APPENDIX 1A: QUALIFICATIONS AND EXPERIENCE OF THE PROJECT TEAM INTRODUCTION

Company	Person	Role on the Seagreen Project EIA/HRA	Job title	Years' experience	Key relevant qualifications	Summary of experience
NIRAS	Tamsin Watt	EIA Coordinator	Principal Consultant	15	BSc Physical Geography and Environmental Science	Tamsin is an environmental specialist with fifteen years' experience in managing projects for coastal and marine developments, with specific experience in Environmental Impact Assessment (EIA) and offshore renewables. She has worked on and managed a wide range of projects, including Nationally Significant Infrastructure Projects and encompassing impact assessments (NSIPs), site characterisation and site selection studies, and coastal and marine monitoring studies.
NIRAS	David Cook	Deputy Project Manager and HRA Coordinator	Senior Consultant	9	MSc Marine Science, Policy and Law BSc Marine Biology	David provides consenting, Environmental Impact Assessment (EIA) and post-consent services to coastal and offshore projects including offshore wind, marine cables, port and nuclear developments. David's offshore wind experience includes EIA coordination, Environmental Liaison, and Project Manager for an export cable consenting project.
NIRAS	Tim Norman	Project Director and Ornithology Expert Advisor	NIRAS Managing Director	20	PhD Environmental Management MSc Conservation BSc Biology	Tim has advised on the consenting of offshore wind farms in the UK for more than 13 years and has particular expertise in Habitats Regulations Assessments. He co-ordinated, on behalf of The Crown Estate (as Competent Authority), the plan-level Round 3 Appropriate Assessment and prepared The Crown Estate's Marine Minerals Plan HRA. He in one of the most experienced consultants in the preparation of HRA for offshore wind farm projects in the UK having led or provided expert advice on the assessments for 20 projects (including at all stages of the UK offshore wind energy programme: Round 1, 2, Extensions, Demonstrators, Scottish Territorial Waters and Round 3) with a total potential installed capacity approaching 20GW.

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NIRAS	Ian Gloyne- Phillips	Marine Mammals Chapter Lead, Fish & Shellfish Ecology Chapter Lead	NIRAS Director of Marine Ecology	18	PhD Geography MSc Zoology BSc Biology	Ian is NIRAS Director of Marine Ecology. His primary areas of expertise are environmental/ecological survey, monitoring, impact assessment and mitigation. He has considerable experience in relation to impact assessments for marine mammals; for example, he was lead technical author of the marine mammal ES chapter for Greater Gabbard Offshore Wind Farm and has contributed similarly at other UK wind farms (e.g. Gwynt y Môr). Since 2008 Ian has worked with developers and regulators to devise and implement marine mammal mitigation for offshore piling and has led such work at London Array, Lincs, Gwynt y Môr, Burbo, Walney and many other projects. He has similar experience in relation to seismic survey. Ian has Expert Witness experience, for example at Walney Extension OWF Planning Inspectorate hearings and in relation to proposed hydrocarbon exploration in the arctic.
NIRAS	Seran Davies	Fish & Shellfish Ecology Support	Senior Consultant	19	MSc Tropical Coastal Management BSc Oceanography and Marine Biology	Seran is a highly competent marine biologist with considerable expertise in relation to fish ecology, fisheries and other ecological survey and assessment techniques. For the past nine years Seran has been heavily involved in EIA and subsequent monitoring programmes for offshore wind farm developments around the UK in relation to marine and coastal ecology. Seran has been project manager for the fish ecology survey and assessment programme at Rhiannon Offshore Wind Farm on behalf of Centrica and has managed a similar programme in relation to benthic ecology for Walney Extension Offshore Wind Farm on behalf of DONG Energy. She completed project management for the Gwynt y Môr Offshore Wind Farm marine ecology EIA (a large Round 2 development off the North Wales coast).
NIRAS	Rachel Barker	HRA Expert Advisor	Senior Consultant	10	BSc Marine Biology	Rachel Barker has more than 10 years of experience in the environment sector, focusing on offshore energy development and strategic planning and consents. Rachel has extensive and diverse experience in environmental consenting and licensing, HRA, EIA, marine policy and, more recently, large scale (>£1m) programme tendering and management in international development consulting.

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NIRAS	Ian Ellis	Ornithology Lead	Principal Ecologist	14	MRes Ecology and Environmental Management BSc Zoology	Ian has over fourteen years' experience in ecological and environmental consultancy and has worked on an extensive range of marine, terrestrial and coastal project work. Ian has led multiple ecological assessments including many on offshore wind ornithology EIA and HRA. With specialism in ornithological assessment, Ian has a background and knowledge in birds spanning over 25 years. Ian has delivered successful ornithology focussed assessment spanning the process from technical reports, Preliminary Environmental Assessment and Environmental Statement chapters for a wide variety of industry sectors.
NIRAS	Tristan Folland	Ornithology Technical Support	Senior Consultant	11	MSc Applied Wildlife Conservation BSc Ecology and Environmental Biology	Tristan has ten years of postgraduate consultancy experience in relation to ecology and ornithology and large, nationally significant infrastructure projects. Tristan has extensive experience of delivering HRAs for numerous public sector clients and across many sectors including transport, regeneration, water, and energy in the UK, Ireland and in Europe.
NIRAS	Robin Ward	Ornithology Technical Support	Senior Ornithologist	30	MSc (by thesis) BSc Applied Biology	Robin is responsible for the delivery of the technical components of the topic, including provision of input to the HRA where appropriate. Robin is a Senior Ornithologist with over 27 years' of waterbird research, monitoring and consultancy experience in academia, NGOs and the private sector. He has strong technical expertise in survey and analysis of waterbird distribution and numbers at a range of spatial scales.
NIRAS	Matthew Hazleton	Consultant Ornithologist, Technical Support	Senior Consultant	6	MSc Marine Environmental Protection BSc Marine Biology and Zoology	Matthew has a wealth of experience in managing and developing GIS and data products for marine and coastal developments. At NIRAS, Matthew has provided such inputs to the EIA, HRA and the examination process for numerous offshore wind farm developments, including Burbo Bank Extension, Walney Extension and Hornsea Project One and Two. To compliment this, he has excellent knowledge of ornithological impact assessment and has provided modelling and data/statistical analysis inputs to such assessments, covering collision risk modelling, displacement analysis and non-breeding screening assessment.

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NIRAS	Dominic Waller	Project Administrator	Environmental Consultant	2	MRes Applied Marine Science BSc Marine Biology	Dominic is an Environmental Consultant with an academic background in marine mammal ecology and conservation. He has supported the management of multi-disciplinary projects and the production of technical reports including research studies, environmental assessments and monitoring reports for a number of developments (i.e. offshore wind farms and subsea cables among others). He has been deployed as a Marine Mammal Observer during piling operations for Walney Extension and has conducted beam trawl surveys for benthic monitoring of Greater Gabbard OWF.
Anatec	Samantha Westwood	Shipping and Navigation Project Lead	Principal Risk Analyst	21	BSc Shipping and Port Operations	Sam has over 20 years' experience within the maritime industry dealing with port & vessel operations and offshore installations. Sam has since developed maritime experience through a variety of roles within the industry including ship operations in Rotterdam and Vessel Traffic Services in Southampton whilst continuing to study at a post graduate level. Since joining the marine consultancy industry, Sam has been actively involved in numerous offshore renewable projects as well other offshore developments from both marine operations and QHSE aspects. Sam has extensive experience in both pre and post consent developments including providing marine guidance to developers. Involvement to date includes acting as a marine navigation advisor for offshore developments including navigation risk reviews, hazard workshops, and site design and stakeholder management. Sam has managed and supported NRAs for a number of significant infrastructure projects including East Anglia 3, Hornsea Project One, Two and Three, Norfolk Vanguard, Beatrice, NNG, Rampion and Dogger Bank OWF projects as well working on guidance alongside key regulators.

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Anatec	Alasdair MacDonald	Shipping and Navigation Project Manager	Principal Risk Analyst (Director)	25	MSc in Petroleum and Offshore Engineering BSc Applied Chemistry	Ali became a Director of Anatec in 2001. He has nearly 25 years' of experience working in risk assessment in the oil and gas and marine sectors. He was Project manager on the identification of Marine Environment High Risk Areas (MEHRAs) for the DfT as well as on the Risk Assessment of UK Search & Rescue Helicopters for the MoD and Maritime & Coastguard Agency. He has also project managed marine risk assessments for a large number of both onshore and offshore facilities including; LNG Terminals, Nuclear intakes/outfalls, Marinas, oil and gas pipelines, gas storage facilities, cable routes, Floating Production Facilities, drilling rigs, Satellite Platforms and Ports. Ali has also provided input to a number of projects around the world including projects in the US, Baltic, Middle East, Europe and Australasia.
The Landscape Partnership	William Wheeler	Director for SLVIA	Technical Director	30	MPhilLD in Landscape Design MA in Geography	William is an experienced specialist in the offshore wind energy sector. He has supported developers on over 20 offshore wind farms capable of delivering over 9,200MW of renewable energy. His expertise includes feasibility studies; Zone Appraisal and Planning studies (ZAPs); Seascape, Landscape and Visual Impact Assessments (SLVIAs); LVIAs for associated onshore infrastructure including substations; post consent amendments; conditions discharge; mitigation proposals and appearing as an expert witness at NSIP Hearings. William previously undertook the on and offshore assessments, including post-consent amendments, for both the Beatrice and the European Offshore Wind Deployment Centre (EOWDC) off Aberdeen.

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SMRU Consulting	Carol Sparling	Marine Mammal Technical Lead	Technical Director	22	PhD Marine Mammal Science BSc Zoology (Marine Biology)	Carol is Technical Director of SMRU Consulting Europe and leads a team of scientists and project managers working on multiple projects involving the quantification, assessment and interpretation of the effects of marine activities on marine mammals. Carol is a recognised international expert with over twenty years' experience in marine mammal science with ten years' experience in applied science consultancy working with both industry and government clients. Carol has a wide range of practical, analytical and management skills and has led numerous projects considering the impact of renewable energy developments on marine mammals as well as providing guidance and advice to government departments and statutory nature conservation advisors.
SMRU Consulting	Rachael Plunkett	Marine Mammal Technical Support	Associate Scientist	6	MRes Marine Mammal Science BSc (Hons) Marine Biology	Rachael has been working in the field of marine mammal science for six years with four years' experience in consultancy. Rachael has considerable experience in various stages of environmental impact assessments for the offshore industry including baseline characterisation reports, quantitative noise impact assessments, data processing and mapping in GIS, ES chapter writing and development of marine mammal monitoring protocols.
Brown and May	Stephen Appleby	Commercial Fisheries EIA Project Director	Managing Director	38	BSc and MSc in Marine and Fisheries Biology	Stephen has a BSc and MSc in Marine and Fisheries Biology. Stephen oversees all Brown & May Marine projects and has 35 years offshore industry experience undertaking commercial fisheries related studies for the oil, gas, cabling and offshore wind farm industries. Stephen has been project manager of commercial and natural fish components for multiple offshore wind farm developments. He project manages adult, juvenile and benthic surveys (pre and post construction) for offshore developments throughout the UK and Europe. Stephen is retained by several energy companies to provide inputs in relation to commercial fisheries interfaces including compensation strategies and managing fisheries liaison.

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Brown and May	Sara Xoubanova	Commercial Fisheries EIA Technical Lead/Project Manager	Senior Consultant	11	MSc Environmental Management BSc Marine Science	Sara Xoubanova is a marine environmental specialist with extensive experience in the UK and Europe. She has a strong background as an EIA consultant to the offshore industry, having produced work for over 20 offshore wind farm projects and various subsea electricity cables, pipelines, port developments and aquaculture installations. Her key area of technical expertise is focused on commercial fisheries and fish ecology, having produced and reviewed numerous commercial fisheries and fish ecology ES chapters and technical reports for offshore infrastructure projects.
Brown and May	Tom Darley	Commercial Fisheries EIA GIS Support	GIS Analyst/ Consultant	3	MSc in Applied Marine Science BSc Environmental Science	Tom has an Environmental Science degree and a MSc specialising in applied marine science. His key area of expertise revolves around data processing and GIS analysis for fisheries data sets. He has worked in a GIS technical role for numerous projects around the world including West Africa, Asia and Europe.
Pager Power	Mike Watson	Civil and Military Aviation	Chairman	20	BEng (Hons) Electronic Computer and Communication s Engineering, Qualified Private Pilot (PPL - Aeroplanes)	Mike established Pager Power Ltd in 1997 and resolved various Scottish radar wind farm objection from 2002, having developed custom software. He enabled permission for the operation of Fallago Rig wind farm , where he delivered expert radar evidence to the planning inspectorate (2007-08). Mike resolved objections to the first wind farm in Oman from civil and military authorities, through technical assessments, survey and meetings (2012-15).

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NIRAS	Casper Samsø Fibæk	GIS Technical Expert	GIS Consultant	5	MSc Eng. Surveying, Planning and Land Management, Geoinformatics BSc Eng. Surveying, Planning and Land Management	Casper has experience working in various fields of geoinformatics and software development. He has extensive experience with agile software development and applying the knowledge of remote sensing and surveying to applications. Casper is a keen academic with published papers on using the Danish agricultural data to map agrarian land fragmentation and using Landsat and Copernicus satellite data to estimate urban growth in the Global South by applying Machine learning tools.
NIRAS	Ingrid Pierce	Introductory Chapter Author.	NIRAS Associate	25	Msc Environmental Technology Bsc Environmental Science	Ingrid is an environmental consultant with over 25 years' experience of EIA and consenting major land and marine infrastructure projects. Recently she was responsible for consenting marine cable route connections from offshore wind farm to shore and was the EIA and Consents Manager for an offshore wind farm. She has extensive project management experience from project feasibility through to design, contract award and installation.
CEFAS	Adrian Farcas	Provision of underwater noise modelling study and Technical Report	Senior Noise and Bioacoustics Modeller	14	PhD Applied Mathematics BSc Mathematics	Adrian is an senior modeller in the Cefas Noise and Bioacoustics team based at Cefas Lowestoft laboratory. Since joining Cefas in 2013, he has been responsible in his current position for the development and application of mathematical and computer models for projects covering a wide range of topics, including underwater acoustics, coastal hydrodynamics, and biological systems. He has more than 10 years of research experience focused on the development and application of mathematical and numerical models in order to answer research and policy questions.
ECON Ecological Consultancy Ltd.	Martin Perrow	Principal Advisor for Ornithology Technical Report	ECON Director	16	PhD Fisheries ecology BSc Zoology	Martin has managed >400 monitoring, assessment, research and review projects for a variety of organisations including developers, Government bodies, and executive agencies, NGOs, utilities and other consultancies.

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ECON Ecological Consultancy Ltd.	Andrew Harwood	Ornithology Technical Report - Surveyor, collision risk modelling and reporting	Ecologist	15	PhD Fisheries Science BSc Zoology	Andrew is involved with many aspects of the work carried out by ECON from undertaking surveys, processing and analysing data, writing reports and papers, and contributing to EIA and HRA.
ECON Ecological Consultancy Ltd.	Richard Berridge	Ornithology Technical Report - Surveyor, data processing and reporting	Marine Ornithologist	11	BSc Marine Biology and Oceanography	Richard's work within ECON involves leading offshore seabird survey teams, vessel liaison, and managing survey logistics. When he is not in the field Richard works inputting the data, constructing and managing databases and ArcGIS files, and compiling reports.
Biggar Economics	Simon Cleary	Socio-economic Assessment	Economist	-	MA Economics and Mathematics	BiGGAR Economics Limited is a leading independent economic consultancy based just outside Edinburgh providing a range of services for central and local government, economic development agencies, other government agencies, universities, colleges, social economy organisations and private sector firms across Europe.