Proposal for Sand Dune Restoration at Ballyteigue Burrow, Kilmore Quay, County Wexford

Contents

1. Introduction 2
2. Conservation objectives 2
3. Project Context and Challenges 3
4. Dune Types and Conservation Status 10
5. Proposed approach 12
6. Alignment with Strategic Objectives and Anticipated Benefits 16
7. Anticipated Benefits: 20
8. Conclusion and Next Steps 20
9. Recommended Next Steps: 20
10. References 21

1. Introduction

This proposal outlines a nature-based plan for supporting the ecological restoration and long-term management of the sand dune system at Ballyteigue Burrow, Kilmore Quay, County Wexford.

Ballyteigue Burrow, locally known as "the Burrow," is recognized as one of the finest sand dune systems in the South East of Ireland and holds significant international conservation importance. It is formally designated as a candidate Special Area of Conservation (cSAC 000696), a Special Protection Area (SPA 004020), and a proposed Natural Heritage Area (pNHA 696). These designations are reinforced by the European Union Habitats Regulations 2021 (Ballyteigue Burrow Special Area of Conservation 000696), which recognises its ecological importance and the need for robust protective measures to conserve its natural habitats and species. Furthermore, Ballyteigue Burrow is situated within the indicative location of the proposed South Wexford Coast Marine Protected Area (MPA), which aims to conserve the long-term conservation of specified species, habitats, and ecosystems, along with their associated ecosystem services and cultural values. This initiative aligns with Wexford County Council's heritage objectives to protect natural heritage and Natura 2000 sites.

2. Conservation objectives

2.1 S.I. No. 435 of 2021 - European Union Habitats (Ballyteige Burrow Special Area of Conservation 000696) Regulations, 2021.

In 1992, the *European Council Directive 92/43/EEC (EU, 1992)* required Ireland to identify and designate specific sites, called Special Areas of Conservation (SACs), and to establish Conservation Objectives for them.

In 2021, the Directive was incorporated into Irish law by the Minister for Housing, Local Government and Heritage: *S.I. No. 435/2021 (European Union Habitats - Ballyteige Burrow Special Area of Conservation 000696 - Regulations 2021*) became the legal instrument used by the Minister to designate the Ballyteige Burrow as a Special Area of Conservation (SAC) and establish its conservation objectives, thereby providing the legal basis for the work carried out by the NPWS at that site.

The 2021 regulations aim to protect the dune system within the Ballyteige Burrow Special Area of Conservation (SAC) by designating it as a protected area under the European Union Habitats Directive (92/43/EEC). The conservation measures in the document focus on maintaining or restoring the natural habitats and populations of species at a favorable status.

To protect these habitats, certain activities that could disturb or damage them require the consent of the Minister, as outlined in Schedule 4. These activities include reclamation, construction, alteration of tracks or boundaries, digging, ploughing, applying fertilizers or pesticides, and changes in livestock density near sensitive areas.

Landowners or occupiers are advised to contact the National Parks and Wildlife Service before undertaking any works listed in Schedule 4. Conservation objectives for the SAC are established and published by the Minister to ensure the protection of these habitats and species

2.2 NPWS (2014) Ballyteigue Burrow SAC 00696 Conservation Objectives Supporting Document – Coastal Habitats, version 1

The most recent, formally published 'Conservation Objectives' document for the Ballyteigue Burrow complex—specifically the Ballyteigue Burrow Special Area of Conservation (SAC) (Site Code: 000696)—was released by the National Parks & Wildlife Service (NPWS) in 2014 (NPWS, 2014). It is the primary site-specific management document.

This document specifically discusses human impacts on the burrow in several sections, highlighting activities that affect the conservation status of habitats. Key mentions include:

- **Perennial Vegetation of Stony Banks:** Human disturbance, such as coastal defence structures and offshore/onshore extraction, can interrupt sediment supply, leading to beach starvation (Section 3.4.1).
- **Trampling and Litter**: Trampling and littering were recorded as negative impacts on marram dunes (white dunes) and fixed dunes (Sections 5.4.2 and 5.4.4).
- **Vehicle use**: wheel ruts from vehicles have disturbed salt marsh surfaces, creating bare substrate and affecting vegetation (Section 4.4.6)
- **Walking and Campfires**: Walking and campfires were recorded as negative impacts on dune habitats, particularly humid dune slacks (Sections 5.4.2 and 2.2.6).

While the National Parks & Wildlife Service (NPWS) has not published a full, updated Site Management Plan or Conservation Objectives Supporting Document for Ballyteigue Burrow SAC/SPA since 2014, several recent documents from NPWS and other bodies address the policy context for coastal erosion, climate change, and human impact.

3. Project Context and Challenges

Ballyteigue Burrow's dune system serves as a vital natural barrier, protecting low-lying agricultural land, freshwater habitats, and infrastructure from coastal erosion, storm surges, and tidal inundation. Despite its importance, the dunes are highly susceptible to natural erosion processes, which are exacerbated by increasing storm frequency and intensity linked to climate change. This degradation leads to habitat loss, reduced coastal protection, and potential impacts on local livelihoods.

Key challenges facing Ballyteigue Burrow include:

- **Coastal Erosion & Flooding:** Destructive waves, storm surges, and wind cause land loss, sand deposition on roads, and damage to property and infrastructure, leading to flooding. On December 16th and 17th 1989, strong storms saw the overtopping of the crest of the dune system on Ballyteigue Burrow which caused significant damage to land and properties around the Killag, Ducormick, Bridgetown and Ballyteigue (Seanad Eireann Debate, 1990). In December 2021, there also was substantial damage done to the same areas including properties in the Ballyburn and Newtown area (see photos 1 to 5).

Photo 1: flooding in 2021

Photo 2: Flooding December 2021

Photos 3 and 4: Flooding along Furlong's Road and the Inish, December 2021

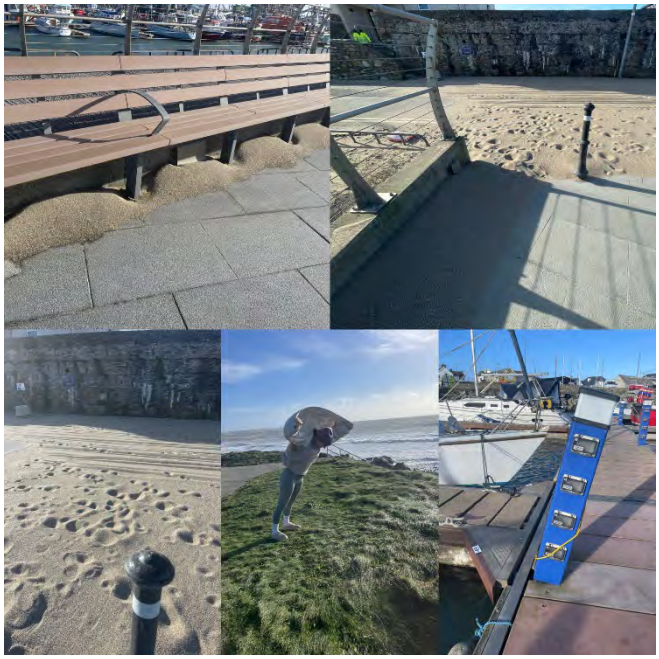

Photo 5: sand deposits on the harbour after Storm Eowyn, January 2025

The photos above (1-5) demonstrate the vulnerability of the area. Long-range scenarios on sea-level rise to 2050 and 2100 pose significant challenges, with potential for increased flooding, erosion, and permanent land loss. The Office of Public Works (OPW) Flood Risk Management Plan for the Ballyteigue-Bannow River Basin (OPW, 2018) identifies Kilmore as an Area for Further Assessment regarding flood risks, and while no "Potentially Viable Flood Relief Works" were identified for the Ballyteigue-Bannow River Basin , the plan sets out a strategy for assisting in management of flood risk. Coastal erosion schemes are a known concern in the Rosslare Municipal District. The OPW (OPW, 2023) also conducted a Natura

Impact Statement (NIS) for the Ballyteigue Kilmore Arterial Drainage Scheme, identifying Ballyteigue Burrow SAC (000696) and SPA (004020) as European sites where significant adverse impacts could not be excluded (see figure 1 below). During summer, beaches are generally higher and sandier than they are in winter. During the winter, the sand moves from the beach to nearshore areas to form sandbars. This happens as a result of changing wave shape due to more intense storm activity. During spring and early summer, or following a storm, the sand in the nearshore region should move back toward - and eventually attach to - the beach. Once on the beach, the finer sand grains are moved by wind action to form higher, wider sand dunes. These seasonal and storm-related interactions and changes in the form, volume, and position of beaches, dunes, and nearshore areas produce what is known as 'dynamic equilibrium'.

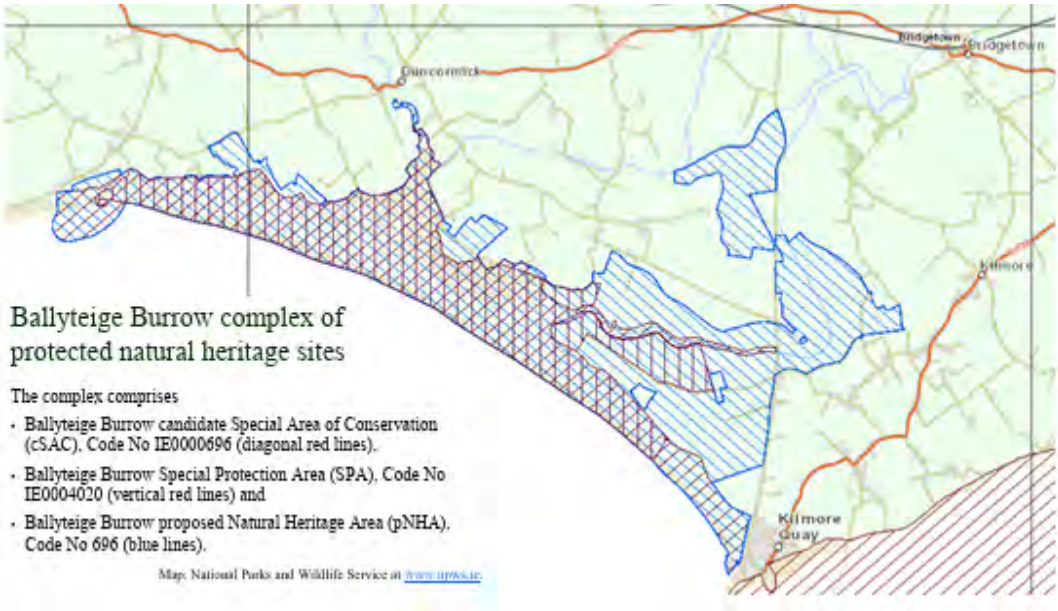

Figure 1: NPWS map - SAC, SPA and pNHA

This cycle has been observed since 2017. Locals have noted the seasonal patterns, but also note that there is more evident wasting of the mobile foredune each winter and an increase in the size of dune "blow-outs". We note that normally undercutting, slumping (photos 6 and 7) and reforming of dune slopes occur in sequence and, ideally, over time, sediment exchange processes return the cross-shore profile to its initial pre-storm position. This recovery step does not occur on the Burrow as the increased traffic on the sand dunes has led to erosion hotspots which are increasing in size and the dune system is retreating inland.

Photo 6-7: slumping and undercutting of dunes on Ballyteigue burrow without recovery, June 2025

- **Anthropogenic activities** (see photos 8 to 11): Humans can cause pressures significantly hindering the natural dune recovery processes. These include trampling, wild parking, camping, unregulated use of All Terrain Vehicles (ATVs), dune scrambling, and fires on the dune and beach. Littering is also a significant issue in Kilmore Quay.

Photo 8, remnants of illegal wild camp site on Ballyteigue burrow sand dunes July 2025

Photo 9, evidence of illegal wild camp site fire on Ballyteigue burrow sand dunes July 2025

Photo 10, kids playing in sand dunes July 2025, Photo 11, visitors to Ballyteigue burrow beach clearly showing crowds in mobile foredune area hindering natural recovery from storm events.

- The local community has expressed concern about these issues, as well as climate change and biodiversity loss. The local community recognises the significant resources required to enforce the legislation which protects the dune system and proposes that a volunteer group work collaboratively with NPWS and Wexford County Council to assist them in managing, patrolling, and monitoring this section of the Wexford coastline. KQCG recognise that beach-dune system recovery to a pre-storm profile position is pre-conditioned by environmental factors such as sand availability, wind conditions, and accommodation space. However, observations over the last number of years have indicated that human-caused pressures are damaging marram grass, leading to less recovery from slumping and winter storm blowouts (see photos 12 to 17) .

Photo 12 Google earth images of the increased number and size of blowouts along Ballyteigue burrow 2010-2024

Photo 13 (left) a pathway caused by foot traffic into the dunes from Ballyteigue burrow beach and Photo 14 (right) slumping along the face of the dune system July 2025

Photo 15 *Photo 16*

Photo 15 top left, the rising sun illuminating the increased number of blowouts along Ballyteigue burrow, June 2025, Photo 16, top right,one of the "smaller" blowouts June 2025

Photo 17 June 2025: larger blowout with evident footprints leading to it indicating significant traffic into the dune and evident slumping, marram grass can be seen to be brown with failing root system.

4. Dune Types and Conservation Status

Ballyteigue Burrow, as part of the Atlantic Biogeographical Region, likely comprises several coastal dune habitats listed under Annex I of the EU Habitats Directive. The conservation status of these dune types in the Atlantic region, as detailed in the "Roadmap for coastal dunes of the Atlantic Region" (Houston, 2023) and "Management of Natura 2000 habitats fixed coastal dunes" (EU, 2010) documents, is generally unfavourable:

- **2110 Embryonic shifting dunes:** These initial dune formations nearest the shoreline cover approximately 5,456 hectares in the Atlantic region and are assessed as "U1 poor" (unfavourable-inadequate).
- **2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes):** These mobile dunes, characterized by marram grass, are found behind embryonic dunes. They span about 28,232 hectares in the Atlantic region and also hold an "U1 poor" conservation status.
- **2130* Fixed coastal dunes with herbaceous vegetation ("grey dunes"):** This is a priority habitat, signifying its particular importance. These stable dunes are colonized by perennial grasslands, lichens, and mosses. They are widely distributed across the Atlantic region, covering an estimated 117,321 hectares. However, their overall conservation assessment is "U2 bad" (unfavourable-bad). Key threats include over-stabilization, insufficient grazing, scrub encroachment (native and non-native), afforestation, invasive alien species, and significant atmospheric nutrient deposition.
- **2190 Humid dune slacks:** These depressions within the dune system, where the water table is exposed, support unique wetland vegetation. They cover approximately 14,751 hectares in the Atlantic region and are also in "U2 bad" condition.

The primary goal of restoration efforts at Ballyteigue Burrow is to achieve a "Favourable Conservation Status (FCS)" for these habitats, aligning with the EU Biodiversity Strategy for 2030 and with NPWS conservation objectives for this SAC. In particular, this dune protection project proposes to help both Shifting dunes (2120) and Grey/fixed dunes (2130*) to achieve a Favourable Conservation Status. As can be seen in the map below Figure 2 (NPWS, 2014), Ballyteigue Burrow has shifting dunes, a total estimated area of 8.11ha, however, this habitat is very difficult to measure in view of its dynamic nature. More than 95% of marram grass (Ammophila arenaria) and/or lyme grass (Leymus arenarius) should be healthy (i.e. green plant parts above ground and flowering heads present). In addition grey dunes/fixed dunes, based on data from the Sand Dunes Monitoring Project (SDM) (Delaney et al., 2013) a total estimated area of 225.65ha of “Grey dunes”. Ballyteigue has one of the most significant areas of fixed dune habitat in the country. Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes (Delaney et al., 2013)

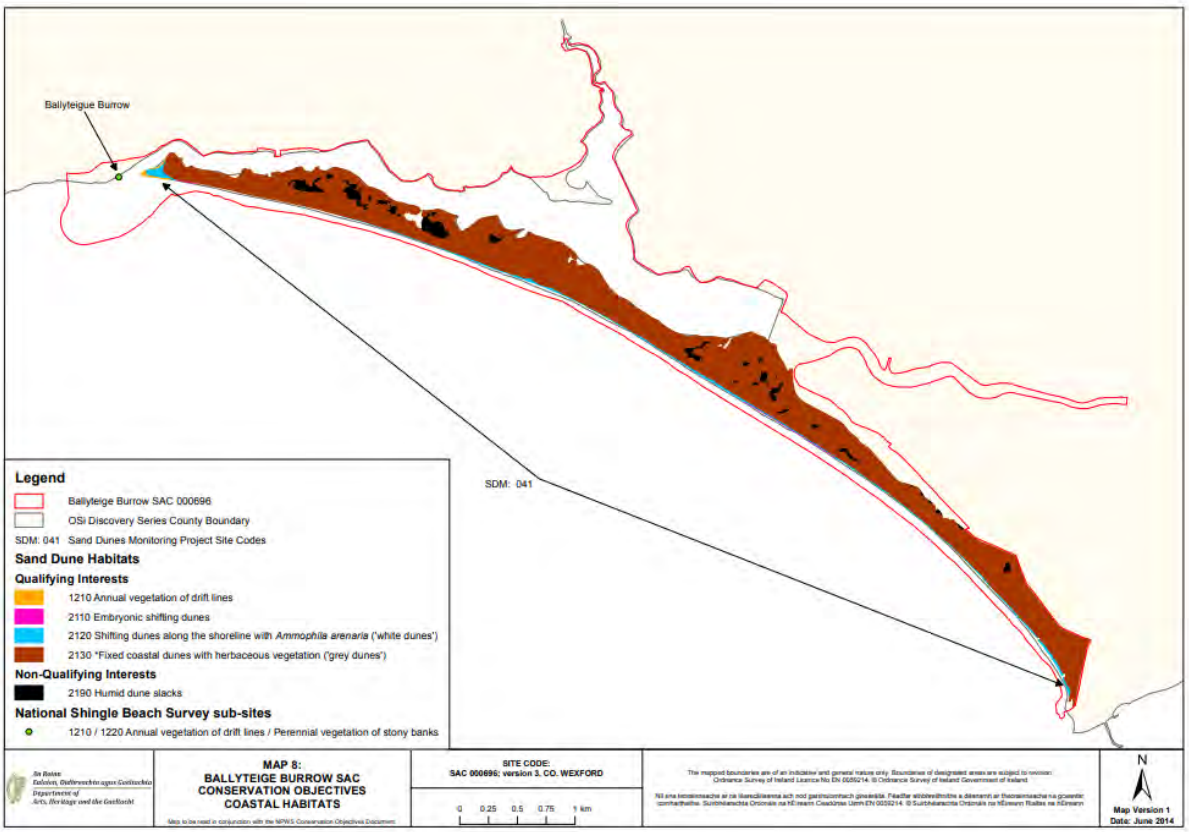

Figure 2, map shows fixed coastal dunes "grey dunes" on Ballyteigue burrow from https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000696.pdf

5. Proposed approach

To mitigate dune damage, the KQCG proposes a four-pronged strategy:

5.1 Signage and information boards

To protect the delicate sand dune system in Ballyteigue, the first step is to implement a strategic signage plan. These signs will be placed at key access points to the dunes, from the harbour and along the memorial garden walk, leading to the burrow trail.

The signs would serve two primary purposes:

- **Awareness and Education**: They will highlight the fragile biodiversity of Kilmore Quay and its surrounding environments, including the ecosystems on the seashore, at sea, and within the burrow.
- **Behavioural Guidance**: The signage will inform people and advise against activities that harm the dunes, such as camping, lighting fires, sliding down the dunes, or straying from designated paths. Visitors will be encouraged to stick to the existing, well-worn trails to prevent further damage.

The signs will be placed at the following locations to maximize their impact:

- The entrance to the Burrow walk trail by Sofrimar.

- The start of the boardwalk after the memorial garden.
- Both the top and bottom of Furlong's Road.

This targeted approach will help create a clear understanding of the environmental risks and promote responsible behavior among visitors, ensuring the long-term preservation of this vital natural resource. Examples of possible signage shown in photo 15-18 below.

Photo 15, Wooden signs

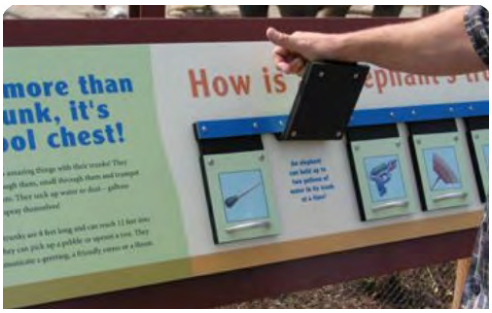

Photo 16, Interactive and educational boards

Photo 17, Signs used at the Maharees, Co . Kerry

Photo 18, CARO information signs

5.2 Awareness/educational campaign

To move beyond simple warnings and foster a sense of shared responsibility and appreciation for this unique ecosystem, educational campaigns can effectively raise awareness about the fragility of the dune system in Ballyteigue. The KQCG is willing and eager to take ownership of these campaigns organise events, monitor the dunes and act as local ambassadors for the conservation effort. These events could include:

- **Guided Walks:** Led by a local expert (e.g., a coastal ecologist, a member of a local conservation group), these walks can explain the role of each part of the dune system, from the embryonic dunes to the more stable back dunes. The expert can point out specific plant and animal species and explain how human activities disrupt the ecosystem. Jim Hurley has organised such talks in the past and is supporting the KQCG in its endeavour. He shared his knowledge with the community at the Sand dune protection information event organised by the KQCG last October 28th at the Stella Maris Centre.

- **Curriculum-Based Education:** Partner with local schools and preschools to develop educational resources for students, such as:
  - *Dune Activity Packs***:** The "Dynamic Dunescapes" project in the UK has created activity packs for primary and secondary schools that include games, worksheets, and field trip guides.
  - *Hands-on Field Trips***:** Organize school trips to the dunes where students can participate in activities like sand sampling, species identification, and litter cleanup, helping them understand the science behind dune dynamics. Bridgetown Vocational School has already been contacted and we are meeting with them in September.

- **Digital and Social Media Campaigns**

  Our group's Facebook and Instagram profile already share compelling stories and visuals featuring short videos that showcase the unique wildlife that depends on the dunes; post facts about the dunes, and the creatures that live there to build a consistent presence and educate a wide audience over time.

- **Printed and Visual Materials with the support of NPWS, Wexford County Council and CARO**

  Leaflets and brochures that include a map of the designated walking trail, a clear "Leave No Trace" message, and information on the ecological importance of the dunes.

5.3 Community engagement and Monitoring

Active community involvement is a cornerstone of this project. The Kilmore Quay Conservation Group has already started initiatives in raising awareness and seeking advice from other successful conservation groups like the Maharees Conservation Association CLG and Tramore Eco Group.

Key aspects of community engagement and monitoring include:

- **Volunteer Programs:** Engaging local community groups, schools, and individuals in implementation activities. We are currently liaising with Kilmore Primary school, whose 6th year pupils travelled to France in June 2025 to see that environmental problems are global and that solutions come from teamwork and shared learning. The protection and maintenance of our coastline is crucial, and Kilmore National School are leading that effort. Kilmore School has been recognised for promoting environmental awareness and action, and pupils took on several eco-friendly initiatives over the past school year, including hosting workshops on pollution and coastal erosion, demonstrating a commitment to the local environment.

- **Citizen Science:** Implementing citizen science programs to monitor restoration success, tracking changes in sand accretion, vegetation cover, and target species. KQCG has started a Bioblitz online, collecting information about the various species spotted on the burrow (KQCG, 2025)

- **Collaboration and networking:** The local community recognises the significant resources required to enforce the legislation which protects the dune system and proposes that our group work collaboratively with NPWS and Wexford County Council to assist them in managing, patrolling, and monitoring this section of the Wexford coastline, while networking with other local groups in their efforts.

5.4. Nature-based solution: chestnut fencing

If the steps above do not produce the desired effect after some time, chestnut fencing as used in the Maharees, Tramore or Curracloe could be the next step to be considered to enhance ecosystem health and coastal resilience and assist in enforcing the eroded dune exclusion zones. Nature-Based Solutions, with healthy and biodiverse ecosystems at their core, are central to achieving objectives relating to the protection and restoration of biodiversity. The methodology combines traditional and proven ecological restoration techniques:

- **Enhancing Dune Dynamics (Targeting 2110 Embryonic Shifting Dunes & 2120 Shifting Dunes): Chestnut Fencing:**

  Strategic placement of chestnut fences perpendicular to prevailing winds around the main blowouts on the burrow will help trap sand, encourage natural accretion, and initiate new dune formation.

  A Roadmap for coastal dunes of the Atlantic Region" was compiled by John Houston for the Beach and Dune Network, with contributions from its members (Houston, 2023). This roadmap focuses on the conservation of coastal dune habitats within the Atlantic biogeographical region. It serves as a guide for knowledge exchange and networking, supporting the EU Biodiversity Strategy for 2030. It also provides sand dunes fencing advice which this proposal is based on (dunes.ie, 2024).

- **Implementation Strategy:** This will involve mapping of erosion hotspots, strategic placement of fencing, and regular monitoring and maintenance.

- **Least Impactful Way to Get Materials onto the beach and into the Dunes**: Minimizing disturbance to the fragile dune ecosystem during material transport is critical. The approach will prioritize low-impact methods:

  - Manual transport**:** For lighter materials, manual carrying by volunteers is the least impactful option. This approach also fosters strong community involvement and stewardship.
  - Small, all-terrain vehicles or quad bikes with low ground pressure tires for heavier materials like the chestnut fencing if approved.
  - Designated Access routes, clearly marked, avoiding sensitive areas and using existing tracks.
  - Timing: transport schedules during periods of minimal ecological sensitivity (e.g., outside bird nesting seasons)
  - Small-scale operations: frequent, smaller transport operations to reduce overall impact.
  - Sleds or rollers for short distances over flat terrain to minimize the need for wheeled vehicles.
  - Human chains for transferring smaller items from a drop-off point to the work site.

6. Alignment with Strategic Objectives and Anticipated Benefits

The KQCG proposal directly supports key objectives within European, national and regional plans.

6.1 European Union Habitats (Ballyteigue Burrow Special Area of Conservation 000696) Regulations 2021 (S.I. No. 435/2021).

The core purpose of the Regulations is to ensure the **"robust protective measures to conserve its natural habitats and species."**

The KQCG proposal is based on the specific Conservation Objectives published by the NPWS in 2014, which remain the detailed, metric-based targets for conservation, as required by the EU 2021 Regulations. It also recognizes the need to obtain Ministerial consent from the NPWS for any on-site works, acknowledging the regulatory control required under Schedule 4 of the 2021 Regulations for activities within a SAC.

6.2 The National Biodiversity Action Plan (NBAP) 2023–2030 (DHLGH, 2023)

The NBAP (2023-2030) is Ireland's fourth plan to address biodiversity loss and the climate crisis. it establishes a national framework of actions, particularly under **Objective 2 (Meet Urgent Conservation and Restoration Needs)** and **Objective 4 (Embed Biodiversity at the Heart of Climate Action)**, that directly relate to the protection of Natura 2000 sites like Ballyteigue in the face of climate change and biodiversity loss.

The plan commits to strengthening the conservation of Ireland's most valuable sites:

- Protected Area Management
- Site-Specific Conservation
- Nature Restoration Plan

The NBAP is also designed to address the intertwined nature of the biodiversity and climate crises.

- **Integrated Policy:** It aims for greater coherence between biodiversity policy and other policy areas, embedding biodiversity into the heart of climate action. This requires public bodies to coordinate efforts to ensure biodiversity and climate goals are mutually supportive.
- **Nature-Based Solutions (NBS):** The plan promotes the use of **nature-based solutions** (NBS) by relevant bodies in programmes relating to terrestrial, coastal, and marine environments. For a coastal Natura 2000 site like Ballyteigue, nature-based solutions would include using natural features—such as managing and restoring sand dunes—to provide climate change adaptation benefits like coastal protection and flood alleviation.

The central philosophy of the plan is to adopt a **"whole of government, whole of society"** approach to biodiversity. This is primarily addressed under **Objective 1: Adopt a Whole of Government, Whole of Society Approach to Biodiversity,** with the aim to ensure that *"every citizen, community, business, local authority, semi-state and state agency has an awareness of biodiversity and its importance... while also understanding how they can act to address the biodiversity emergency***".** It highlights local community involvement:

- **Whole-of-Society Approach:** It recognizes that the conservation and restoration of nature requires a collective national effort, involving every citizen and community.
- **Empowerment of Citizens:** The Minister of State for Nature, Heritage and Electoral Reform, Malcolm Noonan, stated that the plan is based on the idea that "*when citizens, community groups and organisations are empowered to act, there is no limit to what can be achieved.*"

6.3. Wexford Climate Action Plan (WCC, 2024)

- **Climate Adaptation and Resilience:** By restoring and strengthening dunes, the project directly enhances Wexford's ability to adapt to rising sea levels and extreme weather events, reducing flood risk and protecting coastal assets.
- **Biodiversity Protection and Enhancement:** Healthy dunes support unique flora and fauna. The restoration will improve habitat quality, contributing to nature-based solutions and ecosystem protection goals.
- **Carbon Sequestration (indirect):** Healthy coastal ecosystems can contribute to natural carbon sequestration.
- **Public Awareness and Engagement:** The project serves as a visible example of climate action, fostering public understanding and engagement. The plan aims to embed climate action across all Council functions and service delivery areas, and requires local authorities to take a leading role in supporting the transition to a low-carbon society.

6.4. Wexford Development Plan (WCC, 2022):

- Environmental Protection and Enhancement: The project's core purpose is to protect and enhance a valuable natural asset.
- Sustainable Land Management: It promotes sustainable management practices for coastal areas.
- Amenity and Recreation: Healthy dunes enhance aesthetic and recreational value, supporting sustainable tourism and local well-being.
- Protection of Strategic Infrastructure: Reinforcing natural barriers indirectly protects agricultural land, roads, and other infrastructure.
- Ecosystem Services: It recognizes and strengthens vital ecosystem services provided by natural coastal features.

The Kilmore Quay Conservation Group (KQCG) proposal for local engagement and stakeholder collaboration directly implements the objectives of the **Wexford County Development Plan 2022–2028**. Specifically, it aligns with **Chapter 15: Sustainable Communities and Social Infrastructure Strategy**, which is committed to developing sustainable communities and facilitating local social development through engagement with local stakeholders.

6.5 Wexford County Council Heritage Plan (WCC, 2025)

The Heritage Plan identifies objectives to ensure the protection of the county's natural heritage, including Natura 2000 sites and wildlife habitats. It also emphasizes integrating built, cultural, and natural heritage for attractiveness and a sense of place.

6.6 Kilmore Quay (2008) Development Plan for the property at Ballyteige Burrow owned by the Kilmore Quay Community Development Association Limited

The 2008 Ballyteige Burrow Development Plan (2008–2013) was an ambitious, community-led document compiled for the Kilmore Quay Community Development Association (KQCDA)

to manage its 42-hectare sand dune property (Hurley, 2008). The document's dual focus was on conservation and community, setting the stage for the current generation of our proposal.

- Conservation and Preservation Measures

The plan highlighted 9 objectives for the site focused on site management and minimizing human impact: *Habitat Management (Grazing*), *Coastal Risk Management, Amenity Infrastructure* (Management of the walking track), *Car Parking and Protection* (anti-social behaviour and deterioration of the natural environment)

- Community Engagement and Participation

Community involvement was the central mechanism of the plan, with the KQCDA holding the property "in trust for the local community".

- A key objective was "*to protect and enhance the local natural environment by raising awareness, and by informing, engaging, and involving the local community*".
- The drafting process included a public meeting (June 2008) to "*maximise community involvement*" and ensure an agreed vision among members and the wider community.
- Objectives included developing the property as a local amenity, and creating Information and Interpretation materials (e.g., interpretative boards) with the suggestion of training local people as guides.

While the plan was thoughtfully developed by a local expert and grounded in the policy and environmental context of its time, it no longer reflects current conditions and priorities. The document operates under the site's old status as a Candidate Special Area of Conservation (cSAC). The site has since been formally designated as a Special Area of Conservation (SAC) under the *EU Habitats Regulations 2021*, which imposes a much stricter, legally defined mandate for conservation and permitting. The plan also references dated policy (e.g., NPWS Conservation Plan 2003–2008 and County Development Plan 2007). The *National Biodiversity Action Plan (NBAP) 2023–2030* and the *Wexford Climate Action Plan (2022-2028)*, which now frame all coastal work with a greater sense of urgency around the climate and biodiversity crises.

While it addressed coastal defence, it does not possess the detailed, modern understanding of coastal erosion and blowout dynamics that has informed the current Nature-Based Solution (NbS) proposal in the KQCG ‘s proposal (such as the use of sand fences in specific locations, which are now standard best practice).

While the Kilmore Quay 2008 development plan focused on general coastal defence, the KQCG proposal offers a detailed and contemporary approach, informed by a Nature-Based Solution (NbS) and addressing the current context of coastal erosion and climate change.

7. Anticipated Benefits:

This project will yield multiple benefits for the Ballyteigue Burrow area and County Wexford:

- **Increased Coastal Protection:** A more robust dune system provides enhanced natural defence against coastal erosion, storm surges, and flooding.
- **Biodiversity Enhancement:** Restoration of a critical coastal habitat, supporting a wider range of flora and fauna.
- **Climate Resilience:** Direct contribution to Wexford's climate adaptation strategy.
- **Ecosystem Services:** Maintenance of vital natural processes that provide economic and environmental benefits.
- **Sustainable Tourism and Amenity:** A healthy natural environment enhances the visitor experience and supports local tourism.
- **Educational Opportunity:** The project can serve as a living laboratory for environmental education and community involvement.

8. Conclusion and Next Steps

The proposed dune restoration at Ballyteigue Burrow represents a critical, proactive, and ecologically sound investment in County Wexford's natural heritage and climate resilience. By aligning with and directly supporting the objectives of the Wexford Climate Action Plan, the Wexford Development Plan, and the Wexford Heritage Plan, this project offers a sustainable solution to ongoing coastal erosion challenges.

The KQCG carried out a survey to gauge the support in Kilmore Quay community for conservation work on the dune system. About 70% of the 207 people who responded said they would like to see projects promoting “natural habitats Protection and Stewardship (sand dune preservation, seagrass, wildlife corridors etc..) and 43% said they would like to see more projects promoting public awareness of local conservation issue.

We request that NPWS and Wexford County Council accept and support the first 3 options in this proposal (5.1-5.3) with a view to reviewing the use of chestnut fencing, in the event, that signage and awareness efforts do not prove adequate to improve the health of the sand dune system.

9. Recommended Next Steps:

1. **Feasibility Study & Detailed Design:** Conduct a comprehensive site-specific study incorporating work completed by the coastal officer in NPWS, to finalize the exact layout and scale of signage.
2. **Survey:** Geomorphological Surveys (like **topographic mapping** using GPS, drones, or LiDAR to measure dune height, slope, and volume changes), **quadrat sampling** to measure species diversity, abundance, and ground cover, **transect surveys** across dune zones (embryo, foredune, fixed dune) to monitor ecological succession, **footfall and path surveys** to map informal trails and trampling hotspots, **visitor behavior studies** using observation or questionnaires, **land use mapping** to track infrastructure, parking, or illegal campervan parking near dunes.
3. **A signage proposal:** the KQCG is currently working on it.

4. **Implementation:** Commence on-ground works in the appropriate season with works supervised by NPWS and Wexford County council, and regular updates provided by KQCG and adaptation of work plans based on feedback from NPWS and WxCoCo.

This proposal sets the foundation for a vital environmental project that will safeguard Ballyteigue Burrow for future generations, demonstrating Wexford's commitment to sustainable development and climate action.

Kilmore Quay Conservation Group requests that NPWS and Wexford County Council consider this proposal document and engages with the group to guide us in protecting and preserving Ballyteigue Burrow and associated dune system.

10. References

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