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NORMANDEAU ASSOCIATES, INC.

**ENVIRONMENTAL SCIENTISTS,
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MANAGEMENT PLAN
FOR THE SEABROOK DUNE AREA,
SEABROOK, NEW HAMPSHIRE

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Prepared for
THE SEABROOK CONSERVATION COMMISSION
Seabrook, NH

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TABLE OF CONTENTS

	PAGE
1.0 INTRODUCTION.	1
2.0 PURCHASE OPTION	2
3.0 PREVENTION OF INCREASED HABITAT DESTRUCTION	3
3.1 SOURCES OF DAMAGE.	3
3.2 PREVENTING FURTHER DAMAGE.	4
4.0 REDUCTION OF EXISTING DAMAGE.	6
4.1 SLOW SAND MOVEMENT	6
4.2 AUGMENT VEGETATIVE RECOVERY.	7
5.0 MANAGEMENT BY EDUCATION	10
5.1 MANAGEMENT BY NON-PROFIT CORPORATION	10
5.2 NATURE TRAIL DEVELOPMENT	11
6.0 RECREATIONAL OPPORTUNITIES.	13
6.1 PASSIVE RECREATION	13
7.0 MAINTENANCE PLAN.	15
7.1 OPERATIONS BY FRIENDS OF SEABROOK DUNES.	15
7.2 FUNDING SOURCES.	15
7.3 HABITAT MAINTENANCE.	17
7.4 TRAIL MAINTENANCE.	18
8.0 LITERATURE CITED.	20

1.0 INTRODUCTION

The purpose of this management plan is to preserve the remaining Seabrook dunes, while providing for public use of the area for passive recreation and nature study. Two other documents accompany this plan: the single page flyer describing the nature trail, and the Educational Brochure and Trail Guide. This plan is written to serve as a general guide to managing the dune area, since several factors are presently uncertain, including exact property bounds and the implementation date. Certain principles, based on the ecological processes, are implicit in the practices, plans and prohibitions set forth herein:

1. The native dune plants are best suited for stabilizing dune sand.
2. Foot and vehicular traffic irreparably damages dune plants due to the yielding nature of the soil, the scarcity of water, and the fragility of the plant roots. Regrowth requires careful management.
3. Devegetated areas promote the movement of sand, further loss of plant communities, and loss of fertile soil currently held in place by the native plants.
4. Some of the native dune plants, now rare in New Hampshire, deserve protection as a state resource.
5. Sand eroded by the wind is being lost to the area, depleting a non-renewable resource.

These assumptions can best be understood by carefully reading the Educational Brochure and Trail Guide prepared to accompany this plan. The basis for each of the assumptions listed above is explained fully in the brochure, along with many of the principles of managing a loose sand environment.

It is also assumed that the level of effort needed to prevent further habitat degradation by traffic in the dune area will depend on the success of the initial recommendations. It is impossible to gage in advance how effective each step will be in controlling damaging uses and promoting revegetation.

2.0 PURCHASE OPTION

According to the valuation analysis undertaken in January 1984, the property owned by the late John Dondero, referred to therein as Dondero/Seabrook Beach Homes, Inc., might encounter legal constraints were it to be developed as house lots (Thibeault 1984). The New Hampshire Wetlands Board regulations prohibit extensive development in this area, but past cases involving permits in adjacent areas have been allowed. Currently the Town of Seabrook is contending a permit issued by the State Wetlands Board for the Ulaky Parcel, adjacent to the dunes area. The outcome of the suit, as well as the performance of the Wetlands Board in the future will determine how developable this parcel is.

It has been the stated objective of the Town of Seabrook to acquire this parcel outright, thereby gaining control over its preservation and use. Cost has been a consideration, however, and the aforesaid suit may influence this process.

It is possible that the effective implementation of this plan can proceed without the Town's actually purchasing the fifty plus acre parcel, through the use of agreements or easements. At the time of writing, town money has already been allocated for the purchase, and negotiation is underway with the present owners.

This management plan is written with the assumption that complete control of this parcel is transferred to the Town of Seabrook in the near future, and that the cooperation of abutter and citizens prevails, through the combination of education and leadership which have thus far characterized this project.

3.0 PREVENTION OF INCREASED HABITAT DAMAGE

3.1 SOURCES OF DAMAGE

Many past and present causes have contributed to the loss of plant communities now visible in the dune area. By far the most damaging continues to be motor vehicles illegally operated off roadways. Most of the damage to the sand road areas is caused by passenger cars, four-wheel drive automobiles, Off Road Vehicles (ORVs), and trail motorcycles.

The highest priority in the management of the dunes as a conservation area is the prevention of further vehicular damage. Sandy pathways which presently invite daring drivers into the area must be posted and blockaded from illegal entry. In all probability, ninety percent of the vehicular usage will be stopped by these measures, but some drivers will undoubtedly circumvent the blocks and gain access though presently vegetated land, actually creating damage to new areas. Therefore, patrolling and local cooperation are essential to prevent further degradation. Abutters need to be included in this planning, and helped to realize that the inevitable sand loss without plants is to everyone's disadvantage.

Access from Cross Beach Road, hidden from much of the highway, may prove to be particularly difficult to control. The Town of Seabrook will have to establish enforcement measures and priorities depending on the degree of violations encountered once the area is owned and secured.

The Town of Seabrook intends to replace the sand path with a graded and paved road. This raises the difficult issue: several of the rarest plant species occur along this tidal salt marsh line. Construction of an improved road will directly impact this sensitive area; it may alter the tidal hydrology of much of the northern edge of the dunes area, and invite increased vehicular use of the area at all seasons and all tides. This might have a large negative impact on efforts to preserve the native flora unless handled with the advice and cooperation

of knowledgeable ecologists and botanists, such as those who prepared the study of the flora and vegetation for the Office of State Planning.

Vandalism and negligence have affected the dune plants as well as the appearance of the area to visitors. Bottles and rubbish are commonplace. Adjacent to Station 15 on the proposed nature trail is an immense pile of rubble. Much of this trash presently sends signals to visitors that no one cares about the land. The area is frequently used for target practice, and while the sand dunes provide ideal backstops for stray bullets, the effect of the noise alone on wildlife and abutters may be quite large. The litter of broken target objects is also incompatible with the use by nature-oriented passive recreators.

Recent use of the area by hikers and beach plum pickers is also not without lasting impacts. Human footprints especially among beach heather and dune grass are sufficient to permanently disrupt this community, leading to rapid soil loss with wind erosion.

It is important to foster the growth of the idea that this conservation area is for observation, photography, and educational interest; disruptive uses must cease and plants and animals must be protected, possibly to a degree with which the public is unfamiliar.

3.2 PREVENTING FURTHER DAMAGE

Effective control of damage must begin with an accurate list of recent misuses. In collecting this list, it is important to note what abutters feel are recent abridgements of their property rights. Also suggestions must be obtained for correcting these problems. To accomplish these tasks, we recommend that an abutters meeting be held immediately after the purchase of the land has been made.

Heavily used roadways, trails, and vehicular access points will probably require more than prominent posting. Allowance should be made for at least one posting every 50 feet of frontage along Route 1A

and Cross Beach Road, or sixty-five (65) signs. Many of these will be lost to vandalism within the first few months, so approximately twice that many should be on hand initially to cope with illegal access.

The signs should make clear the penalty for vehicular traffic anywhere on the parcel, as decided by the Town of Seabrook, and make clear to all that foot traffic is confined to trails marked with educational signs. However, utility pole barriers may be needed to stop vehicles from using the property. Installation costs may be burdensome on the town. Possibly the state could provide road barriers for the purpose at low cost. Some potential exists for moving some of the onsite refuse into piles at existing entryways, effectively blockading these ways to cars and ORVs. Some barriers will be needed at the following locations:

- The southern tip of the parcel
- To the north of "Poore Steve's"
- Across the back of the Ulaky parcel
- At three locations along Cross Beach Road

Many towns have found that "protecting plants" has little emotional appeal as compared with protecting breeding birds. Thus "Bird Sanctuary" signs may succeed in gaining the respect of passersby where more threatening signs will be less effective.

Snowmobiles and trail motorcycles may prove pernicious; scofflaws will be able to enter the property at will on these "bikes" night or day despite any blockade efforts. Patrolling and abutter cooperation are essentially to control these disrupting machines, capable of permanently destroying between ten and forty square feet of dune vegetation per second. Appalling as this seems to many of us, interviews with operators often reveal that they, like hikers, identify themselves as harmless adventurers. They enjoy the "woods" and do not really see themselves as despoilers.

4.0 REDUCTION OF EXISTING DAMAGE

4.1 SLOWING SAND MOVEMENT

Although some sand is eroded by flowing water, most of the gullies and large scale sand movement is produced by the highest winds each year. Erosion control, once vehicular traffic has been reduced, follows three simple steps:

1. Break the wind speed (as with snow fences)
2. Revegetate the bare sand surfaces
3. Monitor sand movement and revise the erosion control plan accordingly.

Moving sand is effectively trapped by any object within three feet of the ground that slows the wind down. Old Christmas trees have been used on Cape Cod, staked to the ground or tied in a line with ropes. Snow fences, hay bales, or any line of objects that will remain stationary in a high wind will serve as a windbreak.

The result is that sand is deposited on the upwind and downwind sides of the windbreak. The slowing of the wind speed prevents the sand from being carried offsite. A blowout, for example, can be turned back into a dune by a crossed pair of drift fences forming an "X" in its center. The problem with using only a single drift fence is in knowing from which direction the next strong wind will come. If it blows perpendicular to the fence, such as a northwest wind approaching a fence oriented NE to SW, local deposition near the fence will occur. If it blows from the southeast, however, the fence will be ineffective and sand will move through the area and beyond. Thus the crossed form serves to abate wind from all directions.

In an eroded gully, such as that near the large dune to the southwestern side of the conservation area, fences should be placed

across the gully from side to side, since the erosion is caused mainly by winds which blow along the length of the gully.

4.2 AUGMENT VEGETATIVE RECOVERY

Each drift fence, whether it consists of an actual fence or other wind-reducing line of objects, will, in time, bury itself in deposited sand. At this point revegetation will begin naturally or may be promoted artificially. Planting begins with dune grass, (Ammophila breviligulata). As detailed in the educational brochure, this species is rare in New Hampshire although common in the Seabrook Dunes, grows very rapidly and takes over the job of depositing sand by itself, once established. Unlike the drift fences which bury themselves and need to be replaced by higher structures, the dune grass continually grows upward through the descending sand. In areas of rapid sand erosion, dunes of several feet can be built by dune grass alone in one year.

Revegetation can be augmented by the strategic addition of fertilizers (10-10-10 mix) to the sand surface. Ideally fertilizer can be broadcast in March through April by hand (or from an airplane for large areas) early in the morning while the sand surface is wet from rain or just before a rainfall. The combination of water and nutrients penetrates the ground and releases the growth potential of the dune grass, which sends long runners to enter areas devoid of plants.

Fertilizers must always be combined with available fresh water, since the latter is in very short supply in hot weather in open sandy areas. The presence of dry conditions should preclude the application of fertilizers, since the latter can worsen the effects of a drought upon sand dune vegetation.

The use of fertilizers during wet weather will encourage a lush growth, allowing even roadside weeds to temporarily flourish. During the initial stages of revegetation, this is a desirable situation

to reduce the offsite migration of windblown sand. Fertilizer should never be placed where it will leach into wet swales, however, since the sudden increase in nutrients will favor an entirely different set of wetland plants and may destroy the native communities.

Wherever planting is attempted, it should be limited to areas already accreting (gaining) sand from passing wind. The combination of moisture and low levels of fertilizer are also essential, otherwise the new plants will be robbed of sand by each new wind, or will lack the ability to grow rapidly into the new sand.

For additional information on sand management or planting contact:

Mr. Peter Carlson, Sr. Forest & Parks Supervisor
Salisbury Beach State Reservation
P. O. Box 303
Salisbury, MA 01950
(617) 462-4481

Species ideal for planting to stabilize dunes are listed below; do not use commercial lawn mixtures or ornamental shrubs!

Dune grass (Ammophila breviligulata) is ideal for open sand. Hand-planting of sprigs (culms) should begin early in May in areas protected from all traffic and from wind. This species has been successfully used to stabilize moving sand since approximately 1895, when the Town of Provincetown, Massachusetts, used it to remedy a major sand dune movement. Once rooted it grows rapidly and reduces the sand movement to a moderate level wherever it flourishes. It is routinely used at Parker River Refuge and Salisbury Beach Reserve to replace vegetation following vehicle damage, and is planted one culm every 1½ feet, or about one culm per 0.45 square feet. It is available from:

Mr. Edwin Springer
Springer Environmental Services, Inc.
245 Keene Road
Acushnet, MA 02743
(617) 763-2152

Bayberry (Myrica pensylvanica) cannot alone pioneer revegetation in moving sand, but should be rooted after dune grass has begun the process. Moisture but not high fertilizer levels will aid the initial foothold of hand-planted cuttings.

Pitch pine (Pinus rigida) is extremely hardy in the dry windy conditions of vegetated dunes. Cuttings should be planted where soils are stable, following the bayberry. This species needs no special care and can withstand even periodic fires. It has three needles per bundle and very prickly cones. Its vine-like branches near the ground are able to establish new trees at some distance from the original trunk. These drought resistant plants are year-round cover for birds and provide conditions which begin building deeper soils. Sometimes called the scrub pine, this species should not be confused with the widely planted red pine (Pinus resinosa) which is not suited to dune planting.

5.0 MANAGEMENT BY EDUCATION

At this point in reading this document, you should have a fair grasp of the tasks of managing blowing sand and dune plants, and why traffic control is the key to preserving soil, plants and wildlife.

The plan is to share these concepts and a sense of urgency with as many Seabrook citizens as possible. If the vehicular traffic continues unchecked, sand in the parcel will begin moving as much larger walking dunes than are visible in 1985. These, in turn, will inundate and kill the remaining forests and shrubs, and abutters who today are merely annoyed by blowing sand in their yard will learn to dread every windstorm that passes. Moving sand on this scale is no joke. Roads are drifted shut, houses and plantings are sandblasted. Year-round residents would be hardest hit.

The long-term interests of dune conservationists and abutting homeowners are actually closely parallel in the management of this area, and vehicular traffic control is essential to allow the vegetation to slow the wind erosion to its original level. Coordinating the management and education processes is important to achieve these goals.

5.1 MANAGEMENT BY NON-PROFIT CORPORATION

Establishing a volunteer group, possibly named Friends of Seabrook Dunes (FOSD), to work for the protection and management of the dune area has many advantages. Such a volunteer group can provide the catalyst for grass roots support of the dunes area and mobilizing manpower for maintenance or improvement projects. Without the restrictions of municipal budget laws or an annual budget process, this volunteer group also would have considerably more flexibility in raising and spending money to keep pace with the management needs of the area.

Choosing to register as a nonprofit, charitable organization with the N.H. Charitable Trusts Division in the State Attorney General's

Office permits the group to file for tax exempt status, accept tax-deductible donations, qualify for special bulk mailing rates, and apply for grant monies that are unavailable to governmental entities.

The N.H. Office of State Planning has published a detailed booklet describing the process and legal requirements for establishing a volunteer support group, entitled: Friends of Recreation: getting started. A copy is being forwarded to the Town of Seabrook with this report.

The Town of Seabrook already has a similar volunteer support group, Friends of Recreation Seabrook (FORS), as described in Friends of Recreation, page A-6. The Conservation Commission probably should contact FORS to determine if the concerns of the dune conservation plan could be incorporated into the purposes of the existing organization, or whether FORS could provide suggestions for the formation of a new group.

The FOSD group could assume any roles required by the implementation of the conservation plan. Many suggestions are included below (see Section 7). Annual dues, as well as publication of the educational brochure for sale would be advantageous to the educational process as well as being an immediate source of funds.

5.2 NATURE TRAIL DEVELOPMENT

As described in the Educational Brochure, a nature trail has been laid out from the parking area on Cross Beach Road, southward in a figure eight pattern. This provides fifteen numbered stations, with educational descriptions of history, sand erosion, and ecology.

Steps to develop the trail should include:

1. Placement of signs indicating start and end points, and station numbers which correspond to those presented on the flyer maps and in the brochure. Any possible confusion about the course of the trail should be clearly marked to prevent users from taking wrong courses and possibly damaging the vegetation.
2. The publication of flyers from the camera ready copy accompanying this management plan. These are intended for distribution at the parking area from a small, waterproof dispenser.
3. The early distribution of copies of this flyer to abutters at the abutters meeting. Distribution to junior-high and high school science teachers may be handled at the Town of Seabrook's discretion. Generally, the more citizens in a position to understand the interactions of plants and sand, the more support for the area that will be forthcoming. Volunteer organizers can help establish a Friends of Seabrook Dunes, perhaps in time to begin establishing windbreaks and planting dune grass in the spring of 1985.
4. The publication of the educational brochure, for sale at a price to be determined by the conservation commission or FOSD, to help raise money for setting up the nature trail. Possibly, free copies should be made available to teachers, abutters, and other strategic parties, to aid in implementing the educational process.
5. Use of the area as described in this report, to establish those critical areas around the conservation area which need signs, blockades, wind break control, etc.

Ideally, the leaders in the FOSD should combine an understanding of the ecological and educational goals of the dunes area, with sufficient free time to accomplish the many small tasks and connections needed to make a timely success of the venture.

6.0 RECREATIONAL OPPORTUNITIES

6.1 PASSIVE RECREATION

The emphasis of the public educational meetings should be away from consumptive and disruptive types of recreation and direct physical involvement with the environment, such as occurs on game fields or swimming pools, to the enjoyment which comes from being able to identify natural organisms or to understand the more subtle interactions between time, temperature, weather, season, and plants and animals. The public is clearly becoming more and more interested in this type of passive recreation, with photography and nature study rising in popularity.

Children are naturally curious, much to the consternation of many adults. Children have to be repeatedly discouraged to remove this sense of curiosity. Passive recreation channels the curiosity, and helps children gain the skills to answer questions for themselves, rather than bother authorities or depend solely on books or TV.

Imaginative projects can be fostered, especially with the cooperation of local citizens. School projects could, for example, include following the plants through the seasons, photographing or preserving animal tracks in the sand or snow, and measuring the erosion-al processes from week to week, to establish the rates of vegetative recovery or progressive wind damage. Camera stores can sponsor photographic contests of the dune area, with space in the windows for the prize-winners. (Of course, this will sell more film!). Book stores can display some of the field guides most useful for this type of study, some of which are listed in Section 8.0. Imaginative projects can spark the combination of interest and action which will sustain the success of this project for years to come.

The possibilities for biology projects are almost limitless. A student living within walking distance of the nature trail could obtain permission to collect, press and study limited samples, such as

the rushes, grasses and sedges that grow in profusion in the high salt marsh. Local botanists, or those at the University of New Hampshire or at Normandeau Associates, could provide some suggestions of methods and projects involving the commoner dune plants, their growth rates, etc.

7.0 MAINTENANCE PLAN

7.1 OPERATIONS BY FRIENDS OF SEABROOK DUNES

A volunteer organization, such as the proposed Friends of Seabrook Dunes, could proceed on several fronts to manage the parcel after the initial work is complete:

1. Organize citizen workparties to remove litter, create wind barriers, plant dune vegetation, construct boardwalks where needed to allow sand and plants to recover from foot traffic, construct or repair barriers for vehicle control, etc.
2. Conduct fund-raiser or promotional events.
3. Provide training or educational sessions for group members on topics related to the management of the dunes;
4. Form a speaker's bureau of experts available to speak to school or community groups about dunes;
5. Conduct educational tours of the dunes, bird census efforts, and promote the use of the area for research based in a nearby college or university;
6. Serve as advisors to the Conservation Commission on dune-related matters;
7. Apply for grants to support dunes projects;
8. Serve as an advocacy group.

7.2 FUNDING SOURCES

Land and Water Conservation Fund (LWCF)

The LWCF provides federal grants to communities on a 50/50 reimbursable basis. The grants may be used either for land acquisition or the development of an outdoor recreation site, or a combination of both.

Due dates for grant applications are April or May annually. In addition, State Law requires clear and project-specific legal authority to apply for each grant. Town budget item or Town warrant article action is usually required. It is therefore likely that the LWCF will not be a funding option for the dune area until at least 1986. A descriptive brochure is being forwarded to the Town of Seabrook with the final draft of this report.

For additional information or application assistance contact:

Office of Recreation Services
Division of Parks and Recreation
N.H. Dept. of Resources & Economic Development
Box 856
Concord, NH 03301
(603) 271-3627

N. H. Charitable Fund and Affiliated Trusts (NHCF)

N. H. Charitable Fund grants are limited to incorporated non-profit tax-exempt organizations (such as a Friends of Seabrook Dunes) or public agencies in the State of New Hampshire. Generally, grants are not made for capital projects such as the acquisition of land or construction of facilities. It is the purpose of the fund to enhance the quality of life and to make New Hampshire communities more humane, just, and enjoyable places to live. Most grants awarded range between \$ 500 and \$ 5000.

Since the Charitable Fund has a particular interest in assisting grass-roots organizations which are addressing community concerns, an application from a Friends of Seabrook Dunes group could be well received. Grant application for the dunes might be made for improvements needed to stop erosion or control destruction, to develop and implement educational programs or materials, or to implement other elements of this management plan.

The staff at the NHCF will discuss project ideas by phone or personal interview before a formal application is submitted. They will also help in identifying other possible sources of funding. A descriptive brochure is being forwarded to the Town of Seabrook with the final draft of this report.

For additional information or application assistance contact:

N. H. Charitable Fund
1 South St.
P. O. Box 1335
Concord, NH 03301
(603) 225-6641

7.3 HABITAT MAINTENANCE

Once vegetated recovery is implemented in loose sand areas, such as much of the northern edge of the project, checks by regular users will be essential in correcting problems before too much time and damage have passed. A system of damage reporting could be instituted within the managing entity, such as FOSD, however, vandalism and volunteers are a difficult mixture at best.

Care will be needed to distinguish problems which actually threaten the sand environment from problems which are merely unsightly or inconvenient. Small footprints through a dune saddle which break unseen roots and begin the blow-out process are harder to see than several unsightly beer bottles, yet of far more urgent importance to the habitat maintenance than is litter.

It is impossible to assess before the signs and barriers are erected, how recalcitrant the worst despoilers may become and therefore the remedial measures that may be required by the Conservation Commission or the FOSD. It is usually easier to sow mutual respect and cooperation before large issues arise than to patch up relations after parties have heatedly disagreed. Vandalism has a way of getting blamed on whomever you don't like, and the net injustice raises self-righteous

indignation on both sides. Need more be said about the importance of abutters meetings?

Frequent advice from botanists and wildlife biologists familiar with the dunes in Seabrook is most needed, especially as relates to trail and off-trail impacts and maintenance. The occasional picking of herbaceous plants found abundantly on the site should be discouraged but is not serious. Removal of seeds, fruit or leaves in moderation also is low in impact on the scale of importance to dune ecology. Walking through new revegetation is very serious.

7.4 TRAIL MAINTENANCE

The nature trail has been laid out following vehicular and foot paths. In moist areas, such as from the start to station three, along the high salt marsh edge, sand is fairly stable, being mixed with organic material, roots, and moisture. These portions of the trail can be expected to take foot travel well, requiring little maintenance.

The portions of the trail passing between dunes, or across dunes, such as the portion from station four to station nine, may require observation and maintenance if the usage becomes too heavy. Boardwalks can be constructed using pilings driven into the sand, supports bolted between the pilings, and planks (eg. rough cut 2 x 8 inch boards) placed between pilings and across the supports. Details will not be included here, owing to the present availability of construction expertise to the Seabrook Conservation Commission.

The brink of the wet swale, station ten, will probably soon require some boardwalk protection, because walking on the dune grass to the edge and looking into the swale bottom proves to be irresistible for the naturally curious. Whoever assumes leadership in implementing this plan will have to watch this area carefully for foot traffic damage.

As described in section 7.3, the two areas of rapid sand erosion must be treated quickly to reduce sand loss. One is the gully northwest of station 4; the other is the erosion of the blowout at station fifteen, and much of the area across the north end of the project, which will require fencing or wind breaks of some kind. Cross-shaped fences could be arranged near station fifteen which would direct foot traffic, impede illegal vehicular traffic, and still allow the nature trail to proceed from station fourteen west to rejoin the parking lot trail. This area requires the greatest habitat maintenance and the most careful trail planning as well.

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The Seabrook Dune Area
Public Opinion Survey

The Seabrook Dune Area, located on the Western side of Route 1A, is a unique natural resource in the State of New Hampshire. Not only is it the only remaining representation of a sand dune formation in the State, but it also harbors several rare and endangered plant species. This unique area is rapidly being destroyed because of some of the destructive uses of the dunes. The Town of Seabrook Conservation Commission is seeking your input in the process of developing a management plan which will help preserve the dunes while still allowing meaningful access to and enjoyment of the area. Please take a few minutes to let the Conservation Commission know how you feel about this important resource.

1. The dunes are built and sustained by wind-blown sand which is trapped by plants. Many dune plants are very sensitive to foot and vehicle traffic. Without the plants, the wind will rapidly erode the dunes. How important do you think it is to preserve the dunes by taking measures to protect the dune plants:

Check one:

- ☐ very important
- ☐ somewhat important
- ☐ not particularly important
- ☐ no opinion at this time

2. Following is a list of potential uses of the dune area. Next to EACH type of use or activity, please print the number corresponding to how you feel about whether or not the use should occur in the dune area:

0 = use/activity should be prohibited

1 = use/activity could be allowed but not promoted

2 = use/activity is important and should be promoted

- | | |
|---|---|
| ☐ beach plum picking | ☐ recreation vehicle access |
| ☐ nature trails | ☐ plant identification markers |
| ☐ hunting | ☐ picnicking |
| ☐ board walk-ways | ☐ nature study |
| ☐ bird watching, study | ☐ school or recreation department programs |

3. Please write-in any other uses or activities you feel should or should not be allowed to occur in the dune area:

4. Following is a list of problems related to the Seabrook Dune Area which have been reported to the Conservation Commission. Next to EACH problem, please print the number corresponding to the extent to which you see it as a problem which needs to be addressed:

0 = don't think it is a problem

1 = it may not be good, but it's not a real problem

2 = it's an important problem to try to resolve

____ erosion of sand

____ litter

____ vehicles cutting through dune to avoid highway traffic

____ destruction of rare and endangered plant species

____ noise and destruction created by recreational use
of vehicles in the dunes

5. Please write-in any other problems or issues related to the dune area that you think the Conservation Commission should be aware of:

6. To preserve the dune area, the Town of Seabrook must purchase the property so that a management plan can be implemented. Do you feel that the Town's Budget Committee should view expenditures for this purpose as a:

Check one:

____ very high priority budget item

____ high priority budget item

____ about average in priority

____ low priority budget item

____ no opinion at this time

7. If you might be interested in assisting the Conservation Commission in its effort to protect the Seabrook Dune Area, please print your name, address, and phone number below or write a note to the Commission to express your interest:

DATE DUE

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