## Town of Edgartown Cape Pogue DCPC SUPPLEMETAL MATERIALS June 30 5:00 P.M.

MA DOT Bridge Routine Inspection Report for Dyke Bridge	1-22
Vineyard Gazette Article Regarding Approval of TTOR 1990 Beach Management Plan and special permit issued by Select Board	24
Draft of Trustees of Reservations 2022 Beach Management Plan	25-72

### MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE 1 OF 21

# STRUCTURES INSPECTION FIELD REPORT

BR. DEPT. NO. **F-07-004** 

CITY/TOWN		8STRUCTURE NO. 11-Kilo. POINT 41-STATU								41-STATUS	90-R	OUTIN	JE INS	SP. DATE
EDGARTOWN			E07004-43B-MUN-NBI 00					1.046	P:POSTED	S	EP	29,	2021	
07-FACILITY CARRIED				MEMORIAL NAM	E/LOCAL 1	NAME		27-Y	R BUILT	106-YR REBUILT	YR R	EHAE	B'D (N	ON 106)
HWY DIKE RD									1995	0000		(	)000	J
06-FEATURES INTERSECTED 26-FUNCTIONAL CLASS DIST. BRIDO									E INSPECTI	ON ENGINEER	G. Sin	npson		
WATER POUCHA POND Rural Local														
43-STRUCTURE TYPE				22-OWNER Town	21-MAINT	FAINER	TEA	AM LEADI	ER J. Spiezio	)				
702 : Timber Strir	nger/G	irder		Agency	Agency	y								
107-DECK TYPE				WEATHER	TEMP. (ai	r)	TEA ▲	AM MEME	BERS					
				Sunny	10	C		2011						
ITEM 58	6	]	ITE	CM 59		7	]		ITEM	60		7		
DECK		DEF	SUP	ERSTRUCTU	RE	-	J	DEF	SUBST	RUCTURE		-		DEF
1.Wearing surface	6	M-P	1.Stri	ingers		N		-	1. Abut	ments	Dive	Cur	6	
2.Deck Condition	6	M-P	2.Flo	orbeams		N		-	a. Pedes	tals	Ν	Ν		-
3.Stay in Place Forms	N	-	3.Flo	or System Braci	ing	N		-	b. Bridge	e Seats valls	N 7	N 6		- M-P
4.Curbs	N	-	4.Gir	ders or Beams		7		-	d. Breast	twalls	N	6		-
5 Median	N	-	5.Tru	sses - General		N		-	e. Wingw	valls	7	6		S-A
6 Sidewalks	N	-	a.	Upper Chords	N	1		-	f. Slope q. Pointir	Paving/Rip-Rap 1q	N	N		-
7 Paranote	N		b. 1	Lower Chords	Ν	I		-	h. Footings		Ν	Ν		-
	7		c. Web Members N			I		-	i. Piles		7	7 ⊔		-
			d. /	Lateral Bracing	N	ı		-	k. Settlement		8	7		-
9.Anti Missile Fence		-	e. Sway Bracings N			I		-	I. Fasteners		N	6		M-P
10.Drainage System		-	f.	Portals	N	J		-	<i>m.</i> 2. Piers	or Bents	N	N	N	-
11.Lighting Standards	N	-	g	End Posts	N	1		-	a Podos	tale	N	N	IN	_
12.Utilities	8	-	6.Pin	& Hangers		N		-	b. Caps	1015	N	N		-
13.Deck Joints	N	-	7.Cor	nn Plt's, Gussets	s & Angle	es N		-	c. Colum	ns Milita (Bilana III)	N	N		-
14.	N	-	8.Cov	ver Plates		N		-	e. Pointir	/webs/Pierwalls ig	N	N		-
15.	Ν	-	9.Bea	aring Devices		N		-	f. Footin	g	Ν	N		-
16.	N	-	10.Di	iaphragms/Cros	s Frames	S N		-	g. Piles		N	N		-
L	N	۔۔۔۔۔ م	11.Ri	ivets & Bolts		N		-	i. Settler	nent	N	N		-
CURB REVEAL	N	N	12.W	elds		N		-	j.		N	N		-
(In millimeters)			13. M	ember Alignmer	nt	8		-	<i>k.</i> 3. Pile F	Bents	N	N	7	-
APPROACHES		DEF	14.Pa	aint/Coating		N		-	a. Pile Ca	aps	N	7	'	_
a. Appr. pavement condition	Ν	-	15.			N		-	b. Piles		7	7		-
b. Appr. Roadway Settlemer	nt 6	M-P	Year	Painted	Ν				c. Diagor	nal Bracing	7 N	7 N		-
c. Appr. Sidewalk Settlemen	it N	-	COLU		Please ev	nlain			e. Faster	ners	5	6		- M-P
d.	N	-	None	$e(\mathbf{X})$ Minor ( )	Moderate	e () Se	vere	. ( )			=9 pla		volais	N
	_		LOAD	DEFLECTION:	Please ex	plain			UNDERM			ase e	лріан	
(Attached to bridge)	(Y/N)	Ν	None	e(X) Minor()	Moderate	e ( ) Se	vere	( )		DN DAMAGE:	oderat			
		DEF	LOAD None	<b>VIBRATION:</b> e() Minor( <b>X</b> )	Please ex Moderate	r <b>plain</b> ⊧()S∈	vere	()			Jueral	.c (	, se\	
a. Condition of Welds	Ν	-		.,		, , , , ,		· /	None (X	) Minor ( ) Mo	oderat	te (	) Sev	/ere()
b. Condition of Bolts	N	-	Any F	Fracture Critical	Member	: (Y/N)		N						
c. Condition of Signs	Ν	-	Any C	Cracks: (Y/N)	N			]				<u> </u>	05/5	
									93B-U/V	V (DIVE) Insp		09/	25/2	U19

RTN(1)7-96

B.I.N.

400

2-DIST

N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE

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CITY/ FDG	TOWI ART				B.I.I <b>43</b>	BR. DEPT. NO.         8STRUCTURE NO.           BR. DEPT. NO.         8STRUCTURE NO.	INSPECTION	DATE 2021
ITTR	M 61				7	ITEM 36 TRAFFIC SAFETY ACCESSII	SILITY ()	(/N/P)
CHA	NNE			l		A. Bridge Railing 0 7 M-P	Need	Jed Used
СНА	NNE	L PROTECTIO	N			B. Transitions 0 7 M-P Lift Bucket	N	
			Dive	Cur	DEF	C. Approach Guardrail 0 7 M-P Boat	Y	<u>' Y</u>
1.Cha	annel	Scour	7	н	-	D. Approach Guardrail Ends 0 7 M-P Waders	N	IN
2.Em	bankn	nent Erosion	7	7	-	WEIGHT POSTING Not Applicable Inspector 50	) N	I N
3.Deb	oris		8	8	-	H 3 3S2 Single Rigging	N	I N
4 Vec	etatio	n	8	8	_	Actual Posting 09 14 21 N Staging	N	I N
5 11til	itios		N	N		Recommended Posting 09 14 21 N	rol N	I N
C.Dim	Den/		N 0	7		RR Flagger	N	I N
6.Rip	-Rap/3		0	<i>'</i>	-	Waived Date: 00/00/0000 EJDMT Date: 00/00/0000 Police	N	I N
7.Agę	gradat	ion	8	н	-	Signs In Place F W F W		
8.Fer	ider S	ystem	N	N	-	(Y=Yes,N=No, NR=NotRequired)	OWN Y	<u> </u>
						Visibility 7 4 TOTAL H	JURS	12
						CLEARANCE POSTING         N         S           Not         X         ft         in         ft         in         meter	(Y/N):	Υ
STRE	AM FL	OW VELOCITY:				Actual Field Measurement 0 0 (V.C.R.)	(Y/N): N	
Tidal (	<b>X</b> )High	n ( ) Moderate ( ) L	.ow (	) Nor	ne()	At bridge Advance TAPE#:		
ITEM 61	(Dive R	eport): <b>7</b> ITEM 61	l (This	Repo	rt): <b>7</b>	Signs In Place     N     S       (Y=Yes,N=No,     Image: Signs In Place     Image: Signs In Place	ste porformod:	
93b-L	i/W IN	<b>SP. DATE:</b> 09	9/25/	2019	)	NR=Not Required) Legibility/ Visibility/	actile.	
RATI	RATING If YES please give priority:							
Rating	Repo	rt (Y/N): <b>Y</b>				Recommend for Rating or Rerating (Y/N): N HIGH ( ) MEDIUM	( ) LOW ( )	J
Date:	(	01/01/2005				REASON:		
In	specti	on data at time of e	existir	ng rat	ing			
I 58: <b>8</b>	1 59	: <b>9</b> I60: <b>8</b> Da	ite :0	9/16	/2003			
		1				CONDITION RATING GUIDE (For Items 58, 59, 60	and 61)	
	CODE	CONDITION				DEFECTS		
	N	NOT APPLICABLE						
G	9	EXCELLENT	E	xcellen	t condition.			
G	8	VERY GOOD	N	o probl	em noted.			
G	7	GOOD	S	ome m	inor problen	S.		
F	6	SATISFACTORY	SI	tructura	al elements	show some minor deterioration.		
F	5	FAIR		ll prima	ry structura	elements are sound but may have minor section loss, cracking, spalling or scour.		
P	4	POOR	A	dvance	ed section lo	is, deterioration, spalling or scour. rioration, spalling or scour have seriously affected primary structural components. Local failures are po	ssible Fatique crack	
Р	3	SERIOUS	in	steel o	or shear cra	ks in concrete may be present.		
с	2	CRITICAL	A re	dvance moved	d deteriorat substructu	on of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present o e support. Unless closely monitored it may be necessary to close the bridge until corrective action is ta	r scour may have ken.	
с	1	"IMMINENT" FAILURE	M Bi	ajor de ridge is	terioration of closed to the	r section loss present in critical structural components or obvious vertical or horizontal movement affec affic but corrective action may put it back in light service.	ting structure stablility	
	0	FAILED	0	ut of se	ervice - beyo	nd corrective action.		
						DEFICIENCY REPORTING GUIDE		
DEFI	CIENC	Y: A defect in a stru	ucture	that re	quires corre	ctive action.		
CATE M= N	GORI linor E	ES OF DEFICIENC Deficiency - Deficiencies	vhich a	re minor	r in nature, ger	erally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to	: Spalled concrete, Minor p	pot
S= Se	vere/M	ajor Deficiency -	eficienci	es which	are more ext	ing, oroged drainage, etc. insive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major dete vitement. Considerable couring or underwining. Moderate to extensive correction to structural case with measurable loss of	rioration in concrete, Expo	sed and
C S-	Critics	TAJUL D'ELECENT - corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.						
С-5= С-Н=	Critica	al Hazard Deficienc	епсу - ;у і	the br A deficie include b	idge. ency in a comp out are not limi	onent or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structure ed to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians,	al integrity of the bridge. Ex Missing section of bridge r	kamples ailing,
URGE	ENCY	OF REPAIR:		etc.				
I = Im	mediate	<ul> <li>[Inspector(s) immedia</li> </ul>	ately con	itact Dis	trict Bridge Ins	vection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her).		
A = AS P = Pr	SAP- ioritize	[Action/Repair should [Shall be prioritized by	pe initia Districty	ated by [ t Mainter	Jistrict Mainter	ance ⊨ngineer or tne Kesponsible Party (it not a State owned bridge) upon receipt of the Inspection Report]. r or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].	-	
L		. ,					2	

#### **BRIDGE ORIENTATION**

Orientation as follows:

• Dyke Road over Poucha Pond on Chappaquiddick Island has an east/west orientation.

- Tidal flow from south (Flood) to north (Ebb). Sympathies
- Bents(7) & Spans(8) are numbered from the west.
- Beams(5) & Bays(4) numbered from the south, see sketches 1-3.

#### **GENERAL REMARKS**

Bridge roadway is one lane for 2-way traffic with no traffic signals or signage.

Chappy Ferry service from Downtown Edgartown to Chappaquiddick Island was coordinated & supplied by Edgartown Highway Department (Contact Superintendent, Allan DeBettencourt, 508-627-4004).

Underside inspection was performed during a receding tide (2hrs after +1.0ft High Tide) for the Wasque Point tide station utilizing a watercraft launched at the northwest embankment.

The Hytoi Trustees of Reservations operate a live traffic counter that is attached to the south rail at Bent 5 and the numeric display is a yearly per axle count that is reset every April.

## S/A - West at-bridge weight posting sign has compromised visibility due to inadequate height, see photo 1. Both advances lack weight posting signs to inform traffic of the restriction.

Previously installed navigation channel indicator sign attached to the north fascia board in Span 5 is broken and missing, see photo 2.

#### ITEM 58 - DECK

#### Item 58.1 - Wearing surface

Wearing surface is comprised of single coursed 4" x 10" transversely fastened timber decking planks, see photos 3 & 4. Inspection of this item is limited to only the top side of the decking planks.

Specific deficiencies as follows :

- Minor to moderate weathering and surface checking (≤1/16"W) throughout.
- Differential elevation of planks  $\leq 1/2$ "H.
- Abrasion/section loss in wheel paths  $\leq$ 1"D.
- $\approx$ 40% of fasteners are protruding  $\leq$ 1/2"H with nominal wear, predominately in abraded wheel paths.
- Moderate to severe sand accumulation throughout, worst in abraded wheel paths.

#### Item 58.2 - Deck Condition

Minor mildew staining throughout deck planking soffit, see photo 5.

Also see item 58.1 - Wearing Surface for top side deficiencies.

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#### Item 58.12 - Utilities

Two PVC conduits in bay 5, in all spans, see photo 5.

#### **APPROACHES**

#### Approaches b - Appr. Roadway Settlement

The approach roadways are comprised of gravel and loose sand with scattered minor vegetation growth, see photo 1. Both approaches exhibit moderate rutting in wheel paths, and scattered typical gully erosion. This item is limited to the extent of the wingwall bulkheads outlined as "PHASE I" in the construction plans, see sketch 1.

Specific deficiencies as follows :

West approach :

- Southwest immediate approach exhibits a 10'L x 5'W x  $\leq$ 2'D erosion hole, see photo 6.

East approach :

- Southeast immediate approach exhibits 5'L x 16"W x ≤10"D erosion hole, see photo 7.
- East approach along south wingwall bulkhead displays a 25'L x 2'W x  $\leq$ 2'D erosion hole, see photo 8.
- Erosion along both wingwall bulkhead perimeters exposing tiebacks and tops of abandoned bulkheads 16"W x ≤6"D, see photo 9.

See items 60.1.c - Backwalls & 60.1.e - Wingwalls for associated bulkhead deficiencies.

#### ITEM 59 - SUPERSTRUCTURE

#### Item 59.4 - Girders or Beams

Rating based on the condition of the five interior 10" x 10" timber beams, 3" x 10" fascia boards are not structural components, see sketch 3.

Specific deficiencies as follows :

- Scattered bird nests throughout faces of beams.
- Scattered minor top edge splits from misguided deck nails (as-built), see photo 10.
- Span 7 Beam 2 south face, isolated horizontal surface checking ≤1/16"W, see photo 11.

#### Item 59.13 - Member Alignment

See photo 12 for typical vertical alignment of spans.

#### SuperStructure Load Vibration Notes

Minor vibration experienced under live vehicular loadings.

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#### ITEM 60 - SUBSTRUCTURE

#### Item 60.1 - Abutments Item 60.1.c - Backwalls

Inspection and condition rating of this item is based on the timber tongue & groove vertical sheathing and wale systems of the abutment bulkheads to the corner/interface with the wingwall bulkheads. Concrete deadman systems and associated tiebacks are hidden under approach roadways, only exterior tieback cleat boards are accessible.

Deficiencies as follows:

- Both abutment bulkheads exhibit minor to moderate mildew staining above tidal zone, and moderate to heavy marine growth within tidal zone, see photo 13.
- East abutment bulkhead, bulging/bowing 1" seaward, see photo 14.

#### Item 60.1.d - Breastwalls

Inspection and condition rating of this item is based on the condition of the pile caps at both abutments.

#### Item 60.1.e - Wingwalls

Condition rating of this item is based on the timber tongue & groove vertical sheathing and wale systems of the wingwall bulkheads. Tiebacks are hidden under approach roadways, only exterior tieback cleat boards are accessible. See item Approaches b - Approach Roadway Settlement for exposed tiebacks.

Deficiencies as follows:

- All wingwall bulkheads exhibit minor mildew staining above tidal zone, surface checks and moderate to heavy marine growth within tidal zone, see photo 15.
- Both east wingwall bulkheads exhibit bulging/bowing ≤2" seaward and gaps between sheathing & wales, worst at northeast wingwall bulkhead at first tieback from west, see photo 16.
- Northeast wingwall bulkhead between 1st & 2nd piles from west, split middle wale, see photo 15.
- S/A : Northeast wingwall bulkhead at interface with abutment bulkhead, ≤1/2" gap allowing fill loss, see photo 14.

#### Item 60.1.i - Piles

Condition rating based on the 10" timber piles attached to the wingwall bulkheads.

#### Item 60.1.I - Fasteners

Condition rating based on all steel fasteners, and tieback plates associated with abutment & wingwall bulkheads.

- All exposed fasteners and plates exhibit minor to moderate corrosion, see photo 15.

#### Item 60.3 - Pile Bents

#### Item 60.3.a - Pile Caps

Bent 5 south face(End) of cap, FH and FW irregular surface checking ≤1/16"W, see photo 17.

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#### Item 60.3.b - Piles

Rating based on the condition of the 3 piles per bent supporting the cap, the longer piles that function as part of the bridge rail system are not structural components, see sketch 2.

Deficiencies as follows:

- Scattered irregular pile cut offs reducing bearing area & creating  $\leq 1/2$ " gaps between cap, see photo 18.

- Bent 1 southwest pile, minor wane with rust staining, see photo 19.

#### Item 60.3.c - Diagonal Bracing

Moderate to heavy marine growth in tidal zone with scattered rust staining from fasteners, see photo 20.

#### Item 60.3.e - Fasteners

Condition based on diagonal bracing hardware and beam keeper system. All fasteners and angles exhibit minor to moderate corrosion, see photos 20 & 21.

#### TRAFFIC SAFETY

#### Item 36a - Bridge Railing

Bridge railing consists of two 6" x 8" horizontal members bolted to 6" x 8" vertical posts with ≈6' spacing, and 12" piles at bents see photo 3, non-standard. See item 58.8 for condition comments.

#### Item 36b - Transitions

Approach guardrail system attached directly to piles at abutment bents with no change in post spacing, non-standard. Flared at west & perpendicular at east, see sketch 1 and photos 1 & 9.

#### Item 36c - Approach Guardrail

Approach guardrail system consists of two 6" x 8" horizontal members bolted to wingwall bulkhead piles with  $\approx$ 10' spacing, non-standard, see photo 9. System configuration creates a 1.5'H opening between the lower horizontal and top of wingwall bulkhead sheathing.

#### Item 36d - Approach Guardrail Ends

East approach guardrail ends are beyond bridge limits, blunt end at west, non-standard.

#### Sketch / Photo Log

- Sketch 1: Plan View, from 1994 Construction Plans
- Sketch 2 : South Elevation View, from 1994 Construction Plans
- Sketch 3 : Cross Section looking west, Section A-A from 1994 Construction Plans
- Photo 1 : West approach, at-bridge weight posting sign installed at inadequate height.
- Photo 2: Span 5 north elevation, broken & missing navigation channel indicator sign.
- Photo 3 : General wearing surface looking west, sand accumulation in abraded wheel paths.
- Photo 4 : North wheel path looking east (Level @ Bent 4), abraded wheel path w/ sand accumulation & protruding fasteners.
- Photo 5 : General underside Span 5 looking west, minor mildew staining throughout soffit.
- Photo 6 : Southwest immediate approach roadway, erosion hole.
- Photo 7 : Southeast immediate approach roadway, erosion hole.
- Photo 8 : East approach along south wingwall bulkhead, moderate erosion.
- Photo 9 : East approach along north wingwall bulkhead, erosion along abandoned bulkhead exposing tiebacks.
- Photo 10 : Span 2 Beam 2 north face, top edge split from misguided deck fastener.

CITY/TOWN EDGARTOW	N	B.I.N. <b>43B</b>	BR. DEPT. NO. <b>E-07-004</b>	8STRUCTURE NO. E07004-43B-MUN-NBI	INSPECTION DATE SEP 29, 2021						
			REMA	RKS							
Sketch / Ph	Sketch / Photo Log (Cont'd)										
Photo 11 : Photo 12 : Photo 13 : Photo 14 :	Span 7 Beam 2 sou South elevation, typ General view of we North corner of eas	uth face bical ve st abut t abutm	e, horizontal surfa rtical alignment o ment bent & bulk nent bulkhead loc	ce checking. f spans. nead, mildew staining & maring king south, bulging/bowing & g	e growth throughout. gap w/ wingwall						
Photo 15 ·	bulkhead. Northeast wingwall	hulkhe	ad between 1st 8	2nd niles from west split in m	niddle wale						
Photo 16 :	Northeast wingwall sheathing & wales.	bulkhe	ad at first tieback	from west, bulging/bowing w/	gaps between						
Photo 17 :	Bent 5 south face of	of cap, \	vertical end surface	ce checks.							
Photo 18 :	Bent 1 center pile e	ast fac	e, irregular cut of	f w/ gap between cap.							
Photo 19 :	Bent 1 south piles,	minor v	vane w/rust stain	ng.							
Photo 20 :	Bent 7 north end of	east di	agonal bracing, o	corrosion of fastener hardware.							

Photo 21 : Bent 2 Beam 3 south keeper, corrosion to fastener hardware & angle.



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Photo 1: West approach, at-bridge weight posting sign installed at inadequate height.



Photo 2: Span 5 north elevation, broken & missing navigation channel indicator sign.

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## PHOTOS



Photo 3: General wearing surface looking west, sand accumulation in abraded wheel paths.



Photo 4: North wheel path looking east (Level @ Bent 4), abraded wheel path w/ sand accumulation & protruding fasteners.

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Photo 5:	General unde throughout se	rside Span 5 loo offit.	oking west, minor mildew stain	ing
AAA		Penkeren Besterne		





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Photo 7: Southeast immediate approach roadway, erosion hole.





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Photo 9: East approach along north wingwall bulkhead, erosion along abandoned bulkhead exposing tiebacks.



Photo 10: Span 2 Beam 2 north face, top edge split from misguided deck fastener.

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Photo 11: Span 7 Beam 2 south face, horizontal surface checking.



Photo 12: South elevation, typical vertical alignment of spans.

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Photo 13: General view of west abutment bent & bulkhead, mildew staining & marine growth throughout.



Photo 14: North corner of east abutment bulkhead looking south, bulging/bowing & gap w/ wingwall bulkhead.

CITY/TOWN EDGARTOWN	B.I.N. <b>43B</b>	BR. DEPT. NO. <b>E-07-004</b>	8STRUCTURE NO. E07004-43B-MUN-NBI	INSPECTION DAT SEP 29, 202
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Photo 15: Northeast wingwall bulkhead between 1st & 2nd piles from west, split in middle wale.



Photo 16: Northeast wingwall bulkhead at first tieback from west, bulging/bowing w/ gaps between sheathing & wales.

CITY/TOWN EDGARTOWN	B.I.N. <b>43B</b>	BR. DEPT. NO. <b>E-07-004</b>	8STRUCTURE NO. E07004-43B-MUN-NBI	INSPECTION DATE SEP 29, 2021
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Photo 17: Bent 5 south face of cap, vertical end surface checks.





CITY/TOWN EDGARTOWN	B.I.N. <b>43B</b>	BR. DEPT. NO. <b>E-07-004</b>	8STRUCTURE NO. E07004-43B-MUN-NBI	INSPECTION DATE SEP 29, 2021
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Photo 19: Bent 1 south piles, minor wane w/rust staining.



Photo 20: Bent 7 north end of east diagonal bracing, corrosion of fastener hardware.

CITY/TOWN EDGARTOWN	B.I.N. <b>43B</b>	BR. DEPT. NO. <b>E-07-004</b>	8STRUCTURE NO. E07004-43B-MUN-NBI	INSPECTION DATE SEP 29, 2021
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Photo 21: Bent 2 Beam 3 south keeper, corrosion to fastener hardware & angle.

# National Bridge Element Inspection

BDEPT#	E-07-004	Date	09/29/2021
B.I.N.	43B	District Bridge Inspection Eng'r	Grant Simpson
Item 8	E07004-43B-MUN-NBI	Inspecting Agency	Mass. Highway Dept.
Span Group	1	Team Leader	John Spiezio
Town	Edgartown	Team	Alexander Downing
District	5	Member(s)	

El #	Element Name	Units	Env.	Total Q.	% or Q	State 1	State 2	State 3	State 4
31	Timber Deck	sq feet	3	958.500	<b>%</b>	745.500	213.000		
Notes :	·		•						
> 1180	Abrasion	sq feet	3	213.000			213.000		
Notes :		•							·
111	Timber Open Girder	feet	3	355.000	<b>%</b>	335.000	20.000		
Notes :		•							·
> 1170	Split/Delamination (Timber)	feet	3	20.000	<b>%</b>		20.000		
Notes :	·		•						
228	Timber Pile	each	3	45	<b>%</b>	45			
Notes :		•	•						
235	Timber Pier Cap	feet	3	126.000	<b>%</b>	125.000		1.000	
Notes :		•							
> 1170	Split/Delamination (Timber)	feet	3	1.000	<b>%</b>			1.000	
Notes :		•	•						
332	Timb Bridge Railing	feet	3	142.000	<b>%</b>	142.000			
Notes :	•								

, MASS.

## Cape Pogue Land Management Plan Allowed by Board

#### By PAULA DELBONIS

The Edgartown planning board unanimously approved a special permit this week for a management plan for the Cape Pogue Wildlife Refuge and Wasque Reservation.

The permit allows the Trustees of Reservations to implement the plan this summer, protecting 700 acres of shore, marsh and heath lands on Chappaquiddick.

The plan is the first step in minimizing human impact to the beach, said Chris Kennedy, assistant regional superintendent for the Trustees for the Vineyard and Nantucket. He hopes it will reduce the impact of four-wheeldrive vehicles on the fragile dune system and aid the endangered wildlife which nests on the beach.

The Trustees will erect fences and walkways, reroute traffic, begin an educational campaign and installing a portable restroom, putting the plan into effect as soon as possible.

The planning board added a condition to the permit, calling for an annual review of the plan.

"We can't really make a judgment on this until it's had a chance to season," said Michael Donaroma, a member of the planning board, "but you guys have done your homework here."

"This is an excellent, comprehensive plan," said T. Curry Jones, planning board member. "You've certainly touched all the bases and set a pattern

1990

for this board. There's also the financial component; you show us where the money will come from to carry this out."

The Trustees first released the plan in early May, hoping to gain approval and implement the plan this summer. In response to public opposition to a single access gate to Cape Pogue, the Trustees eliminated the gate.

The Trustees received broad support for their plan from a diverse group of Island interests. Island fishermen, the leaders of sportsmen's organizations, the Chappaquiddick Island Association, Island conservation interests and Edgartown property owners all spoke strongly in favor of the plan at a public hearing in early June.

Only two people stepped forward to protest the plan and criticize the Trustees' communication skills. William Brine and Richard Brown, part owners with the Trustees of a stretch of East Beach, attacked the Trustees' plan.

Mr. Kennedy said the Trustees are now working on plans to reduce the area skunk population. The skunks, primary predators to the rare ground nesting birds, destroyed another col-

## **Thank You**

Many thanks to Leonard Green and Edgartown Marine for your generous donation of supplies and equipment for our ony of least terns this week.

In other business, the planning board spoke with representatives of the A&P Corp. and the Edgartown National Bank. The A&P, which promised to complete its work on a joint access by June 15, is not finished.

John Harmon, representing the A&P, said all the work on the A&P will be completed in two weeks.

The planning board praised the A&P for its cooperation, forfeited the right to ask for an escrow account for the unfinished work and gave permission for the town building inspector to issue a certificate of occupancy.

Mr. Harmon said the A&P is also requesting a variance from the state to allow one check-out counter of 11 to not meet handicap access requirements.

The walk way for the counter will be 25 inches instead of 32. He said existing columns in the building prohibit the A&P from complying with the state code. The planning board will write to the state supporting the variance.





# BEACH MANAGEMENT PLAN FOR NORTON POINT and CHAPPAQUIDDICK BEACHES, EDGARTOWN



Photo: Cape Poge Wildlife Refuge

# DRAFT June 2022

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### 1. Introduction

The Norton Point/Chappaquiddick beach is a 12-mile barrier beach system extending from Cape Poge Wildlife Refuge to Norton Point Beach and is one of the most significant and loved coastal areas on Martha's Vineyard. Visitors can access these beaches in several ways including walking from one of the several parking areas, by boat, or by way of over-sand vehicles. Over-sand vehicle (OSV) use is a longstanding privilege on the 12-miles of beach and one highly valued by a broad section of the local and visitor communities. Given the length of the Norton Point/Chappaquiddick barrier beach system (Figure 1), some more remote portions of the beach are difficult to access without an OSV or boat, primarily portions of the Cape Poge Wildlife Refuge. Moreover, OSV use is critical for Trustees staff conducting resource management, effective enforcement, and prompt public safety actions as well as for residents needing access to private property.

Consistent with its charter, The Trustees of Reservations maintains a strong commitment to public access of natural resources while also operating a beach management program that conserves natural and historic resources for generations to come. The multitude of values provided by a barrier beach system and managed concurrently by The Trustees includes protection of inland resources from sea level rise and storm surge; high-quality habitat and viable populations of wildlife including migratory bird species; and recreational opportunities for the public.

In support of these multiple values, it is critical to protect the beach itself from erosion. Projected sea level rise and increases in storm intensity are projected to cause increasingly frequent and more severe erosion and flooding, which will result in more frequent loss of public access as well as wildlife habitat. If not properly managed, public access (both pedestrian and OSV) can damage or destroy vegetation that lend strength and resilience to barrier beaches by trapping and consolidating sand. Inappropriate recreational use, therefore, risks damaging the physical integrity of our beaches that underlies the full range of uses the beaches serve. OSV access must be managed in concert with other values to promote resiliency and minimize negative impacts on wildlife, flora and other beach users.

This Beach Management Plan describes a comprehensive approach to managing this 12-mile continuous beach system including Norton Point, Wasque, Leland, and Cape Poge Beaches, (Figure 1). This Plan is intended to be in compliance and consistent with federal, state, and local regulations and guidelines that guide beach management and access.

### 2. Background

The goal of this Beach Management Plan is to outline current usage of the Norton Point, Wasque, Leland and Cape Poge Wildlife Refuge beaches and detail appropriate management techniques that will protect the diverse and fragile natural resources associated with these beaches while also providing for continued reasonable public use. The threat of climate change and sea level rise in particular is central to this BMP as managing for healthy dunes and a strong barrier is critical to combating erosion and future breaches.

Numerous state, federal and local regulatory statutes, regulations and guidelines exist to protect barrier beaches and ensure that ongoing or proposed activities have limited or no adverse impacts on the functions, habitats or species associated with this landform. This Plan closely follows the *Guidelines for Barrier Beach Management in Massachusetts* (henceforth referred to as the Guidelines) which was produced in 1994 as a collaborative effort between public and private organizations.



Figure 1: Beach Management Plan Area Map



*Figure 2: Close-up map of Lighthouse area including existing pedestrian trail to overlook and proposed pedestrian trail to the beach.* 

Other regulations, agreements, designations and guidelines that shape this plan include:

- Guidelines for Managing Recreational Use of Beaches to Protect Piping Plovers, Terns and Their Habitats in Massachusetts, MDFW 1993<sup>1</sup>
- Guidelines for Barrier Beach Management in Massachusetts. A Report of the Massachusetts Barrier Beach Task Force. February 1994.<sup>2</sup>
- Massachusetts Tern and Piping Plover Handbook: A Manual for Stewards, MDFW 1996
- Massachusetts Piping Plover Habitat Conservation Plan Handbook, 2021;<sup>3</sup>
- The Massachusetts Wetlands Protection Act;<sup>4</sup>
- The Massachusetts Endangered Species Act<sup>5</sup>
- Federal Endangered Species Act
- Federal Migratory Bird Treaty Act
- Dukes County Beach Management Rules<sup>6</sup>
- The Trustees Policy: Over-sand Vehicles on Beaches, 2021;

<sup>&</sup>lt;sup>1</sup> <u>https://www.mass.gov/doc/quidelines-for-managing-recreational-use-of-beaches-to-protect-piping-plovers-</u> <u>terns-and-their/download</u>

<sup>&</sup>lt;sup>2</sup> https://www.mass.gov/doc/guidelines-for-barrier-beach-management-in-massachusetts/download

<sup>&</sup>lt;sup>3</sup> download (mass.gov)

<sup>&</sup>lt;sup>4</sup> https://www.mass.gov/doc/310-cmr-1000-the-wetlands-protection-act

<sup>&</sup>lt;sup>5</sup> 321 CMR 10.00: Massachusetts Endangered Species Act | Mass.gov

<sup>&</sup>lt;sup>6</sup> https://www.dukescounty.org/natural-resources/pages/norton-point-and-eastville-point-beach-rules

- Cape Pogue District of Critical Planning Concern 1994<sup>7</sup>
- Cape Pogue District of Critical Planning Concern, as Amended 2021<sup>8</sup>
- Katama Airfield and Conservation District <sup>9</sup>Coastal District of Critical Planning Concern<sup>10</sup>

This beach management plan pertains to the areas owned or managed through contract by The Trustees.

The Trustees owns and manages over two thousand acres across Martha's Vineyard and over one thousand are subject to this beach management plan including Cape Poge Wildlife Refuge, Wasque, Leland Beach, and Norton Point Beach. Additionally, the Cape Poge Lighthouse is located on Trustees land but is owned and maintained by the U.S. Coast Guard. And there are several privately owned inholdings within the Cape Poge Wildlife Refuge, including a community of private parcels near the Cape Poge Elbow (zone 10).

The Trustees manages both Norton Point and Leland Beaches under the following agreements with the owners of these public beaches, Dukes County and the Massachusetts Division of Marine Fisheries:

- Memorandum of Agreement Between the County of Dukes County and The Trustees of Reservations Regarding Management and Administration of Norton Point Beach, Edgartown, MA, 2021
- Cooperative Management Agreement Between the Commonwealth of Massachusetts and The Trustees of Reservations Regarding Management of Leland Beach, Chappaquiddick Island, Martha's Vineyard, MA, 1994

As conditions warrant and when and if regulations require, this Plan will be reviewed, revised as appropriate, and submitted both to the town and to the state Natural Heritage and Endangered Species Program for review and approval. This Management Plan will include pre-approved procedures for limited changes to beach operation (e.g., changes to pedestrian or OSV trails) that can be expected regularly due to the dynamic nature of this natural environment.

Users of this document are referred to the *Guidelines* themselves for more detailed information. The following sections describe the types of access, associated user activities and specific management and maintenance associated with each activity.

### 3. Current Use and Regulatory Protections

The following sections describe the existing public access and recreational use as well as the relevant regulatory framework to provide background and justification for the guidelines and rules proposed in Section 4 of this Beach Management Plan.

The most common use of the beach system is by pedestrians arriving by vehicle (including OSVs) or by boat during summer months, for recreational purposes. On average, these beaches collectively receive nearly 350,000 visitors each year. Pedestrians are present during all months of the year, but peak usage

10

<sup>&</sup>lt;sup>7</sup> <u>DCPC Cape Poge Decision\_0.pdf (mvcommission.org)</u>

<sup>&</sup>lt;sup>8</sup> Article (dukescounty.org)

<sup>&</sup>lt;sup>9</sup> Article (dukescounty.org)

occurs between May and September. While most of the use is limited to the beachfront, visitors have access to bayside areas, particularly Norton Point, where waters are calmer and OSV use is prohibited. While potential pedestrian impacts are relatively minor, management is necessary to prevent dune erosion, trampling of vegetation and disturbance of wildlife. Access by OSV is allowed along defined corridors with management actions in place to protect beach habitat and dunes from the potential for significant harm.

#### 3.1 Parking Areas

Primary access points for pedestrians are the Dike Bridge, Wasque Reservation and the west entrance to Norton Point Beach. These parking areas and access points do not require an OSV and are identified on Figure 1.

- *Dike Bridge* A 20-car parking area (Town Lot) is located on the west side of the Dike Bridge on land owned by the town of Edgartown.
- Wasque Reservation There are two parking areas at the Wasque Reservation the Fisherman's Lot and the Swim Beach Lot (Figure 3). These lots can accommodate up to 40 cars total including 3 handicapped spots. Visitors can then access the beach via stairs and designated pathways to protect vegetation and shorebird nesting areas.





Figure 3: Beach entrances and parking areas. Fisherman's Lot, Wasque Reservation (top left), entrance to Fisherman's Lot (top right), Wasque Reservation Swim Beach Lot (bottom left) and Wasque Swim Beach Lot from a distance (bottom right).

 Norton Point - While no parking area exists for Norton Point Beach, visitors can use public transportation (Martha's Vineyard Transit Authority) to access the beach or drive onto the beach with a valid OSV permit. OSV permit holders can also drive onto the western half of Norton Point Beach, park and walk the beach all the way to Wasque Reservation or beyond.

#### 3.2 Structures

Several structures exist on the beaches that support access and public use.

#### Boardwalks

One boardwalk is maintained near the Dike Bridge on the adjacent Cape Poge Wildlife Refuge and provides access through the dunes for visitors parking or accessing the beach at the Dike Bridge (Figure 4). While technically on the Cape Poge Wildlife Refuge, this boardwalk provides access to pedestrians visiting Leland Beach just to the south. This boardwalk was constructed to minimize conflicts between pedestrians and OSVs (i.e., for visitor safety) and to reduce impacts to dune vegetation. This boardwalk is approximately 400 feet long and made of Trex (recycled synthetic material) and thus very little maintenance is needed.



Figure 4: Boardwalk to Swimming Beach on Cape Poge Wildlife Refuge

#### Stairs

Aluminum stairs are maintained at Wasque to allow visitors to access the beach from the parking lots (Figure 5). Prior to the 2006 Norton Point Beach breach, wooden stairs were maintained at the Fisherman's Lot that provided access to Wasque Beach and Wasque Point, a popular fishing destination. This boardwalk and many acres of upland were eroded away as a result of the breach. After the beach site closed in 2015, the Trustees replaced the wooden stairs with modular and removable aluminum stairs. These stairs require little maintenance but may need to be adjusted annually for safety and can be removed, if necessary, to prevent storm damage or loss given enough warning.



Figure 5: Modular stairs at Wasque Reservation

#### Gatehouses

The Trustees maintains a gatehouse at the western end of Norton Point Beach and another gatehouse on the beach side of the Dike Bridge (Figure 6). Both of these gatehouses are staffed seasonally. The Dike Bridge gatehouse is constructed of wood and can be moved with heavy equipment. The Norton Point gate house is an aluminum enclosed trailer easily moved with a pick-up truck. The Norton Point gatehouse was moved onto a refurbished OSV trail in 2022 as part of the Norton Point Dune Restoration and Beach Resiliency project approved by the Edgartown Conservation Commission in July 2021. The gatehouse is approximately 0.4 miles from the entrance of Norton Point Beach at Katama Road and Atlantic Avenue.

The Dike Bridge gatehouse also includes two seasonal portable bathrooms, including one with universal access, and a small storage locker. The portable bathrooms are removed seasonally. When present, bathrooms are pumped twice a week and cleaned daily (Figure 6).





*Figure 6: The Trustees gatehouses at beach entrances. East Beach/Dike Bridge Gatehouse (left) and historic Norton Point gatehouse (right).* 

#### Cape Poge Lighthouse

At the northernmost tip of the Cape Poge Wildlife Refuge stands the Cape Poge Lighthouse. The U.S. Coast Guard owns and maintains structural improvements and lighthouse function. Maintenance of this structure is needed periodically and improvements may be needed in the near future to ensure its structural integrity.


Figure 7: Cape Poge Lighthouse (Photo: B. Bransfield/Trustees)

#### 3.3 Watercraft and Kiteboarding

Watercraft, including motorboats, sailing vessels and kayaks, are popular forms of recreation. While most beach access occurs via OSV or through the parking areas, some visitors choose to access the beach by boat. The Trustees do not have jurisdiction over on-water use but do prohibit boats above the mean high-water mark and regulate the activities of pedestrians once they are on land. Boat access to Cape Poge Wildlife Refuge is subject to the Edgartown's Anchorage Moratorium for Cape Poge Bay, adopted in 2021 and renewed in 2022. The Trustees rangers monitor boat visitor activities to ensure compliance with beach regulations and natural resource protection and educate these visitors to the rules and regulations of the beach. This is done through fencing and signs, in-person conversations with Trustees Rangers, and through social media.

Kiteboarders use this beach to launch and land throughout the year. While use exists all along the beaches, kiteboarding is particularly popular on the back site of Norton Point Beach in Katama Bay (see section 5.6 for specific restrictions).

Additionally, The Trustees provides kayak nature tours and a kayak rental program for members and visitors at Pocha Pond. The launch site for these boats is on the east side of the Dike Bridge.

#### 3.4 Pets

Many visitors bring their pets, usually dogs, to recreate with them on the beaches. In addition, some horseback riding occurs during summer months.

#### 3.5 Shell Fishing and Fin Fishing

Commercial and recreational shell fishing occurs on the beaches and surrounding tidal flats. Along the ocean side of the barrier beaches, limited harvest of surf clams occurs, and no adverse impacts are apparent. On bay sides, shell fishing is limited to the tidal flats and often occurs off Trustees managed beaches. While there is no public boat launch, the Trustees allows licensed clammers to access the

bayside of Norton Point for shell fishing if they have an OSV permit. Parking is limited to designated OSV parking areas and shell fishers must walk to the bayside on designated paths.

Fin fishing (i.e., surf casting) is allowed on all 12 miles of beach, subject to temporary restrictions due to shorebird protection regulations and coastal erosion. All shell fishing and fin fishing that occurs on Trustees owned and managed property is subject to town, state and federal regulations.

#### 3.6 Special Events

Special events, including weddings, private functions, movie/commercial filming, the Martha's Vineyard Fishing Derby, and other recreational events occur at these beaches. Special events, however, occur infrequently and are subject to beach regulations and managed to prevent impacts to other visitors and the natural resources. Trustees ecologists provide guidance on allowance of special events during the shorebird breeding season. If events deviate from activities listed in this Plan, additional permitting (wetland or rare species) may be submitted prior to allowing the activity to occur.

#### 3.7 Education and Research

The Trustees provide educational programming at Norton and Chappaquiddick Beaches through the Claire Saltonstall Education Program (CSEP). The CSEP was founded in 1991 to provide place-based education to Martha's Vineyard students. Each year, up to 400 students partake in programming on these specific beaches. Students (grades K-12) study coastal and marine topics through hands-on activities, including but not limited to beach profiling, landform and waterbody mapping, species identification, vegetation monitoring, and erosion and weathering activities. In addition, trained volunteers may engage in monitoring of dunes, collecting beach profile data and monitoring wildlife at various points within this beach system. Students and volunteers access Wasque Beach by foot, Norton Point by foot and over-sand vehicle, and Leland and Cape Poge Wildlife Refuge beaches are accessed by over-sand vehicle. Researchers interested in conducting research on the beaches must complete and submit a Trustees research application for approval.

#### 3.8 Rare Species and Habitat Monitoring and Protection

These beaches are entirely designated as Priority Habitat by MassWildlife's Natural Heritage and Endangered Species Program (MNHESP) for several listed species including piping plover, least tern, common tern, roseate tern and seabeach knotweed. These beaches, dunes, salt marsh and associated intertidal flats provide some the best breeding and migratory habitat for listed shorebirds on Martha's Vineyard.

The Trustees follows the *1993 Guidelines for Managing Recreational Use of Beaches to Protect Piping Plovers, Terns and Their Habitats in Massachusetts* for managing rare shorebirds. The Trustees also maintains a Certificate of Inclusion (COI) under the Piping Plover Habitat Conservation Plan (HCP) operated by the US Fish and Wildlife Service and MassWildlife for these beaches, primarily for maintaining OSV access. The Trustees is accountable for compliance with the 1993 Guidelines inspected and overseen by Massachusetts Division of Fisheries and Wildlife. Violations are punishable by law. The saltmarsh sparrow was listed as a Species of Special Concern by MNHESP in 2020. This sparrow is an obligate of the salt marsh and does utilize the marsh adjacent to beaches. Red knot, a migratory shorebird listed as threatened under the US Endangered Species Act, does utilize the beaches and adjacent flats seasonally in small numbers, especially Norton Point where both foraging and roosting habitat occurs.

Both American oystercatchers and great black-backed gulls nest on the beaches and are designated as species of greatest conservation need in the state's SWAP plan. Only breeding colonies of the gull are identified as greatest conservation need. Both the gull colony at the Gut (zone 11) and American oystercatchers are protected and managed by the Trustees. The Gut is particularly important for many breeding and migratory birds.

While the Trustees monitor the population status and presence of rare species, most management activities are passively conducted through efforts to reduce human disturbance to the species and the habitats they use. The Trustees may use the United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Service<sup>11</sup> for predator control to maintain the habitat's ecological balance for the listed species. Predator control for skunks, raccoon, rats, and crows is completed using the necessary federal and state permits.

With the exception of the saltmarsh sparrow, all listed species utilize similar beach habitat and benefit greatly from the Shorebird Protection Program implemented annually by the Trustees including installation of symbolic fencing, additional protection areas for nests and chicks, and reduction of interference from visitors. Symbolic fencing is installed on or around April 1 to delineate piping plover potential nesting habitat, defined in the 1993 Guidelines. Once nests are established and nests have a complete clutch, The Trustees adds additional symbolic fencing and signage to significantly reduce interference with nesting birds from visitors and OSV users, following the 1993 Guidelines. Symbolic fencing for dune protection and shorebirds protects the majority of habitat at these beaches utilized by seabeach knotweed (upper beach and beach strand community). No protection measures have been identified for saltmarsh sparrow at these sites as little visitor activity occurs in the salt marsh (e.g., shell fishing access). For non-listed, particularly declining and at-risk species, The Trustees applies similar protection efforts, but with greater flexibility to maintain access following *The Trustees Guidelines for Management for Non-Listed Species* (Appendix A).

Protection of N	lests and Nesting Habitat <sup>1</sup> – Symbolic Fencing
Beaches with OSVs	All areas of suitable piping plover and tern nesting habitat, as determined by the DFW must be identified and delineated with posts and warning signs or symbolic fencing on or before April 1 (for piping plovers) or May 15 (for terns) each year. No entry into delineated areas. Prior to nest hatching, OSVs may pass delineated habitat areas along designated vehicle corridors as long as piping plovers are not being disturbed.
Other recreational beaches	All areas of suitable piping plover and tern nesting habitat must be identified and delineated as they are for beaches with OSVs, if in the opinion of the DFW, failure to do so could discourage plovers or terns from nesting as a result of disturbance from human use. At a minimum, a 50-yard radius area around nests and chicks above the high tide line must be delineated with posts and warning signs or symbolic fencing. Refuge areas should be expanded if the 50-yard radius is deemed inadequate to protect incubating adults or unfledged chicks from harm or disturbance. In practice, symbolic fencing is proactively deployed prior to the nesting season at the great majority of recreational beaches without OSVs. However, remote beaches or other low access sites with adequate monitoring may not need all suitable habitat to be proactively delineated as long as the 50-yard area around nests and chicks is delineated.
Protection of C	hicks and Chick Habitat – Timing Restrictions on OSV Use
vehicles not di dune, beach, a perpendicular from the ocean side intertidal are considered occurring obsi- protected area	eemed essential. <sup>4</sup> When unfledged piping plover chicks are present, vehicles are prohibited from all nd intertidal habitat within 100 yards of either side of a line drawn through the nest site and to the long axis of the beach. <sup>3</sup> The resulting 200-yard wide area of protected habitat should extend a side low water line to the bay side low water line or to the farthest extent of dune habitat if no bay- habitat exists. <sup>4</sup> However, vehicles may be allowed to pass through portions of the protected area that d inaccessible to plover chicks because of steep topography, dense vegetation, or other naturally tacles. <sup>5</sup> If unfledged chicks move outside the original 200-yard wide area, then the boundaries of the a should be adjusted to provide at least a 100-yard buffer between chicks and OSVs.
Other Protecti	ons
Pets should at should be prol owners fail to	a minimum be leashed and under control of their owners at all times from April 1 – August 31. Pets hibited on these beaches from April 1 – August 31 if, based on observations and experience, pet keep pets leashed and under control.
Kite flying sho	uld be prohibited on beaches where plovers or terns nest from April 1 to August 31.
Fireworks sho	uld be prohibited on beaches where plovers or terns nest from April 1 to August 31.
<ol> <li>In addition, posts and si</li> <li>Essential ve for guided u</li> <li>When unfle outermost r</li> <li>The Federal 0 of the nest chick mobil highly mobil</li> </ol>	rearing or nursery areas used by unfledged or recently fledged tern chicks must be delineated with gns or symbolic fencing no later than June 21. hicles (e.g., law enforcement) are defined pursuant to the Guidelines for Barrier Beach Management in tts (Massachusetts Barrier Beach Task Force 1994). See the Guidelines for a discussion of procedures use of essential vehicles. dged least tern chicks are present the 100-yard buffer is established from lines drawn through tests of each colony, perpendicular to the long axis of the beach. Guidelines indicate that in most cases vehicle-free areas should extend at least 200 meters on each side during the first week following hatching. The width of the buffer may be adjusted based on observed ity and frequency of monitoring, but may in no case be reduced to less than 100 meters. In some cases, le broods may require protected areas up to 1,000 meters, even where they are intensively monitored.
<ul> <li>Because lea some circui habitat if, in</li> </ul>	st tern chicks disperse from nests shorter distances and at older ages than piping plover chicks, under nstances it may be possible to allow passage of vehicles through portions of protected least tern the opinion of the DFW, this can occur without substantially increasing threats to least tern chicks or

Figure 8 : Summary of Piping Plover protection guidelines from the 1993 Guidelines that informs The Trustee's shorebird protection program. Non-compliance to the guidelines can have state and federal enforcement such as up to six months in prison or \$25,000 fine.

their habitats.

Management activities implemented by The Trustees include public education, protective symbolic fencing, enforcement of access provisions in this Plan (e.g., no dogs during breeding season). These practices support a wide protection of rare and common species using these beaches. These methods are among the most recommended and widely used management strategies to benefit rare beach species. The Trustees provides monitoring data annually to MNHESP for all shorebird species including piping plover, roseate tern, common tern, least tern, American oystercatcher and black skimmer as well as rare plants. Gull colonies are also monitored during periodic statewide colonial waterbird surveys, typically every 5-10 years. Additionally, The Trustees works with governing agencies protecting rare species to obtain necessary permits, share data, and implement management strategies to protect rare and of concern species.

While our rare species management follows and is consistent with state and federal guidelines, The Trustees may enact additional procedures to maintain species of local, regional, or global significance. For example, while American oystercatchers are not listed under the state or federal Endangered Species Acts, this species is significantly less common than the piping plover in Massachusetts and is a vulnerable, beach breeder meriting protection. American oystercatcher is recognized as a Species of Greatest Conservation Need under the Massachusetts State Wildlife Action Plan and is considered a high priority for conservation in various regional and national plans. Trustees managed beaches on Martha's Vineyard and Nantucket support approximately 15% of the state population. Providing reasonably disturbance-free roosting and foraging habitat for migratory shorebirds is an important element of comprehensive beach management as many of these species are declining and need protection. Migratory shorebirds have declined by 70% in recent decades and are now considered some of the most vulnerable bird species.<sup>12</sup> The Trustees holds resource protection as an important part of our mission and will, at times, implement protection efforts that ensure the long-term viability of the delicate beach ecosystem for generations to come, sometimes in excess of state and federal regulations. Similar values are shared by Dukes County (owner of Norton Point Beach) and the Division of Marine Fisheries (owner of Leland Beach) and codified through management agreements with both owners.

#### 3.9 Non-Motorized Vehicles

Non-motorized vehicles (e.g., fat tire bikes) are restricted to OSV trails and corridors while OSV trails are open. Visitors needing assistance to access the beach can request transport by staff via UTV. Beach Accessible Transport Chairs are also available upon request.

#### 3.10 Over-sand Vehicles (OSVs)

The Norton Point/Chappaquiddick beach draws many visitors traveling by OSV to access the more secluded beaches. OSV use is a longstanding privilege on the beach and one highly valued by a broad section of the local and visitor communities. In addition to visitors, OSV use is critical for Trustees staff conducting resource management, enforcement, and public safety actions as well as for residents needing access to private property.

As mentioned in the Background above, OSV travel on beaches can damage or destroy vegetation that lends strength and resilience to both beaches and dunes or detrimentally affect rare shorebird nesting, feeding, and fledgling habitat. For example, vehicles may degrade, bury, or hinder piping plover critical feeding wrack (e.g., shells, seaweed, and other organic marine material) through crushing and burying the material. <sup>13</sup> OSV access is, therefore, managed in balance with other values to promote resiliency and minimize negative impacts on wildlife, flora, and other beach users.

Currently there are three access points for OSVs - the Dike Bridge entrance, the entrance to Norton Point Beach at the "right fork" at Katama Road, and the Wasque Swim Beach access. The last is used by Trustees ATVs and UTVs only. Vehicle access by The Trustees is essential to effectively complete a wide variety of beach management tasks including emergency response, regulation enforcement, general

<sup>12</sup> State of the Birds Report, 2017. <u>https://www.massaudubon.org/content/download/21633/304821/file/massaudubon\_state-of-the-birds-2017-report.pdf</u>

<sup>13</sup> Guidelines for Barrier Beach Management in Massachusetts. 1994. P. 85 https://www.mass.gov/doc/guidelinesfor-barrier-beach-management-in-massachusetts/download?\_ga=2.50846505.1294388152.1654510295-1607635035.1649279842 maintenance, and natural resource management. Beach parking is limited to the areas adjacent to the beach corridors where the beach is wide enough (section 5.7). The plan proposes small parking areas (i) at the Leland Beach crossover (two to three spaces) allowing access to Pocha Pond for fishing, (ii) between the two Norton Point crossovers allowing two to three spaces for fishing at Katama Bay (Zone 2), and (iii) at the Cape Poge lighthouse (three to four spaces). We propose expanding the parking area at the lighthouse and the addition of three small pull offs for three to four OSVs each in the Cape Poge Wildlife Refuge.

Trustees staff use OSVs to enforce regulations. Vehicles allow the Trustees to patrol more efficiently given the nearly six miles of beach used by the public. This is especially important for enforcing regulations in remote areas frequented by visitors arriving by boat and enforcing dog regulations during shorebird breeding season. In the event of medical emergencies, vehicles provide the quickest means to respond. In addition, transportation for individuals with disabilities from the parking area to the main beach is conducted via UTV upon request.

Trustees use OSVs throughout the year to establish restricted area fencing, post regulatory and safety signage, repair boardwalks, remove and replace stairs, collect trash and carry out other maintenance activities. Occasionally, vehicles are needed to retrieve or dispose of whale or other carcasses that wash up that may pose a health problem or attractive nuisance.

Natural resource management is an ongoing activity and often requires the use of OSVs. ATVs and UTVs are critical to the daily monitoring and management for rare shorebirds specifically, the deployment and maintenance of restricted area fencing and predator management (e.g., exclosures). In addition, OSVs are used to establish remote ecological monitoring equipment and conduct research, monitoring and protection for a variety of flora and fauna.

## 4. Rules for Visitor Behavior

The Trustees has established a set of rules in conjunction with our partners for beach usage by the public to protect beach resources and promote visitor safety and enjoyment. The following is a comprehensive list of these rules as they are currently provided to visitors and enforced by The Trustees at these beaches.

- We welcome dogs seasonally October 1<sup>st</sup> to March 31<sup>st</sup> per The Trustees Dog Policy. Dogs must be leashed and under your control. Please protect our beach habitat by cleaning up after your dog
- From time to time, The Trustees are required to close beaches due to nesting birds, storms, or full capacity beaches. Please check for beach closures before coming to the beach at <u>https://www.facebook.com/trusteesmv/</u> or at 508.693.7662
- Trustees' properties are closed between 10pm and 5am, except for active surfcasting.
- Wildlife viewing from a safe distance is required and encouraged. Barrier beaches provide important nesting and resting habitat for many sea, shore, and upland birds. Did you know Massachusetts has the greatest number of breeding piping plovers, a state and federally protect species, along the Atlantic Coast? Please remain a responsible distance from all wildlife to keep them from being disturbed.

- Vegetation, whether living or dead, helps stabilize shorelines, dunes, tidal flats and bluffs and its protection ensures a healthy and pristine beach for all. Please avoid walking and driving on vegetation.
- Please respect our neighbors and their private property by enjoying only The Trustees beach properties.
- Gas or charcoal contained grills are allowed at open beaches during beach daytime hours only. Please bury charcoal deeply to protect walkers. All other fires are prohibited.
- Our properties are carry-in and carry-out. Trash receptacles are not provided on site. Please take your trash with you when you leave.
- Hunting requires prior written permission from Trustees' management who determines hunting areas. All hunting requires proper licenses and compliance with Massachusetts hunting laws and regulations.
- Commercial Activities (those providing service, product, or activity for a fee) require a permit from the Trustees' management.
- Please respect all Trustees' properties and natural features. Disturbing, removing, defacing, cutting or otherwise causing damage to a natural feature, sign, poster, barrier, building, or other property is prohibited.
- Behavior that disturbs the peace of Trustees' properties or its enjoyment by visitors is not allowed. This includes unruly, harassing and/or aggressive behavior toward staff and visitors.
- Trustees staff reserves the right to prohibit the use of alcoholic beverages on their properties. Alcohol is prohibited on Norton Point Beach per the Dukes County Beach Management Rules.
- Trustees staff reserve the right to limit or prohibit the use of handheld kites based on the density of beachgoers in a given area.
- Parties greater than 20 people require a permit by The Trustees' management. Please call 508-693-7662 for more information.
- Over-sand Vehicle (OSV) access to the properties is restricted to registered permit holders with 4-wheel drive vehicles. Visitors are required to deflate tires to 12-15 PSI to enter the beach properties and vehicles should include a low-pressure tire gauge, shovel, an approximate 15-foot-long tow rope, jack support board, fand full size spare tire.
- Vehicles exceeding a gross weight of 6800 pounds are prohibited from Trustees OSV trails and will not be eligible for permits. Dune buggies, motorcycles, mopeds, bicycles, trailers, snowmobiles, all-terrain vehicles, and jet skis are also prohibited.
- OSV Permits are required year-round and are valid from April 1 to March 31. Permits can be purchased online at <u>www.thetrustees.org/mvosv</u> and picked up at Mytoi and Norton Point gatehouses from Memorial Day weekend through Indigenous Peoples' Day weekend. Permit stickers must be applied to front and rear bumpers of the driver side of the vehicle. Vehicles not displaying both stickers will be denied entrance. Replacements for lost or misplaced stickers will not be provided. Stickers will be reissued for sold or damaged vehicles if original stickers are surrendered at time of reissue.
- Permit fees are subject to change, are used for the protection and restoration of the natural environment, and to help meet annual property management expenses.
- By purchasing this permit the purchaser and their guests acknowledge the following. Trustees' rules and regulations are for the health and safety of themselves, others, and the protection of natural resources.

• The Trustees of Reservations reserve the right to impose limitations on the number of vehicles permitted on the OSV corridor. Vehicle occupants in violation of policies and rules may be asked to leave the premises, have their permit revoked (X marked or removed), be subject to court citation or law enforcement action if warranted by the severity of the violation. Trustees beach rangers or gatehouse staff are authorized to enforce violations of policies and rules witnessed or reported to them.

### 5. Guidelines for Responsible Beach Management and Use

This section describes the proposed beach management actions and rules for Norton Point, Wasque, Leland, and Cape Poge Wildlife Refuge Beaches that are currently under the management of The Trustees. Many of these are already in effect. Others, such as restrictions on dogs and the closing of certain trails to non-essential OSV access, reflect new restrictions to protect dune and beach resilience, rare species habitat, and future public enjoyment of beaches.

#### 5.1 Managing Pedestrian Beach Access

Visitors may park at one of three parking areas and access the beach via boardwalks or stairs: one at the Dike Bridge and two at Wasque Reservation (Fisherman's Lot and Swim Beach Lot).

At the Dike Bridge, pedestrians have access to a boardwalk (cable and synthetic wood design (Figure 4) that provides direct access to the swim beach and the rest of the Cape Poge Wildlife Refuge to the north. Alternatively, pedestrians can then walk south to Leland Beach. The boardwalk is assessed annually by Trustees staff and routine maintenance is performed. This includes but is not limited to leveling and re-aligning the boardwalk by hand. Signs advising visitors of uneven surface are maintained.

There are two lots at the Wasque Reservation that visitors can park at and access the beach. The stairs at the Fisherman's Lot (Figure 5) allow visitors to navigate the coastal bank safely without creating erosion. These stairs are aluminum and modular to allow removal should erosion and storms threaten their integrity and require little maintenance. Visitors to the Swim Beach Lot can access the beach via a pedestrian path directly between the beach and the lot (Figure 4). This path is also used by staff to access the beach via ATV/UTV for resource management and enforcement. OSV permit holders are not allowed access to the beach via this path. This path is graded occasionally to maintain safe passage for pedestrians and the Trustees may use "traction mats" for staff access using UTV/ATVs. Fencing is used to define this access and prevent erosion and loss of vegetation.



Figure 9: Wasque Swim Beach pedestrian and staff OSV access path.

#### 5.2 Dune Protection

On the beaches, restricted area fencing (post and rope; Figure 10) is erected for shorebird nesting habitat (seasonal) and dune protection. This fencing protects nesting shorebirds, nests, and chicks from human disturbance and the Maritime Beach Strand and Maritime Dune natural communities (both priority Community Types in Massachusetts) from foot traffic. This fencing is particularly important for protecting dune building and beach resiliency. Fencing is erected along nearly all 12 miles of beach from April 1<sup>st</sup> – Sept 30<sup>th</sup> (significant storms may impact the duration that fencing is in place after the breeding season is over). Fencing is particularly important during this period due to high visitation, but sections may be left in place longer to protect sensitive resources (e.g., migrating shorebirds, rare plants, dunes, coastal banks) from visitors and pets. Current dune protection policies and regulations currently in place include the following.

- Walking and playing on dunes is prohibited except within designated trails.
- Disturbing, removing, defacing, cutting or otherwise causing damage to natural features is prohibited.
- Entering fenced areas designed to protect fragile sand dune vegetation is prohibited.
- Patrolling rangers enforce dune protection regulations.
- Maintaining restricted area fencing (post and wire or rope) in high traffic areas to alert visitors of restricted areas, especially where dunes are at greatest risk of disturbance.
- Installing seasonal restricted area fencing (post and rope) for shorebird nesting habitat along the majority of the 12 miles of beach.
- Installing signage alerting visitors to remain out of sensitive areas.

#### 5.3 Trails

Pedestrians can walk all OSV designated trails and beach corridors as well as all beach areas not protected by symbolic fencing or signs. Four pedestrian-only pathways are maintained on Norton Point and Wasque beaches (Figure 1) to direct pedestrian access across the beach and dunes from bayside to oceanside and one pathway is maintained from the Cape Poge Lighthouse to a lookout on the shore. Another trail is proposed from the Lighthouse parking area to the beach. This trail will provide visitors safe access to the beach by avoiding walking on the OSV road. The Norton Point and Wasque paths are needed to direct visitors arriving by boat in Katama Bay to cross the beach without disturbing breeding shorebirds or impacting dunes and dune vegetation. Similarly, these paths allow visitors arriving by OSV to cross from the ocean side to the bayside. These paths are also used by Trustees staff to patrol the back beach using ATVs or UTVs to enforce regulations and to implement shorebird and rare species management. These trails can also be used for emergency access.

- Trails are defined by fencing on both sides to prevent widening.
- Trails for essential ATV/UTV should be no more than 4ft wide. They should be as narrow as possible to minimize disturbance to surrounding dune habitat as well as to prevent full sized OSVs from using the paths.
- Signs prohibiting non-essential OSVs are posted at entrances.
- Trail locations are temporary due to dynamic beach conditions (e.g., storm wash over, beach erosion and rare species use) but may be usable for multiple years.
- Pedestrian trails will be limited to three annually along Norton Point, one annually at Wasque, one at the Cape Poge lighthouse and an additional trail proposed from the lighthouse to the beach.
- Should trails need to be relocated, trail locations will be selected to avoid beach nesting birds and other rare species including plants.
- Trail locations will avoid vegetated areas where possible and/or sensitive areas.
- Locations will target areas of low dunes with little to no vegetation.
- When trails need to be relocated, The Trustees will notify the Edgartown Conservation Commission for approval.
- Signs are posted along fencing or access points indicating resource protection goals and to encourage the public to avoid entering these sensitive areas.
- The Trustees does not maintain trash receptacles along the beachfront and instead requires visitors to carry their trash out to limit the attraction of shorebird predators.
- Beach raking to remove wrack and other debris is not practiced encouraging natural processes and reducing disturbance to habitat and wildlife. Wrack provides important feeding habitat for birds and other wildlife while also aiding in beach building.



*Figure 10: Example of fencing designating pedestrian and essential vehicle cross over at Wasque and Norton Point beaches.* 

#### 5.4 Dogs and Pets

The Trustees is providing new dog and pet policies that enable greater ecological protections and minimize water pollution due to pet waste. These policies are consistent with many public beaches across the Commonwealth.

- Dogs and pets are prohibited on beaches seasonally April 1<sup>st</sup> to September 31<sup>st</sup> per The Trustees Dog Policy and similar in practice to many Massachusetts beaches that protect nesting shorebirds.
- From October 1<sup>st</sup> to March 31<sup>st</sup> dogs are permitted on-leash only at Leland, Wasque and Norton Point Beaches. At Cape Poge Wildlife Refuge, dogs are allowed on leash from October 1<sup>st</sup> to March 31<sup>st</sup> from the Dike Bridge to the end of the swimming area (zone 6). While The Trustees makes substantial efforts to enforce and explain regulations, we must also rely on visitor compliance.
- Trustees staff patrol the beachfront (ATV, UTV or truck) to enforce pet regulations.
- Signs are erected communicating dog regulations. Additional signage is placed at all trailheads and locations where pets are not permitted.
- Pets are not permitted in the dunes, within restricted areas or on the back-beach. Dogs s are prohibited on bayside beaches to prevent fecal contamination to shellfish-flats.
- Visitors are required to pick up pet waste and dispose of in proper trash receptacles or carry out.

#### 5.5 Horses

Horses are allowed on these beaches but must follow existing roads including OSV trails and corridors (below). All equestrians are required to pick up horse waste and dispose of waste properly to prevent contamination of the beach ecology and uphold the visitor experience.

#### 5.6 Watercraft and Kiteboarding Management

Watercraft:

- Boats are prohibited from landing near designated swim areas.
- Boats are prohibited above the mean high-water mark (MHW).
- Launching of watercraft from the beach is prohibited.

#### Kiteboarding:

Launching and landing kiteboards from the beach is allowed year-round with some restrictions.

- Kiteboarders can access the beach from the water directly or through an OSV and valid permit.
- From April 1 to September 31, kiteboard launching and landing is allowed only in the designated area on Norton Point Beach and kiteboarders must remain 200 yards from designated shorebird habitat shown below in red (Figure 11).



Figure 11: Designated area for kiteboard launching and landing on Norton Point Beach from 4/1 – 9/30 labeled with black. The 200-yard-wide kiteboarding exclusion zone (red) extends to Wasque Reservation.

#### 5.7 Off Road, Over Sand, and Utility Vehicle Use (ORV/OSV/UTV)

Despite their importance, vehicle use on barrier beaches can have adverse impacts to the delicate ecology and rare and endangered species habitat on The Trustees beaches. The Trustees OSV Policy is based on the *Guidelines for Managing Recreational Use of Beaches to Protect Piping Plovers, Terns and Their Habitats in Massachusetts (MDFW 1993)* and *Guidelines for Barrier Beach Management in Massachusetts (1994)*. These Guidelines provide clear direction for OSV access on the beach and dunes to minimize adverse impacts from OSVs. Allowed OSV access pathways on beaches are referred to as *beach corridors* and OSV access pathways in the dunes are referred to *dune trails*. The guidelines also prohibit OSV driving on the inland side [bay side] of the barrier beach.

According to the Guidelines for Barrier Beach Management in Massachusetts:

"Where off-road vehicle use takes place or is proposed to take place on a barrier beach, off-road vehicle beach driving corridors should be designated by beach managers. Corridors should be located such that they avoid wildlife habitat, particularly that of rare species; wrack lines; salt marsh; vegetated areas on coastal beaches; tidal flats; overwash areas; and coastal dunes. A coastal beach off-road vehicle driving corridor should be located at a minimum of 10 feet seaward of the spring high tide line to the most seaward berm crest (Figure 12). Back dune or back barrier vehicle routes should be eliminated wherever and whenever possible and restored (Page 87)."

This beach management plan is shifting OSV operation to better adhere to the state's *Guidelines for Barrier Beach Management* (MBBTF 1994) and the *Shorebird Guidelines* (MDFW 1993) by offering both interdunal and beach corridors (Figure 1).

#### **Beach Corridors**

Consistent with the 1994 Guidelines for barrier Beach Management in Massachusetts and the Trustees goal to minimize OSV impacts to wildlife and beach integrity, OSV travel on the beach will be constrained to clearly delineated corridors (Figure 12). These corridors should be wide enough to allow safe passage and, in some places, accommodate parking areas, turn-outs, or two-way traffic and evaluated regularly for safe passage and guidelines compliance. Through the definition of the beach corridor in the 1994 Guidelines, OSV travel in intertidal areas is not permitted.



*Figure 12: Diagram depicting OSV corridor above intertidal zone (foreshore) and below buffer for the dune. From Guidelines for Barrier Beach Management in Massachusetts (1994).* 

On most of our ocean-facing beaches, corridors will typically be marked on their inland side with symbolic fencing during the spring to late fall season. In most cases this corridor will include the zone

between the fence line and the high tide line and or berm (Figure 13 and Figure 14). The inland edge of a corridor should be as far as possible from the toe of the dune while still leaving room for safe OSV travel on the beach. OSV corridors are least 10 feet seaward from the seaward-most extent of vegetation or Spring tide. This provision complies with the 1994 Guidelines described above. When disturbance is minimized, dunes grow and expand, increasing the resilience of our beaches and the continued availability of them for access, including OSV. If there is insufficient space for an adequate corridor between the lowest vegetation and the high tide line, that section of beach is not wide enough to support appropriate OSV use and shall be closed to OSV traffic until such time as beach accretion produces space for an adequate corridor. Conversely, should the beach and dunes overwash, OSV corridors may be reestablished following the guidelines. The potential length of the beach corridor is designated in blue in Figure 1 and will be open to OSV access when beach conditions can accommodate travel according to the guidelines in this Plan.



*Figure 13: Example of fence placement for wide sections of beach and access points. OSVs are restricted to defined corridors allowing passage and, where desired, parking above the high tide line.* 

#### **Dune Trails**

OSV trails running through the interior of dune systems, such as exist on Leland Beach, the west end of Norton Point Beach, and the Cape Poge Wildlife Refuge, will be generally fenced on both sides to keep OSVs from driving over dune vegetation and widening trails (in some cases topography or vegetation that sufficiently delineate the corridor will negate the need for fencing). Figures 1 and 15 illustrate the current dune trails including those being proposed for closure. Trails that will no longer be maintained for general OSV operation are in red and those that will be maintained are shown in green (Figure 15).



Figure 14: Example of fence placement on narrow sections of beach. As on wide sections, OSV use is restricted to a defined corridor above the high tide line. Narrow beaches may not provide parking in addition to a travel corridor.

Historic sections of the Pocha Pond-side trail on Leland Beach have been closed previously. The remaining section is now within migrating salt marsh and portions of the trail flood with spring tides and storm events which create wet spots in the trail resulting in trail widening. The Trustees will close a 3,615-foot section in accordance with the Guidelines (1994 *Guidelines for Barrier Beach Management in Massachusetts*) and the Wetlands Protection Act (Figure 1). The MOA for Leland Beach recommends this trail be closed to protect the salt marsh and maintained only for emergencies and the Cape Poge District of Critical Concern recommends (4. Section 3.1.C) prohibiting all driving on the beaches of Pocha Pond. This closure will require adding several pull-outs to the center (dune) trail for safe two-way traffic.

On the Cape Poge Wildlife Refuge, Tom's Neck Road runs along the bay-side of this barrier beach system in zones 6, 7, and 8. Traveling along this road necessitates driving within the intertidal zone in multiple locations. Similarly, areas in Zone 9 and 10 are too narrow to create a required beach corridor, privately owned, and/or dangerous to traverse due to cobble. Accordingly, sections that can not create the required beach corridor or require driving in the intertidal zone (Figure 12) will be open to Essential Vehicles only (Figure 15).<sup>14</sup> Additionally, the Cape Poge District of Critical Concern recommends (4. Section 3.1.C) recommends prohibiting the use of vehicles on beaches adjacent to Pocha Pond and Cape Poge Bay. Travel corridors both within the dunes and on the beach will remain accessible when conditions and shorebird protection efforts allow.

The entrance road at Norton Point Beach was rerouted further inland as part of a dune restoration project in 2021 in partnership with the Town of Edgartown to improve the resilience of the entrance infrastructure and minimize traffic congestion at the corner of Katama Road and Atlantic Drive. The

<sup>14</sup> 1994 *Guidelines for Barrier Beach Management in Massachusetts*) and the Wetlands Protection Act

eastern half of Norton Point has completely redeveloped after the 2006 breach and naturally reconnected to Wasque Beach in 2015. The Norton Point barrier beach is one of the most dynamic sections of coastal beach in New England and typically supports nesting colonies of several tern species and three to six pairs of piping plovers. These conditions create difficulty in the creation of new OSV trails through the dunes while also protecting critical habitat. Given the fragility of this narrow beach and the use by several rare bird species, the Trustees limits OSV access to the beach corridor only in zone 2, subject to safe OSV driving conditions, shorebird protection, flooding, and coastal erosion. The decision to not reestablish a dune trail all the way to Wasque Reservation is further supported by the importance of maintaining the resiliency of the beach as a buffer for Katama Bay and Edgartown Harbor. Approximately 3,000 feet of historic dune trail is being closed since it has been mostly eliminated by wind and waves rearranging sand in the last 2-3 years. Should future conditions allow, new dune trails will be carefully considered in collaboration with Dukes County and the Edgartown Conservation Commission and in consultation with MNHESP. The remaining dune trail will be maintained to its current location as long as conditions allow. In addition, all non-essential OSV driving will be prohibited on the bayside of this beach as this entire section requires driving in the intertidal or salt marsh and is therefore, not in compliance with the Guideline and the MOA between the County and Trustees.



*Figure 15. OSV and pedestrian access for Norton Point and Chappaquiddick beaches by zone (same as Figure 1).* 

#### Current Condition and Management by Zone

Below are descriptions of OSV access by zone (Figure 15). Any of the below zones could, and likely will be, subject to additional restrictions and closures during the shorebird season when state and federal

guidelines require. Symbolic fencing, typically consisting of metal posts, rope, and signage attached to some of the posts, is a primary means by which visitor access, including OSVs, are managed and rare species and their habitat are protected on the beaches. Symbolic fencing may be kept in place year-round or erected and removed seasonally depending on its location and purpose.

Zone 1 – The western section of Norton Point Beach including the entrance. This area typically has a defined berm reflecting average high tides and a clearly defined upper beach with a primary dune. The bayside is backed by salt marsh and mud flats and serves as important habitat for some of the largest concentrations of migrating shorebirds on Martha's Vineyard. OSV access will be limited to a well-defined beach corridor starting at the first access point beginning after the gatehouse and restored dune. OSVs will be restricted to the reconstructed dune trail from the paved road to the gatehouse reserving the area of beach adjacent to South Beach for pedestrians only. Depending upon existing conditions, beach managers may require OSVs to proceed on a one-way loop after passing the gatehouse or proceed either on the beach corridor or dune trail with two-way traffic. Beach parking will be provided when the beach is wide enough.

Zone 2 – This zone includes the majority of Norton Point Beach to its junction with Wasque Beach. Zone includes one dune crossover trail for OSVs (with small pull-out area for vehicle parking) and a beach corridor trail that will be established along the length of the beach when conditions allow safe passage. In recent years the eastern end of this zone has been experiencing erosion resulting in escarpment with no upper beach or berm establishing before the dune grass. The beach is typically steep, very narrow and subject to daily tidal flooding, thus prohibiting OSV travel and thru traffic to Wasque Reservation. In addition to the one crossover trail and associated pull-out area, OSV passengers can access the back beach with its calmer waters via one to three pedestrian trails (Section 5.3). Beach parking will be provided when the beach is wide enough.

This zone is also the area where the majority of shorebirds nest, particularly terns. All of Norton Point Beach is designated Priority Habitat (NHESP) and, given the number and abundance of rare birds nesting in this area, any dune trail would significantly impact breeding and staging birds. The bayside beach is intertidal and during lower tides grades into broad, shallow sand flats used by migrating and breeding shorebirds.

Zone 3 – This zone includes the beach at Wasque Reservation and is currently not accessible by OSVs due to unsafe conditions. Wasque Point is experiencing erosion and the beach is very steep and subject to daily tidal flooding. Similar conditions exist to the west on portions of Norton Point Beach preventing through OSV travel. These conditions have persisted for the last two years and will likely continue for the near future. The Trustees will monitor conditions and open a beach corridor when conditions are safe for OSV driving and guidelines can be met.

Zone 4 – Leland Beach is divided into two halves, the northern and southern halves. The crossover (OSV trail that connects the dune trail to the beach corridor) divides these two halves. Zone 4 is the southern half of Leland Beach. Leland Beach faces east and is characterized by a well-established berm with a wide beach above the berm and well-defined low dunes. This zone is the narrower of the two sections overall but the actual beach is wider on this section than on the northern half. While this section has narrow dunes there is suitable nesting and foraging habitat for shorebirds on both the Muskeget Sound (outer beach) and Pocha Pond sides. As the outer beach, especially near Wasque Point, is typically wide, beach parking is usually available on this section.

Zone 5 – This is the northern half of Leland Beach that abuts the Cape Poge Wildlife Refuge and designated Swimming Beach. While this section of the barrier is wider overall (i.e., the width between the MHW on the beach and salt marsh) than the southern half, the beach is typically narrower. The Pocha Pond side is bordered by a salt marsh that makes piping plover use essentially non-existent for both breeding and foraging. The crossover dividing the two halves allows beach managers greater flexibility to manage OSV access during shorebird breeding.

Zone 6 – This zone includes the southern end of the Cape Poge Wildlife Refuge and is a designated swimming beach. OSV driving, except for essential vehicles for management and safety, is prohibited in this zone during seasonal operations This section is closed to OSVs mid-May to the end of September. This section is narrow with no parking.

Zone 7 – This section includes the majority of the Maritime Juniper Woodland Plant Community Type, a priority community type. The dune trail skirts the woodland on the east side. Primary dunes occur between the dune trail and the beach. This section of beach is narrow, but typically gets slightly wider to the north. Parallel parking is limited to the north end.

Zone 8 – This section includes the 2-acre lot owned by Edgartown known as the Jetties, which can be identified by two small rock jetties perpendicular to the beach. The Jetties, the town parcel, has no space available for parking and OSV trail is diverted around. The site is accessible to pedestrians and OSV parking is available north of the jetties. There are also old shipwreck remains in this section that The Trustees rope off for safety reasons.

Zone 9 – This zone is very narrow and may not have room for a travel corridor at all times.

Zone 10 – This zone includes the north facing beach below the Elbow bluff. It is narrow with lots of cobble and travel is often hazardous. Much of this section is privately owned. Signage will inform Trustees' visitors that the beach corridor for non-essential (i.e., public) OSVs ends after zone 9.

Zone 11 – Approximately 1-mile of this zone is privately owned and not part of the Cape Poge Wildlife Refuge; the Trustees' management of this area is restricted and conducted by permission only. The area from the Cape Poge Elbow to the Gut is very low in elevation with little established beach above mean high tide. Parts of this zone often overwashes during storms or high seas. This area has no defined berm and during typical high tides there is no room between vegetation and water. During lower tides, OSV passage is possible but travel is all within the intertidal zone which is prohibited under the Guidelines. As a result, access is limited to pedestrian use only and essential OSV vehicles when passage is safe and vegetation can be avoided for enforcement, rare species management and emergencies.

#### Trustees Staff OSV Operator Requirements

All staff operating essential OSVs on the beaches are approved by beach managers and ecology staff who train vehicle users in proper methods of operation. During the shorebird breeding season, only trained staff can operate essential vehicles in restricted areas. Guidelines are further restricted and vehicle travel through closed areas is limited to emergency response, regulation enforcement, shorebird management and operations associated with a valid Certificate of Inclusion under the Piping Plover Habitat Conservation Plan for Massachusetts.

• OSV operators must be employees or volunteers of the Trustees or have approval of Trustees managers.

- OSV operators must be trained in driving techniques and undergo a detailed orientation by a designated staff person.
- Essential vehicle operators driving OSVs in shorebird restricted areas must be trained by Trustees Ecology staff and demonstrate an understanding of shorebird guidelines and ecology.
- OSV operators must demonstrate an understanding of barrier beach ecology and appreciate the sensitivity associated with the site.
- OSV operators must pass the Trustees drivers check/qualification.
- Essential vehicles may access back beach areas, closed trails and pedestrian crossovers for enforcement, safety and resource protection only.
- When possible, operators should enforce regulations and perform maintenance tasks by stopping their vehicle and proceeding by foot.

#### Public OSV Operator Requirements

- OSVs must have and display a valid Trustees permit (i.e., sticker).
- OSVs must have all necessary safety equipment as specified on the permit and be approved by staff before entry to the beach. Required equipment includes a jack, a base board for jack, a shovel, tow rope and tire pressure gauge. Vehicles should be equipped with a full-size spare tire and foldable, portable ramps are highly recommended.
- OSVs must be 4-wheel drive. AWD vehicles will not be allowed on the beach.
- All OSV operators must have and maintain a current copy of the *Trustees Over-sand Vehicle Driving Guide* at all times while driving on the beach (Appendix A).
- All vehicles must stay in designated vehicle corridors or trails.
- OSVs are prohibited from towing water-skiers, dune skiers, hang gliders, para gliders, or the like.
- Standing in a moving vehicle, riding on a fender, tailgate, roof, or other position outside the vehicle is prohibited.
- Stickers may be revoked for violations of the rules and regulations by The Trustees staff without
  refund of permit fees. Serious violations such as harassment, unruly and violent behavior,
  underage and excessive drinking are also subject to court citation. Violating or disregarding the
  rules and regulations can result in expulsion from the premises, and/or a fine and imprisonment,
  as allowed by law.
- The Trustees reserves the right to impose limitations on the number of vehicles permitted at the property on a given day.
- OSV access is prohibited from beaches during weather alerts including warmings and advisories.

#### General OSV Operating Guidelines

- All vehicles are directed to stay in designated vehicle corridors or trails.
- OSV operators must reduce the pressure in all four tires to 15 pounds per square inch (PSI) or lower before entering the beach. This requirement reduces impacts to the road system and reduces the chances of vehicles getting stuck. The Trustees will impose towing fees up to \$200 for vehicles in need of assistance by winch truck.
- OSV speed must never exceed 15 MPH. On dune trails, OSV speeds must never exceed 10 MPH. When shorebird chicks are present on the beach, speeds must never exceed 5 MPH. Exceptions should only occur in cases of medical or safety emergencies.
- Speeding vehicles will be stopped and drivers reminded of their obligation to obey speed limits and other regulations.
- OSV operators must avoid driving on debris and vegetation, especially the wrack line.
- OSV operators must remain alert and avoid wildlife.

- OSVs must avoid driving through areas of standing water, especially on dune trails.
- Public safety and regulation patrolling should be conducted at a reasonable frequency, especially during busy seasons and times of day.
- All staff should be notified of any restrictions limiting vehicle travel at the start of their work shift.
- The Trustees will maintain air stations at their current locations at the Katama Entrance/Exit and Mytoi Ranger Station, to facilitate tire drawdown and reinflation.
- All vehicle access is prohibited from beaches during weather alerts including warmings and advisories.

#### Additional OSV Operating Guidelines During Shorebird Breeding

- Only essential vehicles are permitted to drive through areas where hatched piping plover and tern checks are present.
- All vehicle operators must be trained in shorebird ecology by a Trustees Ecology Program staff member before they are permitted to drive on the beach when chicks are present.
- All vehicle operators must review and understand the locations of all plover and tern nesting activity by studying daily reports (office map and bulletin board) which are updated regularly and by consulting with Ecology staff.
- Operators must record in an Essential Vehicle Log the date, their name/call #, time of departure, time of return, and any additional comments when driving into areas where piping plover and tern chicks have hatched.
- Patrols must not occur prior to 6:00 am or after 7:00 PM except in emergencies.
- Speeds must never exceed <u>5 MPH</u>.
- When possible, operators should enforce regulations by stopping their vehicle and proceeding by foot.
- In non-emergency situations the Trustees will transport, or escort, state and federal officials needing beach access.
- Trustees' Beach management and Ecology staff are authorized to revoke a staff member's ability to operate OSVs and temporarily close any portion of beach to vehicles during the shorebird breeding season.

#### Shorebird Nest Protection

- See MDFW 1993 Shorebird Guidelines for complete details.
- Seasonal fencing to protect potential nesting habitat of coastal breeding birds from OSV traffic will be in place by April 1, by which date piping plovers have begun arriving and starting to prospect for nesting territories on the beach. "Potential nesting habitat" refers to specific locations where birds (piping plovers and tern species) have nested or considered nesting in the past as well as habitat that are known to be preferred for nesting (e.g., overwash areas or relatively flat, lightly vegetated areas at the foot of the dune system, and sparsely vegetated or unvegetated sections of upper beach). Fencing will be maintained until the end of the nesting season.
- If a wrack line is consistently present, measures will be taken to prevent OSVs from driving on it (wrack is an important ecological feature of beaches and in particular an important foraging resource for plovers and other shorebirds).
- When active nests are discovered, fence lines will often need to be adjusted or added to provide protection to the nest. A 50-yard buffer (radius), at a minimum, will be fenced around active nests as recommended in the Guidelines. Shorebird staff may find it useful to observe a nest

from 100 yards or so away, to see how the birds respond to OSVs under an initial fencing arrangement.

- In cases where a 50-yard buffer is not sufficient to prevent birds from disturbance, protected areas should be expanded.
- Alternatively, in cases where nesting birds are not disturbed by OSVs, buffers may be less than 50 yards, but will need Trustees Ecology staff approval.
- Generally speaking, shorebird staff working on the beach should carry fencing materials (posts, a post-driver, line, and signage) sufficient to fence off at least one nest. Ten posts and 200 yards of line will generally be sufficient.
- In places where the beach is less than 50 yards wide, a fence buffer of this size will extend down to the waterline, in which case it will not be possible to allow continued OSV passage between the nest and the water. In these cases, a section of beach about 100 yards long, centered on the nest, will need to be closed to OSVs until the eggs have hatched and the chicks have left the area (e.g., moved elsewhere or died). If the configuration of the road system allows, OSVs may be routed around the nest site by using crossover trails and interior or bay-side trails.
- All decisions on fence locations will be made and approved by the Trustees' ecologists and guided by the governing principle that birds should be able to nest without frequent disturbance.

#### Protection of unfledged shorebird chicks

See MDFW 1993 Shorebird Guidelines for complete details. Once eggs have hatched, chicks are extremely vulnerable to many threats including predators, human disturbance, OSV's and weather. Protection efforts of unfledged chicks are designed to reduce chick loss. To avoid takings and to reduce these threats, Trustees staff will:

- Close beach corridors 100 yards on either side of a nest with hatched chicks (Figure 16).
- Delineate closed areas using 5-foot galvanized T-posts (75-100 feet apart) and quarter-inch braided polypropylene line in a bright color (yellow, pink, red, or orange), or comparable material, for visibility.
- Place signs on every second or third fence post indicating resource protection (e.g., shorebird habitat, dune protection, restoration) and rotate seasonally as needed.
- Shorebird and stewardship staff will review material choices periodically for efficacy, cost and environmental impact.
- Maintain adequate OSV-Free buffers as chicks move.
- Close both beach corridors and dune trails where beaches are narrow and foraging habitat exists on both sides with no barriers preventing cross beach travel by the shorebirds.
- Where conditions include barriers such as heavily vegetated dunes or other obstructions to plover movement that preclude birds crossing from one side to the other, the closure may be limited to one side of the barrier beach where birds are.

#### Lifting restrictions after chicks fledge

- Chicks will be declared fledged when they meet the temporal or basic physical standards for fledging found in the Guidelines (MDFW 1993).
- Closures will be maintained until chicks meet the standard for fledging.
- Determination of fledging will be the responsibility of Trustees' Ecology staff.



Figure 16: Example of the potential use of an inside trail to bypass a closure for unfledged chicks on the ocean side beach. Fence lines exclude OSVs from a 200-yard section of beach centered on nest site. Dune topography and vegetation preclude chicks heading west into active trail and little or no foraging habitat exists on the bayside. Crossover trails north and south of illustrated area will allow OSVs to move from ocean side beach to interior trail where required.

#### OSV Corridor Maintenance

- The primary route for OSV travel will be via the ocean side beach corridor, with vehicle use taking place over unvegetated and unconsolidated sand as far from the dunes as possible without impacting the wrack line, approaching a steep berm too closely, or requiring operation on wet, intertidal sand.
- Corridors and trails should generally occupy no more space than is required for safe passage that is, a single set of wheel ruts plus passing turnouts.
- Corridors and trails should be as even as possible, minimizing deep holes or "washboard" and methods such as towed landscape rakes or grading may be used *exclusively within the defined corridor* to achieve those conditions.
- Wet spots along dune trails will have clean sand added or vehicle mats installed per Conservation Commission approval.
- Dune trails should be limited to situations in which there are clear, specific reasons for such use (e.g., when it is necessary to bypass sections of ocean beach that are closed due to bird activity or inaccessible due to erosion). The Trustees' long-term policy prohibits construction of additional interior roads beyond what exist at the time of adoption of this management plan.
- Bayside trails will be closed and these areas only accessed by essential vehicles as needed for enforcement, safety, emergencies and resource protection including beach cleanups and trash removal.

- Dune trails will make use of turnouts to keep trails as narrow as possible. Turn-outs can be less frequent where visibility is good, since drivers can see traffic coming from the opposite direction. In these situations, one turn-out every 200 meters is appropriate.
- In winding sections of dune trails, turn-outs should be frequent enough to avoid drivers having to back up long distances in order for opposing traffic to pass. In these situations, turn-outs may need to be established every 50 meters.
- Signage will be used to remind drivers not to park in turnouts.
- Generally speaking, turn-outs should not be larger than necessary to allow vehicles to pass each other: an area about 3 meters wide and 10 meters long will allow room for easy turning into and out of the turn-out, while keeping the vehicle in the turn-out safely out of the way of the passing vehicle.
- Turnouts will be clearly marked with white posts to signal to drives where they occur and to prevent widening.

#### **Beach Parking**

In areas popular with beach visitors (e.g., the western end of Norton Point), a continuous parking area may be created by establishing an OSV corridor wide enough to accommodate both moving and parked vehicles. Wide beaches may accommodate perpendicular parking while narrow beaches may require parallel parking.

#### Crossovers

Crossovers connect dune trails with the outer beach and beach corridors. This layout allows flexibility in adapting the trail system to flooding, erosion, the presence of rare species, or other factors that may render road sections unusable for periods of time. Using crossovers, traffic can be routed around closed sections. However, crossover roads often represent weakened points in the barrier beach, vulnerable to overwash and even breaching. Additionally, since they often cut across vegetated sections of dune, crossover roads can represent loss or fragmentation of dune integrity and habitat. For these reasons, crossover roads should be limited in number, designed with resilience in mind, relocated as infrequently as possible, and managed to reduce unnecessary impacts (e.g., widening). There are currently two crossovers on Norton Point, one on Leland Beach, and four on the Cape Poge Wildlife Refuge including the access road at the Dike Bridge that are maintained for OSVs and at the Town of Edgartown's parcel at The Jetties (the boundary of Zone 7 and Zone 8).

Changes in beach configuration may render these crossovers useless (i.e., they may cross over onto a section of beach that is impassable, inaccessible, or simply absent due to erosion or beach recession). In such situations, the affected crossover may be retired and a similar crossover constructed in the same general area, but in a more useful location. The Leland Beach crossover has remained stable for many years and relocation is not anticipated in the next few years. Conversely, the crossovers on Norton Point Beach are subject to more dynamic forces and require relocation more frequently. The Trustees will relocate crossover roads to maintain safe OSV access that respects resource protection by following the below guidelines:

- There will be no net increase in the number of crossovers.
- Crossovers will be designed at angles or with S curves to minimize risks from storm flooding and erosion.
- Locations will avoid known or primary rare species habitat including nesting shorebirds.
- Proposed locations will be vetted with and approved by the Edgartown Conservation Commission and MNHESP.

- Old crossovers will be closed and allowed to revegetate and sequester sand.
- Upon request by the Conservation Commission or MNHESP, beach grass will be planted to facilitate restoration of old crossovers following standard planting densities and time of year.

Since erosion or other changes affecting crossover trails can happen quickly and with no warning, this management plan represents *pre-approval for limited relocation of crossover trails*, subject to Edgartown Conservation Commission approval and MNHESP determination that no particular ecological risks beyond reversible alteration of habitat arise from the proposed new crossover, and that the procedures and conditions outlined above and in the rest of this section are followed.

#### Public Outreach

The Trustees commits to regular and ongoing communication through multiple platforms (social media, website, beach hotline, etc.) to ensure visitors are informed on OSV access. The Trustees is grounded in its mission to protect special places and their delicate ecology for the public's enjoyment, though OSV access is not guaranteed. It is also important to remember that even when OSV use is not allowed on sections of beach, pedestrian access generally continues to be allowed.

- OSV permit holders will be made aware that their permit allows OSV access only in compliance with regulations and that OSV access to sections of beach may be suspended for reasons including but not limited to unsafe conditions, protection of wildlife, or quotas on beach use and that access may be restricted at short notice.
- Trustees staff shall make every reasonable effort to keep the public well informed about current or impending closures through use of social media, Trustees web pages, word of mouth, and dissemination of information through stakeholder websites and email lists.

#### Unsafe Conditions and Conditions Leading to Excessive Impacts

Staff will routinely monitor road conditions year-round (unless seasonal closures are in place completely preventing OSV access to portions or all of the beach) and will assess beach conditions as soon as it can be safely done after significant weather events. Sections of beach corridors or dune trails determined to be unsafe by the Trustees Stewardship Manager will be closed at the manager's discretion. Conditions warranting closure of sections of road include, but are not limited to, soft sand, steep beach profile, eroded or escarped beach, very narrow beach, flooding, or the presence of debris in the OSV corridor.

Similarly, sections of road should be closed if conditions make it likely that OSV passage will have undue negative impacts on road conditions or will impact resources such as vegetation near the OSV corridor. Examples might be shallow flooding that is passable but likely to encourage OSV operators to drive on vegetation to avoid the water, or water-saturated sand that is passable but will be deeply rutted by OSV passage. Again, staff discretion will generally need to be the determinant if closure is needed for these reasons. At all times, protection of resources should be the highest priority, with OSV access a secondary goal.

#### Over-sand Vehicle Quota

In order to maintain a high-quality visitor experience for all beach users and avoid undue ecological or resilience impacts from OSV use, beach managers have established a maximum number of vehicles that may be accommodated on each section of beach based on the *1994 Guidelines*<sup>15</sup> and existing conditions. The beach quota has been calculated using the linear amount of beach accessible to OSVs and an

allotment of 20x30 feet per vehicle. When beaches are wide, perpendicular parking will require 60 feet of width to accommodate both the two-way OSV corridor and the parking area, all of which must be above the MHW line. When the beaches are narrow, at least 30 feet will be needed to accommodate parallel parking between the OSV corridor and MHW. These parking dimensions take into account the size of a typical OSV plus any extensions including trailer hitches, carriers for coolers or bikes, and enough space for OSV doors to open on either side of a vehicle.

Based on existing conditions and the above factors, the Trustees calculates a maximum OSV capacity of 911 spaces total across all beaches before shorebird closures during peak shorebird breeding season. Due to the dynamic nature of these beaches, the quota is subject to seasonal and annual change but will be assessed regularly (daily at times of peak use) to ensure safety and resource protection goals are maintained. Table 1 identifies potential and current capacities for each section of beach based on access and width of beach.

The Trustees does not expect this capacity to be reached at any given time due to the following factors:

- Erosion Parts of the beach are not safe to access due to beach erosion. As sea-level rises and storms become more frequent and/or intense, this erosion pattern is likely to intensify, disrupting access further.
- Dune Creation Future dune restoration projects, while improving dune resilience and public access, may result in impacts to OSV parking.
- Rare Species See restrictions discussed in section 5.10
- Access to Chappaquiddick The number of potential OSVs that can access the beaches on Chappaquiddick is governed by the frequency of the Chappy Ferry which can only accommodate 2-3 vehicle at a time.

Trustees staff may use multiple systems to enforce these quotas (e.g., hours-long closures once the maximum number is reached). Staff will monitor the number of vehicles and document OSV use and management for annual reporting. Stewardship staff will track daily numbers of OSVs accessing the property and the number of days when parking capacity is reached (i.e., OSVs are turned away at the gate). This data will be reported annually for each beach property.

Table 1: Parking Calculations for Beach Sections. The number of potential spaces is given for parallel or perpendicular parking depending on what the width of the corridor allows. The number of existing spaces most closely indicates how many vehicles we can reasonably expect to park at a given time due to current (2022) width and access conditions.

	Parking available - current conditions as of spring 2022			
Beach Zone	Total Length of beach (ft)	Length of parking (ft)	Spaces available (max.)	Orientation to water
Zone 1: Norton Point Beach (West)	3,810	3,590	180	perpendicular
Zone 2: Norton Point Beach (East)	8,668	0	0	
Zone 3: Wasque	4,676	0	0	
Zone 4: Leland Beach South	4,102	4,102	205	perpendicular
Zone 5: Leland Beach North	3,786	3,786	190	perpendicular
Zone 6: Swimming Beach	3,513	0	0	
Zone 7: Swim Beach to Jetties	7,951	7,900	263	parallel
Zone 8: North Crossover	4,458	2200	73	parallel
Zone 9: Cape Poge Pt.	1,525	0	0	
Zone 10: Cape Poge Elbow	2,795	0	0	
Zone 11: Cape Poge Gut	9,896	0	0	
Totals		21,578	911	

Table 1 Potential and current capacities for OSV parking at each section of beach based on access and width of beach during 2022.

#### Assistance for Vehicles in Distress

The Trustees may, as resources permit, offer assistance to vehicles that become stuck or disabled on the beach. The Trustees may, at its discretion, charge reasonable fees for these services. The ranger staff will also make reasonable provision, including training of staff, use of radios or other communications equipment, and acquisition of emergency devices such as portable defibrillators, to respond to medical emergencies on the beach. Nevertheless, OSV operators will be informed that they enter the beach at their own risk.

#### Access for Private Residents

Private residents of Cape Poge access their properties on OSV corridors within the Trustees' managed wildlife refuge through an established Right of Way. Cape Poge residents' vehicles are considered essential vehicles for purposes of this Plan.

#### 5.8 Signage

Clear informational and regulatory signage is an essential component to beach management and is often the first thing people encounter when visiting the beaches. Due to high visitation and a sprawling landscape, signage is an effective tool for messaging. Signs are strategically placed throughout the beach, especially at access points, and erected as needed for varying situations. Signage is used to alert visitors to:

- Beach regulations
- Restricted access areas
- Wildlife restrictions
- General area closures

- Wayfinding
- Safety considerations
- Education and interpretation

Sign construction consists of metal (T- and U-posts) or wooden (generally 4x4 in. or 6x6 in.) posts, with attached plastic, laminate or metal signs fastened with bolts, wire, plastic ties, or rope. Signposts are hand-dug or pounded into the sand. The Trustees will avoid placing signs in sensitive areas or within vegetated areas when possible.

#### 5.9 Special Events

Special events occur infrequently within the resource area. These events bring in small to large numbers of people for recreation purposes. Some examples include The Ipswich Schools Beach Picnic, movie/commercial filming, benefit horse rides, fishing derbies, community athletic events, fundraisers, beach clean-ups, and guided walks in the resource area. Generally, these events pose no more impacts than typical recreational uses. However, events can impact the resource if not properly vetted and regulated. If any special events might propose activities which may impact or alter resource areas, and/or deviate from activities listed in this plan, additional wetland filings will be submitted prior to allowing the activity to occur. In addition, Massachusetts Endangered Species Act filing may be required for certain events in priority habitat.

- Ecology staff will be contacted prior to allowing special events to occur, especially during the shorebird breeding season.
- Special events will follow normal regulations outlined in this Management Plan.
- Small, removable, temporary structures (i.e., tents, pole pavilions, chairs and tables) may be allowed provided they do not alter the resource, vegetation, or impact wildlife. Structures will only be allowed on areas of open sand. Structures must be removed following the end of the event.
- During movie/commercial filming, the Trustees will deploy supervisory staff throughout the duration of the production to ensure no impacts to the natural resources occur.
- During beach clean-ups, trash removal is allowed off-trail and on open sand provided it does not impact rare species.
- Those wishing to hold special events must contact Trustees staff and the Town of Edgartown when appropriate prior to holding the event.
- Special events will occur during normal operating hours, unless otherwise authorized by Trustees staff.
- A permit is needed for events including more than 20 people on Norton Point Beach following County regulations.

#### 5.10 Shorebird Protection Program and Rare Species Management

Shorebird research and management (Shorebird Program) by The Trustees was initiated in 1986, the same year the Atlantic Coast Piping Plover was listed as threatened under the United States Endangered Species Act. The goals of the program are to protect rare and declining shorebirds and associated critical habitat from human disturbances and depredation using a variety of fencing techniques, intensive monitoring, predator management, and public education. Initiatives to protect rare shorebirds are based on guidelines distributed by the Massachusetts Division of Fish and Wildlife (MDFW 1993).

A suite of listed species including piping plovers, least terns, common terns, and roseate terns are the main focus of protection but other declining or species of conservation need are targeted as well and include American oystercatchers, black skimmers and breeding colonies of herring and great black backed gulls. All these species select and use similar beach habitat and face similar threats (e.g., predators, storm overwash, disturbance from recreational activities, and OSV operators failing to follow guidelines).

#### Maintenance and Protection Measures

- Trustees follow state and federal guidelines for managing plovers and terns. See guidelines for complete details.
- Management for listed breeding species (e.g., plovers and terns) begins April 1<sup>st</sup> and lasts into September. Daily monitoring, seven days a week, typically begins in late April and extends into August.
- Ecology staff delineates breeding habitat in early April and seasonal restricted-area fencing and signage are erected for shorebird nesting habitat (Figure 17). Fencing is adjusted throughout the season to ensure breeding birds have sufficient space – minimum of 50 yds from the closest plover nest, or up to the high tide line if there is not ample beach to include the 50 yd buffer. Fencing is maintained from April 1<sup>st</sup> through September or when breeding is complete and staff determine fencing is no longer needed.
- Fencing may be left in place after breeding to protect dunes or migratory birds or removed prior to severe storms to prevent loss of supplies.
- Non-lethal predator management techniques may be deployed to protect nests. This consists of electric fencing and metal cages surrounding nests.
- Lethal predator control is contracted through USDA APHIS Wildlife Services in addition to inhouse predator removal. Control focuses on overabundant crows and skunks that target shorebird nests and chicks. Federal and state permits are required to carry out this work and are on file with the Trustees.
- OSV restrictions are implemented to protect nesting and foraging habitat (see section 3.8).
- Patrolling shorebird rangers and shorebird monitors enforce regulations surrounding shorebird protection during daily patrols and while monitoring.
- Ecology staff works with state and federal officials to report productivity/nesting data and alert law enforcement of violations of regulations under the Endangered Species Protection Act.
- Annual reports are completed summarizing the season prior to the November following the breeding season. These reports are on file with the Trustees.
- Staff regularly educate visitors surrounding shorebird ecology and management.



*Figure 17: Typical example of fencing materials used to protect shorebirds from pedestrians and OSVs.* 

#### **Rare Species**

In addition to protecting bird habitat from OSV incursion, populations of rare plants will be fenced to prevent them being driven on or trampled. Many such plant populations will be protected fortuitously by shorebird fencing. Currently the only rare plant documented on beach habitat is the seabeach knotweed (*Polygonum glaucum*), a species of Special Concern with a limited range in Massachusetts and beach obligate. The knotweed is an annual with a shifting population. The preferred habitat is infrequently flooded upper beach.

#### Research on Trustees Properties

Research on natural systems and wildlife is fundamentally important to understanding them. The Trustees' philosophy is to allow or undertake research on our properties, especially where this research has a direct benefit to resource protection (e.g., shoreline erosion, sediment studies).

Those seeking to conduct research on Trustees properties must submit research applications which are vetted by ecology and property staff. The Trustees will only allow research that poses no threat to the resource. Typically, research is very benign, involving accessing remote areas, assessing plants and wildlife and installing instruments or materials necessary for ecological monitoring (e.g., salinity wells, wildlife cameras). Any research proposing the collection of rare plants or animals must obtain proper permits from the state and USFWS and provide documentation to the Trustees in their application. In addition, any research which could adversely impact resource areas will have to seek Conservation Commission approval in addition to approval by the Trustees.

- All researchers must complete a Trustees research permit application to carry out their work, in addition to any local, state, or federal permits.
- The Trustees may install markers establishing permanent locations for monitoring. Posts will be small, established by hand, and constructed with plastic material within wet areas.

- Trustees will establish with posts or attach to flora, remote wildlife acoustics and photo monitoring equipment.
- The Trustees will use OSVs for various monitoring and research needs.
- The Trustees will permit limited collection of flora and fauna for the purposes of conservation and research if proper state and federal permits have been acquired.
- The Trustees will allow those conducting research off-trail and in other sensitive areas if those conducting the work can demonstrate its importance to the Trustees and its management and the value to conservation and natural resources.

#### Education

It is natural that such spectacular examples of coastal ecosystems as are found at the beaches on Martha's Vineyard would serve as an outdoor classroom and living laboratory through which youth, families and the public can gain knowledge of natural history, coastal ecology, climate change, and more. The Trustees run educational programming through the Claire Saltonstall Education Program (CSEP) and limited public programming on Wasque, Norton Point, and Leland Beaches. Examples of this educational and public programming includes curriculum-based programs designed for school groups (grades K-12), over-sand vehicle tours (Snowy Owl Prowls during the winter months and Explore the Shore Tours year-round), and volunteer beach clean-ups. These groups are all under the supervision of Trustees employees while partaking in a program. Groups or volunteers not under the supervision of Trustees staff or trained experts, limited off-trail and sensitive resource area use are acceptable (i.e., school groups guided by teachers or Trustees staff in salt marsh).

- The Trustees will allow school groups, or groups whose purpose is intended to conduct coastal education and passive recreation activities, access to resource areas. Groups intending to access areas normally designated as off-limits must secure Trustees permission to do so prior to arrival.
- The Trustees will design its own coastal programs and events within the resource areas governed by current regulations. The Trustees may occasionally engage small groups in sensitive areas for the purposes of education and training.
- Signage may be erected to protect sensitive resource areas and for general interpretation.
- The Trustees, staff and volunteers will engage in opportunities to educate visitors in formal and informal ways, both by guided experiences as well as through interpretive signage and other media.

#### 5.11 Marine Mammal Protection and Injured Wildlife

Appendix B provides the Trustees Policy Managing Marine Mammal and Sea Turtle Stranding's and Managing Injured or Found Birds-Piping Plovers and Roseate Terns. These policies provide internal guidance surrounding the management of marine mammals and injured Wildlife. It is important the Trustees manage these occurrences for the safety of the animals and visitors.

# APPENDIX A The Trustees Guidelines for Management for Non-Listed Species

# trusteesPolicyManaging Non-listed Bird Species on Coastal<br/>Beaches

#### Summary

The Trustees protect and manage 26 miles of coastal beaches that provide critical habitat for a wide range of both listed and non-listed wildlife species, especially birds. Unlike listed species (e.g., piping plover and least tern), non-listed bird species with similar habitat needs do not receive the same level of regulatory protection and as a result, typically receive less on-the-ground protection and are more vulnerable to disturbance. However, non-listed species face the same threats as listed species and are often equally as rare in Massachusetts as listed species dependent on beach habitat. To ensure non-listed bird species remain part of the beach experience and maintain viable populations the Trustees has developed this policy.

Species covered under this policy include birds which nest on Trustees coastal beaches but do not receive protection under the Federal Endangered Species Act or the Massachusetts Endangered Species Act. Species include American oystercatchers, willets, great black-backed and herring gulls (breeding pairs with nests/chicks), black skimmers and migratory and staging terns and shorebirds. All of these species except black skimmer are Species of Greatest Conservation Need for Massachusetts and the black skimmer is at its northern range with 12 or fewer pairs breeding annually. Many of these species including American oystercatchers and migratory shorebirds are included in national conservation plans due to population declines and concerns for the species future security.

Protection of Nests:

- Nests will be symbolically fenced following the guidelines for listed species to limit disturbance to nesting birds and the risk of nest destruction by pedestrians or OSVs
- Signage will be placed marking the area as a nesting area and foot and vehicle traffic prohibited from fenced area.
- If alternative routes exist prohibit OSV use not including Trustees Essential OSVs.

• If alternative routes <u>are not</u> available, symbolic fencing placement will maximize the buffer around nests while allowing passage for OSVs and pedestrians following The Trustees OSV guidelines and Beach Management Plans.

Protection of Chicks:

- When alternative routes are available The Trustees will restrict non-essential OSVs from where unfledged chicks are present and reroute traffic away from unfledged chicks.
- When alternative routes <u>are not</u> available, and areas are not currently closed to OSVs due to listed species:
  - Signage and speed-restricting fencing should be placed in areas of unfledged chicks and maintained until chicks have fledged or moved to other areas.
  - OSV operators and permit holders will be informed via social media reminding people of the presence of unfledged chicks in specific areas.

Feeding/Staging Grounds:

- When alternative routes for OSVs are available The Trustees will restrict non-essential OSVs from where migratory birds and newly fledged chicks congregate\*.
- When alternative routes <u>are not</u> available The Trustees will leave fencing up and/or expand to reduce disturbance
- Signage will be erected in these areas delineating their boundary and communicating the importance of undisturbed feeding and staging areas for increased survival during migration.

\*Important feeding, loafing and stagging sites are typically well known and monitored, but bird use can vary from year to year as habitat conditions change requiring annual review and modification of protection efforts.

#### References

Atlantic Flyway Shorebird Initiative: Business Plan

https://atlanticflywayshorebirds.org/about/

Massachusetts State Wildlife Action Plan

https://www.mass.gov/service-details/state-wildlife-action-plan-swap

Atlantic Coast Joint Venture: Bird Conservation Region 30 (New England) Priority Species

https://www.acjv.org/BCR\_30/BCR30\_June\_23\_2008\_final.pdf

# Appendix B: Trustees Managing Marine Mammal and Sea Turtle Strandings

#### **RULE & PROCEDURES**

NEVER approach or touch a stranded marine mammal: they can be very dangerous. Seals and whales are protected under the Marine Mammal Protection Act (MMPA). It is against the law to touch, feed, or otherwise harass them. Harassment occurs when YOUR behavior changes THEIR behavior.

The public should be kept at least 150' from a stranded animal – the stress caused by a curious public can result in the accelerated weakening of the animal or even death. NEVER try and push the animal back into the water.

#### If a Whale is observed ALIVE on a beach

Call the NOAA Fisheries Stranding & Entanglement Hotline, NE Aquarium and your regional Ecology staff immediately. When calling the Aquarium, be prepared to leave a message with a callback number and detailed information about the location, nature of the stranding, and any obvious injuries to the animal. It is not necessary to determine the species of whale prior to calling. Taking a few representational photos that can be sent by cell phone or email may also be helpful for Aquarium staff.

Notify property superintendent and/or OM (or other designated staff) to initiate Crisis Management Team protocols and prepare for public and media inquiries. Post a staff member at the animal to keep public away until help arrives.

#### If a Seal or Sea Turtle is observed ALIVE on the beach

Make a quick assessment of the animal's condition from a distance. Note any obvious injuries, poor body condition (e.g., ribs or hip bones showing), or entanglements.

If the animal is deemed healthy, keep public away from animal.

If the animal is deemed sick or injured, call your regional Ecology staff immediately and the NE Aquarium (for the Northeast call the Seacoast Science Center). When calling the Aquarium, be prepared to leave a message with a callback number and detailed information about the location, nature of the stranding, and any obvious injuries to the animal. It is not necessary to determine the species of seal or turtle prior to calling. Taking a few representational photos that can be sent by cell phone or email may be helpful for Aquarium staff. Notify property superintendent and/or OM (or other designated staff) and post a staff member near the animal to keep public away.

If a Whale is found DEAD on the beach

Call the NE Aquarium and your regional Ecology staff immediately. When calling the Aquarium, be prepared to leave a message with a callback number and detailed information about the location,

nature of the stranding, and any obvious injuries to the animal. It is not necessary to determine the species of whale prior to calling. Taking a few representational photos that can be sent by cell phone or email may be helpful for Aquarium staff.

Notify property superintendent and/or OM (or other designated staff) to initiate Crisis Management Team protocols and prepare for public and media inquiries. Feel free to rope off the carcass to keep the public away.

Once the Aquarium has completed their evaluation, the whale should be buried on the beach. If possible, whales should be buried above the high tide line at a depth of 4+ feet. Contact the Coastal Ecologist to identify a whale disposal location that will not adversely impact shorebird nesting habitat or other sensitive areas.

Follow up the event with a summary call or email to the regional Ecology staff.

#### If a Seal or Sea Turtle is found DEAD on the beach

Call your regional Ecology staff, and the NE Aquarium (for the Northeast call the Seacoast Science Center). They may wish to examine the animal for cause of death. When calling the Aquarium, be prepared to leave a message with a callback number and detailed information about the location, nature of the stranding, and any obvious injuries to the animal. It is not necessary to determine the species of seal or turtle prior to calling. Taking a few representational photos that can be sent by cell phone or email may be helpful for Aquarium staff to determine if they need to come out.

Notify property superintendent and/or OM (or other designated staff). Feel free to rope off the carcass or obscure it with beach debris to keep the public away.

If the Aquarium is not interested in sampling the animal, or when they are finished with their evaluation, no additional action is necessary. If public curiosity and/or public health are concerns, the animal may be buried near where it was found. Seals and sea turtles should be buried in the intertidal zone (between low and high tide lines) at a depth of 4+ feet.

Follow up the event with a summary call or email to the regional Ecology staff.

## Appendix C: Trustees Managing Injured or Found Birds-State or Federally Listed Species

Guidelines for Handling Injured Piping Plovers, Roseate Terns, and other shorebirds, which are federally and state listed (i.e. Least Terns, Red Knots). With over 26 miles of shoreline, containing significant breeding habitat for rare shorebirds, it's possible to find wounded wildlife of this nature. Due to the status of piping plovers and tern species, it's important that specific steps are taken if an injured bird were discovered. These guidelines are meant to inform staff and managers at coastal properties on the BMPs' for handling injured wildlife of this nature.

#### **GUIDELINES & BEST PRACTICES**

- Determine the nature of the injury and assess the capabilities and behavior of the bird. Is it in distress?
- Work with beach staff to address public inquiries and keep visitors away from the injured bird.
- Contact the Ecology staff in your region. If neither is available contact Ecology Program Director. (Contact info below)
- Determine if injury is potentially treatable (e.g., a broken leg is treatable but a missing leg is not). If you are unsure if treatment is feasible, call the Tufts Wildlife Clinic (508 839-7918).
- Determine whether capture is feasible. A highly mobile bird capable of flight is extremely difficult to catch.
- Contact DFW.
- Contact the Beach Managers.

If it is determined that the bird requires treatment and needs to be captured, try to avoid stressing the bird during the mid-day heat. Ideally capture should be attempted early in the morning when temperatures are cooler and public visitation is low.

Contact the Animal Rescue League of Boston (617 426-9170) if you require advice on capture techniques or to request help with capture. They might be able to help with transporting the animal.

Once captured, it is important that it be delivered to the Tufts Wildlife Clinic as soon as possible (within 2-4 hours). A captured bird should not be subjected to any unnecessary stress or handling. The bird should be placed in a dark container (ventilated cardboard box) lined with a towel or blanket. During transport, the bird should be kept in a cool and quiet location.

Federally protected species should be transported to: Tufts Wildlife Clinic

Tufts University School of Veterinary Medicine

200 Westboro Road (Route 30)

North Grafton, MA (508) 839-7918
Notify Tufts Wildlife Clinic that you are in route with a federally protected species. They can also be called ahead of time to discuss whether it is feasible to treat the injury.

Normal clinic hours are: Monday –Friday, 9:00AM – 4:00PM; and Saturday – Sunday, 9:00AM – 12:00PM. If you will be arriving before or after normal clinic hours, the bird should be brought directly to the Small Mammal Emergency Room (follow signs when arrive on campus). Call the clinic number and leave a message to alert them that you will be arriving outside of normal hours.