

Extraction of Accreting Beach Sand from Outhead, West Sands, St Andrews for Use on St Andrews Links Sand Dune Restoration

Method Statement 2026 (Including Operations Method and Supporting Information)

Background and Purpose for Sand Harvesting

The harvesting and application of sand is crucial to the effective and sustainable maintenance of the sand dune system around Outhead. This is widely accepted as the best and preferred nature-based solution for this SSSI shoreline.

In February and March 2025 St Andrews Links harvested and installed up to 20,000t of sand into a heavily eroded and degraded dune shoreline under licence

MS-10522

Issued: August 2024

Agreed Volume 28,500 t

Volume actually taken: 20,007 t

This activity carried full Fife Council planning permission and was supported by NatureScot. This licence expired on 31st March 2025.

Since this period, the dune has eroded back faster due to exposure of gabion ends. This was a potential and highlighted by Prof Alasdair Dawson in his Geomorphological Report. The proposal is a way to manage the gabion exposure by input of small volumes annually to manage and slow erosion rate to allow dune time to build resilience.

A significant amount of sand has naturally deposited immediately north of the recharge site. This sand in part is blown and drifted sand from the recharge site and is adding to natural accretion at the sand bar immediately north and west of the northern end of the 2025 recharge site.

Activity Proposal:

- To harvest this accreting sandbar and to redeposit this back onto the dune face at the gabion end. This slows dune recession considerably, if the gabion end/dune face zone can be covered. (Prof. A.Dawson.Outhead Geomorphology Report)
- This would involve 2000t per year to be harvested in a single annual operation, scheduled between October-February for 3 years under methodology detailed below. The much-preferred option and geomorphological optimum is to carry out operation in October, before the winter storms.

Proposed Schedule of Works:

October 2026: Harvest, recharge dune toe and restore both dune toe and harvest site

Between Feb-Aug 2027: Beach Volume Assessment. Results to NatureScot.

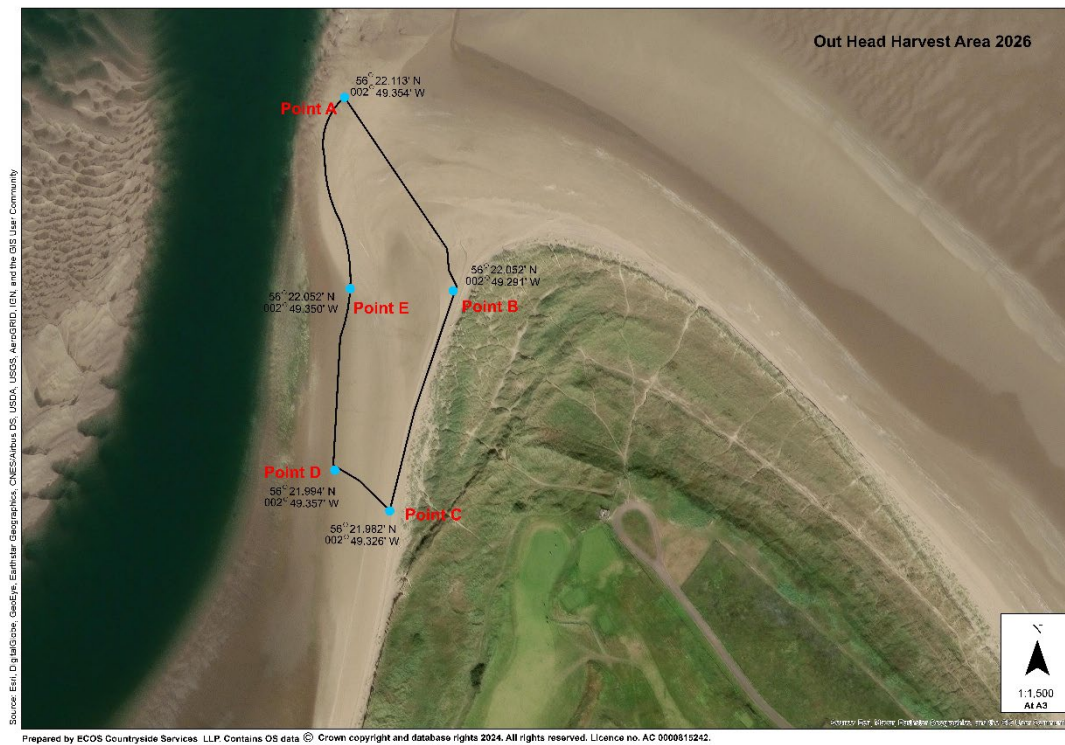
October 2027: 2nd Harvest, recharge and restoration.

Between Feb-Aug 2028: Beach Volume Assessment.

October 2028: 3rd Harvest, recharge and restoration.

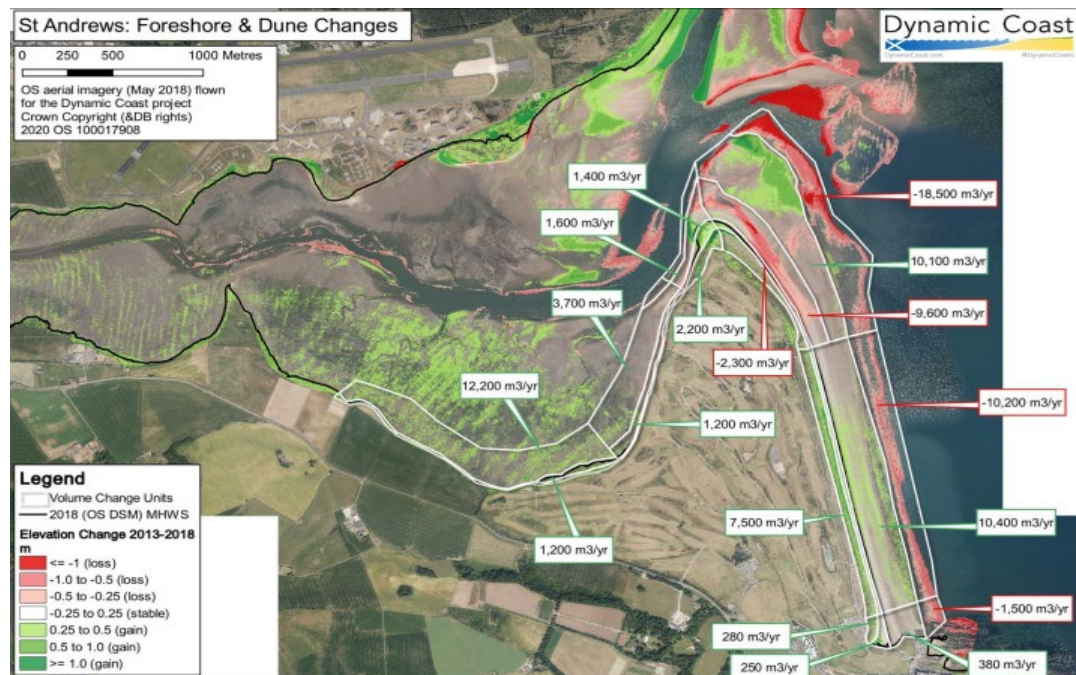
Between Feb-Aug 2029: 3rd Beach Volume Assessment. Results to NatureScot and discuss future options.

Proposed Sand Harvest Site: Co-ordinates polygon

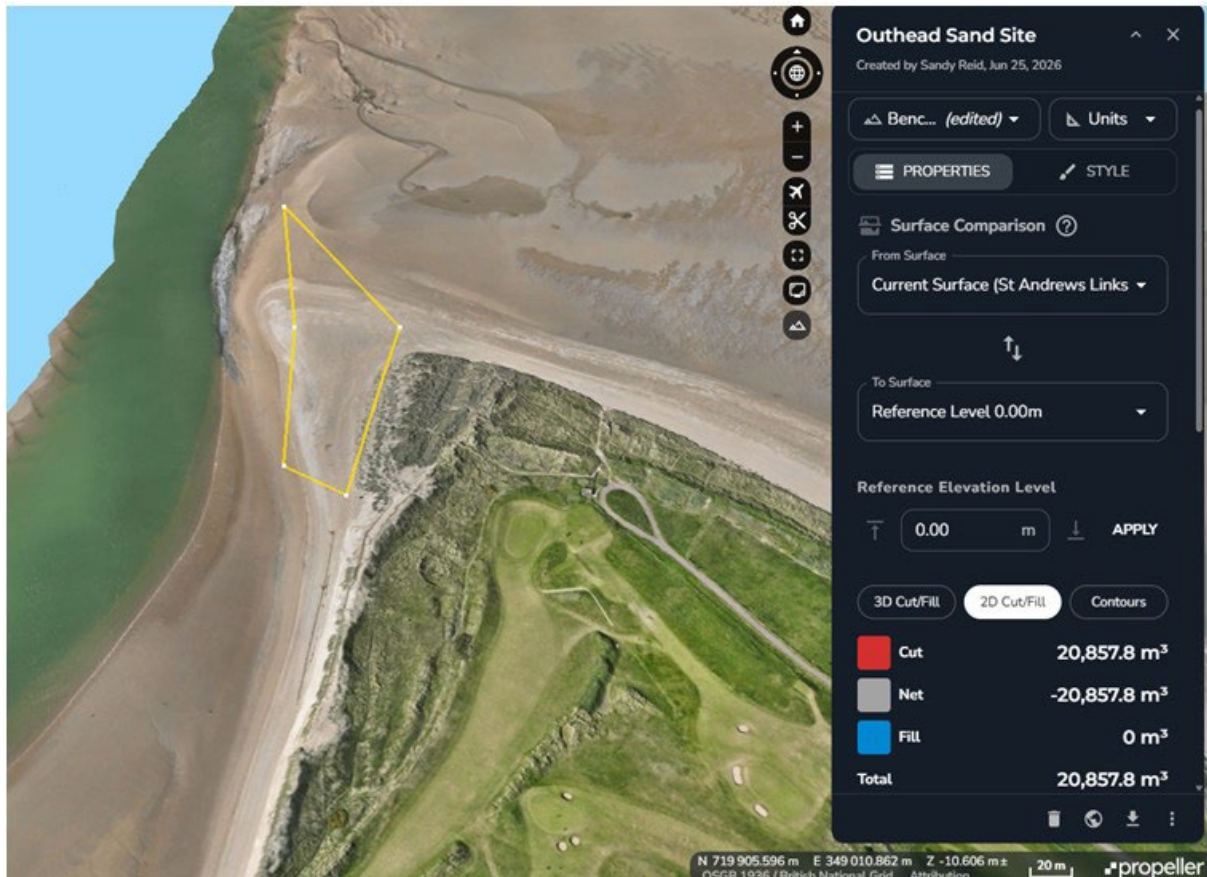


Supporting Detail:

- Overview: Outhead north and west sandbars are accreting and have been for some years. This is highlighted within Dynamic Coast 2



Beach Volume Assessment: Proposed Harvest Site 2026 Indicated. Calculations taken on this area and from 0 OD- vegetation edge. (Drone Flights and Software MJ Abbott)



Outhead Contour Elevations: Base map part drone survey 2026 and earlier Google Earth.



- The Volumetric Beach Assessment has indicated volumes present of **20,857m³**, well in excess of proposed sand harvest volume.
- This additional sand harvest licence applied for (6000t over 3 years) when added to sand taken under licence 10522 still holds total harvest volumes below those agreed under licence 10522. (28,500t)
- This sand is sand deposited in this area by wind and tide movements across the recharge site and is likely to be sand taken on the 2025 harvest licence (10522) and placed on this shoreline.
- This sand is deposited within the same coastal cell and does not require large movements between any harvest site and the deposition site.
- Deposition will take place above MHWL and is agreed to by Fife Council planning as a 'maintenance' operation.

Marine Licence History

Licence 10522: Detailed above.

Issued Aug 2024

Sand extracted from West Sands beach to carry out sand dune restoration.

Volume taken: 20,007t

Licence 10780:

Issued: December 2024

Agreed Volume: 1700t per year for 3 years (may be extended to 10 years in 2027 *per comms NatureScot*)

Sand harvesting from West Sands Beach, St Andrews for the purpose of golf related projects and emergency sand dune restoration on West Sands beach.

All expected assessments, investigations and necessary licence constraints and advisory notes were abided by and the following reports on this licence activity.

Licence Constraints Addressed (applicable to licences expired 10522 and current 10780)

3.3.1 The Licensee must ensure that any debris or waste materials arising during the course of the Licensed Activity are removed for disposal at an approved location above the tidal level of Mean High Water Springs.

- No waste material produced and sand sediment is the only activity material.

3.3.2 The Licensee must ensure appropriate steps are taken to minimise damage to the foreshore and seabed by the Licensed Activity.

- Sandbars are selected within the licence area for additional natural height, scrapes of no deeper than 250mm are made. These scrapes are in pure lower beach sand with minimal biodiversity or ecological mass.

3.3.3 The Licensee must ensure the foreshore and seabed are returned to the original profile, or as close as reasonably practicable, following the completion of the Licensed Activity.

- These scrapes are edge softened with excavator prior to leaving site and are usually infilled on the next high tide by natural processes and always infilled naturally within 14 days of harvesting.

3.3.4 Any person authorised by the Licensing Authority must be permitted to inspect the site at any reasonable time.

3.3.5 The Licensee must ensure no Licensed Activities take place within 2km of the designated St Andrews (West Sands) Bathing Waters during the bathing season (01 June to 15 September inclusive) without prior approval of the Licensing Authority.

- All sand harvesting during this licence period has taken place within the agreed timeframes held within the licence (October-March)

3.3.6 The Licensee must ensure that an ecologist with ornithological expertise is present during the Licensed Activity from January 2022 onwards. The ecologist must record the number and activity of qualifying bird species of the Firth MS-00008986 26 February, 2021 of Tay and Eden Estuary Special Protection Area present 30 minutes prior to, during and 30 minutes after the Licensed Activity to record any disturbance and displaced of birds within the site and its vicinity.

- Monthly shorebird surveying has taken place during this licence period, additional shorebird surveys are conducted prior to, during and post operation activity as per licence. This is conducted by West Sands Ranger Service lead staff member who is an experienced bird surveyor with significant bird reserve management skills and BTO methodology surveying practice.

3.3.7 The Licensee must ensure that the records required by condition 3.3.6 are provided to the Licensing Authority on an annual basis from January 2022 onwards.

- All bird survey records are supplied.

3.4.1 The Licensee must, no later than 14 days following the Completion of the Licensed Activity notify the Licensing Authority.

- This is done annually, if requested under licence. Beach monitoring is forecast to take place each year of the licence.

Proposed Sand Harvest Methodology: Outhead Northwest Sandbar

To extract sand accumulating at northern sandbar immediately north of Outhead sand dune restoration 2025 site.

To move this sand in a single operation by method detailed below a maximum of 500m to recipient site.

Operation duration: 3 to 4 days.

The method St Andrews Links Trust employ to extract sand has been practiced over the years and minimises any environmental and public access impact.

Harvesting takes place during the lowest tidal state and shallow scrapes are excavated to a depth not exceeding 250mm over a large area of notable high point sand bars below MHWM.

Sand is extracted using a tracked, 360-degree, 20 tonne excavator feeding 3 and 6 tonne trailers and dumpers. Additional excavator to be used to shape dune toe.

The extraction depth is limited to 250 mm.

All sand is removed to above MHWMOST with no deposits below MHWMOST.

Harvest site is partially restored by softening edges and levelling, the current natural infill rate is between 2 and 10 days.

Timing of Extraction

The period of extraction is October

Extraction is generally carried out during inclement weather at low tidal states and when the beach has low visitor numbers. (5am-12 noon)

There have been no notable impacts nor complaints or enquiries regarding this activity over the licenced periods and Fife Council and Nature Scot have been fully aware and supportive regarding the purpose and method.

Volumes

2000 tonnes per annum. Totalling 6000 tonnes (approx. 3500m³) over 3 years.

Supporting Information: Investigations, Observations, Planning and Reports

There is good evidence to suggest that sand is additionally accumulating on the target sandbar. Photographs and reports are included to support this application.

Fife Council Planning: The local authority has concluded and agreed that a maintenance project, if implemented, would not require additional application and hence is approved under specific constraints. (notification from NatureScot included as evidence)

Supporting Consultation Letters: Have distributed to relevant authorities and returned positive. Included with application.

Dynamic Coast 2 2022 (Nature Scot/Scot Govt) reported findings that evidenced accretion around the MS licence 10522 harvest site of 10,000m³ per annum, some of this surplus was removed and placed into the recharge dune and following, some of this sand is now accreting along the proposed harvest sandbar 2026.

Our ranger service monitors the beach weekly and provide shorebird surveying monthly. They observe a trend of accretion in the sand bar immediately north of our 2025 recharge site. The sites beach level has accreted as per project design. Tides are expected to add to the beach levels through the summer months of 2026 as in previous years.

Beach Level Monitoring 2025 Onwards:

SALT conducted levels and topographical monitoring and comparison vegetation edge as part of the agreed programme for the 2025 recharge project (licence 10522).

Beach Volume Assessment has been carried out with results included. **The volume is 20,857m³ (35,450t)**

Supporting Reports:

Geomorphological Report: To evidence reasoning of proposed activity.

Shorebird Surveys:

Experienced and trained ornithologist staff will continue shorebird monitoring through monthly vantage point surveys. They will also survey daily during licenced activity.

Archaeological Protocol

SALT apply a protocol for operations staff addressing finds during activity.

SSSI/SAC/SPA Impact Assessment

This activity has been undertaken for 150 years predating all natural heritage designations. The action is also in support of a historic and designed landscape of world importance and for the benefit of SSSI features and structure and function of a natural coastline.

SALT have applied demonstrable good stewardship across the areas of the SSSI/SAC/SPA through its ranger service who monitor daily the site, carry out ecological monitoring and implement supporting projects designed to protect and enhance the habitats and wildlife of the notifications.

There have been many surveys and studies in very recent years such as Dynamic Coast (Nature Scot), Outhead Peninsular Dune Recharge Feasibility study and associated Geomorphology Report, EIA and RIAA, which have reached the conclusion sand harvesting at West Sands Outhead provides no notable or significant ecological impact, evidenced by appropriate assessments made for the purpose of the licence 10522 sand dune restoration.

We would accept the longevity of the activity and these reports as evidence there is no requirement to determine this outcome again for the purpose of this application, however of course it is accepted that consultation would include as standard an appropriate assessment of this activity.

Impact Upon Fisheries and Marine Safety

This activity carries no risk to marine safety with minor volumes of sand being the only dredged material and the deposition is above MHWM. The historical application of this previously licenced activity should act as evidence of this assessment.

There is no recognised fishery or shellfish collection within the proposed harvest area and this portion of St Andrews Bay. There is minimal shellfish composition within the sediment seafloor excavated and any removal and disturbance is unintended and insignificant.

Use of the Extracted Sand

For the purpose of maintaining sand dune habitat.

Conclusion

St Andrews Links Trust place a great deal of emphasis on employing the most sustainable methods of maintaining the historic Links courses. Becoming one of the first major golf destinations to undertake Golf Environment Organisation (GEO) accreditation and are generally recognised throughout the golf industry as an exemplar for sustainable practices. Using sand from the West Sands for the purpose of sand dune restoration is widely agreed as a nature positive and sustainable nature-based approach.

Declaration Of Understanding

This site will be monitored, and should accretion reverse or natural processes or requirements change then sand harvesting will cease.

Location of Sand Extraction: for indication and overview of site location only, for consultation purposes, harvest site will be within this area, taking from high points on sandbar. Exact co-ordinates will be held on Marine Licence and associated mapping.

