

# STRATEGY FOR ACHIEVING FAVOURABLE CONSERVATION STATUS IN ENGLAND

## TEMPLATE CHANGE CONTROL

**SPECIES:** Little Tern (*Sternula albifrons*)

**AUTHOR/S:** >Insert name/s<

DATE	VERSION	DESCRIPTION	REASON	WHO?
17.6.2019	v0.1	First draft	New	KM
22/7/2019	V0.2	Expert input	Specialist advice required to refine the strategy.	HR
6/8/19	V0.3	New draft	To take specialist input into account and align with strategy guidance.	FR
1/10/19	V0.4	New draft	Take new specialist advice into account	FR
03/02/20	V0.5	New Draft (ongoing)	Updated to incorporate TSG comments	GC
04/02/20	V0.6	New Draft	Changes to text to reflect initial advice from LT steer group	GC
01/06/20	V0.7	New draft	Downloaded from googledocs to capture commnets from sterr gp etc.	GC
21/07/20	V0.8/0.9	Changes to data in table 2	Some updates to reflect a revised Template (from work on habs strategy)	GC
23/07/20	V1.0	Converted into revised template	As example of Spp Strategy in the new template	GC

Nov20	V1.1	Converted to revised template following Beaver strategy example		FM
February 2023	V1.2	New draft in line with new vision for FCS strategies	Updated FCS strategies guidance	TM
6 <sup>th</sup> July 2023	V1.3	Revised following comments from Leigh Locke and Sarah Anthony		TM

## REVIEW COMMENTS

Version number	Reviewer	Date	Key issues raised Link to full comments (TRIM)	Actioned? (y/n)

## ACKNOWLEDGEMENTS

*Please include details of anybody you would like to acknowledge in this section. These should be people who have actively contributed to producing this document. These could be either named individuals or more generic – a group of colleagues or a group in another organisation.*

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## About the DFCS project

Natural England's Defining Favourable Conservation Status (DFCS) project is defining the minimum thresholds at which habitats and species in England can be considered to be thriving. Our Favourable Conservation Status (FCS) definitions are based on ecological evidence and the expertise of specialists. We are now also producing FCS strategies, which describe the objectives and actions required to achieve FCS.

We are doing this so that we can use "what good looks like" for species and habitats in England to guide ambitious decision making and actions that achieve and sustain thriving wildlife.

We are publishing FCS definitions and strategies so that you, our partners and decision-makers, can do your bit for nature, better.

As we publish more of our work, the format of our definitions and strategies may evolve, however the content will remain largely the same.

This strategy has been prepared using current data and evidence. It represents Natural England's view of how to achieve FCS based on the situation and best available information at the time of publication.

# STRATEGY FOR ACHIEVING FAVOURABLE CONSERVATION STATUS IN ENGLAND

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## 1. INTRODUCTION

This document sets out Natural England's view on how to achieve Favourable Conservation Status (FCS) for Little Tern in England. Please see the [Definition of Favourable Conservation Status for Little Tern](#) for a description of how FCS has been defined for this species.

Favourable Conservation Status strategies are practical documents that describe the actions needed to deliver FCS in England and assess the likelihood of achieving FCS over a defined medium-term timeframe. Section 2 of this strategy provides a summary of the priority actions needed to deliver FCS and the likelihood of achieving FCS over the 25 years of this strategy. Section 3 sets out necessary background, summarising the historic and current conservation status of the species. Section 4 describes how FCS can be delivered, including priority conservation actions and a geographical breakdown of where contributions to FCS could be made across England. Section 5 assesses whether FCS is achievable within the 25 years of this strategy, identifying key constraints and providing time-specific objectives towards FCS. FCS strategies are living documents and will be updated as new information becomes available.

Further information on how to produce and use FCS strategies can be found in the accompanying guidance document Producing and using Favourable Conservation Status Strategies. [Defining Favourable Conservation Status in England](#) provides background to Natural England's approach for defining FCS.

## 2. SUMMARY OF STRATEGY

*This section is a short summary of key points from the rest of the document.*

### 2.1 Priority actions

*Once sections 3 to 5 are complete, summarise the following, in 4-6 bullet points:*

- *The priority actions needed to achieve FCS (see section 4.1).*
- *Include an overarching perspective of where in England potential contributions to FCS could be made (from section 4.2).*

Below are the high-level priority actions needed to achieve Favourable Conservation Status for Little Tern in England:

- Implementation of enhanced beach-nesting bird protection schemes, to mitigate against disturbance by humans – especially those with dogs – and predation, is vital to increase breeding success and reverse population declines. Beach-nesting bird protection is required at all current and new sites. This will require long-term and predictable resourcing for wardening. Schemes must reduce the impacts of disturbance by dogs on beach-nesting birds.
- Long-term restoration of naturally functioning coastal habitats to provide a larger area of sustainable breeding habitat. This relies on achieving FCS for coastal sand dunes and coastal vegetated shingle.
- Targeted restoration, creation, and enhancement of breeding habitat to create a larger and more resilient network of nesting sites. It is important to reverse the current trend of fewer and larger colonies, which makes the population vulnerable to localised storms, tidal events, and opportunistic predation.
  - New breeding colonies need to be created at both former sites and new areas e.g., through the creation of new islands or spits. There is a particularly high potential for habitat restoration and creation in Essex and Kent, where much larger populations existed historically.
  - New breeding habitat must be created in the right locations. Site selection must account for the projected impacts of climate change, particularly sea level rise.

The above actions have the strongest potential to contribute to FCS in Cumbria, Essex, Hampshire, Kent, Norfolk, Northumberland, and Sussex.

### 2.2 Achievability

*State whether FCS is achievable within the timeframe of the strategy. Where this is not the case, briefly describe the why and provide the expected timeframe of long-term delivery (see section 5.1). Identify any key factors that are likely to impede progress towards FCS, such as a lack of delivery tools or external processes such as climate change (see sections 5.1 & 5.2).*

*In the below table, provide the favourable values for each parameter from the species' FCS definition document, the changes required to achieve these thresholds, and the time-specific objectives set out by this strategy (see section 5.3). Where FCS is achievable within the strategy, objectives should be favourable values.*

Significant progress towards Favourable Conservation Status can be achieved within the next 25 years. The actions required to recover the population are well understood and are likely to be effective if delivered at sufficient scale to influence the England population. However, Little Terns are currently declining, and it may take up to 10 years to halt this decline before population increases again due to the time taken for actions to have impact, particularly for sufficient recruitment of new birds into the breeding population. As such, it may take longer than 25 years to achieve FCS. The restoration and creation of sufficient breeding habitat to support the species, which relies on restoring dynamic coastal ecosystems, will also be a long-term process.

Lack of reliable and predictable funding for protection and wardening, and long-term delivery mechanisms to provide new safe nesting habitats, are barriers to achieving FCS in this species. Currently, funding for beach-nesting bird protection and wardening is short-term and unpredictable, with beach-nesting bird protection relying heavily on RSPB wardening and volunteers. Delivering effective beach-nesting bird protection requires more sustainable and predictable funding rather than significant additional funding. Nesting habitat restoration and creation are also currently delivered opportunistically through mechanisms such as planning mitigation funding and managed realignments.

Despite the constraints, it will be possible to make significant steps towards FCS over the next 25 years due to the coordinated approach and volunteer effort established during the EU LIFE+ funded Little Tern Recovery Project (2014-18). Over the next 25 years, it should be possible to halt and reverse the current population decline by expanding best practice management to more colonies, and through targeted habitat management to increase the number of breeding colonies. This strategy's 25-year objectives towards FCS are shown in Table 1.

**Table 1.** Objectives towards Favourable Conservation Status for Little Tern.

<b>Favourable Conservation Status parameter</b>	<b>Favourable Conservation Status</b>	<b>Change needed to achieve Favourable Conservation Status</b>	<b>Objective of Favourable Conservation Status strategy</b>
<b>Natural range and distribution</b>	The number of colonies at the time of the 1968-72 Breeding Atlas (Sharrock, 1976).	Maintain current range and increase the distribution by 40 10km squares to 80 10km squares in locations which will	Increase the number of active colonies by 20.  This should be reviewed by 2030.

		achieve distribution of the species throughout the range.	
<b>Population</b>	The population size of the mid-late 1980s, approximately 2,000 pairs.	Increase the population by 996 breeding pairs, from 1,004 to 2,000.	1,200 breeding pairs by 2030  1,500 breeding pairs by 2048
<b>Habitat for the species</b>	242 km <sup>2</sup> of breeding habitat with enhanced management to address issues of predation, recreational disturbance and habitat loss caused by coastal squeeze	Increase the area of available breeding habitat by 109 km <sup>2</sup> , from 133km <sup>2</sup> to 242 km <sup>2</sup> .	Create/restore 20 new areas of breeding habitat, each capable of supporting >10 pairs.  Beach-nesting bird protection is required at all new and restored breeding habitat.



### 3. BACKGROUND

*This section provides the necessary context for understanding the strategy. It should be a maximum of a page long. Please use in-text references to indicate sources throughout this document.*

#### 3.1 Species background

*Provide a succinct background to the species, avoiding information that is provided in its FCS definition. Focus on the species' current conservation status and the primary threats it faces. Highlight any significant changes in its status since the publication of its FCS definition.*

Little Tern is at unfavourable conservation status in England. In recent decades, there has been a reduction in the number of colonies, a loss of range and, in general, there are poor levels of productivity.

The UK Little Tern population is currently estimated to be around 1,004 pairs (New Seabird Atlas ref). Although widely scattered around the UK, the population is concentrated around the coasts of East Anglia, the south-east and north-east of England, and north Wales. Despite three decades of conservation effort, Little Terns in England declined by 32% between 2000 and 2018 (and in the UK by 26% over this period) (New Seabird Atlas ref).

The decline has been attributed to reductions in breeding success rather than to emigration or changes in adult survival. A primary factor contributing to the low breeding success is human disturbance, largely through recreational activity, although many sites are now wardened or fenced off, which helps manage disturbance. Other contributing factors include loss of nests due to bad weather, habitat loss/change (natural and due to man-influenced coastal squeeze), predation of chicks and eggs, and food shortages.

#### 3.2 Related species and habitats

*Highlight any other key species or habitats that may be influenced by the strategy. This strategy should aim to maximise synergies between different species and habitats. Advice on how to integrate delivery for species and habitats is provided in the [Nature Networks Evidence Handbook](#) and [Generating more integrated biodiversity objectives – rationale, principles and practice](#) (paying particular note to the appendices), and should be at the core of thinking around delivery of FCS.*

In the UK, Little Terns nest exclusively on the coast in well-camouflaged shallow scrapes on sand and shingle beaches, spits, or inshore islets. These scarce shingle and dune coastal habitats are protected and may also be designated features on protected sites. See also the [Definition of Favourable Conservation Status for Coastal Sand Dunes](#).

Delivery for Little Terns is likely to have benefits for other breeding bird species, including other terns, gulls, ringed plover (*Charadrius hiaticula*) and oystercatcher (*Haematopus*

*ostralegus*). Predator management may have limited, localised impacts on populations of potential predators.

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## 4. DELIVERING FCS

*This section outlines the objectives and actions necessary to achieve FCS for the species in England. It should be 2-3 pages long.*

### 4.1 Priority actions

*Describe the priority actions that are required to achieve FCS. These should be high-level strategic actions rather than detailed measures for individual sites and typically will need to be ambitious.*

*Consider a range of evidence when assessing the potential conservation actions the species requires. Natural England species specialists will be able to recommend relevant internal and external sources of evidence. The FCS definition for this species may point towards conservation priorities and, in such cases, can be used as starting points. It may be useful to refer to species recovery curves, where available, to assess the sequential actions needed for recovery. There may also be existing published conservation strategies or action plans for the species, which may be useful for initial reference. Authors may also consult Defining Favourable Conservation Status in England for advice on collating evidence.*

Achieving Favourable Conservation Status for Little Tern in England requires range restoration, an increase in the number of colonies within the current and restored range, and an increase in the size of the population. The priority actions needed to achieve these ambitions are discussed below.

#### Enhanced beach-nesting bird protection

Little Terns are heavily dependent on conservation management, particularly predator control, management of disturbance, and habitat improvement. Colony abandonment and breeding failure as a direct or indirect effect of anthropogenic disturbance is a particular issue. Breeding success of more than 0.70 fledged chicks per breeding pair is required to halt – and ultimately reverse – the current population decline (JNCC 2016). To achieve this will require the implementation of enhanced beach-nesting bird protection schemes at current and new nesting sites to mitigate against disturbance by humans, especially those with dogs.

Many Little Tern colonies are now wardened and fenced off, which has greatly helped to manage disturbance, but resourcing of this protection has been variable and uncertain. Achieving the population increase needed to deliver FCS will require these protection schemes to be enhanced, through increased and more reliable funding to include – as a minimum – wardening, rope perimeter fences with appropriate signage to reduce human disturbance, measures to reduce the effects of disturbance by dogs on beach-nesting birds, and barriers to reduce mammalian predation such as electric fences or nest cages. These measures should be put in place early in the season. If resources are limited, enhanced management will need to be prioritised at the 10 most important colonies in England. When these top sites are performing well, they will provide a supply of birds to spread into other areas.

There is currently a new beach-nesting bird project in development funded through NE and RSPB's 'Action for Birds in England' programme which looks to identify and set up the best practice management at the most important sites for three target species: Little Tern, ringed plover, and oystercatcher. The long-term funding of this project is essential to deliver FCS for Little tern.

#### Restoration and creation of breeding habitat

Little Terns have very specific breeding habitat requirements, needing sand or shingle beaches or islands free from human disturbance and mammalian and seabird predation. Achieving FCS for Little Tern will require increasing the area of breeding habitat for this species through long-term restoration of coastal ecosystems and targeted habitat creation at existing and new breeding colonies.

#### *Long-term restoration of breeding habitat*

Large stretches of naturally functioning coast are more likely to provide a range of suitable nesting sites for Little Terns. Restoring naturally-functioning and dynamic coastal processes is vital to create sustainable areas of suitable habitat for this species in the long-term, necessary to achieve and sustain FCS for this species. This will depend on achieving FCS for coastal sand dunes and coastal vegetated shingle by restoring natural functioning of these habitats. However, in order to be of value to Little Terns, new breeding sites will have to be protected from disturbance and predation.

Coastal evolution and natural vegetation succession mean that some sites become less suitable for Little Terns over time whilst others become more suitable. Many Little Tern colonies face an increasing risk of being washed out due to rising sea-levels, and a reduction in size of breeding beaches due to beach scouring and dune encroachment. This risk is likely to increase unless natural coastal processes can be restored to allow foreshore and beaches to roll back and so adapt to rising sea-levels and increased storm events under climate change.

Information on coastal processes developed to support Shoreline Management Plans, such as whether coastlines are accreting or eroding, should be used to understand likely trends in suitability along the English coastline and to predict where suitable breeding sites are likely to exist in the future. Most Little Tern colonies currently occur in Special Protected Areas (SPAs) (Table 3). However, if the number of colonies increases and expands it will be necessary to review this series and to consider new notifications for established colonies, to maintain protection for the majority of the population.

#### *Targeted restoration and creation of breeding habitat*

As the restoration of dynamic coastal habitat is a long-term process, targeted habitat creation, restoration, and enhancement is needed to create a larger and more resilient network of nesting sites and thus to make progress towards FCS in the short- and medium-term. This is needed to reverse the current trend of fewer and larger colonies,

which makes the population vulnerable to localised storms, tidal events, and opportunistic predation.

Breeding habitat needs to both be restored at former sites and created in new areas. Existing degraded habitat can be restored using a variety of micro-management techniques to make it suitable for nesting Little Terns (e.g., vegetation management through removal or burial, re-profiling). New breeding habitat must be created in the right locations, where there is strong potential to create viable new breeding colonies but currently insufficient habitat. This can be achieved by constructing offshore islands and spits, which lack mammalian predators and are often inaccessible to humans, or through strengthening and stabilising (or destabilising and creating more dynamic) beaches e.g., through strategically placing dredged material as 'beach recharge' to create viable nesting habitats for terns.

It is important that habitat restoration and creation for Little Terns do not impede the natural functioning of coastal processes. Whilst the creation of islands and other habitats are important for achieving FCS for this species, it should not be seen as an alternative to protecting and maintaining naturally occurring islands and beaches. If any potential Little Tern habitat creation or enhancement sites are located within a SPA or Site of Special Scientific Interest for dune or shingle habitat features, it will be necessary to assess management proposals for terns against the conservation objectives for the habitat.

Once habitats are created or restored, actions may be needed to attract Little Terns to them. Terns can be attracted using decoys and recordings of courtship calls, increasing the likelihood of sites being colonised (Kotliar & Burger, 1984; Burger, 1988; Jeffries & Brunton, 2001; Colombé & Allcorn, 2003).

Habitat creation and restoration for Little Terns should be targeted in areas with the following properties:

- Situated on the coast, with well-camouflaged shallow scrapes on naturally functioning shingle and sand beaches, spits or inshore islets with foreshores sparsely vegetated with typical coastal species. Where monitoring shows that vegetation cover alone is preventing nesting, then apply suitable management techniques at a scale that meets the needs of nesting colonies.
- Situated above the highest spring tides so that they are not flooded during the breeding season and likely to remain so given the projected impacts of climate change.
- With suitable topography for breeding Little Terns, that is away from high cliffs and dunes to allow good all-round vision.
- Close to shallow, sheltered feeding areas with abundant food supply (a variety of small fish and marine invertebrates), ideally <1 km but to a maximum of 6.3 km from the nesting site. This will require assessments of prey population data (Gill, 2003), field surveys of prey availability (Perrow *et al.*, 2003), or existing knowledge of use by other tern species.

- Either isolated from human populations or where resources are available to manage recreational access and predation.

## 4.2 Place-based delivery

*Include a strategic breakdown of where potential contributions to FCS could be made. This should be provided in the table below alongside a short accompanying narrative to highlight any general patterns and key populations or regions.*

*It may be appropriate to prioritise geographically where conservation actions have the greatest potential to contribute towards FCS. This could mean focusing efforts on maintaining a population or area of habitat that contributes strongly to FCS, or restoring an extirpated population or area of degraded habitat with strong potential to contribute to FCS in the future.*

*The selected spatial scale should be appropriate for the species. For terrestrial species, a county- or National Character Area-scale focus will facilitate the link between FCS strategies and delivery. Geographical breakdowns are likely to be more challenging in marine environments. Where possible, marine strategies should quantify potential contributions to FCS at a regional scale. For strategies focused on coastal features, authors may prioritise FCS contributions by county or Area Team region. Potential contributions are indicative only and thus should be rounded appropriately.*

The county breakdown in Table 2 provides a guide to where potential contributions to Favourable Conservation Status of Little Tern could be prioritised across counties in England over the course of this 25-year strategy. Potential contributions are indicative, based on the best available population data (historic and most recent counts), knowledge (on past and current management, current pressures and issues) and expert judgement of future prospects.

Numbers of breeding pairs have historically fluctuated across the breeding range, increasing at some locations while decreasing to zero at others. The range in historical breeding numbers, combined with information on potential habitat availability, gives an impression of what might be achievable in the future.

The strongest contributions to FCS can potentially be made Cumbria, Essex, Hampshire, Kent, Norfolk, Northumberland, and Sussex. There is a particularly high potential for habitat restoration and creation in counties such as Essex and Kent (i.e., the Thames and Essex estuaries), which historically held much larger populations than currently. Norfolk is the county with the largest population in England and has the potential to grow further with improved protection of existing colonies and creation of new safe nesting areas. There is potential for smaller population increases in various counties currently harbouring small populations, including Cheshire, Dorset, Durham, Lincolnshire, and Yorkshire.

**Table 2.** County-specific historic and current Little Tern population data, and indications of where contributions to Favourable Conservation Status could be made. Data are numbers of breeding pairs. Potential contributions to FCS are indicative, based on expert judgement and current data.

County	Historic population <sup>1</sup>	Current population - Seabird count 2018 <sup>2</sup>	Current population - 2021-2022 newsletters <sup>3</sup>	Potential 25-yr contribution to FCS	Commentary of priority actions
Cumbria	60-105	60	59 (2022)	110 (+50)	Various actions at different colonies, including improved protection of beach colonies e.g., Foulney, South Walney and the establishment of a larger area of safe nesting habitat at Hodbarrow lagoon.
Cleveland (Durham)		10	49 (2022)	60 (+40)	Better protection of beach nesting birds through planning mitigation projects
Dorset	30-120	37	43-49 (2022)	52 (+15)	Small increases at the only colony, Chesil.
Essex	163-370	41	23 (2022)	149 (+108)	High potential for habitat creation from beneficial use projects in Essex estuaries and Thames, and through large multipurpose coastal habitat creation schemes e.g., Wallasea. This is the county with greatest potential for habitat creation to benefit populations, though terns may take some time to increase and repopulate these sites. Also, improved protection of beach nesting birds including those on small islands through planning mitigation funding. Reaching the target assumes colonisation of recently created habitat at Wallasea, the creation of at least one more large scale managed realignment project with habitat for a significant little tern colony, and a pipeline of beneficial use opportunities providing opportunities within the Essex Estuaries.
Hampshire	82-245	66	17 (2022)	106 (+40)	Significant potential through new habitat creation schemes around Solent and Langstone Harbour – particularly through beneficial use projects and managed realignments. Improved protection of beach nesting birds funded through planning mitigation projects – extending current Bird Aware Solent service to the breeding season.

Kent	38-135	6	9 (2022)	46 (+40)	As in Essex, high potential for habitat creation through beneficial use and large multipurpose coastal habitat schemes. Also, improved protection of beach nesting birds including those on small islands through planning mitigation funding. This a priority for The Thames, Medway and Swale and also Dungeness/Rye Bay
Lincolnshire	46-156	22	17 (2022)	52 (+30)	New habitat creation opportunities through compensatory habitat delivery, and managed realignments. Improved protection of beach nesting birds through planning mitigation.
Norfolk	416-600	552	641 (2022)	692 (+140)	The county with most of Englands little terns and the largest England colonies. Must a priority for conservation and recovery. Increased and more secure funding of protection at current colonies e.g., Winterton, Blakeney, Scolt, Holme and Holkham should increase productivity at these key colonies which can fuel wider population increase . also need to create a new safe nesting site for little terns Better protection/management of Scrobie Sands if it continues to provide nesting opportunities above highest tides.
Northumberland	20-71	90	75 (2022)	140 (+50)	Improved funding and management of beach nesting colonies through Space for Shorebirds, the Northumberland County Council Coastal Mitigation Service, funded by house builder and tourism developer contributions through the planning system.
Suffolk	80-378	55	12 (2022)	115 (+60)	Better protection of beach nesting bird colonies in North Suffolk: Kessingland and satellite sites. Habitat creation at various coastal sites to create new and improved breeding opportunities. restoration at Orfordness.
E & W Sussex	12-132	32	40 (2022)	82 (+50)	Habitat enhancement at Pagham/Medmerry and Rye Harbour/Rye Bay. New beach bird protection at Pagham Harbour (already set up) and establish similar system for Rye Bay.
Yorkshire	4-68	33	39 (2022)	73 (+40)	New habitat creation opportunities through compensatory habitat delivery and managed realignments.
<b>TOTAL</b>	<b>1247-2087</b>	<b>1004</b>	<b>1034</b>	<b>1582 (+585)</b>	



<sup>1</sup> From Sharrock, 1976, Gibbons, Reid, & Chapman, 1993, Brown & Grice, 2005, Balmer, et al., 2013; <sup>2</sup> Add Seabird Count ref; <sup>3</sup> Add ref for counts from steering group newsletter

### 4.3 Role of protected sites

*Quantify the potential contributions to FCS from protected sites, following the strategic principles of section 4.2. This should be provided in the table below alongside a short accompanying narrative to highlight any general patterns and key sites. This section is intended to assess the importance of the designated site network for achieving FCS and to identify any key sites with the potential to make strong contributions to FCS. Where possible, provide estimates for all individual protected sites where the species is found (absolute values) and for the protected site network as a whole (absolute and proportional values). For terrestrial species, we recommend focusing on Special Areas of Conservation or Special Protection Areas. Do not differentiate between protected sites where the species is or is not designated.*

This breakdown by protected sites provides a guide to where potential contributions to Favourable Conservation Status of Little Tern could be prioritised across Special Protection Areas (SPAs) in England. Potential contributions are indicative.

**Table 3.** Estimated current and potential proportion of Little Tern population inside and outside Special Protection Areas (SPAs). Data are numbers of breeding pairs.

	Historic population - Seabird Count 2000 <sup>1</sup>	Historic no. sites	Current population - Seabird Count 2018 <sup>2</sup>	Current population- 2021-2022 newsletters <sup>3</sup>	Current no. sites	SACO population target <sup>4</sup>	Potential 25-yr contribution to FCS
<b>Inside SPAs</b>			<i>Absolute (Proportional %)</i>			<b>1511</b>	<i>Absolute (Proportional %) total</i>
Alde-Ore Estuary	88	2	0		0	48	20
Benacre to Easton Bavents	8	2	55		2	39	60
Blackwater Estuary	97	4	6		3	5	50
Chesil Beach and The Fleet	81	1	37		1	54	52
Chichester and Langstone Harbours	87	1	57		1	109	100
Colne Estuary	20	1	1		1	40	40
Dungeness to Pett Level	11	2	12		2	35	20
Foulness	3	1	0		0	31	50
Gibraltar Point	32	1	21		1	40	40
Great Yarmouth North Denes	239	2	133		2	277	150
Hamford Water	183	2	34		2	39	50
Humber Flats, Marshes and Coast	59	2	33		2	51	100
Lindisfarne	7	1	50		2	42	70

Medway Estuary and Marshes	14	1	0		1	24	30
Minsmere – Walberswick	19	3	0		3	32	50
Morecambe Bay	26	1	11		1	42	70
North Norfolk Coast	296	5	228		5	400	400
Northumberland Coast	43	1	40		1	40	60
Pagham Harbour	0		20		1	14	30
Solent and Southampton Water	42	3	9		3	49	50
Teesmouth and Cleveland Coast	11	2	10		2	40	60
Thanet Coast and Sandwich Bay						30	
The Wash						30	
<b>Outside SPAs</b>			<i>Absolute (Proportional %)</i>				<i>Absolute (Proportional %)</i>

<sup>1</sup> Add Seabird 2000 Count ref <sup>2</sup> Add Seabird 2018 Count ref; <sup>3</sup> Add ref for counts from steering group newsletter; <sup>4</sup> Population targets from Supplementary Advice on Conservation Objectives

#### 4.4 Links to other strategies or action plans

*Reference any important – particularly national – conservation strategies, action plans or other guidance for this species. Identify any links to this strategy that may be relevant to delivery.*

For Little Tern:

- Little Tern Species Recovery Plan (The EU LIFE Little Tern Recovery Project partnership, 2019)
- The EU LIFE+ Nature Little Tern Recovery Project should be referred to for detailed advice, based on direct experience, when delivering for this species.  
<https://littleternproject.org.uk/documents/>

For managing coastal processes to help provide and manage habitat suitable for Little Tern:

- Working with natural processes to reduce flood risk: The evidence base for working with natural processes to reduce flood risk (EA, 2017).  
<https://www.gov.uk/government/publications/working-with-natural-processes-to-reduce-flood-risk>

- Beach Management manual (EA 2010)
- Guide to the management and restoration of coastal vegetated shingle:  
<http://publications.naturalengland.org.uk/publication/84013?category=43007>
- Defra report on managing sand dunes for flood defence:  
<http://sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu&Module=FJPPProjectView&Location=None&ProjectID=9051&FromSearch=Y&FieldOfStudy=12&SearchText=dunes&ShowDocuments=1&SortString=ProjectCode&SortOrder=Asc&Paging=10&FJP=1>
- Integration of habitats and species based on natural function (with coastal section and case study): <http://publications.naturalengland.org.uk/publication/5891570502467584>

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## 5. ACHIEVABILITY OF FAVOURABLE CONSERVATION STATUS

*This section uses the available evidence to assess how to achieve FCS. From this assessment, it should be possible to develop time-bound objectives towards FCS and a recovery plan describing the conservation actions that should be prioritised to achieve FCS. This section should typically be around 2 pages long.*

### 5.1 Assessing achievability

*Assess the likelihood of achieving Favourable Conservation Status for the species, considering the following:*

- *The current status of the species and the change in status required to meet FCS.*
- *The past impacts of conservation actions on the status of the species, which will reflect earlier societal choices and other factors that affect delivery.*
- *Other evidence of the efficacy of conservation actions.*
- *The availability of delivery tools and mechanisms to implement conservation actions, identifying where lack of delivery tools may constrain implementation of appropriate actions.*

*Based on this assessment, state whether it is likely to be feasible to achieve FCS for each parameter within the timeframe of this strategy. Be aware of not constraining or overestimating the level of ambition based on historical delivery. Where FCS is not achievable with the timeframe of the strategy, indicate the expected long-term delivery of FCS.*

Significant progress towards Favourable Conservation Status can be achieved within the next 25 years. The actions required to recover the population are well understood and are likely to be effective if delivered at sufficient scale to influence the England population. However, Little Terns are currently declining, and it may take up to 10 years to halt this decline before population increases again due to the time taken for actions to have impact, particularly for sufficient recruitment of new birds into the breeding population. As such, it may take longer than 25 years to achieve FCS. FCS is achievable in the long-term but will require more reliable and predictable resourcing, particular for beach-nesting bird protection and wardening.

Little Tern populations are declining and it may take up to 10 years to halt this decline, due to the time taken for sufficient recruitment of new birds into the breeding population. The population is predicted to stabilise if annual breeding success can be increased to 0.70 fledged chicks/breeding pair (JNCC 2016), which is considered achievable only with increased levels of resources for protection and targeted habitat management and creation. Wilson et al. (2020) used a simple population model to show that even if the elevated breeding success levels achieved by the EU LIFE+ funded [Little Tern Recovery Project](#) (2014 – 2019) were maintained, the projected population decline between 2020–2050 would only be slowed by 30%, so more needs to be done to achieve population stabilisation. Adequate resourcing of site protection/wardening schemes is essential to protect current colonies and boost productivity. In addition, it is necessary to create new safe nesting sites to replace those being lost or degraded through sea level rise, coastal erosion, habitat change, and incompatible levels of disturbance.

Despite the need for a long-term focus, it will be possible to make significant steps towards FCS over the next 25 years due to the coordinated approach and volunteer effort established during the LIFE project and the resulting formation of the British Isles Little Tern Steering Group. This project provided increased resources between 2014-19 across the most important UK Little Tern SPAs to provide an enhanced warden scheme, predator management, habitat management and enhancement in existing colonies, and creation/restoration of habitat to support new colonies. Previously, actions had generally focused on single colonies with static site-based operations generally working in isolation from each other. The enhanced warden scheme under the project facilitated a move to partnership operations with several organisations working together across sites, sharing experience and resources. Overall, an estimated additional 1,785 chicks fledged due to the LIFE+ Little Tern Recovery Project, with a significant increase in productivity in smaller colonies. Those that survive their first few years are expected to recruit back into the UK and Irish population, benefitting from the legacy of protection, habitat restoration and creation measures established as part of the project.

The Little Tern work is now evolving into a wider beach-nesting bird programme also including ringed plover and oystercatcher. Funding is being sought from NE to support this programme. Additional funding supports the programme coordination but also provides funding to the most important sites ensuring that they are all fully equipped and able to follow best practice methods. Volunteers play an increasingly important role but employed seasonal officers are essential at all sites. A lack of regular and reliable funding for site protection/wardening remains a major barriers to achieving FCS for Little Terns.

Currently, habitat restoration and creation are often delivered opportunistically through mechanisms such as planning mitigation funding and managed realignments,. There are likely to be new delivery opportunities in the future resulting from new UK environmental legislation, such as Biodiversity Net Gain to offset habitat loss from coastal developments and Environmental Land Management schemes, which may potentially be able support the development of predator proof fencing and new shingle islands. Delivering and maintaining FCS for Little Terns will require sustainable mechanisms that can provide long-term protection of colonies and restoration of naturally functioning breeding habitat. Achieving FCS for Little Tern requires the restoration . of dynamic coastal ecosystems to create a larger area of sustainable breeding habitat. This will be a long-term process; whilst this work is ongoing, intensive ongoing management will be required to slow population declines

## 5.2 External factors

*Discuss how any other external factors that may impede or facilitate progress towards FCS. Avoid duplicating information in FCS definition documents on analyses of current and past threats. In particular consider persistent threats and drivers, such as climate change, which cannot be controlled without structural shifts in economic or social sectors and which may lead to future deterioration or improvement in the conservation status of the species.*

*Please refer to [Natural England and RSPB's Climate Change Adaptation Manual](#) for information on the predicted impacts of climate change on the species and potential adaptation options. If this information is not available for the species, Natural England climate change specialists can be approached to write an assessment for this strategy. Where appropriate, maps of potential climate change impacts or sensitivity should be included or referenced to.*

Natural England and RSPB's [Climate Change Adaptation Manual](#) classifies the climate change sensitivity of Little Tern as high. See the specific pages of the Manual for further details.

Little Terns nest in areas of sand and shingle close to the shoreline and are therefore vulnerable to dynamic coastal change and coastal squeeze. Consequently, they are being affected by climate change impacts such as sea level rise and increased summer storminess leading to more frequent inundation of nest sites. Any loss of habitat which leads to higher concentration on existing sites is likely to exacerbate existing pressures from predation and disturbance.

Climate change may create opportunities for populations to increase in more northerly areas, although this is dependent on the availability of suitable sand and shingle habitat and food sources. However, it is not clear that their northern range of this species is limited by climate, as there are large areas of apparently suitable habitat within their current range that is not used, likely due to other factors such as disturbance, and they already breed as far north as Orkney.

Climate envelope modelling suggests that Britain's climate will become more suitable for a range of southerly distributed seabirds, including the Little Tern, but this assumes no climate-induced effects on prey species such as sand eels. Although climate change could mean Little Terns may become more abundant in the north of their range, food availability could limit any potential expansion. Little Terns could be affected by the impact of rising sea temperatures on populations of sand eels and clupeid fish. Unlike other tern species, they habitually feed very close to their nesting sites during chick rearing. The ability to mitigate this is likely to be limited to creating and restoring sites where prey availability is sustained.

Future prospects for populations in England may be impacted by 'short stopping' of birds on migration, especially resulting from responses to climate change.

### 5.3 Objectives

*Describe England-scale objectives for each parameter within the timeframe of the strategy. Objectives should be ambitious steps towards FCS or – if achievable within the timeframe of the strategy – FCS itself. Objectives must be specific, measurable, and achievable. When defining the objectives, consider the trajectory of expected delivery and define short-term milestones towards objectives (e.g., 5 years). For example, where a strategy uses habitat restoration, consider the time required to restore a particular habitat and for the return of any associated focal species. It also may be useful to provide a figure to represent the delivery of milestones and objectives over time.*

25-year objectives from Table 1 to be discussed here.

## 5.4 Monitoring and evaluation

*Outline a concise plan for monitoring and evaluating progress towards the strategy's objectives. This should describe the monitoring processes currently in place for the species, including the type of data collected and its frequency of collection. This plan may identify any gaps in existing monitoring, such as a lack of survey effort, and any additional monitoring needs.*

*Describe how monitoring data will be used to evaluate progress towards FCS objectives, for instance by describing any modelling required to quantify conservation status from monitoring data. It may be useful to refer to the approaches used to define favourable conservation status for this species.*

Ongoing monitoring following the LIFE project will measure productivity at the most important sites until 2023, with reporting expected 2025.

Plans are to continue population and productivity monitoring at the Little Tern LIFE project sites for 5 years after the conclusion of the LIFE project, which would give 10 years of data and hopefully enough time for signs of a positive effect of these measures. The 10<sup>th</sup> year will be 2023. This would be analysed during 2024 and reported during 2025. It is also planned to review data from the colour ringing project at this time. From 2025 we would be able to reassess the targets in the action plan and in the FCS document.



## ANNEX 1: REFERENCES

*Reference all documents used to develop this strategy*

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## **Offcuts**

Use the provisions in the Marine and Coastal Access Act (2009) to ensure protection from disturbance for wildlife, including species such as Little Tern.

Such measures are important in England, but action also needs to consider impacts in the wider locations and migratory routes of Little Terns.

Established breeding sites provide important source populations to encourage dispersal and establishment of new colonies. However, Little Tern are an opportunistic species that can exist in very small colonies. Where habitat is suitable, they may utilise ephemeral and non-conservation designated areas, and such opportunities should not be overlooked. Expanding range – not just numbers – may be equally important for this species.

Levels of recreational activities and beach visitors are expected to increase (several new local studies on visitor numbers and disturbance impacts), leading to an increased risk of disturbance on breeding beaches.