme adequately covers the Hinkley Point area, and no changes are suggested.

13. Acknowledgements

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14. References

Allott, R., 2005. Assessment of compliance with the public dose limit. Principles for the assessment of total retrospective public doses. National Dose Assessment Working Group. NDAWG/2/2005.

BEIS, 2018. UK Strategy for Radioactive Discharges – 2018 Review of the 2009 Strategy. BEIS, London.

Byrom, J., Robinson, C., Simmonds, J.R., Walters, B., and Taylor, R.R., 1995. Food consumption rates for use in generalised radiological dose assessments. J. Radiol. Prot. 1995 Vol. 15 No 4 335-341.

Camplin, W.C., Grzechnik, M.P. and Smedley, C.A., 2005. Methods for assessment of total dose in the Radioactivity in Food and the Environment report. Presented to the National Dose Assessments Working Group (NDAWG). Paper NDAWG/3/2005, 27th April 2005.

Dewar, A., 2013. Estimation of Child Doses Using Habits Data and Profiling Total Dose Methodology, 2013. RL 29/13. Cefas, Lowestoft.

EC, 2014. Council Directive 2013/59/EURATOM laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation. OJ L13, 17.1.2014:1-73. EC, Brussels.

EA, FSA, FSS, NRW, NIEA and SEPA, 2024. Radioactivity in Food and the Environment, 2023. EA, FSA, FSS, NRW, NIEA and SEPA, Bristol, London, Aberdeen, Cardiff, Belfast and Stirling. RIFE 29.

EA, SEPA, DoENI, NRPB and FSA, 2002. Authorisation of discharges of radioactive waste to the environment. Principles for the assessment of prospective public doses. Interim Guidance. EA, SEPA, DoENI, NRPB and FSA, Lancaster.

EA, SEPA, NIEA, HPA and FSA, 2012. Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment. EA, SEPA, NIEA, HPA and FSA, Penrith.

FSA, 2012. Radioactivity in Food Monitoring Review. FSA, London.

FSA, 2013. Radioactivity in Food Monitoring Review. Summary report of responses to consultation from stakeholders. FOODSA0128. FSA, London.

Greenhill, B.J., Clyne, F.J., Milligan, A., and Neish, A., 2018. Radiological Habits Survey: Hinkley Point, 2017. RL 01/18. Cefas, Lowestoft.

Good Housekeeping, 1994. Good Housekeeping Cook Book. Ebury Press, London.

Hessayon, D. G., 1990. The Fruit Expert, pbi Publications, Waltham Cross.

Hessayon, D. G., 1997. The Vegetable & Herb Expert, Expert Books, London.

Hunt, G.J., Hewett, C.J. and Shepherd, J.G., 1982. The identification of critical groups and its application to fish and shellfish consumers in the coastal area of the north-east Irish Sea. Health Physics, Vol. 43, No 6, 875-889.

IAEA, 1996. International basic safety standards for protection against ionizing radiation and for the safety of radiation sources. Saf. Ser. No. 115. IAEA, Vienna.

ICRP, 1992. The Biological Basis for Dose Limitation in the Skin. ICRP Publication 59. Ann. ICRP 22 (2).

ICRP, 2007. The 2007 Recommendations of the International Commission on Radiological Protection. Annal. ICRP 37 (2-4). Elsevier Science, Oxford, (ICRP Publ. 103).

Ministry of Agriculture Fisheries and Food. Pesticides Safety Directorate's Handbook. Appendix IC. London: 1996.

NDAWG, 2005. Position paper on the collection and use of habits data for retrospective dose assessments. National Dose Assessment Working Group. NDAWG/4/2005.

NDAWG, 2012. Acquisition and use of habits data for prospective assessments. National Dose Assessment Working Group. NDAWG/2/2012.

National Radiological Protection Board, 2005. Guidance on the application of dose coefficients for the embryo and fetus from intakes of radionuclides by the mother. Docs NRPB 16(2). NRPB, Chilton, 41pp.

Smith, K.R. and Jones, A.L., 2003. Generalised habit data for radiological assessments. NRPB-W41. NRPB, Chilton.

UK Parliament, 1965. Nuclear Installations Act, 1965 (as amended). HMSO, London.

UK Parliament, 2012. UK Strategy for Radioactive Discharges. DECC, London.

UK Parliament, 2016. Environmental Permitting (England and Wales) Regulations. Stat. Inst. 2016.

UK Parliament, 2017. The Ionising Radiations Regulations 2017. Stat. Inst. 2017/1075. HMSO, London, 68pp.

www.cefas.co.uk/expertise/surveys/habits/ - Last accessed 02/12/2024.

www.gov.uk/government/publications/ambient-gamma-radiation-dose-rates-across-the-uk - Last accessed 25/10/2024.

www.gov.uk/government/publications/radioactivity-in-food-and-the-environment-rifereports - Last accessed 17/02/2025.

www.ons.gov.uk - Last accessed 02/12/2024.

Table 25. Survey coverage

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
Summary of all pathways					
	Number of people residing in the terrestrial survey area (excluding those resident in the direct radiation survey area) (See (B) Terrestrial pathways)	1,410ª	86 ^b	6.1%	The survey targeted individuals who were potentially the most exposed, mostly producers of local foods such as farmers and allotment holders.
All potential interviewees in the Hinkley Point aquatic, terrestrial and direct radiation survey areas.	Number of people residing in the direct radiation survey area (See (C) Direct radiation pathways)	30	15 ^b	50%	Interviews were conducted with members of the public from 9 residences out of an estimated total of 18 permanent residences.
	Number of itinerant workforce resident in the direct radiation survey area for the construction of Hinkley Point C (See (C) Direct radiation pathways)	U	2	U	Estimated occupancy data for 2 people living in the temporary accommodation near Hinkley Point C site have been included in the data analysis.
	Number of people working, visiting and undertaking recreational activities in the direct radiation survey area (See (C) Direct radiation pathways)	U	44 ^b	U	Excluding employees and contractors at the nuclear licensed site. Where generalised data for groups of people were obtained, for example employees at some businesses, only a limited number of representative individuals have been included.
	Number of people affected by liquid discharges (excluding those assigned to other categories above) (See (A) Aquatic pathways)	U	285 ^b	U	Where generalised data for groups of people were obtained, for example, members of clubs, only a limited number of representative individuals have been included.

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
All potential interviewees in the Hinkley Point aquatic, terrestrial and direct radiation survey areas.	Total for aquatic, terrestrial and direct radiation survey areas	U	432 ^b	U	
(A) Aquatic pathways					
People using the intertidal areas (for example: dog walkers, people playing, etc.)	Number of people undertaking activities on the intertidal areas in the aquatic survey area	U	237	U	Where generalised data for groups of people were obtained, for example, members of clubs, only a limited number of representative individuals have been included.
People undertaking activities in or on water (for example: swimming, rowing and kayaking etc.)	Number of people undertaking activities in or on water in the aquatic survey area	U	130	U	Where generalised data for groups of people were obtained, for example, members of clubs, only a limited number of representative individuals have been included.
Sea fish consumers	Number of people consuming sea fish from the aquatic survey area	U	23	U	
Crustacean consumers	Number of people consuming crustaceans from the aquatic survey area	U	12	U	

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
(A) Aquatic pathways					
Wildfowl consumers (from waters or intertidal areas subject to liquid discharges)	Number of people consuming wildfowl from the aquatic survey area	U	10	U	
Marine plants and algae	Number of people consuming marine plants or algae from the aquatic survey area	U	7	U	The species of marine plants/algae identified being consumed was samphire and Porphyra.
Salt marsh grazed cattle meat consumers (from intertidal areas subject to liquid discharges)	Number of people consuming salt marsh grazed cattle meat from the aquatic survey area	U	20	U	
(B) Terrestrial pathways	5				
Farmers	Number of farmers, smallholders and their family members consuming food from the terrestrial survey area	U	55	U	Interviews were conducted at 16 farms out of an estimated 17 farms in the terrestrial survey area. Seven of the farms interviewed were not consuming any food from the terrestrial survey area. One smallholding was identified within the terrestrial survey area.

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
(B) Terrestrial pathway	s				
Allotment holders and gardeners	Number of allotment holders, gardeners and their family members consuming food from the terrestrial survey area	U	54	U	
Honey consumers	Number of people consuming honey produced in the survey area	U	24	U	Three beekeepers were identified who kept hives in the survey area.
(C) Direct radiation pat	hways				
Residents	Number of residents in the survey area	30	15	50%	Interviews were conducted with members of the public from 9 residences out of an estimated total of 18 permanent residences.
Itinerant workforce residing in temporary	Number of temporary residents in the survey area	U	2	U	The observations include 2 estimated rates to represent the Hinkley Point C contractors living in the temporary accommodation.

Group	Criteria	Estimate of complete coverage	Number for whom positive data was obtained	Coverage for positive observations	Notes
(C) Direct radiation pa	thways				
Employees	Number of people working in the survey area	U	24	U	Excluding people who were living in the direct radiation survey area and employees and contractors at the nuclear licensed site. Where generalised data for groups of people were obtained, for example employees at some businesses, only a limited number of representative individuals have been included.
Visitors (people undertaking recreational activities or visiting relatives)	Number of people visiting the survey area	U	20	U	
Breakdown of age groups for people residing in the 5 km terrestrial survey area					
Adult	16 years old and over	1,230ª	131	11%	
Child	6 years old to 15 years old	150ª	12	8.0%	
Infant	0 to 5 years old	60ª	4	6.7%	

Notes for Table 25

^a Estimate of the number of people residing in the 5 km terrestrial survey area based on data from www.ons.gov.uk.

^b The number of people for whom positive data was obtained for pathways (A) and (B) and (C) will usually not equal the relevant totals in the summary of all pathways. This is because in sections (A), (B) and (C) some individuals may be counted 2 or more times, for example someone who goes angling and consumes foods from the terrestrial area.

U – Unknown

Food group	Examples of foods within the group
Green vegetables	Asparagus, broccoli, Brussels sprouts, cabbage, calabrese, cauliflower, chard, courgette, cucumber, gherkin, globe artichoke, herbs, kale, leaf beet, lettuce, marrow, spinach
Other vegetables	Aubergine, broad bean, chili pepper, French bean, kohl rabi, mangetout, pea, pepper, pumpkin, runner bean, sweetcorn, tomato
Root vegetables	Beetroot, carrot, celeriac, celery, chicory, fennel, garlic, Jerusalem artichoke, leek, onion, parsnip, radish, shallot, spring onion, swede, turnip
Potato	Potato
Domestic fruit	Apple, apricot, blackberry, blackcurrant, boysenberry, cherry, damson, fig, gooseberry, grape, greengage, huckleberry, loganberry, melon, nectarine, peach, pear, plum, raspberry, redcurrant, rhubarb, rowanberry, strawberry, tayberry, white currant
Milk	Cows' milk, cream, goats' milk, yoghurt
Cattle meat ^a	Beef
Pig meat ^a	Pork
Sheep meat ^a	Lamb, mutton
Poultry ^b	Chicken, duck, goose, grouse, guinea fowl, partridge, pheasant, pigeon, turkey, woodcock
Eggs	Chicken egg, duck egg, goose egg
Wild/free foods	Blackberry, chestnut, crab apple, damson, dandelion root, elderberry, nettle, rowanberry, sloe
Honey	Honey

Table 26. Typical food groups used in habits surveys

Food group	Examples of foods within the group
Wild fungi	Mushrooms, other edible fungi
Rabbits/hares	Hare, rabbit
Venison ^a	Venison
Sea fish	Bass, brill, cod, ling, dab, Dover sole, flounder, gurnard, haddock, hake, herring, lemon sole, mackerel, monkfish, mullet, plaice, pollack, rays, saithe, salmon, sea trout, sprat, turbot, whitebait, whiting, witch, cuttlefish ^c , squid ^c
Fish (freshwater)	Brown trout, eel (river), perch, pike, rainbow trout, salmon (river)
Crustaceans	Brown crab, common lobster, crawfish, Nephrops, prawn, shrimp, spider crab, squat lobster, velvet swimming crab
Molluscs	Cockles, limpets, mussels, oysters, razor clam, scallops, whelks, winkles
Wildfowl ^b	Canada goose, greylag goose, mallard, pink-footed goose, pintail, shoveler, teal, wigeon

<u>Notes</u>

^a Including offal.

^b Domesticated ducks and geese are classified as poultry. Wild ducks and geese are classified as wildfowl.

^c Although squid and cuttlefish are molluscs, radiologically they are more akin to fish due to their mobility and physiology.

Person ID number	Bass	Cod	Dover sole	Flounder	Grey mullet	Lesser spotted dogfish	Thornback ray	Whiting	Total
4666/1/1	10.2	31.4	4.5	-	-	-	-	-	46.2
4671/2/1	3.2	26.9	-	-	-	-	-	-	30.1
4660/1/1	21.3	-	-	-	-	-	-	-	21.3
4576/1/1	4.3	6.0	-	-	-	-	-	-	10.3
4582/1/1	0.7	1.0	2.8	0.7	-	-	-	2.6	7.7
4582/2/1	0.7	1.0	2.8	0.7	-	-	-	2.6	7.7
4652/1/1	0.6	-	-	-	4.6	-	1.3	-	6.4
4652/2/1	0.6	-	-	-	4.6	-	1.3	-	6.4
4652/4/1	0.6	-	-	-	4.6	-	1.3	-	6.4
4597/1/1	-	-	3.4	-	2.6	-	-	-	5.9
4597/2/1	-	-	3.4	-	2.6	-	-	-	5.9
4615/1/1	-	5.4	-	-	-	-	-	-	5.4
4615/2/1	-	5.4	-	-	-	-	-	-	5.4
4576/2/1	2.1	3.0	-	-	-	-	-	-	5.1
4576/3/1	2.1	3.0	-	-	-	-	-	-	5.1
4611/7/1	0.8	2.7	0.4	-	-	-	-	-	3.9
4611/8/1	0.8	2.7	0.4	-	-	-	-	-	3.9
4672/1/1	1.0	-	0.8	-	-	1.8	-	-	3.6
4672/2/1	1.0	-	0.8	-	-	1.8	-	-	3.6
4586/1/1	1.3	1.8	-	-	-	-	-	-	3.1
4673/1/1	1.6	-	-	-	-	-	-	-	1.6
4673/2/1	1.6	-	-	-	-	-	-	-	1.6

Table 27. Adults' consumption rates of sea fish from the Hinkley Point aquatic survey area (kg y⁻¹)

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of sea fish for adults based on the 3 high-rate consumers is 32.5 kg y^{-1}

The observed 97.5th percentile rate based on 22 observations is 37.8 kg y⁻¹

Table 28. Adults' consumption rates of crustaceans from the Hinkley Point aquatic survey area (kg y⁻¹)

Person ID number	Brown shrimp
4597/1/1	2.0
4597/2/1	2.0
4597/3/1	2.0
4597/4/1	2.0
4597/5/1	2.0
4597/6/1	2.0
4597/11/1	2.0
4597/11/2	2.0

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of crustaceans for adults based on the 8 high-rate consumers is 2.0 kg $y^{\mbox{-}1}$

The observed 97.5th percentile rate based on 8 observations is 2.0 kg y⁻¹

Table 29. Adults' consumption rates of wildfowl from the Hinkley Point aquatic survey area (kg y-1)

Person ID number	Canada goose	Mallard	Teal	Pigeon	Total
4615/1/1	5.0	0.9	-	1.2	7.1
4615/2/1	5.0	0.9	-	1.2	7.1
4689/1/1	0.8	0.3	0.1	0.2	1.4
4689/2/1	0.8	0.3	0.1	0.2	1.4
4689/3/1	0.8	0.3	-	0.2	1.3
4689/4/1	0.8	0.3	-	0.2	1.3
4689/5/1	0.8	0.3	-	0.2	1.3
4622/1/1	-	0.4	-	0.3	0.8

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of wildfowl for adults based on the 2 high-rate consumers is 7.1 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 7.1 kg y-1

Person ID number	Porphyra	Samphire	Total
4597/1/1	1.0	-	1.0
4597/5/1	1.0	-	1.0
4663/1/1	-	0.6	0.6
4663/1/2	-	0.6	0.6
4663/1/3	-	0.6	0.6
4663/2/1	-	0.6	0.6
4663/2/2	-	0.6	0.6

Table 30. Adults' consumption rates of marine plants/algae from the Hinkley Point aquatic survey area (kg y⁻¹)

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of marine plants/algae for adults based on the 7 high-rate consumers is 0.7 kg y^{-1}

The observed 97.5th percentile rate based on 7 observations is 1.0 kg y⁻¹

Table 31. Adults' consumption rates of salt marsh grazed cattle meat from the Hinkley Point aquatic survey area (kg y⁻¹)

Person ID number	Salt marsh beef
4688/8/1	15.0
4688/9/1	15.0
4688/1/1	10.9
4688/2/1	10.9
4688/10/1	10.9
4688/11/1	10.9
4606/5/1	10.0
4606/6/1	10.0
4606/7/1	10.0
4606/8/1	10.0
4606/1/1	8.0
4606/2/1	8.0
4688/4/1	7.5
4688/5/1	7.5
4688/6/1	7.5
4688/7/1	7.5

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of salt marsh grazed cattle meat for adults based on the 16 high-rate consumers is 10.0 kg y^{-1}

The observed 97.5th percentile rate based on 16 observations is 15.0 kg y⁻¹

Table 32. Infants' consumption rates of sea fish from the Hinkley Point aquatic survey area (kg y^{-1})

Person ID number	Bass	Grey mullet	Thornback ray
4652/3/1	0.3	2.3	0.6

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of sea fish for the infant age group based on the high-rate consumer is 3.2 kg y⁻¹

The observed 97.5th percentile is not applicable for one observation

Table 33. Children's consumption rates of crustaceans from the Hinkley Point aquatic survey area (kg y⁻¹)

Person ID number	Brown shrimp
4597/7/1	1.5

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of crustaceans for the child age group based on the high-rate consumer is 1.5 kg y^{-1}

The observed 97.5th percentile is not applicable for one observation

Table 34. Infants' consumption rates of crustaceans from the Hinkley Point aquatic survey area (kg y⁻¹)

Person ID number	Brown shrimp
4597/8/1	1.0
4597/9/1	1.0
4597/10/1	1.0

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of crustaceans for the infant age group based on the 3 high-rate consumers is 1.0 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 1.0 kg y⁻¹

Table 35. Children's consumption rates of wildfowl from the Hinkley Point aquatic survey area (kg y⁻¹)

Person ID number	Canada goose	Mallard	Total
4689/7/1	0.8	0.3	1.1
4689/6/1	0.6	0.2	0.8

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of wildfowl for the child age group based on the 2 high-rate consumers is 1.0 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 1.1 kg y-1

Table 36. Children's consumption rates of salt marsh grazed cattle meat from the Hinkley Point aquatic survey area (kg y^{-1})

Person ID number	Salt marsh beef
4688/3/1	8.2
4688/12/1	8.2
4606/3/1	6.0

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of salt marsh grazed cattle meat for the child age group based on the 3 high-rate consumers is 7.5 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 8.2 kg y⁻¹

Table 37. Infants' consumption rates of salt marsh grazed cattle meat from the Hinkley Point aquatic survey area (kg y⁻¹)

Person ID number	Salt marsh beef
4606/4/1	4.0

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of salt marsh grazed cattle meat for the infant age group based on the high-rate consumer is 4.0 kg y^{-1}

The observed 97.5th percentile is not applicable for one observation

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4600/4/4	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/1/1	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
4600/4/2	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/1/2	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
4600/4/2	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/1/3	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
4600/4/4	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/1/4	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
4600/1/5	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/1/5	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
4600/4/6	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/1/0	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
4600/4/7	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/1/7	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
4600/2/4	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/2/1	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
400/0/0	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/2/2	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-
	Stolford	Ecological	400	-	-	-	-	-	-	-	-
4000/2/3	Steart Marshes	fieldwork	-	-	-	-	400	-	-	-	-

Table 38. Adults' intertidal occupancy rates in the Hinkley Point aquatic survey area (h y⁻¹)

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
		Setting nets	256	-	-	-	-	-	-	-	-
1507/5/1	Stalford	Playing	-	24	-	-	-	-	-	-	-
439773/1	Stonord	Collecting seaweed and limpets	-	-	-	-	-	-	-	5	-
4689/1/1	River Brue, Combwich and River Parrett	Wildfowling	52	-	-	-	-	-	-	-	-
4652/1/1	Stolford	Setting nets	8	-	-	-	-	-	-	-	-
		Setting nets	4	-	-	-	-	-	-	-	-
4597/1/1	Stolford	Collecting seaweed and limpets	-	-	-	-	-	-	-	5	-
4595/2/1	Stolford	Dog walking and playing	-	322	-	-	-	-	-	-	-
4595/2/1	Kilve		-	-	-	8	-	-	-	-	-
	St Audrie's Bay	Dog waiking	-	-	-	-	-	-	8	-	-
4607/2/1	Berrow Beach and Brean Beach	Bait digging	-	313	-	-	-	-	-	-	-
1617/1/1	Stolford	Dog wolking	-	235	-	-	-	-	-	-	-
404//1/1	Steart Marshes	Dog waiking	-	-	-	-	156	-	-	-	-
4622/1/1	Lilstock, Hinkley Point and Stolford	Wildfowling	-	40	-	-	-	-	-	-	-
	Stert Flats		-	26	-	-	-	-	-	-	-
4669/1/1	East Quantoxhead Beach	Dog walking	-	-	-	26	-	-	-	-	-
	Blue Anchor		-	-	-	-	-	26	-	-	-
4642/3/1	Hinkley Point and Stolford	Walking	-	26	-	-	-	-	-	-	-
4597/6/1	Stolford	Playing	-	24	-	-	-	-	-	-	-
4597/11/1	Stolford	Playing	-	24	-	-	-	-	-	-	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4597/11/2	Stolford	Playing	-	24	-	-	-	-	-	-	-
1611/1/1	Steart Marahaa	Marsh warden	-	18	-	-	-	-	-	-	-
4041/1/1	Steart Marshes	duties	-	-	-	-	18	-	-	-	-
	Stolford		-	13	-	-	-	-	-	-	-
1607/1/1	Shurton Bars	Dog wolking	-	-	20	-	-	-	-	-	-
4007/1/1	Kilve	Dog waiking	-	-	-	13	-	-	-	-	-
	Lilstock		-	-	-	-	-	-	-	13	-
	Stolford		-	13	-	-	-	-	-	-	-
4697/2/4	Shurton Bars	Degwalking	-	-	20	-	-	-	-	-	-
400//2/1	Kilve	Dog waiking	-	-	-	13	-	-	-	-	-
	Lilstock		-	-	-	-	-	-	-	13	-
4670/1/1	Stolford	Dog walking	-	12	-	-	-	-	-	-	-
4070/1/1	Shurton Bars	Dog waiking	-	-	12	-	-	-	-	-	-
4670/2/1	Stolford	Dog walking	-	12	-	-	-	-	-	-	-
4670/2/1	Shurton Bars	Dog walking	-	-	12	-	-	-	-	-	-
	Stolford		-	10	-	-	-	-	-	-	-
	Kilve	Dlaving	-	-	-	5	-	-	-	-	-
4646/1/1	Steart Marshes	Playing	-	-	-	-	10	-	-	-	-
	Kilve		-	-	-	-	-	-	-	20	-
	Stolford	Angling	-	-	-	-	-	-	-	Stones	-
	Stolford		-	10	-	-	-	-	-	-	-
1616/0/1	Kilve	Playing	-	-	-	5	-	-	-	-	-
4040/2/1	Steart Marshes		-	-	-	-	10	-	-	-	-
	Kilve		-	-	-	-	-	-	-	5	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4==0/4/4		Walking	-	10	-	-	-	-	-	-	-
4576/1/1	Stolford	Angling	-	-	-	-	-	-	-	96	-
4576/0/4	Stalfard	Walking	-	10	-	-	-	-	-	-	-
4370/2/1	51011010	Angling	-	-	-	-	-	-	-	96	-
4595/1/1	Stolford	Playing	-	9	-	-	-	-	-	-	-
	Stolford		-	8	-	-	-	-	-	-	-
4570/4/4	East Quantoxhead Beach	Dogwalking	-	-	-	117	-	-	-	-	-
4573/1/1	Helwell Bay and Doniford	Dog waiking	-	-	-	-	-	-	16	-	-
4573/1/1 Ea He 4573/2/1 Ea He	Kilve and Lilstock		-	-	-	-	-	-	-	16	-
-	Stolford		-	8	-	-	-	-	-	-	-
1572/2/1	East Quantoxhead Beach	Dog wolking	-	-	-	117	-	-	-	-	-
43/3/2/1	Helwell Bay and Doniford	Dog waiking	-	-	-	-	-	-	16	-	-
	Kilve and Lilstock		-	-	-	-	-	-	-	16	-
	Blue Anchor and Lilstock		-	5	-	-	-	-	-	-	-
4618/1/1	Burnham-on-Sea, Berrow Beach and Brean Beach	Metal detecting	-	-	-	-	-	20	-	-	-
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
	Watchet and Kilve	activities	-	-	-	0	-	-	-	-	-
/700/1/1	Watchet	Rock pooling	-	-	-	9	-	-	-	-	-
T UU/ 1/ 1	Blue Anchor and Brean Beach	Environmental	-	-	-	-	-	5	stones - - - 96 - - - 96 - 96 - 96 - 96 - 96 - 96 - 96 - 96 - - 16 - - 16 - 16 - 16 - - 16 - - 16 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <t< td=""><td>-</td></t<>	-	
	Lilstock	activities	-	-	-	-	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	3	-	

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
4700/2/1 4700/2/2 4700/2/2	Watchet and Kilve	activities	-	-	-		-	-	-	-	-
4700/2/1	Watchet	Rock pooling	-	-	-	9	-	-	-	-	-
11 00, 2, 1	Blue Anchor and Brean Beach	Environmental	-	-	-	-	-	5	-	-	-
	Lilstock	activities	-	-	-	-	-	-	-	3	-
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
	Watchet and Kilve	activities	-	-	-	0	-	-	-	-	-
1700/2/2	Watchet	Rock pooling Environmental	-	-	-	9	-	-	-	-	-
4100/2/2	Blue Anchor and Brean Beach		-	-	-	-	-	5	-	-	-
	Lilstock	activities	-	-	-	-	-	-	-	3	-
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
	Watchet and Kilve	activities	-	-	-	0	-	-	-	-	-
1700/2/3	Watchet	Rock pooling	-	-	-	9	-	-	-	-	-
4700/2/3	Blue Anchor and Brean Beach	Environmental	-	-	-	-	-	5	-	-	-
	Lilstock	activities	-	-	-	-	-	-	-	3	-
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
	Watchet and Kilve	activities	-	-	-	0	-	-	-	Stones	-
1700/2/1	Watchet	Rock pooling	-	-	-	9	-	-	-	-	-
7100/2/4	Blue Anchor and Brean Beach	Environmental	-	-	-	-	-	5	-	-	-
	Lilstock	activities	-	-	-	-	-	-	-	Stones	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
4700/3/1 4700/3/2	Watchet and Kilve	activities	-	-	-		-	-	-	-	-
4700/3/1	Watchet	Rock pooling	-	-	-	9	-	-	-	-	-
	Blue Anchor and Brean Beach	Environmental	-	-	-	-	-	5	-	-	-
	Lilstock	activities	-	-	-	-	-	-	-	3	-
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
	Watchet and Kilve	activities	-	-	-	0	-	-	-	-	-
1700/2/2	Watchet	Rock pooling	-	-	-	9	-	-	-	-	-
4700/3/2	Blue Anchor and Brean Beach	Environmental	-	-	-	-	-	5	-	-	-
	Lilstock	activities	-	-	-	-	-	-	-	3	-
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
	Watchet and Kilve	activities	-	-	-	0	-	-	-	-	-
1700/3/3	Watchet	Rock pooling	-	-	-	9	-	-	-	-	-
4700/3/3	Blue Anchor and Brean Beach	Environmental	-	-	-	-	-	5	-	-	-
	Lilstock	activities	-	-	-	-	-	-	-	3	-
	Hinkley Point	Environmental	-	3	-	-	-	-	-	-	-
	Watchet and Kilve	Environmental activities	-	-	-	0	-	-	-	-	-
4700/3/4	Watchet	Rock pooling	-	-	-	9	-	-	-	-	-
4101014	Blue Anchor and Brean Beach	Environmental	-	-	-	-	-	5	-	-	-
	Lilstock	activities	-	-	-	-	-	-	-	Stones	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4729/3/1	Shurton Bars	Dog walking and fossil hunting	-	-	26	-	-	-	-	-	-
	Shurton Bars		-	-	13	-	-	-	-	-	-
4630/1/1	Brean Beach, Burnham-on- Sea and Blue Anchor	Walking	-	-	-	-	-	24	-	-	-
	Kilve		-	-	-	-	-	-	-	2	-
	Shurton Bars		-	-	6	-	-	-	-	-	-
4620/2/1	St Audrie's Bay	Dog walking	-	-	-	-	-	-	4	-	-
	Lilstock		-	-	-	-	-	-	-	13	-
1620/2/1	Shurton Bars	Dog wolking	-	-	6	-	-	-	-	-	-
4020/3/1	St Audrie's Bay	Dog waiking	-	-	-	-	-	-	4	-	-
4666/1/1	Kilve, Shurton Bars and Hinkley Point	Angling	-	-	-	581	-	-	-	-	-
	Lilstock and Stolford		-	-	-	-	-	-	-	315	-
4671/1/1	Hinkley Point	Angling	-	-	-	260	-	-	-	-	-
1511/2/1	Watchat and Daniford	Reachcombing	-	-	-	117	-	-	-	-	-
4041/2/1	Watchet and Doniiold	Deachcombing	-	-	-	-	-	-	117	-	-
1508/10/1	Watchet	Analina	-	-	-	86	-	-	-	-	-
4330/10/1	Lilstock and Stolford	Anging	-	-	-	-	-	-	-	172	-
	Kilve	Fossil hunting and geological fieldwork	-	-	-	16	-	-	-	-	-
4600/2/4	East Quantoxhead Beach	Geological fieldwork	-	-	-		-	-	-	-	-
4000/3/1	Helwell Bay	Fossil hunting and geological fieldwork	-	-	-	-	-	-	32	-	-
	Watchet and Helwell Bay	Sitting on the beach	-	-	-	-	-	-		-	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
	Kilve	Fossil hunting and geological fieldwork	-	-	-	16	-	-	-	-	-
1600/3/2	East Quantoxhead Beach	Geological fieldwork	-	-	-		-	-	-	-	-
4000/3/2	Helwell Bay	Fossil hunting and geological fieldwork	-	-	-	-	-	-	32	-	-
	Watchet and Helwell Bay	Sitting on the beach	-	-	-	-	-	-		-	-
4500/4/4	Watchet	Angling	-	-	-	16	-	-	-	-	-
4090/1/1	Lilstock and Stolford	Angling	-	-	-	-	-	-	-	32	-
1509/1/2	Watchet	Angling	-	-	-	16	-	-	-	-	-
4390/1/2	Lilstock and Stolford	Angiing	-	-	-	-	-	-	-	32	-
1509/1/2	Watchet	Angling	-	-	-	16	-	-	-	-	-
4390/1/3	Lilstock and Stolford	Angiing	-	-	-	-	-	-	-	32	-
1509/1/1	Watchet	Angling	-	-	-	16	-	-	-	-	-
4390/1/4	Lilstock and Stolford	Angiing	-	-	-	-	-	-	-	32	-
1508/1/5	Watchet	Angling	-	-	-	16	-	-	-	-	-
4390/1/3	Lilstock and Stolford	Angiing	-	-	-	-	-	-	-	32	-
1508/1/6	Watchet	Analina	-	-	-	16	-	-	-	-	-
4390/1/0	Lilstock and Stolford	Angiing	-	-	-	-	-	-	-	32	-
1508/1/7	Watchet	Analina	-	-	-	16	-	-	-	-	-
4390/1/7	Lilstock and Stolford	Angiing	-	-	-	-	-	-	-	32	-
1508/1/8	Watchet	Analina	-	-	-	16	-	-	-	-	-
TJJJU 1/0	Lilstock and Stolford		-	-	-	-	-	-	-	32	-
1508/1/0	Watchet	Angling	-	-	-	16	-	-	-	-	-
+330/1/8	Lilstock and Stolford	Anging	-	-	-	-	-	-	-	32	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
1500/1/10	Watchet	Angling	-	-	-	16	-	-	-	-	-
4598/1/10	Lilstock and Stolford	Angling	-	-	-	-	-	-	-	32	-
1000/1/1	\\/ctch.ct	Rock pooling	-	-	-	12	-	-	-	-	-
4002/1/1	watchet	Playing	-	-	-	-	-	-	-	6	-
	Kilve	Eccoil hunting	-	-	-	7	-	-	-	-	-
4600/5/1	Helwell Bay	Fossil nunling	-	-	-	-	-	-	50	-	-
	Watchet	Ecological surveys	-	-	-	-	-	-	59	-	-
1511/1/1	Watchat and Daniford	Litter collecting	-	-	-	6	-	-	-	-	-
4041/1/1	Watchet and Doniloid	Litter collecting	-	-	-	-	-	-	6	-	-
1511/1/2	Watchat and Daniford	Littor collecting	-	-	-	6	-	-	-	-	-
4041/1/2	Watchet and Doniloid		-	-	-	-	-	-	6	-	-
1511/1/2	Watchat and Daniford	Littor collecting	-	-	-	6	-	-	-	-	-
4341/1/3	Watchet and Donilord		-	-	-	-	-	-	6	-	-
1511/1/1	Watchet and Doniford	Litter collecting	-	-	-	6	-	-	-	-	-
	Watchet and Doniford		-	-	-	-	-	-	6	-	-
4541/1/5	Watchet and Doniford	Litter collecting	-	-	-	6	-	-	-	-	-
1/1/0	Watchet and Doniford		-	-	-	-	-	-	6	-	-
4541/1/6	Watchet and Doniford	Litter collecting	-	-	-	6	-	-	-	-	-
		Eliter concerning	-	-	-	-	-	-	6	-	-
4541/1/7	Watchet and Doniford	Litter collecting	-	-	-	6	-	-	-	-	-
	Watchet and Doniford	Enter concerning	-	-	-	-	-	-	6	-	-
4541/1/8	Watchet and Doniford	Litter collecting	-	-	-	6	-	-	-	-	-
			-	-	-	-	-	-	6	-	-
4541/1/9	Watchet and Doniford	Litter collecting	-	-	-	6	-	-	-	-	-
-0-1/1/9		Litter conecting	-	-	-	-	-	-	6	-	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4541/1/10	Watchet and Doniford	Litter collecting	-	-	-	6	-	-	-	-	-
		.	-	-	-	-	-	-	6	-	-
4606/1/1	Steart Marshes	Tending livestock	-	-	-	-	122	-	-	-	-
4663/1/1	Steart Marshes	Nature warden duties and collecting samphire	-	-	-	-	100	-	-	-	-
4663/1/2	Steart Marshes	Nature warden duties and collecting samphire	-	-	-	-	100	-	-	-	-
4663/1/3	Steart Marshes	Nature warden duties and collecting samphire	-	-	-	-	100	-	-	-	-
4663/2/1	Steart Marshes	Nature warden duties and collecting samphire	-	-	-	-	100	-	-	-	-
4663/2/2	Steart Marshes	Nature warden duties and collecting samphire	-	-	-	-	100	-	-	-	-
4615/1/1	Bridgwater Bay and River Parrett	Wildfowling	-	-	-	-	24	-	-	-	-
4582/2/1	Berrow Beach	Dog walking	-	-	-	-	-	1043	-	-	-
47111/1	Blue Anchor	Angling and walking	-	-	-	-	-	886	-	-	-
4660/1/1	Berrow Beach	Angling and bait digging	-	-	-	-	-	782	-	-	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4675/1/1	Blue Anchor	Dog walking and sitting on the beach	-	-	-	-	-	738	-	-	-
4678/1/1	Blue Anchor	Dog walking	-	-	-	-	-	456	-	-	-
4678/2/1	Blue Anchor	Dog walking	-	-	-	-	-	456	-	-	-
4582/1/1	Burnham-on-Sea, Berrow Beach and Brean Beach	Metal detecting and angling	-	-	-	-	-	432	-	-	-
4570/1/1	Burnham-on-Sea, Berrow Beach and Brean Beach	Dog walking	-	-	-	-	-	207	-	-	-
4575/1/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	-	391	-	-	-
4655/1/1	Berrow Beach, Brean Beach and Burnham-on-Sea	Beach warden duties	-	-	-	-	-	391	-	-	-
4655/1/2	Berrow Beach, Brean Beach and Burnham-on-Sea	Beach warden duties	-	-	-	-	-	391	-	-	-
4655/1/3	Berrow Beach, Brean Beach and Burnham-on-Sea	Beach warden duties	-	-	-	-	-	391	-	-	-
4655/1/4	Berrow Beach, Brean Beach and Burnham-on-Sea	Beach warden duties	-	-	-	-	-	391	-	-	-
4603/1/1	Blue Anchor	Dog walking and playing	-	-	-	-	-	377	-	-	-
4603/2/1	Blue Anchor	Dog walking and playing	-	-	-	-	-	377	-	-	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4675/2/1	Blue Anchor	Dog walking and sitting on the beach	-	-	-	-	-	321	-	-	-
4673/1/1	Blue Anchor	Angling and bait digging	-	-	-	-	-	233	-	-	-
4585/1/1	Burnham-on-Sea	Walking	-	-	-	-	-	182	-	-	-
4654/1/1	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	158	-	-	-
4654/1/2	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	158	-	-	-
4654/1/3	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	158	-	-	-
4654/1/4	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	158	-	-	-
4654/1/5	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	158	-	-	-
4667/1/1	Blue Anchor and Brean Beach	Dog walking	-	-	-	-	-	152	-	-	-
4667/2/1	Blue Anchor and Brean Beach	Dog walking	-	-	-	-	-	152	-	-	-
4540/1/1	Blue Anchor	Dog walking	-	-	-	-	-	117	-	-	-
4540/2/1	Blue Anchor	Dog walking	-	-	-	-	-	117	-	-	-
4540/3/1	Blue Anchor	Dog walking	-	-	-	-	-	117	-	-	-
4540/4/1	Blue Anchor	Dog walking	-	-	-	-	-	117	-	-	-
4578/1/1	Berrow Beach	Dog walking	-	-	-	-	-	117	-	-	-
4679/1/1	Blue Anchor	Playing	-	-	-	-	-	60	-	-	-
4679/1/1	Watchet	Walking	-	-	-	-	-	-	2	-	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4679/2/1	Blue Anchor	Playing	-	-	-	-	-	60	-	-	-
	Watchet	Walking	-	-	-	-	-	-	2	-	-
4654/2/1	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	46	-	-	-
4654/2/2	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	46	-	-	-
4654/2/3	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	46	-	-	-
4654/2/4	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	46	-	-	-
4654/2/5	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	46	-	-	-
4654/2/6	Burnham-on-Sea and Brean Beach	Lifeguard duties	-	-	-	-	-	46	-	-	-
4584/1/1	Burnham-on-Sea and Brean Beach	Dog walking	-	-	-	-	-	39	-	-	-
4584/2/1	Burnham-on-Sea and Brean Beach	Dog walking	-	-	-	-	-	39	-	-	-
4586/1/1	Brean Beach	Angling	-	-	-	-	-	36	-	-	-
4607/1/1	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
4607/1/2	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
4607/1/3	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
4607/1/4	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
4607/1/5	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
4607/1/6	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
4607/1/7	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
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4607/1/8	Burnham-on-Sea	Angling	_	-	-	-	-	36	-	-	-
4607/1/9	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
4607/1/10	Burnham-on-Sea	Angling	-	-	-	-	-	36	-	-	-
4579/6/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	-	32	-	-	-
4579/7/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	-	32	-	-	-
4579/8/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	-	32	-	-	-
4579/9/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	-	32	-	-	-
4629/2/1	Blue Anchor	Playing	-	-	-	-	-	32	-	-	-
	East Quantoxhead Beach		-	-	-	21	-	-	-	-	-
4721/1/1	Blue Anchor	Dog wolking	-	-	-	-	-	21	-	-	-
4721/1/1	Doniford	Dog waiking	-	-	-	-	-	-	21	-	-
	Kilve and Lilstock		-	-	-	-	-	-	-	42	-
4657/1/1	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4657/1/2	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4657/1/3	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4657/1/4	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4657/1/5	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4657/1/6	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4657/1/7	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4657/1/8	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4657/1/9	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4657/1/10	Burnham-on-Sea	Rescue duties	-	-	-	-	-	16	-	-	-
4583/1/1	Burnham-on-Sea	Dog walking	-	-	-	-	-	12	-	-	-
4611/7/1	Burnham-on-Sea	Dog walking	-	-	-	-	-	6	-	-	-
4611/8/1	Burnham-on-Sea	Dog walking	-	-	-	-	-	6	-	-	-
4672/1/1	Blue Anchor	Bait digging	-	-	-	-	-	6	-	-	-
4574/1/1	Helwell Bay	Dog walking	-	-	-	-	-	-	626	-	-
4626/1/1	Helwell Bay and Doniford	Dog walking	-	-	-	-	-	-	104	-	-
4626/2/1	Helwell Bay and Doniford	Dog walking	-	-	-	-	-	-	104	-	-
4575/1/1	Helwell Bay and St Audrie's Bay	Dog walking	-	-	-	-	-	-	56	-	-
4625/1/1	Helwell Bay	Walking	-	-	-	-	-	-	52	-	-
4577/1/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/1/2	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/1/3	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/1/4	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/2/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/2/2	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-

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Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4577/2/3	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/2/4	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/2/5	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/2/6	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/4/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/4/2	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/5/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/5/2	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/6/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/8/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/9/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-
4577/10/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	-	38	-	-

Person ID number	Location	Activity	Mud	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones	Boat on mud
4600/4/1	Watchet and Helwell Bay	Sitting on the beach	-	-	-	-	-	-	20	-	-
4000/4/1	Watchet	Ecological surveys	-	-	-	-	-	-	30	-	-
4600/4/2	Watchet and Helwell Bay	Sitting on the beach	-	-	-	-	-	-	20	-	-
4000/4/2	Watchet	Ecological surveys	-	-	-	-	-	-	30	-	-
4623/1/1	St Audrie's Bay	Angling	-	-	-	-	-	-	15	-	-
4604/1/1	Stert Flats	Dog walking	-	-	-	-	-	-	-	156	-
4620/1/1	Lilstock	Dog walking	-	-	-	-	-	-	-	13	-
4597/2/1	Stolford	Collecting seaweed and limpets	-	-	-	-	-	-	-	5	-
4616/1/1	Lilstock	Angling	-	-	-	-	-	-	-	5	-
4542/3/1	Watchet Harbour	Boat maintenance	-	-	-	-	-	-	-	-	730
4542/4/1	Watchet Harbour	Boat maintenance	-	-	-	-	-	-	-	-	730
4542/1/1	Watchet Harbour	Boat maintenance	-	-	-	-	-	-	-	-	196
4542/2/1	Watchet Harbour	Boat maintenance	-	-	-	-	-	-	-	-	196
4539/1/1	Watchet Harbour	Boat maintenance	-	-	-	-	-	-	-	-	117

Notes for Table 38

The emboldened observations are the high-rate individuals The mean intertidal occupancy rate over mud for adults based on 11 high-rate observations is 387 h y⁻¹ The observed 97.5th percentile rate based on 14 observations is 400 h y⁻¹ The mean intertidal occupancy rate over mud and sand for adults based on 3 high-rate observations is 290 h y⁻¹ The observed 97.5th percentile rate based on 32 observations is 315 h y⁻¹ The mean intertidal occupancy rate over mud, sand and stones for adults based on 6 high-rate observations is 17 h y⁻¹ The observed 97.5th percentile rate based on 8 observations is 24 h y⁻¹ The mean intertidal occupancy rate over rock for adults based on 2 high-rate observations is 421 h y⁻¹ The observed 97.5th percentile rate based on 46 observations is 242 h y⁻¹ The mean intertidal occupancy rate over salt marsh for adults based on 11 high-rate observations is 378 h y⁻¹ The observed 97.5th percentile rate based on 21 observations is 400 h y⁻¹ The mean intertidal occupancy rate over sand for adults based on 14 high-rate observations is 536 h y⁻¹ The observed 97.5th percentile rate based on 82 observations is 781 h y⁻¹ The mean intertidal occupancy rate over sand and stones for adults based on the high-rate observation is 626 h y⁻¹ The observed 97.5th percentile rate based on 48 observations is 115 h y⁻¹ The mean intertidal occupancy rate over stones for adults based on 3 high-rate observations is 215 h y⁻¹ The observed 97.5th percentile rate based on 39 observations is 179 h y⁻¹ The mean intertidal occupancy rate over boat on mud for adults based on 2 high-rate observations is 730 h y⁻¹ The observed 97.5th percentile rate based on 5 observations is 730 h y⁻¹

Person ID number	Location	Activity	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones
4507/7/4	Stalfard	Playing	24	-	-	-	-	-	-
439////1	51011010	Collecting seaweed and limpets	-	-	-	-	-	-	5
	Stolford		10	-	-	-	-	-	-
16161311	Kilve	Playing	-	-	5	-	-	-	-
4040/3/1	Steart Marshes	Flaying	-	-	-	10	-	-	-
	Kilve		-	-	-	-	-	-	5
	Stolford		10	-	-	-	-	-	-
16161111	Kilve	Playing	-	-	5	-	-	-	-
4040/4/1	Steart Marshes	Flaying	-	-	-	10	-	-	-
	Kilve		-	-	-	-	-	-	5
4595/3/1	Stolford	Playing	9	-	-	-	-	-	-
4595/4/1	Stolford	Playing	9	-	-	-	-	-	-
4595/8/1	Stolford	Playing	9	-	-	-	-	-	-
4595/9/1	Stolford	Playing	9	-	-	-	-	-	-
4729/4/1	Shurton Bars	Dog walking and fossil hunting	-	26	-	-	-	-	-
1500/2/1	Watchet	Angling	-	-	16	-	-	-	-
4390/2/1	Lilstock and Stolford	Anging	-	-	-	-	-	-	32
1500/2/1	Watchet	Angling	-	-	16	-	-	-	-
4390/3/1	Lilstock and Stolford	Anging	-	-	-	-	-	-	32
1500/1/4	Watchet		-	-	16	-	-	-	-
4390/4/1	Lilstock and Stolford	Anging	-	-	-	-	-	-	32
1 E 0 0 / E / A	Watchet	Angling	-	-	16	-	-	-	-
4598/5/1	Lilstock and Stolford	Angling	-	-	-	-	-	-	32

Table 39. Children's intertidal occupancy rates in the Hinkley Point aquatic survey area (h y⁻¹)

Person ID number	Location	Activity	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones
4500/0/4	Watchet	A re allia a	-	-	16	-	-	-	-
4598/6/1	Lilstock and Stolford	Angling	-	-	-	-	-	-	32
4500/7/4	Watchet		-	-	16	-	-	-	-
4598/7/1	Lilstock and Stolford	Angling	-	-	-	-	-	-	32
4500/0/4	Watchet	Angling	-	-	16	-	-	-	-
4398/8/1	Lilstock and Stolford	Angling	-	-	-	-	-	-	32
4500/0/4	Watchet	Angling	-	-	16	-	-	-	-
4390/9/1	Lilstock and Stolford	Anging	-	-	-	-	-	-	32
1602/2/1	Watchat	Rock pooling	-	-	12	-	-	-	-
4002/2/1	Watchet	Playing	-	-	-	-	-	-	6
4602/3/1 Wat	Watchat	Rock pooling	-	-	12	-	-	-	-
	Watchet	Playing	-	-	-	-	-	-	6
1602/1/1	Watchot	Rock pooling	-	-	12	-	-	-	-
4002/4/1	Watchet	Playing	-	-	-	-	-	-	6
1670/3/1	Blue Anchor	Playing	-	-	-	-	60	-	-
40/ 5/ 5/ 1	Watchet	Walking	-	-	-	-	-	2	-
1670/1/1	Blue Anchor	Playing	-	-	-	-	60	-	-
40/3/4/1	Watchet	Walking	-	-	-	-	-	2	-
4579/2/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	32	-	-
4579/3/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	32	-	-
4579/4/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	32	-	-
4579/5/1	Berrow Beach and Brean Beach	Playing	-	-	-	-	32	-	-

Person ID number	Location	Activity	Mud and sand	Mud, sand and stones	Rock	Salt marsh	Sand	Sand and stones	Stones
4629/1/1	Blue Anchor	Playing	-	-	-	-	32	-	-
4629/3/1	Blue Anchor	Playing	-	-	-	-	32	-	-
4577/3/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/7/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/11/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/12/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/13/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/13/2	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/14/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/15/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/15/2	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/16/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/17/1	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-
4577/17/2	Helwell Bay and Doniford	Camping and playing	-	-	-	-	-	38	-

Notes for Table 39

The emboldened observations are the high-rate individuals The mean intertidal occupancy rate over mud and sand for the child age group based on 7 high-rate observations is 11 h y⁻¹ The observed 97.5th percentile rate based on 7 observations is 22 h y⁻¹ The mean intertidal occupancy rate over mud, sand and stones for the child age group based on the high-rate observation is 26 h y⁻¹ The observed 97.5th percentile is not applicable for one observation The mean intertidal occupancy rate over rock for the child age group based on 11 high-rate observations is 15 h y⁻¹ The observed 97.5th percentile rate based on 13 observations is 16 h y⁻¹ The mean intertidal occupancy rate over salt marsh for the child age group based on 2 high-rate observations is 10 h y⁻¹ The observed 97.5th percentile rate based on 2 observations is 10 h y⁻¹ The observed 97.5th percentile rate based on 2 observations is 10 h y⁻¹ The mean intertidal occupancy rate over salt marsh for the child age group based on 2 high-rate observations is 30 h y⁻¹ The observed 97.5th percentile rate based on 8 observations is 60 h y⁻¹ The observed 97.5th percentile rate based on 8 observations is 60 h y⁻¹ The observed 97.5th percentile rate based on 14 observations is 38 h y⁻¹ The observed 97.5th percentile rate based on 14 observations is 38 h y⁻¹ The observed 97.5th percentile rate based on 14 observations is 38 h y⁻¹ The observed 97.5th percentile rate based on 14 observations is 32 h y⁻¹

Person ID number	Location	Activity	Mud and sand	Sand	Sand and stones
4597/8/1	Stolford	Playing	24	-	-
4597/9/1	Stolford	Playing	24	-	-
4595/5/1	Stolford	Playing	9	-	-
4595/6/1	Stolford	Playing	9	-	-
4595/7/1	Stolford	Playing	9	-	-
4070/5/4	Blue Anchor	Playing	-	60	-
4079/0/1	Watchet	Walking	-	-	2
4603/3/1	Blue Anchor	Playing	-	12	-
4603/4/1	Blue Anchor	Playing	-	12	-

Table 40. Infants' intertidal occupancy rates in the Hinkley Point aquatic survey area (h y⁻¹)

<u>Notes</u>

The emboldened observations are the high-rate individuals

The mean intertidal occupancy rate over mud and sand for the infant age group based on 5 high-rate observations is 15 h y^{-1}

The observed 97.5th percentile rate based on 5 observations is 24 h y⁻¹

The mean intertidal occupancy rate over sand for the infant age group based on the high-rate observation is 60 h y⁻¹

The observed 97.5th percentile rate based on 3 observations is 58 h y⁻¹

The mean intertidal occupancy rate over sand and stones for the infant age group based on the high-rate observation is $2 h y^{-1}$

The observed 97.5th percentile is not applicable for one observation

Location	National Grid Reference	Substrate	Gamma dose rate at 1mª
Watchet West Beach	ST 069 434	Sand and stones	0.073
Kilve	ST 144 445	Rock	0.068
Steart Marshes	ST 260 455	Mud and sand	0.084
Blue Anchor	ST 021 435	Sand	0.059
Blue Anchor	ST 021 435	Sand and stones	0.066
Doniford	ST 086 432	Mud and sand	0.078
Helwell Bay	ST 079 432	Sand and stones	0.093
River Brue	ST 303 479	Mud	0.062
Burnham-on-Sea	ST 302 487	Sand	0.065
Berrow Beach	ST 290 536	Sand	0.062
Brean Beach	ST 295 584	Sand	0.064
Lilstock	ST 171 454	Stones	0.064
Stolford	ST 233 459	Stones	0.070
St Audrie's Bay	ST 105 431	Sand	0.087
Shurton Bars	ST 192 460	Sand	0.060

Table 41. Gamma dose rate measurements over intertidal substrates in the Hinkley Point aquatic survey area (μ Gy h⁻¹)

<u>Notes</u>

^a These measurements have not been adjusted for background dose rates

Person ID number	Location	Activity	Fishing gear	Sediment
4507/5/4	Stalford	Netting	253	-
45977571	Stollord	Collecting limpets	-	1
4652/1/1	Stolford	Setting nets	2	-
4507/1/1	Stalford	Netting	1	-
45977171	Stollord	Collecting limpets		1
4607/2/1	Berrow Beach and Brean Beach	Bait digging	-	313
4660/1/1	Berrow Beach	Bait digging	-	104
4689/1/1	River Brue, Combwich and River Parrett	Wildfowling	-	52
4622/1/1	Hinkley Point, Stolford and Lilstock	Wildfowling	-	40
4615/1/1	Bridgwater Bay and River Parrett	Wildfowling	-	24
4673/1/1	Blue Anchor	Bait digging	-	24
4672/1/1	Blue Anchor	Bait digging	-	6
4597/2/1	Stolford	Collecting limpets	-	1

Table 42. Adults' handling rates of fishing gear and sediment in the Hinkley Point aquatic survey area (h y⁻¹)

<u>Notes</u>

The emboldened observations are the high-rate individuals

The mean handling rate of fishing gear for adults based on the high-rate observation is 253 h y^{-1}

The observed 97.5th percentile rate based on 3 observations is 240 h y⁻¹

The mean handling rate of sediments for adults based on the high-rate observation is 313 h y^{-1}

The observed 97.5th percentile rate based on 10 observations is 266 h y⁻¹

Table 43. Children's handling rates of sediment in the Hinkley Point aquatic survey area (h y^{-1})

Person ID number	Location	Activity	Sediment
4597/7/1	Stolford	Collecting limpets	1

<u>Notes</u>

The emboldened observation is the high-rate individual

The mean handling rate of sediments for the child age group based on the high-rate observation is 1 h y^{-1}

The observed 97.5th percentile is not applicable for 1 observation

Person ID number	Location	Activity	In water	On water
4648/3/1	River Parrett and Burnham-on-Sea	Jet skiing	130	-
1577/1/1	Watchet Inner Harbour, Doniford,	Paddleboarding and kayaking	112	-
43777171	Watchet and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/1/2	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
43777172	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/1/3	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
43777173	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/1/1	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
43777174	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/2/1	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
+5/7/2/1	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/2/2	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
43777272	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/2/3	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
+311/2/3	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/2/1	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
+5/7/2/4	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/2/5	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
+311/2/3	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/2/6	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/4/1	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
+57774/1	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280

Table 44. Adults' occupancy rates in and on water in the Hinkley Point aquatic survey area (h y⁻¹)

Person ID number	Location	Activity	In water	On water
1577/1/2	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
4377/4/2	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/5/1	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
437773/1	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/5/2	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
401110/2	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/6/1	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
-07170/1	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/8/1	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/9/1 Watchet Harbour, Doniford, Watchet		Paddleboarding and kayaking	112	-
	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/10/1	Watchet Harbour, Doniford, Watchet and	Paddleboarding and kayaking	112	-
	Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4648/4/1	River Parrett and Burnham-on-Sea	Water skiing	33	-
		Being on a boat	-	66
4648/4/2	River Parrett and Burnham-on-Sea	Water skiing	33	-
1010/1/2		Being on a boat	-	66
4648/4/3	River Parrett and Burnham-on-Sea	Water skiing	33	-
		Being on a boat	-	66
4652/1/1	Stolford	Swimming	20	-
4654/1/1	Burnham-on-Sea and Brean Beach	Paddleboarding	13	-
4654/1/2	Burnham-on-Sea and Brean Beach	Paddleboarding	13	-
4654/1/3	Burnham-on-Sea and Brean Beach	Paddleboarding	13	-
4654/1/4	Burnham-on-Sea and Brean Beach	Paddleboarding	13	-
4654/1/5	Burnham-on-Sea and Brean Beach	Paddleboarding	13	-

Person ID	Location	Activity	In water	On water
4654/2/1	Burnham-on-Sea and Brean Beach	Paddleboarding	7	-
4654/2/2	Burnham-on-Sea and Brean Beach	Paddleboarding	7	-
4654/2/3	Burnham-on-Sea and Brean Beach	Paddleboarding	7	-
4654/2/4	Burnham-on-Sea and Brean Beach	Paddleboarding	7	-
4654/2/5	Burnham-on-Sea and Brean Beach	Paddleboarding	7	-
4654/2/6	Burnham-on-Sea and Brean Beach	Paddleboarding	7	-
4580/1/1	River Brue and Burnham-on-Sea	Sailing and rowing	-	548
4611/1/1	Bridgwater Bay	Boat angling	-	216
4611/1/2	Bridgwater Bay	Boat angling	-	216
4611/1/3	Bridgwater Bay	Boat angling	-	216
4611/1/4	Bridgwater Bay	Boat angling	-	216
4611/1/5	Bridgwater Bay	Boat angling	-	216
4611/1/6	Bridgwater Bay	Boat angling	-	216
4611/1/7	Bridgwater Bay	Boat angling	-	216
4611/1/8	Bridgwater Bay	Boat angling	-	216
4611/1/9	Bridgwater Bay	Boat angling	-	216
4611/1/10	Bridgwater Bay	Boat angling	-	216
4542/1/1	Blue Anchor to St Audrie's Bay	Boat angling	-	215
4542/2/1	Blue Anchor to St Audrie's Bay	Boat angling	-	215
4542/3/1	Blue Anchor to St Audrie's Bay	Boat angling	-	215
4542/4/1	Blue Anchor to St Audrie's Bay	Boat angling	-	215
4577/18/1	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4577/18/2	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4577/18/3	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4577/18/4	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4577/18/5	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195

Person ID	Location	Activity	In	On
number		, toting	water	water
4577/18/6	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4577/18/7	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4577/18/8	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4577/18/9	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4577/18/10	Watchet Harbour, Watchet and Doniford	Teaching boating activities	-	195
4539/1/1	Throughout the survey area	Pleasure cruising	-	175
4581/1/1	Bridgwater Bay, Burnham-on-Sea and River Parrett	Sailing	-	152
4581/2/1	Bridgwater Bay, Burnham-on-Sea and River Parrett	Sailing	-	152
4648/1/1	River Parrett	Rowing	-	150
4648/1/2	River Parrett	Rowing	-	150
4648/1/3	River Parrett	Rowing	-	150
4648/1/4	River Parrett	Rowing	-	150
4648/1/5	River Parrett	Rowing	-	150
4648/2/1	River Parrett	Rowing	-	150
4648/2/2	River Parrett	Rowing	-	150
4648/2/3	River Parrett	Rowing	-	150
4648/2/4	River Parrett	Rowing	-	150
4648/2/5	River Parrett	Rowing	-	150
4648/5/1	Bridgwater Bay	Boat angling	-	120
4648/6/1	Bridgwater Bay	Boat angling	-	120
4611/7/1	Bridgwater Bay	Boat angling	-	108
4580/2/1	River Parrett and Burnham-on-Sea	Sailing	-	104
4580/2/2	River Parrett and Burnham-on-Sea	Sailing	-	104
4580/2/3	River Parrett and Burnham-on-Sea	Sailing	-	104

Person ID	Location	Activity	In water	On
4580/2/4	River Parrett and Burnham-on-Sea	Sailing	water	104
4580/2/5	River Parrett and Burnham-on-Sea	Sailing	-	104
4580/2/6	River Parrett and Burnham-on-Sea	Sailing	-	104
4580/2/7	River Parrett and Burnham-on-Sea	Sailing	-	104
4580/2/8	River Parrett and Burnham-on-Sea	Sailing	-	104
4580/2/9	River Parrett and Burnham-on-Sea	Sailing	-	104
4580/2/10	River Parrett and Burnham-on-Sea	Sailing	-	104
4580/3/1	River Brue To River Parrett	Rowing	-	104
4580/3/2	River Brue To River Parrett	Rowing	-	104
4580/3/3	River Brue To River Parrett	Rowing	-	104
4580/3/4	River Brue To River Parrett	Rowing	-	104
4580/3/5	River Brue To River Parrett	Rowing	-	104
4580/3/6	River Brue To River Parrett	Rowing	-	104
4580/3/7	River Brue To River Parrett	Rowing	-	104
4580/3/8	River Brue To River Parrett	Rowing	-	104
4580/3/9	River Brue To River Parrett	Rowing	-	104
4580/3/10	River Brue To River Parrett	Rowing	-	104
4729/3/1	Shurton Bars	Paddling	-	17
4657/1/1	Burnham-on-Sea	Hovercraft rescue duties	-	8
4657/1/2	Burnham-on-Sea	Hovercraft rescue duties	-	8
4657/1/3	Burnham-on-Sea	Hovercraft rescue duties	-	8
4657/1/4	Burnham-on-Sea	Hovercraft rescue duties	-	8
4657/1/5	Burnham-on-Sea	Hovercraft rescue duties	-	8
4657/1/6	Burnham-on-Sea	Hovercraft rescue duties	-	8
4657/1/7	Burnham-on-Sea	Hovercraft rescue duties	-	8
4657/1/8	Burnham-on-Sea	Hovercraft rescue duties	-	8

Person ID number	Location	Activity	In water	On water
4657/1/9	Burnham-on-Sea	Hovercraft rescue duties	-	8
4657/1/10	Burnham-on-Sea	Hovercraft rescue duties	-	8

Table 45. Children's occupancy rates in and on water in the Hinkley Point aquatic survey area (h y⁻¹)

Person ID number	Location	Activity	In water	On water
1577/3/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
407770/1	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/7/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/11/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/19/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking		-
4377/12/1	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/13/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
4377/13/1	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/13/2	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
4377/13/2	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating		280
1577/11/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
4377/14/1	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/15/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
4377/13/1	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280

Person ID number	Location	Activity	In water	On water
1577/15/2	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
4377/13/2	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/16/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
4377/10/1	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
1577/17/1	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
4377/17/1	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4577/17/2	Watchet Harbour, Doniford, Watchet	Paddleboarding and kayaking	112	-
	and Hinkley Point	Canoeing, rowing, rafting, sailing and powerboating	-	280
4611/3/1	Bridgwater Bay	Boat angling	-	30
4611/5/1	Bridgwater Bay	Boat angling	-	30
4611/6/1	Bridgwater Bay	Boat angling	-	30
4611/6/2	Bridgwater Bay	Boat angling	-	30
4611/6/3	Bridgwater Bay	Boat angling	-	30
4611/6/4	Bridgwater Bay	Boat angling	-	30
4611/6/5	Bridgwater Bay	Boat angling	-	30
4611/6/6	Bridgwater Bay	Boat angling	-	30
4729/4/1	Shurton Bars	Paddling	-	17

Table 46. Infants' occupancy rates on water in the Hinkley Point aquatic survey area (h y⁻¹)

Person ID number	Location	Activity	In water	On water
4652/3/1	Stolford	Swimming	20	-
4611/2/1	Bridgwater Bay	Boat angling	-	30
4611/4/1	Bridgwater Bay	Boat angling	-	30

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Person ID	Asparagus	Broccoli	Brussels sprout	Cabbage	Calabrese	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Total
number												
4670/1/1	-	-	-	-	-	-	-	16.6	-	9.1	1.5	27.2
4670/2/1	-	-	-	-	-	-	-	16.6	-	9.1	1.5	27.2
4684/1/1	1.5	-	3.4	13.7	-	-	-	-	2.7	-	-	21.3
4684/2/1	1.5	-	3.4	13.7	-	-	-	-	2.7	-	-	21.3
4686/1/1	-	-	-	-	-	17.0	-	-	-	-	-	17.0
4686/2/1	-	-	-	-	-	17.0	-	-	-	-	-	17.0
4690/1/1	-	-	-	-	-	-	-	3.4	8.5	-	4.0	15.9
4690/2/1	-	-	-	-	-	-	-	3.4	8.5	-	4.0	15.9
4644/1/1	-	-	5.5	5.1	-	-	-	-	-	-	1.2	11.8
4644/2/1	-	-	5.5	5.1	-	-	-	-	-	-	1.2	11.8
4651/1/1	-	-	-	4.8	2.2	2.2	1.5	-	-	-	-	10.7
4651/2/1	-	-	-	4.8	2.2	2.2	1.5	-	-	-	-	10.7
4651/3/1	-	-	-	4.8	2.2	2.2	1.5	-	-	-	-	10.7
4587/1/1	-	-	-	-	-	-	-	-	1.7	-	4.8	6.5
4587/2/1	-	-	-	-	-	-	-	-	1.7	-	4.8	6.5
4645/1/1	-	-	-	-	-	-	-	1.0	4.0	-	-	5.0
4645/2/1	-	-	-	-	-	-	-	1.0	4.0	-	-	5.0
4645/3/1	-	-	-	-	-	-	-	1.0	4.0	-	-	5.0
4661/1/1	-	1.6	2.2	-	-	-	-	1.0	-	-	-	4.8
4661/2/1	-	1.6	2.2	-	-	-	-	1.0	-	-	-	4.8
4588/1/1	-	-	1.7	2.3	-	-	-	-	-	-	-	4.0
4588/2/1	-	-	1.7	2.3	-	-	-	-	-	-	-	4.0
4588/3/1	-	-	1.7	2.3	-	-	-	-	-	-	-	4.0
4588/4/1	-	-	1.7	2.3	-	-	-	-	-	-	-	4.0

Table 47. Adults' consumption rates of green vegetables from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Asparagus	Broccoli	Brussels sprout	Cabbage	Calabrese	Cauliflower	Chard	Courgette	Cucumber	Kale	Lettuce	Total
4595/1/1	-	2.0	-	-	-	-	-	-	-	-	-	2.0
4595/2/1	-	2.0	-	-	-	-	-	-	-	-	-	2.0
4597/1/1	-	-	-	-	-	-	-	-	0.8	-	-	0.8
4597/2/1	-	-	-	-	-	-	-	-	0.8	-	-	0.8
4597/3/1	-	-	-	-	-	-	-	-	0.8	-	-	0.8
4597/4/1	-	-	-	-	-	-	-	-	0.8	-	-	0.8
4597/5/1	-	-	-	-	-	-	-	-	0.8	-	-	0.8
4597/6/1	-	-	-	-	-	-	-	-	0.8	-	-	0.8
4597/11/1	-	-	-	-	-	-	-	-	0.8	-	-	0.8
4597/11/2	-	-	-	-	-	-	-	-	0.8	-	-	0.8

Notes

The emboldened observations are the high-rate consumers

The mean consumption rate of green vegetables for adults based on the 13 high-rate consumers is 16.8 kg y⁻¹ The observed 97.5th percentile rate based on 34 observations is 27.2 kg y⁻¹

Person ID number	Aubergine	Broad bean	Chilli pepper	French bean	Pea	Pepper	Runner bean	Squash	Sweetcorn	Tomato	Total
4690/1/1	-	-	-	3.4	-	-	4.3	2.7	-	66.6	77.0
4690/2/1	-	-	-	3.4	-	-	4.3	2.7	-	66.6	77.0
4684/1/1	1.4	1.0	0.1	-	1.0	3.9	1.5	1.8	4.6	10.5	25.7
4684/2/1	1.4	1.0	0.1	-	1.0	3.9	1.5	1.8	4.6	10.5	25.7
4644/1/1	-	-	-	-	-	-	25.5	-	-	-	25.5
4644/2/1	-	-	-	-	-	-	25.5	-	-	-	25.5
4588/1/1	-	3.4	-	-	1.7	-	4.5	-	-	2.5	12.1
4588/2/1	-	3.4	-	-	1.7	-	4.5	-	-	2.5	12.1
4588/3/1	-	3.4	-	-	1.7	-	4.5	-	-	2.5	12.1
4588/4/1	-	3.4	-	-	1.7	-	4.5	-	-	2.5	12.1
4593/1/1	-	-	-	-	-	-	-	-	-	9.0	9.0
4593/2/1	-	-	-	-	-	-	-	-	-	9.0	9.0
4595/1/1	-	-	-	0.4	-	-	2.0	0.9	-	4.6	7.9
4595/2/1	-	-	-	0.4	-	-	2.0	0.9	-	4.6	7.9
4645/1/1	0.3	-	0.7	-	0.1	0.3	-	1.3	-	1.7	4.4
4645/2/1	0.3	-	0.7	-	0.1	0.3	-	1.3	-	1.7	4.4
4645/3/1	0.3	-	0.7	-	0.1	0.3	-	1.3	-	1.7	4.4
4661/1/1	-	-	-	-	1.6	-	2.0	-	-	-	3.6
4661/2/1	-	-	-	-	1.6	-	2.0	-	-	-	3.6
4587/1/1	-	-	-	-	-	-	3.1	-	-	-	3.1
4587/2/1	-	-	-	-	-	-	3.1	-	-	-	3.1
4670/1/1	-	-	-	-	-	-	-	-	-	2.5	2.5
4670/2/1	-	-	-	-	-	-	-	-	-	2.5	2.5
4651/1/1	-	-	-	-	-	-	-	-	2.2	-	2.2
4651/2/1	-	-	-	-	-	-	-	-	2.2	-	2.2

Table 48. Adults' consumption rates of other vegetables from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Aubergine	Broad bean	Chilli pepper	French bean	Pea	Pepper	Runner bean	Squash	Sweetcorn	Tomato	Total
4651/3/1	-	-	-	-	-	-	-	-	2.2	-	2.2
4597/1/1	-	-	-	-	-	0.5	-	-	-	1.1	1.5
4597/2/1	-	-	-	-	-	0.5	-	-	-	1.1	1.5
4597/3/1	-	-	-	-	-	0.5	-	-	-	1.1	1.5
4597/4/1	-	-	-	-	-	0.5	-	-	-	1.1	1.5
4597/5/1	-	-	-	-	-	0.5	-	-	-	1.1	1.5
4597/6/1	-	-	-	-	-	0.5	-	-	-	1.1	1.5
4597/11/1	-	-	-	-	-	0.5	-	-	-	1.1	1.5
4597/11/2	-	-	-	-	-	0.5	-	-	-	1.1	1.5

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of other vegetables for adults based on the 4 high-rate consumers is 51.4 kg y⁻¹ The observed 97.5th percentile rate based on 34 observations is 77.0 kg y⁻¹

Person ID number	Beetroot	Carrot	Celeriac	Celery	Leek	Onion	Parsnip	Radish	Shallot	Spring onion	Total
4684/1/1	-	1.0	-	2.5	5.4	11.5	8.1	-	-	-	28.5
4684/2/1	-	1.0	-	2.5	5.4	11.5	8.1	-	-	-	28.5
4587/1/1	3.6	-	-	-	-	12.5	-	-	-	1.6	17.7
4587/2/1	3.6	-	-	-	-	12.5	-	-	-	1.6	17.7
4690/1/1	1.1	-	-	-	5.0	10.1	-	-	-	-	16.2
4690/2/1	1.1	-	-	-	5.0	10.1	-	-	-	-	16.2
4670/1/1	12.5	1.3	-	-	-	-	-	-	-	-	13.8
4670/2/1	12.5	1.3	-	-	-	-	-	-	-	-	13.8
4686/1/1	-	-	-	-	5.0	5.5	-	-	-	-	10.5
4686/2/1	-	-	-	-	5.0	5.5	-	-	-	-	10.5
4651/1/1	-	0.8	0.5	2.0	-	3.5	2.3	-	-	-	9.1
4651/2/1	-	0.8	0.5	2.0	-	3.5	2.3	-	-	-	9.1
4651/3/1	-	0.8	0.5	2.0	-	3.5	2.3	-	-	-	9.1
4588/1/1	1.7	3.4	-	-	-	1.3	-	-	-	-	6.4
4588/2/1	1.7	3.4	-	-	-	1.3	-	-	-	-	6.4
4588/3/1	1.7	3.4	-	-	-	1.3	-	-	-	-	6.4
4588/4/1	1.7	3.4	-	-	-	1.3	-	-	-	-	6.4
4604/1/1	-	-	-	-	-	-	-	-	5.8	-	5.8
4661/1/1	3.6	1.7	-	-	-	-	-	-	-	-	5.3
4661/2/1	3.6	1.7	-	-	-	-	-	-	-	-	5.3
4645/1/1	0.5	0.3	-	-	-	-	0.3	1.4	-	-	2.6
4645/2/1	0.5	0.3	-	-	-	-	0.3	1.4	-	-	2.6
4645/3/1	0.5	0.3	-	-	-	-	0.3	1.4	-	-	2.6
4644/1/1	0.9	-	-	-	-	-	-	-	-	-	0.9
4644/2/1	0.9	-	-	-	-	-	-	-	-	-	0.9

Table 49. Adults' consumption rates of root vegetables from the Hinkley Point terrestrial survey area (kg y⁻¹)

Notes for Table 49

The emboldened observations are the high-rate consumers The mean consumption rate of root vegetables for adults based on the 10 high-rate consumers is 17.3 kg y⁻¹ The observed 97.5th percentile rate based on 25 observations is 28.5 kg y⁻¹

Person ID number	Potato
4588/1/1	125.0
4588/2/1	125.0
4588/3/1	125.0
4588/4/1	125.0
4644/1/1	50.0
4644/2/1	50.0
4686/1/1	50.0
4686/2/1	50.0
4587/1/1	37.5
4587/2/1	37.5
4651/1/1	23.8
4651/2/1	23.8
4651/3/1	23.8
4645/1/1	6.7
4645/2/1	6.7
4645/3/1	6.7
4595/1/1	6.5
4595/2/1	6.5

Table 50. Adults' consumption rates of potato from the Hinkley Point terrestrial survey area (kg y⁻¹)

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of potato for adults based on the 8 high-rate consumers is 87.5 kg y^{-1}

The observed 97.5th percentile rate based on 18 observations is 125.0 kg y⁻¹

Person ID number	Apple	Blackcurrant	Cherry	Damson	Fig	Gooseberry	Greengage	Loganberry	Mulberry	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Walnut	Total
4649/1/1	45.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45.4
4604/1/1	20.0	-	-	-	-	3.6	-	-	-	6.8	-	3.6	-	-	-	-	34.1
4641/1/1	25.0	-	-	0.3	0.5	-	0.3	-	2.5	-	-	-	-	-	-	2.5	31.0
4641/2/1	25.0	-	-	0.3	0.5	-	0.3	-	2.5	-	-	-	-	-	-	2.5	31.0
4595/1/1	25.0	-	0.7	-	0.6	-	-	-	-	-	0.6	-	-	-	-	-	26.9
4595/2/1	25.0	-	0.7	-	0.6	-	-	-	-	-	0.6	-	-	-	-	-	26.9
4667/1/1	22.7	-	-	-	-	-	-	-	-	2.3	-	-	-	-	-	-	24.9
4667/2/1	22.7	-	-	-	-	-	-	-	-	2.3	-	-	-	-	-	-	24.9
4670/1/1	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.0
4670/2/1	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.0
4644/1/1	5.0	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	7.5
4644/2/1	5.0	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	7.5
4661/1/1	-	-	-	-	-	-	-	-	-	-	2.0	-	0.2	3.2	0.4	-	5.8
4661/2/1	-	-	-	-	-	-	-	-	-	-	2.0	-	0.2	3.2	0.4	-	5.8
4588/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	4.3
4588/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	4.3
4588/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	4.3
4588/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	4.3
4630/1/1	4.0	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	4.2

Table 51. Adults' consumption rates of domestic fruit from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Apple	Blackcurrant	Cherry	Damson	Fig	Gooseberry	Greengage	Loganberry	Mulberry	Plum	Raspberry	Redcurrant	Rhubarb	Strawberry	Tayberry	Walnut	Total
4684/1/1	2.0	0.3	-	-	-	-	-	-	-	-	-	-	-	1.5	-	-	3.8
4684/2/1	2.0	0.3	-	-	-	-	-	-	-	-	-	-	-	1.5	-	-	3.8
4651/1/1	-	0.4	-	-	-	-	-	-	-	-	0.7	-	-	1.4	-	-	2.6
4651/2/1	-	0.4	-	-	-	-	-	-	-	-	0.7	-	-	1.4	-	-	2.6
4651/3/1	-	0.4	-	-	-	-	-	-	-	-	0.7	-	-	1.4	-	-	2.6
4686/1/1	-	-	-	-	-	-	-	0.8	-	-	-	-	-	0.8	0.8	-	2.3
4686/2/1	-	-	-	-	-	-	-	0.8	-	-	-	-	-	0.8	0.8	-	2.3
4587/1/1	-	-	-	-	-	-	-	-	-	-	1.0	-	-	1.0	-	-	2.0
4587/2/1	-	-	-	-	-	-	-	-	-	-	1.0	-	-	1.0	-	-	2.0
4645/1/1	-	0.7	-	-	-	0.2	-	-	-	-	0.8	-	0.3	-	-	-	2.0
4645/2/1	-	0.7	-	-	-	0.2	-	-	-	-	0.8	-	0.3	-	-	-	2.0
4645/3/1	-	0.7	-	-	-	0.2	-	-	-	-	0.8	-	0.3	-	-	-	2.0
4690/1/1	-	-	-	-	-	-	-	-	-	-	-	-	1.0	0.5	-	-	1.4
4690/2/1	-	-	-	-	-	-	-	-	-	-	-	-	1.0	0.5	-	-	1.4

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of domestic fruit for adults based on the 8 high-rate consumers is 30.6 kg y⁻¹

The observed 97.5th percentile rate based on 33 observations is 36.3 kg y⁻¹

Table 52. Adults	consumption rates o	of milk from the Hink	ley Point terrestrial st	urvey
area (I y ⁻¹)				

Person ID number	Cows' milk
4636/1/1	414.6
4729/1/1	365.0
4688/8/1	365.0
4688/9/1	365.0
4636/2/1	311.0
4636/3/1	311.0
4636/4/1	311.0
4636/5/1	311.0
4729/2/1	265.5
4729/3/1	265.5
4688/1/1	265.5
4688/2/1	265.5
4688/10/1	265.5
4688/11/1	265.5
4688/4/1	182.5
4688/5/1	182.5
4688/6/1	182.5
4688/7/1	182.5
4636/6/1	103.7
4636/6/2	103.7
4636/6/3	103.7
4636/6/4	103.7
4636/6/5	103.7
4636/6/6	103.7
4636/6/7	103.7
4636/6/8	103.7
4636/6/9	103.7
4636/6/10	103.7

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of milk for adults based on the 18 high-rate consumers is 282.0 I $y^{\mbox{-}1}$

The observed 97.5th percentile rate based on 28 observations is 381.1 l y-1

Person ID number	Beef
4588/1/1	62.5
4588/2/1	62.5
4588/3/1	62.5
4588/4/1	62.5
4638/1/1	37.5
4638/2/1	37.5
4686/2/1	20.9
4637/1/1	18.8
4637/2/1	18.8
4637/3/1	18.8
4637/4/1	18.8
4686/1/1	15.6
4638/5/1	2.5
4638/6/1	2.5
4638/7/1	2.5
4638/8/1	2.5

Table 53. Adults' consumption rates of cattle meat from the Hinkley Point terrestrial survey area (kg y⁻¹)

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of cattle meat for adults based on the 7 high-rate consumers is 49.4 kg y^{-1}

The observed 97.5th percentile rate based on 16 observations is 62.5 kg y⁻¹

Table 54. Adults' consumption rates of pig meat from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Pork
4686/2/1	20.9
4686/1/1	15.6

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of pig meat for adults based on the 2 high-rate consumers is 18.2 kg y⁻¹

The observed 97.5th percentile rate based on 2 observations is 20.7 kg y⁻¹

Table 55. Adults' consumption rates of sheep meat from the Hinkley Point terrestrial survey area (kg y^{-1})

Person ID number	Lamb
4670/1/1	15.0
4670/2/1	15.0
4686/1/1	8.0
4686/2/1	8.0
4637/1/1	7.5
4637/2/1	7.5
4637/3/1	7.5
4637/4/1	7.5

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of sheep meat for adults based on the 8 high-rate consumers is 9.5 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 15.0 kg y⁻¹

Table 56. Adults' consumption rates of poultry from the Hinkley Point terrestrial survey area (kg y^{-1})

Person ID number	Pheasant	Pigeon	Total
4588/1/1	2.8	0.3	3.1
4588/2/1	2.8	0.3	3.1
4588/3/1	2.8	0.3	3.1
4588/4/1	2.8	0.3	3.1
4613/1/1	1.8	-	1.8
4613/2/1	1.8	-	1.8
4613/3/1	1.8	-	1.8
4613/5/1	1.8	-	1.8

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of poultry for adults based on the 8 high-rate consumers is 2.4 kg y^{-1}

The observed 97.5th percentile rate based on 8 observations is 3.1 kg y⁻¹

Person ID number	Chicken egg	Duck egg	Total
4651/1/1	33.9	-	33.9
4651/2/1	33.9	-	33.9
4651/3/1	33.9	-	33.9
4644/1/1	8.2	8.1	16.3
4644/2/1	8.2	8.1	16.3
4645/1/1	13.9	-	13.9
4645/2/1	13.9	-	13.9
4645/3/1	13.9	-	13.9
4595/1/1	12.3	-	12.3
4595/2/1	12.3	-	12.3
4729/1/1	11.9	-	11.9
4729/2/1	11.9	-	11.9
4729/3/1	11.9	-	11.9
4604/1/1	11.9	-	11.9
4684/1/1	10.4	-	10.4
4684/2/1	10.4	-	10.4
4597/1/1	7.4	-	7.4
4597/2/1	7.4	-	7.4
4593/1/1	4.1	-	4.1
4593/2/1	4.1	-	4.1
4622/1/1	4.1	-	4.1
4622/2/1	4.1	-	4.1
4667/1/1	4.1	-	4.1
4667/2/1	4.1	-	4.1
4670/1/1	0.2	-	0.2
4670/2/1	0.2	-	0.2

Table 57. Adults' consumption rates of eggs from the Hinkley Point terrestrial survey area (kg y⁻¹)

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of eggs for adults based on the 14 high-rate consumers is 17.7 kg y^{-1}

The observed 97.5th percentile rate based on 26 observations is 33.9 kg y⁻¹

Person ID number	Blackberry	Elderflower	Hazelnut	Sloe	Total
4641/1/1	2.5	-	5.0	-	7.5
4641/2/1	2.5	-	5.0	-	7.5
4644/1/1	2.5	-	-	-	2.5
4644/2/1	2.5	-	-	-	2.5
4587/1/1	1.5	-	-	0.5	2.0
4587/2/1	1.5	-	-	0.5	2.0
4604/1/1	1.8	-	-	-	1.8
4588/1/1	1.8	-	-	-	1.8
4588/2/1	1.8	-	-	-	1.8
4588/3/1	1.8	-	-	-	1.8
4588/4/1	1.8	-	-	-	1.8
4667/1/1	1.5	-	-	-	1.5
4667/2/1	1.5	-	-	-	1.5
4670/1/1	0.5	-	-	-	0.5
4670/2/1	0.5	-	-	-	0.5
4729/3/1	0.3	0.2	-	-	0.5
4729/1/1	0.3	-	-	-	0.3
4729/2/1	0.3	-	-	-	0.3
4630/1/1	0.2	-	-	-	0.2

Table 58. Adults' consumption rates of wild/free foods from the Hinkley Point terrestrial survey area (kg y⁻¹)

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of wild/free foods for adults based on the 4 high-rate consumers is 5.0 kg y^{-1}

The observed 97.5th percentile rate based on 19 observations is 7.5 kg y⁻¹

Table 59. Adults' consumption rates of rabbits/hares from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Rabbit
4588/1/1	0.3
4588/2/1	0.3
4588/3/1	0.3
4588/4/1	0.3
4613/1/1	0.3
4613/2/1	0.3
4613/3/1	0.3
4613/5/1	0.3

Notes for Table 59

The emboldened observations are the high-rate consumers

The mean consumption rate of rabbits/hares for adults based on the 8 high-rate consumers is 0.3 kg y⁻¹

The observed 97.5th percentile rate based on 8 observations is 0.3 kg y⁻¹

Table 60. Adults' consumption rates of honey from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Honey
4642/1/1	5.3
4642/2/1	5.3
4642/3/1	5.3
4641/1/1	2.7
4641/2/1	2.7
4638/1/1	1.1
4638/2/1	1.1
4645/1/1	0.9
4645/2/1	0.9
4645/3/1	0.9
4643/1/1	0.7
4643/2/1	0.7
4687/1/1	0.7
4687/2/1	0.7
4687/3/1	0.6
4604/1/1	0.5
4638/5/1	0.5
4638/7/1	0.2
4638/8/1	0.2

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of honey for adults based on the 5 high-rate consumers is 4.3 kg y^{-1}

The observed 97.5th percentile rate based on 19 observations is 5.3 kg y⁻¹

Table 61. Adults' consumption rates of wild fungi from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Mushrooms
4595/1/1	0.2
4595/2/1	0.2
4670/1/1	0.2
4670/2/1	0.2

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of wild fungi for adults based on the 4 high-rate consumers is 0.2 kg y^{-1}

The observed 97.5th percentile rate based on 4 observations is 0.2 kg y⁻¹

Table 62. Adults' consumption rates of venison from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Venison
4613/1/1	10.0
4613/2/1	10.0
4613/3/1	10.0
4613/5/1	10.0

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of venison for adults based on the 4 high-rate consumers is 10.0 kg y^{-1}

The observed 97.5th percentile rate based on 4 observations is 10.0 kg y⁻¹

Table 63. Children's consumption rates of green vegetables from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Cucumber
4597/7/1	0.6

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of green vegetables for the child age group based on the high-rate consumer is 0.6 kg y^{-1}

The observed 97.5th percentile is not applicable for one observation

Table 64. Infants' consumption rates of green vegetables from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Cucumber
4597/8/1	0.4
4597/9/1	0.4
4597/10/1	0.4

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of green vegetables for the infant age group based on the 3 high-rate consumers is 0.4 kg y⁻¹

The observed 97.5th percentile rate based on 3 observations is 0.4 kg y-1

Table 65. Children's consumption rates of other vegetables from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Pepper	Tomato	Total
4597/7/1	0.4	0.8	1.1

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of other vegetables for the child age group based on the high-rate consumer is 1.1 kg y^{-1}

The observed 97.5th percentile is not applicable for one observation

Table 66. Infants' consumption rates of other vegetables from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Pepper	Tomato	Total
4597/8/1	0.2	0.5	0.8
4597/9/1	0.2	0.5	0.8
4597/10/1	0.2	0.5	0.8

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of other vegetables for the infant age group based on the 3 high-rate consumers is 0.8 kg y^{-1}

The observed 97.5th percentile rate based on 3 observations is 0.8 kg y⁻¹
Table 67. Children's consumption rates of domestic fruit from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Apple	Damson	Fig	Greengage	Mulberry	Walnut	Total
4641/3/1	25.0	0.3	0.5	0.3	2.5	2.5	31.0
4641/4/1	25.0	0.3	0.5	0.3	2.5	2.5	31.0

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of domestic fruit for the child age group based on the 2 high-rate consumers is 31.0 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 31 kg y⁻¹

Table 68. Children's consumption rates of milk from the Hinkley Point terrestrial survey area (I y^{-1})

Person ID number	Cows' milk
4729/4/1	199.1
4688/3/1	199.1
4688/12/1	199.1

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of milk for the child age group based on the 3 high-rate consumers is 199.1 J y^{-1}

The observed 97.5th percentile rate based on 3 observations is 199.1 l y-1

Table 69. Children's consumption rates of cattle meat from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Beef
4638/3/1	37.5
4638/4/1	37.5

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of cattle meat for the child age group based on the 2 high-rate consumers is 37.5 kg y^{-1}

The observed 97.5th percentile rate based on 2 observations is 37.5 kg y⁻¹

Table 70. Children's consumption rates of poultry from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Pheasant
4613/4/1	1.8

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of poultry for the child age group based on the high-rate consumer is 1.8 kg y^{-1}

The observed 97.5th percentile is not applicable for one observation

Table 71. Children's consumption rates of wild/free foods from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Blackberry	Hazelnut	Total
4641/3/1	2.5	5.0	7.5
4641/4/1	2.5	5.0	7.5
4729/4/1	0.2	-	0.2

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of wild/free foods for the child age group based on the 2 high-rate consumers is 7.5 kg y⁻¹

The observed 97.5th percentile rate based on 3 observations is 7.5 kg y⁻¹

Table 72. Children's consumption rates of rabbits/hares from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Rabbit
4613/4/1	0.3

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of rabbits/hares for the child age group based on the high-rate consumer is 0.3 kg y^{-1}

The observed 97.5th percentile is not applicable for one observation

Table 73. Children's consumption rates of honey from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Honey
4687/5/1	6.8
4641/3/1	2.7
4641/4/1	2.7
4638/3/1	1.1
4638/4/1	1.1

<u>Notes</u>

The emboldened observations are the high-rate consumers

The mean consumption rate of honey for the child age group based on the 3 high-rate consumers is 4.1 kg y^{-1}

The observed 97.5th percentile rate based on 5 observations is 6.4 kg y⁻¹

Table 74. Infants' consumption rates of honey from the Hinkley Point terrestrial survey area (kg y^{-1})

Person ID number	Honey
4687/4/1	0.3

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of honey for the infant age group based on the high-rate consumer is 0.3 kg y^{-1}

The observed 97.5th percentile is not applicable for one observation

Table 75. Children's consumption rates of venison from the Hinkley Point terrestrial survey area (kg y⁻¹)

Person ID number	Venison
4613/4/1	10.0

<u>Notes</u>

The emboldened observation is the high-rate consumer

The mean consumption rate of venison for the child age group based on the high-rate consumer is 10.0 kg y⁻¹

The observed 97.5th percentile is not applicable for one observation

Food group	Food	Percentage
	Cabbage	21.7%
	Courgette	15.9%
	Cucumber	15.7%
	Cauliflower	14.3%
	Brussels sprout	10.2%
Green vegetables	Lettuce	8.1%
	Kale	6.4%
	Broccoli	2.6%
	Calabrese	2.3%
	Chard	1.6%
	Asparagus	1.1%
	Tomato	53.9%
	Runner bean	24.4%
	Sweetcorn	4.0%
	Broad bean	4.0%
	Squash	3.8%
Other vegetables	Pepper	3.3%
	Pea	3.1%
	French bean	1.9%
	Aubergine	1.0%
	Chilli pepper	0.5%
	Onion	37.7%
	Beetroot	20.5%
	Leek	12.2%
	Carrot	9.8%
Deetweeteklee	Parsnip	9.5%
Root vegetables	Celery	4.4%
	Shallot	2.3%
	Radish	1.7%
	Spring onion	1.3%
	Celeriac	0.6%
Potato	Potato	100.0%
	Apple	72.0%
	Walnut	6.4%
	Strawberry	5.2%
Domoctic fruit	Plum	4.7%
Domestic Itult	Raspberry	3.5%
	Mulberry	1.4%
	Gooseberry	1.2%
	Blackcurrant	1.1%

Table 76. Percentage contribution each food type makes to its terrestrial food group for adults

Food group	Food	Percentage
	Redcurrant	1.0%
	Rhubarb	1.0%
	Tayberry	0.7%
Domostio fruit	Fig	0.6%
Domestic Iruit	Loganberry	0.4%
	Cherry	0.4%
	Greengage	0.1%
	Damson	0.1%
Milk	Cows' milk	100.0%
Cattle meat	Beef	100.0%
Pig meat	Pork	100.0%
Sheep meat	Lamb	100.0%
Doultry/	Pheasant	96.2%
Founty	Pigeon	3.8%
Eggs	Chicken egg	94.7%
Eyys	Duck egg	5.3%
	Blackberry	70.5%
Wild/frog foods	Hazelnut	26.3%
	Sloe 2.6%	
	Elderflower	0.5%
Rabbits/hares	Rabbit	100.0%
Honey	Honey	100.0%
Wild fungi	Mushrooms	100.0%
Venison	Venison	100.0%

<u>Notes</u>

Percentages are based on the consumption of all adults in the survey consuming that particular food group

Person ID number	Main activity	Indoor	Outdoor	Total
	Main activity	occupancy	occupancy	occupancy
0 – 0.25 km zone				
4666/1/1	Angling	-	521	521
4671/1/1	Angling	-	208	208
4576/1/1	Angling	-	24	24
4576/2/1	Angling	-	24	24
4622/1/1	Wildfowling	-	20	20
4700/1/1	Undertaking environmental activities	-	3	3
4700/2/1	Undertaking environmental activities	-	3	3
4700/3/1	Undertaking environmental activities	-	3	3
4700/2/2	Undertaking environmental activities	-	3	3
4700/3/2	Undertaking environmental activities	-	3	3
4700/2/3	Undertaking environmental activities	-	3	3
4700/3/3	Undertaking environmental activities	-	3	3
4700/2/4	Undertaking environmental activities	-	3	3
4700/3/4	Undertaking environmental activities	-	3	3
>0.25 – 0.5 km zone		·	·	·
4641/5/1	Working	-	600	600
4729/5/1	Working	-	183	183
4638/9/1	Working	-	135	135
4729/3/1	Working	-	68	68
4641/1/1	Working	-	36	36
4640/1/1	Working	-	32	32
4640/1/2	Working	-	32	32
4729/1/1	Working	-	26	26
4729/2/1	Working	-	26	26

Table 77. Direct radiation occupancy rates for adults and children in the Hinkley Point area (h y⁻¹)

Person ID number	Main activity	Indoor	Outdoor	Total
	Main activity	occupancy	occupancy	occupancy
>0.25 – 0.5 km zone		1		
4642/3/1	Walking	-	26	26
>0.5 – 1.1 km zone				
4669/1/1	Residing	8445	182	8628
4630/1/1	Residing	6456	1392	7847
4664/1/1	Residing	6941	731	7672
4664/2/1	Residing	6390	831	7221
4667/1/1	Residing	5147	2009	7156
4667/2/1	Residing	5147	2009	7156
4690/1/1	Residing	5313	1460	6773
4595/1/1	Residing	5820	915	6734
4593/1/1	Residing	6065	451	6516
4593/2/1	Residing	6065	451	6516
4635/2/1	Residing	6100	313	6414
4635/3/1	Residing	6100	313	6414
4649/1/1	Residing	6030	56	6086
4690/2/1	Residing	5210	326	5536
4595/2/1	Residing	5074	417	5491
4744/1/1ª	Residing at temporary accommodation	2839	501	3340
4744/2/1 ^a	Residing at temporary accommodation	2839	501	3340
4635/1/1	Working	1874	313	2187
4635/1/2	Working	1874	313	2187
4635/1/3	Working	1874	313	2187
4635/1/4	Working	1874	313	2187
>0.5 – 1.1 km zone				
4635/1/5	Working	1874	313	2187

Person ID number	Main activity	Indoor occupancy	Outdoor occupancy	Total occupancy
>0.5 – 1.1 km zone				
4635/1/6	Working	1874	313	2187
4652/1/1	Dog walking	-	274	274
4652/2/1	Dog walking	-	274	274
4589/2/1	Working	-	176	176
4589/1/1	Working	-	152	152
4687/1/1	Dog walking	-	117	117
4687/2/1	Dog walking	-	117	117
4729/4/1	Dog walking, fossil hunting and paddling	-	42	42
4670/1/1	Dog walking	-	12	12
4670/2/1	Dog walking	-	12	12
4620/2/1	Dog walking	-	3	3
4620/3/1	Dog walking	-	3	3
4661/1/1	Walking	-	3	3
4661/2/1	Walking	-	2	2
4661/3/1	Walking	_	2	2

<u>Notes</u>

^a Occupancy data for ID's 4744/1/1 and 4744/2/1 are estimated (Annex 4).

0 – 0.25 km zone	
Number of hours	Number of observations
>8000 to 8760	0
>7000 to 8000	0
>6000 to 7000	0
>5000 to 6000	0
>4000 to 5000	0
>3000 to 4000	0
>2000 to 3000	0
>1000 to 2000	0
0 to 1000	14
0 to 8760	14
>0.25 – 0.5 km zone	
Number of hours	Number of observations
>8000 to 8760	0
>7000 to 8000	0
>6000 to 7000	0
>5000 to 6000	0
>4000 to 5000	0
>3000 to 4000	0
>2000 to 3000	0
>1000 to 2000	0
0 to 1000	10
0 to 8760	10
>0.5 – 1.1 km zone	
Number of hours	Number of observations
>8000 to 8760	2
>7000 to 8000	5
>6000 to 7000	7
>5000 to 6000	2
>4000 to 5000	0
>3000 to 4000	2 ^a
>2000 to 3000	6
>1000 to 2000	0
0 to 1000	14
0 to 8760	37 ^a

Table 78. Analysis of direct radiation occupancy rates for adults and children in the Hinkley Point area (h y^{-1})

<u>Notes</u>

^a Estimated data for 2 people living in the temporary accommodation have been included in the data analysis (Annex 4).

Location	Indoor substrate	Indoor gamma dose rate at 1 metreª	Outdoor substrate	Outdoor gamma dose rate at 1 metre ^a
Residence 1	Not recorded	Not recorded	Grass	0.074
Residence 2	Concrete	0.069	Grass	0.07
Residence 3	Wood	0.08	Grass	0.08
Residence 4	Concrete	0.065	Grass	0.076
Residence 5	Not recorded	Not recorded	Concrete	0.071
Residence 6	Concrete	0.083	Grass	0.074
Residence 7	Not recorded	Not recorded	Grass	0.075
Residence 8	Concrete	0.071	Grass	0.076
Residence 9	Concrete	0.082	Grass	0.083

Table 79. Gamma dose rate measurements (μ Gy h⁻¹) for the Hinkley Point direct radiation survey area

Notes

^a These measurements have not been adjusted for background dose rates

Table 80. Background gamma dose rate measurements for the Hinkley Point survey area (μ Gy h⁻¹)

	Location	National Grid Reference	Substrate	Gamma dose rate at 1 metre
Background 1	West	ST 146 440	Grass	0.080
Background 2	South	ST 240 401	Grass	0.095
Background 3	East	ST 261 453	Grass	0.065

Combination number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
1												Х							Х																	
2																														Х				Х		
3	Х																					Х									Х		Х		Х	Х
4						Х	Х	Х	Х	Х						Х			Х																	
5				Х																						Х										
6																						Х				Х										
/					X						Х															V										
8					X																					X	V						V			
9	Y																										^ V						^	v		
11	^																										^	X					X	^ X		
12	X																_										X	~				X	~	~		
13	~					Х		Х	Х	Х		Х	Х	Х													~					~				
14	Х																						Х						Х						Х	Х

Table 81. Combinations of adult pathways for consideration in dose assessments in the Hinkley Point area

Combination number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
15	Х																								Х				Х						Х	Х
16																			Х				Х	Х	Х				Х						Х	Х
17																							Х		Х	Х			Х							
18																							Х		Х		Х		Х						Х	Х
19																								Х				Х	Х						Х	Х
20																							Х		Х			Х	Х							
21																									Х		Х	Х	Х							
22	Х	Х		Х		Х	Х									Х						Х							Х		Х	Х				
23		Х		Х		Х	Х															Х	Х						Х		Х	Х				
24															Х			Х			Х															
25						Х	Х		Х	Х						Х				Х			Х		Х			Х							Х	Х
26											Х					Х	Х							Х										Х	Х	Х
27						Х	Х	Х	Х	Х						Х	Х																			
28						Х	Х	Х	Х	Х		Х			Х		Х	Х																		
29										Х							Х		Х				Х			Х									Х	Х
30										X						Х	Х										Х								Х	Х

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Combination number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
31								Х		Х						Х	Х		Х										Х							
32										Х							Х							Х			Х		Х						Х	Х
33						Х	Х	Х		Х				Х		Х	Х			Х			Х	Х											Х	Х
34			Х																			Х										Х				
35			Х													Х							Х									Х			Х	Х
36	Х		Х																							Х						Х				

<u>Notes</u>

The food groups and external pathways marked with a cross are combined for the corresponding combination number. For example, combination number 3 represents an individual (or individuals) from Annex 1 who had positive data for the following pathways: sea fish, occupancy over mud, handling fishing gear, occupancy in water, indoor occupancy within 1.1 km of the nuclear licensed site boundary and outdoor occupancy within 1.1 km of the nuclear licensed site boundary.

							-		-			-					-																			
Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4539/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117	-	-	-	175	-	-
4540/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117	-	-	-	-	-	-	-	-	-
4540/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117	-	-	-	-	-	-	-	-	-
4540/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117	-	-	-	-	-	-	-	-	-
4540/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117	-	-	-	-	-	-	-	-	-
4541/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	6	-	-	-	-	-	-	-	-
4541/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117	-	-	117	-	-	-	-	-	-	-	-
4542/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	196	-	-	-	215	-	-
4542/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	196	-	-	-	215	-	-
4542/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	730	-	-	-	215	-	-
4542/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	730	-	-	-	215	-	-
4573/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	117	-	-	16	16	-	-	-	-	-	-	-
4573/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	117	-	-	16	16	-	-	-	-	-	-	-
4574/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	626	-	-	-	-	-	-	-	-
4575/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56	-	-	-	-	-	-	-	-
4576/1/1	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	96	-	-	-	-	-	-	24
4576/2/1	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-	-	-	96	-	-	-	-	-	-	24
4576/3/1	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4577/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-

Annex 1. Adults' consumption rates (kg y⁻¹ and I y⁻¹) and occupancy rates (h y⁻¹) in the Hinkley Point area

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4577/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/5/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/9/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/10/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	112	280	-	-
4577/18/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4577/18/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-	-
4578/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117	-	-	-	-	-	-	-	-	-
4579/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	397	-	-	-	-	-	-	-	-	-
4579/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-
4579/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-
4579/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-
4579/9/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-
4580/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	548	-	-
4580/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-
4580/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-
4580/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-
4580/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-
4580/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over
4580/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/2/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/2/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/2/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/2/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4580/3/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4581/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4581/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4582/1/1	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	432	-	-
4582/2/1	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1043	-	-
4583/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-
4584/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-
4584/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	-	-
4585/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	182	-	-
4586/1/1	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4587/1/1	-	-	-	-	-	6.5	3.1	17.7	37.5	2.0	-	-	-	-	-	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-
4587/2/1	-	-	-	-	-	6.5	3.1	17.7	37.5	2.0	-	-	-	-	-	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-
4588/1/1	-	-	-	-	-	4.0	12.1	6.4	125.0	4.3	-	62.5	-	-	3.1	-	1.8	0.3	-	-	-	-	-	-	-	-	-	-	-
4588/2/1	-	-	-	-	-	4.0	12.1	6.4	125.0	4.3	-	62.5	-	-	3.1	-	1.8	0.3	-	-	-	-	-	-	-	-	-	-	-
4588/3/1	-	-	-	-	-	4.0	12.1	6.4	125.0	4.3	-	62.5	-	-	3.1	-	1.8	0.3	-	-	-	-	-	-	-	-	-	-	-
4588/4/1	-	-	-	-	-	4.0	12.1	6.4	125.0	4.3	-	62.5	-	-	3.1	-	1.8	0.3	-	-	-	-	-	-	-	-	-	-	-
4589/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4589/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4593/1/1	-	-	-	-	-	-	9.0	-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-
4593/2/1	-	-	-	-	-	-	9.0	-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-
4595/1/1	-	-	-	-	-	2.0	7.9	-	6.5	26.9	-	-	-	-	-	12.3	-	-	-	0.2	-	-	9	-	-	-	-	-	-

stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	104	-	-
	-	-	-	-	152	-	-
	-	-	-	-	152	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	152
	-	-	-	-	-	-	176
	-	-	-	-	-	6065	451
	-	-	-	-	-	6065	451
	-	-	-	-	-	5820	915

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over
4595/2/1	-	-	-	-	-	2.0	7.9	-	6.5	26.9	-	-	-	-	-	12.3	-	-	-	0.2	-	-	322	-	8	-	-	8	-
4597/1/1	5.9	2.0	-	1.0	-	0.8	1.5	-	-	-	-	-	-	-	-	7.4	-	-	-	-	-	4	-	-	-	-	-	-	5
4597/2/1	5.9	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	7.4	-	-	-	-	-	-	-	-	-	-	-	-	5
4597/3/1	-	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4597/4/1	-	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4597/5/1	-	2.0	-	1.0	-	0.8	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	256	24	-	-	-	-	-	5
4597/6/1	-	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-
4597/11/1	-	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-
4597/11/2	-	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-
4598/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/4	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/8	_	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/9	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32
4598/1/10	_	-	-	_	_	_	-	-	_	_	_	_	-	-	-	-	_	-	_	_	-	-	-	-	16	-	-	-	32
4598/10/1	-	_	_	_	_	-	_	_	_	_	_	-	_	-		-	-	-	-	-	-	_	-	-	86	-		<u> </u>	17
4600/1/1	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	-	_	_	400	_	_	-	400	_	_	_
4600/1/2	_	_		_		_	_	_		_				_		_	_	_	_	_	_	400	_	_	_	400			
4600/1/2																						400				400			
4600/1/3	_	_	_	-	_	_	_	_	_	-		_	_	_	_	_	_	_	-		-	400	-	-	_	400	_		
4600/1/4																	-	_				400			-	400			
4000/1/5	-	-	-	-	_	_	-	-	_	-	-	-	-	-	-	_	-	-	-	-		400	-	-	-	400			
4000/1/0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-
4000/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400			-
4000/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-
4000/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-		-
4000/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-
4600/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	32	-
4000/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	32	-
4000/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-
4600/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-
4600/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	59	-

stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
	-	-	-	-	-	5074	417
	-	1	1	-	-	-	-
	-	-	1	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	253	1	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over
4601/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4602/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	6
4603/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	377	-	-
4603/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	377	-	-
4604/1/1	-	-	-	-	-	-	-	5.8	-	34.1	-	-	-	-	-	11.9	1.8	-	0.5	-	-	-	-	-	-	-	-	-	15
4606/1/1	-	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	122	-	-	-
4606/2/1	-	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4606/5/1	-	-	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4606/6/1	-	-	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4606/7/1	-	-	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4606/8/1	-	-	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4607/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	-
4607/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	313	-	-	-	-	-	-
4611/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4611/7/1	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-
4611/8/1	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-
4613/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	0.3	-	-	10.0	-	-	-	-	-	-	-	-
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stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
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	-	-	-	-	216	-	-
	-	-	-	-	108	-	-
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Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4613/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	0.3	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4613/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	0.3	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4613/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	0.3	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4615/1/1	5.4	-	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	24	-	-	-	-
4615/2/1	5.4	-	7.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4616/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-
4620/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	-
4620/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	4	13	-	-	-	-	-	-	3
4620/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	4	-	-	-	-	-	-	-	3
4622/1/1	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	-	40	-	-	-	-	-	-	-	-	40	-	-	-	20
4622/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4623/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-
4625/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	-	-	-	-	-	-	-	-
4626/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	104	-	-	-	-	-	-	-	-
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4629/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-
4630/1/1	-	-	-	-	-	-	-	-	-	4.2	-	-	-	-	-	-	0.2	-	-	-	-	-	-	13	-	-	24	-	2	-	-	-	-	-	6456	1392
4635/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1874	313
4635/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1874	313
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4636/1/1	-	-	-	-	-	-	-	-	-	-	414.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4636/2/1	-	-	-	-	-	-	-	-	-	-	311.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4636/3/1	-	-	-	-	-	-	-	-	-	-	311.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4636/4/1	-	-	-	-	-	-	-	-	-	-	311.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4636/5/1	-	-	-	-	-	-	-	-	-	-	311.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4636/6/1	-	-	-	-	-	-	-	-	-	-	103.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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4636/6/7	-	-	-	-	-	-	-	-	-	-	103.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4636/6/8	-	-	-	-	-	-	-	-	-	-	103.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4636/6/9	-	-	-	-	-	-	-	-	-	-	103.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4636/6/10	-	-	-	-	-	-	-	-	-	-	103.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4637/1/1	-	-	-	-	-	-	-	-	-	-	-	18.8	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4637/2/1	-	-	-	-	-	-	-	-	-	-	-	18.8	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4637/3/1	-	-	-	-	-	-	-	-	-	-	-	18.8	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4637/4/1	-	-	-	-	-	-	-	-	-	-	-	18.8	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4638/1/1	-	-	-	-	-	-	-	-	-	-	-	37.5	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4638/2/1	-	-	-	-	-	-	-	-	-	-	-	37.5	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4638/5/1	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4638/6/1	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4638/7/1	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4638/8/1	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4638/9/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		135
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4040/1/2										31.0					_		7.5		27				- 18			- 18			_							36
4641/2/1				-			-	-		31.0		-			-		7.5	-	2.1	-		-	10				-		-	-					-	
4641/5/1	_	_	-	-		-	-	-	_	-	_	-	_	_	_	-	-	-	-	-	-	_	-	_	_	_	-	_	_	_	-	_	_			600
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4642/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	-	-	-	26	-	-	-	-	-	-	-	-	-	-	_	-	26
4643/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4643/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4644/1/1	-	-	-	-	-	11.8	25.5	0.9	50.0	7.5	-	-	-	-	-	16.3	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4644/2/1	-	-	-	-	-	11.8	25.5	0.9	50.0	7.5	-	-	-	-	-	16.3	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4645/1/1	-	-	-	-	-	5.0	4.4	2.6	6.7	2.0	-	-	-	-	-	13.9	-	-	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4645/2/1	-	-	-	-	-	5.0	4.4	2.6	6.7	2.0	-	-	-	-	-	13.9	-	-	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4645/3/1	-	-	-	-	-	5.0	4.4	2.6	6.7	2.0	-	-	-	-	-	13.9	-	-	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4646/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	5	10	-	-	30	-	-	-	-	-	-	-
4646/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	5	10	-	-	5	-	-	-	-	-	-	-
4647/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	235	-	-	156	-	-	-	-	-	-	-	-	-	-
4648/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4648/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130	-	-	-
4648/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	66	-	-
4648/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	66	-	-
4648/4/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	66	-	-
4648/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	-	-
4648/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	-	-
4649/1/1	-	-	-	-	-	-	-	-	-	45.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6030	56
4651/1/1	-	-	-	-	-	10.7	2.2	9.1	23.8	2.6	-	-	-	-	-	33.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4001/2/1	-	-	-	-	-	10.7	2.2	9.1	23.8	2.0	-	-	-	-	-	33.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4031/3/1	-	-	-	-	-	10.7	2.2	9.1	23.0	2.0	-	-	-	-	-	33.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4052/1/1	6.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	2	-	20	-	-	274
4032/2/1	6.4	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			2/4
4654/1/1		_	_	_	_	_	_	_	_	_	_	_		_	-	_	-	-	-	-		_	_	_	_	_	158		_	_	_		13	_	-	_
4654/1/2	-	_	-	_	-	-	_	_	_	_	_	-	-	_	-	_		-		-	-	-	_	_	_	_	158	_	-	_	_	-	13	-	-	
4654/1/3	-	_	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	158	-	-	-	-	-	13	-	-	-
4654/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	-	-	-	-	-	13		-	-
4654/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	-	-	-	-	-	13	-	-	-
4654/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	-	-	7	-	-	-
4654/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	-	-	7	-	-	-
4654/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	-	-	7	-	-	-
4654/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	-	-	7	-	-	-
4654/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	-	-	7	-	-	-
4654/2/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-	-	-	-	-	7	-	-	-
4655/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	391	-	-	-	-	-	-	-	-	-
4655/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	391	-	-	-	-	-	-	-	-	-
4655/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	391	-	-	-	-	-	-	-	-	-
4655/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	391	-	-	-	-	-	-	-	-	-

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over
4657/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4657/1/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-
4660/1/1	21.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	782	-	-
4661/1/1	-	-	-	-	-	4.8	3.6	5.3	-	5.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4661/2/1	-	-	-	-	-	4.8	3.6	5.3	-	5.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4661/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4663/1/1	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-
4663/1/2	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-
4663/1/3	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-
4663/2/1	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-
4663/2/2	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-
4664/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4664/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4666/1/1	46.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	581	-	-	-	315
4667/1/1	-	-	-	-	-	-	-	-	-	24.9	-	-	-	-	-	4.1	1.5	-	-	-	-	-	-	-	-	-	152	-	-
4667/2/1	-	-	-	-	-	-	-	-	-	24.9	-	-	-	-	-	4.1	1.5	-	-	-	-	-	-	-	-	-	152	-	-
4669/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	26	-	26	-	-
4670/1/1	-	-	-	-	-	27.2	2.5	13.8	-	10.0	-	-	-	15.0	-	0.2	0.5	-	-	0.2	-	-	12	12	-	-	-	-	-
4670/2/1	-	-	-	-	-	27.2	2.5	13.8	-	10.0	-	-	-	15.0	-	0.2	0.5	-	-	0.2	-	-	12	12	-	-	-	-	-
4671/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	260	-	-	-	-
4671/2/1	30.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4672/1/1	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-
4672/2/1	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4673/1/1	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233	-	-
4673/2/1	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4675/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	738	-	-
4675/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	321	-	-

stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	-	-	8	-	-
	-	-	104	-	-	-	-
	-	-	-	-	-	-	3
	-	-	-	-	-	-	2
	-	-	-	-	-	-	2
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	6941	731
	-	-	-	-	-	6390	831
5	-	-	-	-	-	-	521
	-	-	-	-	-	5147	2009
	-	-	-	-	-	5147	2009
	-	-	-	-	-	8445	182
	-	-	-	-	-	-	12
	-	-	-	-	-	-	12
	-	-	-	-	-	-	208
	-	-	-	-	-	-	-
	-	-	6	-	-	-	-
	-	-	-	-	-	-	-
	-	-	24	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	hintertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
40/0/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	-	-	-	-	-	-
4070/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	430	-	-	-	-	-	-	-	-	-
4679/2/1	-		-	-		-	-	-	-					-	-	-	-	-	-	-	-	-	-	-	-		60	2	-	-		-	-	-	-	-
4684/1/1	-	-	_	-	-	21.3	25.7	28.5	-	38	-	-	-	-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4684/2/1	-	-	-	-	-	21.3	25.7	28.5	-	3.8	-	-	-	-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4686/1/1	-	-	-	-	-	17.0	-	10.5	50.0	2.3	-	15.6	15.6	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4686/2/1	-	-	-	-	-	17.0	-	10.5	50.0	2.3	-	20.9	20.9	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4687/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	13	20	13	-	-	-	13	-	-	-	-	-	-	117
4687/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	13	20	13	-	-	-	13	-	-	-	-	-	-	117
4687/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/1/1	-	-	-	-	10.9	-	-	-	-	-	265.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/2/1	-	-	-	-	10.9	-	-	-	-	-	265.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/4/1	-	-	-	-	7.5	-	-	-	-	-	182.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/5/1	-	-	-	-	7.5	-	-	-	-	-	182.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/6/1	-	-	-	-	7.5	-	-	-	-	-	182.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/7/1	-	-	-	-	7.5	-	-	-	-	-	182.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/8/1	-	-	-	-	15.0	-	-	-	-	-	365.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/9/1	-	-	-	-	15.0	-	-	-	-	-	365.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/10/1	-	-	-	-	10.9	-	-	-	-	-	265.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/11/1	-	-	-	-	10.9	-	-	-	-	-	265.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
4689/1/1	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	-	-	-	-	-	-	-	-	-	52	-	-	-	-
4009/2/1	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4009/3/1	-		1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4689/5/1	_	-	1.3	-	_	_	_	_	_	_	-	_	_	-	-	_	-	-	_	-	_	_	-	_	-	-	_	_	_	_	-	_	_	_		-
4690/1/1	-	-	-	-	-	15.9	77.0	16.2	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5313	1460
4690/2/1	-	-	-	-	-	15.9	77.0	16.2	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5210	326
4700/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	-	-	-	3
4700/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	-	-	-	3
4700/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	-	-	-	3
4700/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	-	-	-	3
4700/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	-	-	-	3
4700/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	-	-	-	3
4700/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	-	-	-	3

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Root vegetables	Potato	Domestic fruit	Milk	Cattle meat	Pig meat	Sheep meat	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Wild fungi	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over
4700/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3
4700/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3
4711/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	886	-	-
4720/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	20	-	-
4721/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	-	21	21	42
4729/1/1	-	-	-	-	-	-	-	-	-	-	365.0	-	-	-	-	11.9	0.3	-	-	-	-	-	-	-	-	-	-	-	-
4729/2/1	-	-	-	-	-	-	-	-	-	-	265.5	-	-	-	-	11.9	0.3	-	-	-	-	-	-	-	-	-	-	-	-
4729/3/1	-	-	-	-	-	-	-	-	-	-	265.5	-	-	-	-	11.9	0.5	-	-	-	-	-	-	26	-	-	-	-	-
4729/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4744/1/1ª	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4744/2/1ª	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes

The emboldened observations are the high-rate individuals

U = Unknown

^a Occupancy data for ID's 4744/1/1 and 4744/2/1 are estimated (Annex 4).

stones	Intertidal occupancy over boat on mud	Handling fishing gear	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
	-	-	-	-	-	-	3
	-	-	-	-	-	-	3
	-	-	-	-	-	-	-
	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
	-	-	-	-	-	-	26
	-	-	-	-	-	-	26
	-	-	-	-	17	-	68
	-	-	-	-	-	-	183
	-	-	-	-	-	2839	501
	-	-	-	-	-	2839	501

Person ID number	Crustaceans	Wildfowl	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Domestic fruit	Milk	Cattle meat	Poultry	Wild/free foods	Rabbits/hares	Honey	Venison	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4577/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/11/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/12/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/13/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/13/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/14/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/15/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/15/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/16/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/17/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4577/17/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	-	112	280	-	-
4579/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-
4579/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-
4579/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-

Annex 2. Children's consumption rates (kg y⁻¹ and I y⁻¹) and occupancy rates (h y⁻¹) in the Hinkley Point area

Person ID number	Crustaceans	Wildfowl	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Domestic fruit	Milk	Cattle meat	Poultry	Wild/free foods	Rabbits/hares	Honey	Venison	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4579/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-
4595/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
4595/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
4595/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
4595/9/1	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-
4597/7/1	1.5	-	-	0.6	1.1	-	-	-	-	-	-	-	-	24	-	-	-	-	-	5	1	-	-	-	-
4598/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32	-	-	-	-	-
4598/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32	-	-	-	-	-
4598/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32	-	-	-	-	-
4598/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32	-	-	-	-	-
4598/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32	-	-	-	-	-
4598/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32	-	-	-	-	-
4598/8/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32	-	-	-	-	-
4598/9/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-	-	32	-	-	-	-	-
4602/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	6	-	-	-	-	-
4602/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	6	-	-	-	-	-
4602/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	6	-	-	-	-	-
4606/3/1	-	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Person ID number	Crustaceans	Wildfowl	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Domestic fruit	Milk	Cattle meat	Poultry	Wild/free foods	Rabbits/hares	Honey	Venison	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4611/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-
4611/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-
4611/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-
4611/6/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-
4611/6/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-
4611/6/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-
4611/6/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-
4611/6/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	-	-
4613/4/1	-	-	-	-	-	-	-	-	1.8	-	0.3	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-
4629/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-
4629/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-
4635/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6100	313
4635/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6100	313
4638/3/1	-	-	-	-	-	-	-	37.5	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-
4638/4/1	-	-	-	-	-	-	-	37.5	-	-	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-
4641/3/1	-	-	-	-	-	31.0	-	-	-	7.5	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
4641/4/1	-	-	-	-	-	31.0	-	-	-	7.5	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
4646/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	5	10	-	-	5	-	-	-	-	-

Person ID number	Crustaceans	Wildfowl	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Domestic fruit	Milk	Cattle meat	Poultry	Wild/free foods	Rabbits/hares	Honey	Venison	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Handling sediment	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4646/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	5	10	-	-	5	-	-	-	-	-
4679/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	2	-	-	-	-	-	-
4679/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	2	-	-	-	-	-	-
4687/5/1	-	-	-	-	-	-	-	-	-	-	-	6.8	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/3/1	-	-	8.2	-	-	-	199.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/12/1	-	-	8.2	-	-	-	199.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4689/6/1	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4689/7/1	-	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4729/4/1	-	-	-	-	-	-	199.1	-	-	0.2	-	-	-	-	26	-	-	-	-	-	-	-	17	-	42

Notes

The emboldened observations are the high-rate individuals

U = Unknown

Person ID number	Fish	Crustaceans	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Honey	Intertidal occupancy over mud and sand	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Occupancy in water	Occupancy on water
4595/5/1	-	-	-	-	-	-	9	-	-	-	-
4595/6/1	-	-	-	-	-	-	9	-	-	-	-
4595/7/1	-	-	-	-	-	-	9	-	-	-	-
4597/8/1	-	1.0	-	0.4	0.8	-	24	-	-	-	-
4597/9/1	-	1.0	-	0.4	0.8	-	24	-	-	-	-
4597/10/1	-	1.0	-	0.4	0.8	-	-	-	-	-	-
4603/3/1	-	-	-	-	-	-	-	12	-	-	-
4603/4/1	-	-	-	-	-	-	-	12	-	-	-
4606/4/1	-	-	4.0	-	-	-	-	-	-	-	-
4611/2/1	-	-	-	-	-	-	-	-	-	-	30
4611/4/1	-	-	-	-	-	-	-	-	-	-	30
4652/3/1	3.2	-	-	-	-	-	-	-	-	20	-
4679/5/1	-	-	-	-	-	-	-	60	2	-	-
4687/4/1	-	-	-	-	-	0.3	-	-	-	-	-

Annex 3. Infants' consumption rates (kg y^{-1}) and occupancy rates (h y^{-1}) in the Hinkley Point area

<u>Notes</u>

The emboldened observations are the high-rate individuals

U = Unknown

Annex 4. Qualitative and estimated data for use in dose assessments

Details of activity	Exposure pathways involved	Estimated rate
Hinkley Point C contractors residing in temporary accommodation	Occupancy within the direct radiation survey area	Distance from nuclear licensed site boundary: 0.51 km Indoor occupancy: 2839 h y ⁻¹ Outdoor occupancy: 501 h y ⁻¹

<u>Notes</u>

These estimated data have been included in the data analysis for this report as the activity has been identified but rates not quantified at the time of the survey.

Annex 5. Ratios for determining consumption and occupancy rates for children and infants

Crown	Ra	tio ^a
Group	Child ^e /adult	Infant ^e /adult
Sea fish ^b	0.200	0.050
Crustaceans ^b	0.250	0.050
Molluscs ^b	0.250	0.050
Green vegetables	0.444	0.222
Other vegetables	0.500	0.200
Root vegetables	0.500	0.375
Potato	0.708	0.292
Domestic fruit	0.667	0.467
Milk	1.000	1.333
Cattle meat	0.667	0.222
Pig meat	0.625	0.138
Sheep meat	0.400	0.120
Poultry	0.500	0.183
Eggs	0.800	0.600
Wild/free foods ^c	0.490	0.110
Game ^d	0.500	0.140
Honey	0.789	0.789
Wild fungi	0.450	0.150
Freshwater fish ^b	0.250	0.050
External exposure over aquatic substrates ^b	0.500	0.030

<u>Notes</u>

^aExcepting notes b and c, consumption ratios were derived from Byrom and others (1995) which presented data for infants aged 6 to 12 months and children aged 10 to 11 years. ^bRatios were derived from Smith and Jones (2003) which presented data for infants and children of unspecified ages.

^cRatios were derived from FSA data for wild fruit and nuts for infants and children of 10 year old.

^dGame includes rabbits/hares and venison.

^eNote that the age ranges within the age groups in this table do not correspond exactly with the age ranges within the age groups used throughout the rest of this report.

Annex 6. Consumption rates (kg y⁻¹ and I y⁻¹) and occupancy rates (h y⁻¹) for women of childbearing age^a in the Hinkley Point area

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4540/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117	-	-	-	-	-	-
4577/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/4/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/4/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/5/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4577/6/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38	-	112	280	-	-
4579/7/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-
4579/9/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-
4581/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	-	-
4597/3/1	-	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4597/11/1	-	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-
4597/11/2	-	2.0	-	-	-	0.8	1.5	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-
4600/1/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-	-	-	-	-
4600/1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-	-	-	-	-
4600/1/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-	-	-	-	-
4600/1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-	-	-	-	-
4600/1/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-	-	-	-	-
4600/1/6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-	-	-	-	-
4600/1/7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	-	-	-	-	-	-	-
4606/2/1	-	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4606/8/1	-	-	-	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4613/3/1	-	-	-	-	-	-	-	-	-	1.8	-	-	0.3	-	10.0	-	-	-	-	-	-	-	-	-	-	-	-
4622/2/1	-	-	-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4629/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-
4636/3/1	-	-	-	-	-	-	-	-	311.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4636/5/1	-	-	-	-	-	-	-	-	311.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4641/4/1	-	-	-	-	-	-	-	31.0	-	-	-	7.5	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
4642/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	-	-	-	-	-	-	-	-	-	-	-	-	-
4642/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	-	-	26	-	-	-	-	-	-	-	-	-	26

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4648/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4648/2/5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	-	-
4652/4/1	6.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4661/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
4663/1/1	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-	-
4663/1/2	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-	-
4663/1/3	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-	-	-	-	-
4679/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	2	-	-	-	-	-
4687/2/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	13	20	13	-	-	-	13	-	-	-	117
4687/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/2/1	-	-	-	-	10.9	-	-	-	265.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4688/7/1	-	-	-	-	7.5	-	-	-	182.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4689/3/1	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4700/3/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	3
4700/3/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	3
4700/3/3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	-	3

Person ID number	Fish	Crustaceans	Wildfowl	Marine plants/algae	Salt marsh grazed cattle meat	Green vegetables	Other vegetables	Domestic fruit	Milk	Poultry	Eggs	Wild/free foods	Rabbits/hares	Honey	Venison	Intertidal occupancy over mud	Intertidal occupancy over mud and sand	Intertidal occupancy over mud, sand and stones	Intertidal occupancy over rock	Intertidal occupancy over salt marsh	Intertidal occupancy over sand	Intertidal occupancy over sand and stones	Intertidal occupancy over stones	Occupancy in water	Occupancy on water	Indoor occupancy within 1.1 km of the nuclear licensed site boundary	Outdoor occupancy within 1.1 km of the nuclear licensed site boundary
4700/3/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	9	-	5	-	3	-	-	0	3
4729/5/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	183
4744/2/1 ^b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2839	501

Notes

U = Unknown

^a Based on National Statistics guidelines, women were deemed to be of childbearing age if they were between 15 and 44 years old.

Women of unknown age were included as they were potentially women of childbearing age.

^b Occupancy data for ID 4744/2/1 are estimated (Annex 4).

Pathway Name	Number of Individuals	Notes	Crustacea	- Direct	Eggs	Fish - Sea	Fruit - Domestic	Fruit and nuts - Wild	ح 5 Gamma external - Houseboat	ی Gamma external – Salt Marsh	ح له Gamma external - Sediments	Figure Honey	ຣັດ Marine plants/algae	Meat - Cow	ຊີ o Meat - Game	Meat - Pig	Meat - Poultry	Meat - Salt Marsh Grazed	Meat - Sheep	S Meat - Wildfowl	Milk	Mushrooms	Occupancy In water	→ Occupancy On water	→ Plume (IN; 0-0.25 km)	ح ک Plume (MID; 0.25-0.5 km)	ح ² Plume (OUT; 0.5-1.1 km)	S Vegetables - Green	Vegetables - Other Domestic	Vegetables - Potatoes	S Vegetables - Root
Crustacea Consumers	8		2.0	-	1.9	1.5	-	- Ng	-	-	46	- Ng	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	1.5	-	ng
Occupants for Direct Radiation	56			1.0	1.4	1.3	3.8	0.2	-	1	28	0.2	-	-	-	-	-	-	0.5	0.01	15.4	0.01	1	1	14	20	1900	1.7	3.5	0.2	1.2
Egg Consumers	14		-	0.4	17.7	-	8.3	0.6	-	-	37	0.2	-	-	-	-	-	-	-	-	64.0	0.03	-	1	-	9	870	5.3	6.2	14.6	3.0
Sea Fish Consumers	3		-	0.3	-	32.5	-	-	-	-	370	-	-	-	-	-	-	-	-	-	-	-	-	-	170	-	-	-	-	-	-
Domestic Fruit Consumers	8		-	0.8	5.6	-	30.6	2.5	-	2	100	0.7	-	-	-	-	-	-	-	-	-	0.1	-	-	-	5	4080	0.5	2.0	1.6	0.7
Wild Fruit and Nut Consumers	4		-	0.3	8.2	-	19.3	5.0	-	5	5	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	5.9	12.8	25.0	0.5
Occupants over Houseboat	2		-	-	-	-	-	-	730	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220	-	-	-	-	-	-	-
Occupants over Salt marsh	11		-	-	-	-	-	-	-	380	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	-	-
Occupants over Sediment	25		-	-	-	1.5	-	-	-	160	490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Honey Consumers	5		-	0.4	-	-	12.4	3.0	-	4	9	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-		-	-
Consumers of Marine Plants and Algae	7		0.6	-	1.1	0.9	-	-	-	71	42	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.4	-	-
Cattle Meat Consumers	7		-	-	-	-	2.8	1.0	-	-	-	0.3	-	49.4	0.2	3.0	1.7	-	1.1	-	-	-	-	-	-	-	-	4.7	6.9	78.6	5.2
Game Meat Consumers	4		-	-	-	-	-	-	-	-	-	-	-	-	10.3	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pig Meat Consumers	2		-	-	-	-	2.3	-	-	-	-	-	-	18.2	-	18.2	-	-	8.0	-	-	-	-	-	-	-	-	17.0	-	50.0	10.5
Salt Marsh Grazed Cattle Meat Consumers	8		-	-	-	-	2.1	0.9	-	-	-	-	-	31.3	5.3	-	2.4	-	-	-	-	-	-	-	-	-	-	2.0	6.0	62.5	3.2
Poultry Meat Consumers	16		-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	10.0	-	-	157.6	-	-	-	-	-	-	-		-	-
Sheep Meat Consumers	8		-	0.3	0.1	-	3.1	0.1	-	-	6	-	-	13.9	-	4.6	-	-	9.5	-	-	0.04	-	-	-	-	3	11.0	0.6	12.5	6.1
Wildfowl Consumers	2		-	-	-	5.4	-	-	-	12	-	-	-	-	-	-	-	-	-	7.1	-	-	-	-	-	-	-	-	- /	-	-
Milk Consumers	18		-	0.2	2.0	-	-	0.1	-	-	1	-	-	-	-	-	-	5.8	-	-	282.0	-	-	1	-	7	-	-	-	-	-
Mushroom Consumers	4		-	1.0	6.3	-	18.5	0.3	-	-	97	-	-	-	-	-	-	-	7.5	-	-	0.2	-	-	-	-	3060	14.6	5.2	3.3	6.9
Occupancy In Water	19		-	-	-	-	-	-	-	-	36	-	-	-	-	-	-	-	-	-	-	-	110	270	-	-	-	-	-	-	-
Occupancy On Water	43		-	-	-	-	-	-	43	-	16	-	-	-	-	-	-	-	-	-	-	-	47	250	-	-	-	-		-	-
Local Occupants (0-0.25 km)	2		-	1.0	-	23.1	-	-	-	-	160	-	-	-	-	-	-	-	-	-	-	-	-	-	360	-	-	-	-	-	-
Local Occupants (>0.25-0.5 km)	1		-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600	-	-		-	-
Local Occupants (>0.5-1.1 km)	13		-	1.0	2.7	-	10.4	0.2	-	-	49	-	-	-	-	-	-	-	-	-	-	0.03	-	-	-	-	6400	2.4	12.5	0.9	2.2
Green Vegetable Consumers	13		-	0.3	12.0	-	4.4	0.5	-	-	4	-	-	2.8	-	2.8	-	-	3.5	-	-	0.02	-	-	-	-	950	16.8	20.6	20.9	12.8
Other Domestic Vegetables Consumers	4		-	0.5	5.2	-	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3080	18.6	51.4	-	22.4
Potato Consumers	8		-	-	4.1	-	4.6	1.5	-	-	-	-	-	35.8	0.2	4.6	1.5	-	2.0	-	-	-	-	-	-	-	-	9.2	12.4	87.5	6.1
Root Vegetable Consumers	10		-	0.4	2.1	-	3.9	0.5	-	-	5.0	-	-	3.6	-	3.6	-	-	4.6	-	-	0.03	-	-	-	-	1230	17.6	21.7	17.5	17.3

Annex 7. Summary of profiles for adults in the Hinkley Point area for use in the assessment of total dose

Notes for Annex 7

- 1) Direct radiation is expressed as proportion of group who are present within 1.1 km of site perimeter.
- 2) Gamma external Houseboat represents occupancy over boat on mud.
- 3) Gamma external Salt Marsh represents occupancy over salt marsh.
- 4) Gamma external Sediments represents occupancy over intertidal substrates including mud; mud and sand; mud, sand and stones; sand; sand and stones; stones.
- 5) Marine plants/algae represents consumption of samphire and Porphyra.
- 6) Meat Game represents consumption of rabbits/hares and venison.
- 7) Plume times are the sum of individuals' indoor and outdoor times.
- 8) Plume time includes estimated data for 2 people residing at temporary accommodation (Annex 4).

The means of the high-rate groups are determined by the 'cut-off' method and are emboldened on the diagonal.

Except for the direct radiation pathway, the figures across the rows are the means of the consumption and occupancy rates for the other pathways for the individuals within that profile.
Annex 8. Summary of profiles for the child age group (6 years old to 15 years old) in the Hinkley Point area for use in the assessment of total dose

Profile Name	Number of Individuals	Notes Units	ର୍ଜ୍ଦି Crustacea	- Direct	죠 Fruit - Domestic	죠 Fruit and nuts - Wild	ー Camma external – Salt Marsh	ਤ ਿ Gamma external - Sediments	Aney Honey	ති Meat - Cow	dar − Game	죠 Meat - Poultry	A Meat – Salt Marsh Grazed Cow	ନ୍ଦ୍ର Meat - Wildfowl	Milk	ר Occupancy In water	ר Occupancy On water	J O Plume (OUT; 0.5-1.1 km)	ភ្នំ Vegetables - Green	죠 Vegetables - Other Domestic
Crustacea Consumers	1		1.5	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	0.6	1.1
Occupants for Direct Radiation	3		-	1.0	-	0.1	-	9	-	-	-	-	-	-	66.4	-	6	4290	-	-
Domestic Fruit Consumers	2		-	-	31.0	7.5	-	-	2.7	-	-	-	-	-	-	-	-	-	-	-
Wild Fruit and Nuts Consumers	2		-	-	31.0	7.5	-	-	2.7	-	-	-	-	-	-	-	-	-	-	-
Occupants over Salt Marsh	2		-	-	-	-	10	15	-	-	-	-	-	-	-	-	-	-	-	-
Occupants over Sediment	30		0.1	0.03	-	0.01	-	36	-	-	-	-	-	-	6.6	45	110	1	0.02	0.04
Honey Consumers	3		-	-	20.7	5.0	-	-	4.1	-	-	-	-	-	-	-	-	-	-	-
Cattle Meat Consumers	2		-	-	-	-	-	-	1.1	37.5	-	-	-	-	-	-	-	-	-	-
Game Meat Consumers	1		-	-	-	-	-	-	-	-	10.3	1.8	-	-	-	-	-	-	-	-
Poultry Meat Consumers	1		-	-	-	-	-	-	-	-	10.3	1.8	-	-	-	-	-	-	-	-
Salt Marsh Grazed Cattle Meat Consumers	3		-	-	-	-	-	-	-	-	-	-	7.5	-	132.7	-	-	-	-	-
Wildfowl Consumers	2		-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-
Milk Consumers	3		-	0.3	-	0.1	-	9	-	-	-	-	5.5	-	199.1	-	6	14	-	-
Occupancy In Water	12		-	-	-	-	-	38	-	-	-	-	-	-	-	110	280	-	-	-
Occupancy On Water	12		-	-	-	-	-	38	-	-	-	-	-	-	-	110	280	-	-	-
Local Occupants (>0.5-1.1 km)	2		-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	6410	-	-
Green Vegetable Consumers	1		1.5	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	0.6	1.1
Other Domestic Vegetable Consumers	1		1.5	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	0.6	1.1

Notes for Annex 8

- 1) Direct radiation is expressed as proportion of group who are present within 1.1 km of site perimeter.
- 2) Gamma external Salt Marsh represents occupancy over salt marsh.
- 3) Gamma external Sediments represents occupancy over intertidal substrates including mud and sand; mud, sand and stones; sand; sand and stones; stones.
- 4) Meat Game represents consumption of rabbits/hares and venison.
- 5) Plume times are the sum of individuals' indoor and outdoor times.

The means of the high-rate groups are determined by the 'cut-off' method and are emboldened on the diagonal.

Except for the direct radiation pathway, the figures across the rows are the means of the consumption and occupancy rates for the other pathways for the individuals within that profile.

Annex 9. Summary of profiles for the infant age group (0 to 5 years old) in the Hinkley Point area for use in the assessment of total dose

Profile Name			Crustacea	Fish - Sea	Gamma external - Sediments	Honey	Meat Salt Marsh Grazed Cow	Occupancy In water	Occupancy On water	Vegetables - Green	Vegetables - Other Domestic	
		Notes			1							
		Units	kg	kg	h	kg	kg	h	h	kg	kg	
Crustacea Consumers	3		1.0	-	16	-	-	-	-	0.4	0.8	
Sea Fish Consumers	1		-	3.2	-	-	-	20	-	-	-	
Occupancy over Sediment	3		0.7	-	37	-	-	-	-	0.3	0.5	
Honey Consumers	1		-	-	-	0.3	-	-	-	-	-	
Salt Marsh Grazed Cattle Meat Consumers	1		-	-	-	-	4.0	-	-	-	-	
Occupancy In Water	1		-	3.2	-	-	-	20	-	-	-	
Occupancy On Water	2		-	-	-	-	-	-	30	-	-	
Green Vegetable Consumers	3		1.0	-	16	-	-	-	-	0.4	0.8	
Other Domestic Vegetable Consumers	3		1.0	-	16	-	-	-	-	0.4	0.8	

<u>Notes</u>

1) Gamma external - Sediments represents occupancy over intertidal substrates including mud and sand; sand; sand and stones. The means of the high-rate groups are determined by the 'cut-off' method and are emboldened on the diagonal.

Except for the direct radiation pathway, the figures across the rows are the means of the consumption and occupancy rates for the other pathways for the individuals within that profile.

Annex 10. Summary of profiles for women of childbearing age^a in the Hinkley Point area, for use in assessments of total dose to prenatal children

Pathway Name		Notes	Crustacea	L Direct	Eggs	Fish - Sea	 Fruit - Domestic	Fruit and nuts - Wild	 Gamma external − Salt Marsh 	ر Gamma external - د Sediments	Honey	 Marine plants/algae 	c Meat - Game		 Meat – Salt Marsh Grazed Cow	Meat - Wildfowl	Milk	Occupancy In water	Occupancy On water	 Plume (IN; 0-0.25 km) 	 Plume (MID; 0.25-0.5 km) 		Vegetables - Green	Vegetables - Other Domestic
		Units	kg	-	kg	kg	kg	kg	h	h	kg	kg	kg	kg	kg	kg	I	h	h	h	h	h	kg	kg
Crustacea Consumers	3		2.0	-	-	-	-	-	-	16	-	-	-	-		-	-	-	-	-	-	-	0.8	1.5
Occupants for Direct Radiation	8		-	1.0	-	-	-	-	-	13	0.7	-	-	-		-	-	-	-	1	23	380	-	-
Egg Consumers	1		-	-	4.1	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
Sea Fish Consumers	1		-	-	-	6.4	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
Domestic Fruit Consumers	1		-	-	-	-	31.0	7.5	-	-	2.7	-	-	-		-	-	-	-	-	-	-	-	-
Wild Fruit and Nut Consumers	1		-	-	-	-	31.0	7.5	-	-	2.7	-	-	-		-	-	-	-	-	-	-	-	-
Occupants over Salt Marsh	7		-	-	-	-	-	-	400	400	-	-	-	-		-	-	-	-	-	-	-	-	-
Occupants over Sediment	7		-	-	-	-	-	-	400	400	-	-	-	-		-	-	-	-	-	-	-	-	-
Honey Consumers	3		-	0.3	-	-	10.3	2.5	-	9	4.4	-	-	-		-	-	-	-	-	9	-	-	-
Consumers of Marine Plants and Algae	3		-	-	-	-	-	-	100	-	-	0.6	-	-		-	-	-	-	-	-	-	-	-
Game Meat Consumers	1		-	-	-	-	-	-	-	-	-	-	10.3	1.8		-	-	-	-	-	-	-	-	-
Poultry Meat Consumers	1		-	-	-	-	-	-	-	-	-	-	10.3	1.8		-	-	-	-	-	-	-	-	-
Salt Marsh Grazed Cattle Meat Consumers	4														9.1		112.0							
Wildfowl Consumers	1		-	-	-	-	-	-	-	-	-	-	-	-		1.3	-	-	-	-	-	-	-	-
Milk Consumers	4		-	-	-	-	-	-	-	-	-	-	-	-	4.6	-	267.5	-	-	-	-	-	-	-
Occupancy In Water	10		-	-	-	-	-	-	-	38	-	-	-	-		-	-	110	280	-	-	-	-	-
Occupancy On Water	16		-	-	-	-	-	-	-	24	-	-	-	-		-	-	70	230	-	-	-	-	-
Local Occupants (0-0.25 km)	4		-	1.0	-	-	-	-	-	11	-	-	-	-		-	-	-	-	3	-	-	-	-
Local Occupants (>0.25-0.5 km)	1		-	1.0	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	180	-	-	-
Local Occupants (>0.5-1.1 km)	1		-	1.0	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	3340	-	-
Green Vegetable Consumers	3		2.0	-	-	-	-	-	-	16	-	-	-	-		-	-	-	-	-	-	-	0.8	1.5
Other Domestic Vegetable Consumers	3		2.0	-	-	-	-	-	-	16	-	-	-	-		-	-	-	-	-	-	-	0.8	1.5

Notes for Annex 10

^a Based on National Statistics guidelines, women were deemed to be of childbearing age if they were between 15 and 44 years old. Women of unknown age were included as they were potentially women of childbearing age.

- 1) Direct radiation is expressed as proportion of group who are present within 1.1 km of site perimeter.
- 2) Gamma external Salt Marsh represents occupancy over salt marsh.
- 3) Gamma external Sediments represents occupancy over intertidal substrates including mud; mud and sand; mud, sand and stones; sand; sand and stones; stones.
- 4) Marine plants/algae represents consumption of samphire.
- 5) Meat Game represents consumption of rabbits/hares and venison.
- 6) Plume times are the sum of individuals' indoor and outdoor times.
- 7) Plume time includes estimated data for 2 people residing at temporary accommodation (Annex 4).

The means of the high-rate groups are determined by the 'cut-off' method and are emboldened on the diagonal.

Except for the direct radiation pathway, the figures across the rows are the means of the consumption and occupancy rates for the other pathways for the individuals within that profile.

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