

101402898

Revision 01

ECOLOGY WORKING GROUP

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Meeting:	8 th October 2024, 10:00-16:00
Location:	Hybrid: Sizewell C MCA / MS Teams
Chair:	James Meyer (JM) - ESC
Attendees:	<p>SZC Voting member – Steve Mannings (SMan), SZC Observers - Nick Stayt (NS), Alan Lewis (AL), Jack Raven (JR), Natalie Clifton (NC), Alison Milward (AM)</p> <p>SCC Voting Member – Andrew Murray-Wood (AMW),</p> <p>ESC Voting Member – James Meyer (JM) ESC Observer – Naomi Hayes (NH), Richard Hunt (RH)</p> <p>Natural England Voting member - Patrick Robinson (PR) Natural England Observer – Charis Russel-Smith (CRS), David White (DW), Sean Mahoney (SMah)</p> <p>Environment Agency voting member–Chris Strachan (CS) Environment Agency Observer - Ayden Hassan (AH),</p> <p><u>Invited parties</u> RSPB – Adam Rowlands (AR) Suffolk Wildlife Trust – Ben McFarland (BM)</p>
Apologies:	

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Meeting Notes:

- Actions from last meeting (that haven't yet been covered in discussion):
 - **AR to contemplate how to best demonstrate the potential natural barrier effect of Marsh Harriers (owner: RSPB) & AL to consider the use of individual markings for future observations to determine foraging SPA birds within Sizewell Marshes (SZC):** Closed. No updates have been shared yet. AR notes that Marsh Harriers will defend territory around their nest, but this is typically limited to the immediate vicinity. The likelihood of them displacing birds seeking to forage is considered low, potentially negating the need to identify individual birds. AR noted that while there are wing-tagged birds at Minsmere, they do not currently mark birds originating from Minsmere as a result of distinctive features.
 - **Create a version control statement for the TEMMP to track changes between versions, suggesting a revision table behind the cover page (owner: SZC):** NS mentioned they are moving towards a position where they can submit this for discharge under Requirement 4 following EWG approval of survey methods.
 - **SMan to consider alternative approaches to data sharing to make it more accessible to the group, balancing data security and transparency (owner: SZC):** Ongoing.
 - **EWG members to consider the usefulness of survey updates and briefings in meetings (owner: EWG):** Group agrees with moving forward with hybrid approach to meetings as per this session.
 - **Natural England to reflect on what information they would like to receive as part of the non-licensable monitoring reporting (owner: Natural England):** CR and SM are happy to use this forum to keep Natural England licensing team informed about the non-licensable mitigation secured under the DCO.

UNEXPLODED ORDNANCE (UXO) UPDATE

- SMan reported that the UXO clearance program has been ongoing. Following communications around UXO, AR attended site in September 2024 with SMan to better understand the scope of UXO works. SMan stated a formal notification process has since been agreed with the RSPB which is working well. The process will be reviewed in Q4 2024.
- AR suggested that if works continue beyond spring 2025 it would be beneficial to consider factors such as weather conditions in determining the timing of detonations to minimise any disturbance to Minsmere if practical.

SIZEWELL MARSHES SSSI TURF UPDATE

- AB reports that the area of Permanent and temporary land take from the Sizewell Marshes SSSI to the west of the existing Sizewell B Station (within the Order limits) was historically mapped as M22 fen meadow (as early as 2007/2008). Since 2014, an increased abundance of rush has been observed due to localised flooding, a trend that has continued annually. A National Vegetation Classification (NVC) survey was conducted in June/July 2024 to assess the area of permanent loss following an initial review of the turf transfer approach. The survey also covered the wider Sizewell Marshes SSSI to explore if this was a localised issue, but results of this wider NVC survey were not discussed.
- Permanent monitoring plots (G27 and G50) and an additional 12 quadrats were surveyed, with plants recorded on the Domin scale as per NVC standards. During the survey, the fields were submerged in water, up to 10cm in some locations, with deeper submersion noted in February/March.
- The conclusion is that M22 fen meadow is no longer present in the area due to sustained high water levels and the consequent inability to manage the area regularly and dominance of pond-sedge and reed.

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- SMan noted there is no impact as the compensatory habitat in relation to the fen meadow compensation agreed within the DCO. However, the change is that Sizewell C will not transfer material (i.e. turf) to the compensatory sites.
- AMW inquired about the next steps. SMan noted the issue with water levels in the SSSI area needs discussion in the Water Level Management group (WLMG). The WLMG plan to discuss experiences, implications, and updates on the situation and agree on the next steps. SMan stated that ditch diversion is likely to improve drainage.
- AMW mentioned that for the Benhall, Halesworth, and Pakenham sites, translocation of turfs was planned to kick-start the process. He asked if turf translocation is essential. The main method for creating fen meadow is green hay, which will proceed. SMan reiterated that turf translocation was not essential and was to be included at Halesworth if feasible, but it is not feasible for the reasons explained.
- BM asks about the seed banks in the turfs, suggesting that under the right conditions, M22 might regenerate from the seed bank. SMan hopes the seed bank is viable, and that proper hydrology will help recover the situation. AB stated that on eastern side the material is very friable and wet, however, to the west, improved drainage and regular management could help restore the area to M22, with seeds from nearby good-quality M22 areas aiding natural colonisation.
- BM suggests that further west, where turfs are drier, there might be relict fen species in the peat profile. AB responds that soil work showed no structure to hold such species, and the fields have been underwater, degrading the soil.
- The key starting point is to get water levels right to allow machinery access for plot management. BM agrees but emphasises the importance of water quality and nutrient levels. SMan agreed and noted that the NVC survey covered the entire site in terms of M22, and the information will be shared.

SSSI LAND-TAKE UPDATE

- Updated Land-take (iteration 4)
 - NS presented the updated land-take permanent and temporary SSSI land-take estimates which take account of detailed design information and address some mapping errors in the previous estimate.
 - This 2024 review of SSSI land-take confirms that the actual amount of permanent land-take from the SSSI is 5.19 ha (0.55 ha less than assumed). The detailed construction methods intended to be used to divert Sizewell Drain subject to approval of SSSI Method Statements by East Suffolk Council following consultation with the Environment Agency and Natural England under DCO Requirement 21
 - Despite the changes in area, the fen meadow sites will proceed to create the necessary quantum of fen meadow in accordance with the DCO, although arguably this is now an enhancement as the SZC Project will not require any permanent loss of M22 fen meadow from Sizewell Marshes SSSI.
 - BM asks about the Retained SSSI corridor, noting it appears surrounded by permanent land-take and questioned how it is safeguarded functionally if it is physically separated from the SSSI. SMan explains that the retained SSSI corridor was agreed upon years ago and was never intended to be a hands-off area. Sizewell C believe the functionality of the SSSI in these areas will be retained.
 - SMan elaborated on the process of diverting the drain and building the crossing this year. Once the barrier is built, they will move out of the area, removing only scrubs from the corridor and allowing reeds to regrow. The area will be kept suppressed for a year to facilitate works and then vacated quickly.

NATTERJACK TOAD UPDATE - OVERALL APPROACH

- SMan explained Retsoms Field is currently unfavourable for natterjack toads due to dense vegetation and a lack of

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open ground. Updated proposal focus on developing the population within Retsoms Field with toads and establishing connections to Minsmere in the longer term, subject to suitable habitat being present there.

- The impact from the project is within the Order limits, which includes accommodating a water management zone. The design has been adjusted to protect a rabbit warrens (used as hibernation features by natterjack toads), but it will still affect a portion of the habitat used by the toads. The most recent survey (2024) will underpin the license application for this mitigation.
- To maximise the utilisation of the field, a planning application will be submitted to ESC to provide additional breeding pond habitats. These will not be lined ponds like the existing ones but will be dug down to use natural groundwater. The design includes three ponds set at different levels, with a management operation to ensure optimal conditions across these ponds for a sustainable long-term plan. The planning submission will include a commitment to a medium to long-term vision, aiming to export as many toads as possible while fostering growth first.
- BM emphasises that the feedback previously received from Amphibian and Reptile Conservation (ARC) was that creating connectivity across the wider landscape was important. He suggested that ARC need to review the updated plans to ensure alignment with their opinion.

ACTION - Sizewell C to share plans with ARC colleagues to agree on the approach for natterjack toads.

HABITAT MANAGEMENT PROPOSALS 24/25

- The plans controlling habitat management include the Outline Landscape and Ecology Management Plan (oLEMP), Estate Wide Management Plan (EWMP), Marsh Harrier Implementation Plan, and Wild Aldhurst LEMP.
- The oLEMP is primarily post-construction but includes some elements for the construction phase. The EWMP focuses on the EDF Energy Sizewell Estate and covers areas outside the order limits. The Marsh Harrier Implementation Plan is a DCO requirement addressing the creation and management of the marsh harrier habitat.
- The Wild Aldhurst LEMP extends for 10 years following completion of the Wild Aldhurst Project and will be updated this year. This LEMP document will be reviewed to ensure all specified actions are delivered. Key areas include grassland habitats, reed beds, and areas to the south (woodland and open access). This winter, a reed cutting plan for the lagoons will be developed, focusing on initial vegetation clearance. The goal is to cut the entire reed bed within 8 years, allowing for 1 or 2 winters with unfavourable conditions. The work program will also address marginal vegetation to ensure deep water areas are present and scrub management is done across site. Grassland areas will continue with cutting mechanics, and heather introduction areas will be topped up with brushings. Coordination with contractors and other coastal partners for reed cutting will be considered to reduce mobilisation costs.
- Grazing: The plan is to develop a grazing strategy and collaborate with other partners to offer sustainable grazing. This includes providing the necessary infrastructure for summer and winter grazing to facilitate conservation management.
- BM inquired about the boundary of Wild Aldhurst, specifically the northeast corner. SMan explains that Sizewell C utilises land from that corner to house a water management zone during construction. This area will be restored and returned to the reserve post-construction. BM asks if this area contributes to the projects overall BNG, and SMan confirmed it does, as it will ultimately be restored in accordance with the OLEMP.
- AWM mentions AD6 and the remodelling of the road, asking if green hay can be used to plant the verge after reconstruction to match the planting on the other side of the fence.
- AR emphasises the importance of grazing, noting that his team is coordinating projects with the national landscapes

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team to feed into the Natural Environment Improvement Fund.

- Wild Studio
 - LS noted that the plan for this area is to continue existing mechanical cutting regime on a rotational basis and aim to introduce grazing. Additionally, plan is to create areas of bare ground along south-facing slopes and continue with heather brashing. Additional access paths will curve towards the west and east.
- Marsh Harrier Habitat
 - LS provided an overview of the management for the different habitat features within this area of the site.
 - Terrestrial Area: The southern area, with its dense grass sward, is developing well and serves as the main focus for reptile habitat. Additional work will be done in the northern section, where the grass is thinner, to thicken it, through overseeding.
 - Wild Bird Cover Plots: This year, the focus is on advanced seedbed preparation and exploring ways to introduce water to these areas during the Spring.
 - Linear Bunds: Material from other estate management clearance activities, such as agricultural products from other activities will be used.
 - Lagoon: The lagoon has good reed bed establishment in the margins but is patchy in open water areas. This is being investigated and a plan will identify the necessary steps.
 - Deer Fence: The deer fence is linked to ongoing health and safety works and is expected to come down. However, this will be reviewed against other risks this may introduce.
 - BM inquiries about the reptile habitat suitability survey results and whether they relate to the marsh harrier habitat. SMan confirms these are separate areas but management as a whole needs to be integrated not to counter one another.
 - The southern part of the wetland has been assessed as suitable for water vole translocation. If capacity at Wild Aldhurst is exceeded, the southern part of the Marsh Harrier Habitat could serve as a receptor.
- Wild Aldhurst Update
 - Wetland Development:
 - The wetland was developed as compensatory habitat, with reeds planted in 2015. The most recent survey, conducted in 2022, revealed wet reed and *Phragmites australis* swamp covering the majority of reed beds, and dry reed stands on the ridge banks at the western end of Basin A, comprising S26d (*Phragmites australis*). This aligns with the design objectives. The reed beds now require management as they are beginning to shade out the aquatic macrophytes. Currently, some vegetation is transitioning towards A2b and A3 communities, which are widespread across Sizewell Marshes. This is a positive development, as it aligns with the objective of producing communities similar to those in the Sizewell Marshes SSSI.
 - Additionally, frogbit, ivy-leaved duckweed, and rigid hornwort, all of which are scarce/notable species, are widely recorded within Wild Aldhurst, as they are within Sizewell Marshes SSSI. SMan stated that this is what SZC set out to achieve at Wild Aldhurst which is really good to see.
 - Grassland Development
 - The most recent surveys were conducted in 2022 and 2023.
 - Grassland is developing around the wetland area.
 - Semi-natural dry, heathy grasslands are emerging as expected in this region.
 - Heather brashings have been repeatedly added over many years, and some extensive areas of heather, including NVC H8a (*Calluna vulgaris* – *Ulex gallii* heath), are establishing well.
 - Sward Quality: The grassland includes good quality, diverse grassland communities forming, with some heathland contributions. These are considered to be of SSSI quality. Large areas of the site

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especially those in open access areas are transitioning to grassland communities, mixed with open vegetation sward, which is promising and can be further improved with continued management. Some localised areas comprise ruderal grassland that requires substantial attention/management.

- Several positive indicator species were recorded in the 2022 and 2023 surveys, along with notable species such as the green-winged orchid. It is worth noting that the majority of the grassland species are drought stress-tolerant which is to be expected on the crag sands and adds to interest.
- Invertebrates
 - Recent work on invertebrates includes surveys conducted in 2022 and 2023, covering both terrestrial and aquatic invertebrate communities and included sweep netting, pootering, direct searching, malaise trapping, moth trapping, and Norfolk hawkers transects.
 - Overall, the site supports a reasonably diverse range of aquatic invertebrates and a highly diverse terrestrial invertebrate community, including numerous Lepidoptera. The site hosts a wide range of conservation notable species, including the Norfolk Hawker and several priority habitat species (RDB1 and RDB2).
 - Pantheon analysis was undertaken, revealing that the site supports sufficient species for five SATs to be considered in favourable condition i.e. of SSSI quality. It was noted Key SATs include W314 Reed-fen and pools due to wetland interest, as well as rich flower resource, bare sand and chalk, and scrub edge. SMan noted the invertebrate assemblage is one of key reasons for designation of Sizewell Marshes SSSI, so it was really encouraging to see that large parts of Wild Aldhurst, including all of the wetland, are already of SSSI quality in respect of invertebrates. It was also positive to see that much of the terrestrial habitat is also of SSSI quality in this regard.
 - In conclusion, both the wet and dry habitats at Wild Aldhurst are of high interest for invertebrates. The site supports one legally protected species (Norfolk Hawker) and has also recorded the great silver water beetle, along with several interesting terrestrial invertebrates, including Graylings.
- Aquatic eDNA (August 2022)
 - Basin samples were analysed for invertebrate and fish taxa.
 - eDNA identified four fish species: three-spined stickleback, nine-spined stickleback, eel, and tench.

NS asked if the group agreed to proceed with the proposed habitat management measures for Wild Aldhurst, Wild Studio and the marsh Harrier Habitat. The group agrees on the management approach presented.

EWG Decision – the EWG agreed with Sizewell C Limited’s proposed habitat management measures for Wild Aldhurst, Wild Studio and the marsh Harrier Habitat for the 2024/2025 season.

TEMMP METHODS AND NEXT STEPS (NS)

- Terrestrial Ecology Monitoring and Mitigation Plan (TEMMP) Update
 - NS confirmed that the final method statements for Bat Activity and Natterjack Toad have been issued.
 - SZC are aiming to submit the TEMMP to ESC for discharge in November/December.
 - AD survey methods will be reviewed in Q1 2025 ahead of the start of civil works on the AD site. An update on this review will be provided at the next meeting to determine if any methods need to be issued.
 - NS noted the statement in the discharged Water Monitoring and Mitigation Plan (WMMP) indicating the ability to make minor revisions to the discharged plan as a working group without the need for re-

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discharge. NS sought confirmation if this would also be appropriate in this forum. It was agreed for minor revisions this may be suitable.

OTHER MATTERS FOR DISCUSSION (SMan)

- Partnership with Wild East (SMan)
 - The focus of this important new partnership with Wild East is to harness the power of SZC's supply chain to commit 20% of land to nature and engage the SZC workforce to boost conservation volunteering.
- Fen Meadow Update (SMan)
 - Benhall: Formation levels have been achieved and the contractor is demobilising. A lessons learnt report is being drafted that will inform Halesworth and Pakenham.
 - Pakenham and Halesworth: Enabling work on these two sites is proceeding.
 - Updated Fen Meadow/Wet Woodland Plans are to be submitted to ESC/SCC for approval in Q4 2024
- Lighting Winter 24/25 winter season (SMan)
 - Temporary lighting will be required before the installation of fixed lighting on the site. Deployment is planned over the next few weeks, including the use of tower lights.
 - The lighting plans need to be agreed upon with the site operations team, who are currently going through the design and assurance process. The commitment is to maintain dark corridors and keep habitats adjacent to the site dark.
 - Ongoing discussions with Natural England in relation to the Sizewell C Project bat license and seeking greater clarity on compliance as the project transitions from clearance to operational mode, which includes considerations for lighting.

ACTION - SZC to share 2024/2025 winter lighting plan for information.

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Actions raised during the meeting:

Date Raised	Ref.	Description	Lead	Date Due
08/10/2024	11	The RSPB, SZC, SWT ARC are to discuss the natterjack toad proposals	Sizewell C Limited and RSPB	November 2024
08/10/2024	12	SZC to share 2024/2025 winter lighting plan for information	Sizewell C Limited	November 2024

Key decisions made during the meeting:

Date	Ref.	Decision
08/10/2024	1	Agreement was reached for SZC to proceed with proposed management of Wild Aldhurst, Wild Studio and the marsh harrier habitat for the 2024/25 season in accordance with the presentation provided.

Author: Caitlin Murphy (SZC)