FY 1992 **FINAL PRODUCT** Task 93
Conserv. Easement Program

Conservation Easement Program

Final Report

To the Virginia Council on the Environment
Virginia Coastal Resources Management Program
Grant #NA27OZ0312-01
From The Nature Conservancy
February 15, 1994

Rec'd. by Dept. of
Environmental Quality

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Public & Inter-
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Overview of Results

The Nature Conservancy has successfully completed all tasks of the Conservation Easement Program. The final work products -- including a set of computer mapping products, a final concept plan for seaside farm properties, and the conservation easement manual -- are enclosed with this report.

A summary of results for the eight tasks of the program are as follows:

1. Develop Conservation Easement Document. With reviews and comments by Conservancy attorneys, public agency officials, researchers, landowners and conservation practitioners, the Conservancy revised and developed a "state of the art" conservation easement for waterfront farms. The easement specifies the necessary measures for controlling inappropriate development and land uses. In addition to the required seaside farm conservation easement document, the Conservancy also developed conservation easement standards for seaside village properties. The seaside farm easement is explained in layperson's language in section four of the Conservation Easement Program manual; the legal document is included as an appendix in the manual.

2. Identify Priority Tracts in the Project Area. The Conservancy developed a ranking system for priority tracts. Priority rankings were based upon: (1) key developability factors (e.g. water access, waterfrontage, acreage, soils); (2) programmatic values; and (3) opportunity to secure a conservation easement. The Conservancy ranked over 30 properties on the Northampton County seaside. A large majority of the highest priority parcels are located in an area the Conservancy calls the "Broadwater Macrosite." Section three of the manual describes the Broadwater Macrosite in greater detail.

3. Develop and Apply a Financial Analysis Model. With *pro bono* assistance from a national development company, the Conservancy developed a financial model to analyze the revenues and costs associated with compatible development of seaside farms. The model takes into account the "time value of money" by analyzing cash flows over a period of years. The model is further explained and illustrated in the appendix of the manual. Using this financial analysis, the Conservancy has been able to demonstrate that low-impact development is an economically viable alternative for waterfront farms.

4. Contact and Meet with Owners of at Least 20 Priority Tracts. Over the course of the program, the Conservancy contacted and met with the owners of 24 priority tracts on the Northampton County seaside. 19 of these parcels are located in the Broadwater Macrosite.

   During the course of the landowner contact initiative, the Conservancy: acquired 4 properties; presented options to acquire 2 additional properties; and is engaged in negotiations on 5 other properties.

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Without exception, all of the landowners contacted have expressed interest in working with the Conservancy -- over time -- under the conservation easement program, providing that they can eventually achieve a fair economic return for their property. The Conservancy expects the new Conservation Easement Program manual to be a tremendous help in working with Eastern Shore landowners.

5. Secure Baseline Data and Maps for at Least 10 Priority Tracts. The Conservancy secured aerial photos, environmental conditions data, and baseline maps for over 30 priority tracts, all located in the Broadwater Macrosite. Under the grant, the Conservancy also developed computer mapping capability. The Conservancy's land planning consultant assembled a comprehensive data set for a large (approximately 10 square mile) planning area called the North Broadwater Macrosite. This data -- including landforms, topography, tree lines, roads and buildings, and property boundaries -- has been scanned and digitized into the computer mapping system acquired through the grant. A report on the Geographic Information System (GIS) computer mapping project is enclosed.

6. Develop Land Use Plans and Financial Analyses for at Least 10 Priority Tracts. Working with its land planning consultants, the Conservancy developed a land use concept plan for a large area of the North Broadwater Macrosite extending from Green's Creek to Phillips Creek, encompassing 16 different properties. A separate report on the Green's Creek - Upshur Creek - Phillips Creek Seaside Farms concept plan in enclosed. This land plan will serve as a model for future Conservancy planning efforts. The Conservancy developed land plans and financial analyses for 7 other priority parcels under the Conservation Easement Program grant.

7. Secure Conservation Easement Restrictions on at Least 10 Priority Tracts. The Conservancy completed the necessary steps to assure permanent conservation easement restrictions for a total of 10 properties for which plans have been developed under the grant. These properties are:

Mt. Pleasant Farm
Mill Creek Farm
Blankenship Farm
Lorish-Terry Property
Terry Brothers Seafood Property
J.N. Bell Property
Standard Products Property
Phillips Creek Farm
Major Farm
Piscopo Property
Jay Property

The Conservancy now owns title to each of these properties. Under its non-profit charter, the Conservancy is obligated to manage these seaside farm and village properties for the purposes described in the Conservation Easement Program. The purposes of the easement are thus assured by means of Conservancy ownership. The Conservancy will retain and record a conservation easement upon the sale or transfer of the properties, using the conservation easement legal document as presented in the appendix of the manual (with certain amendments appropriate for seaside village parcels). A conservation easement will be secured under one or more of the following scenarios:

A. The Conservancy may transfer some or all of these holdings during 1994 to the new Virginia Eastern Shore Sustainable Development Corporation, as part of the Conservancy's commitment to provide $500,000 worth of land towards the capitalization of the corporation. The land transfer to the corporation would include a perpetual conservation easement retained by the Conservancy.

B. The Conservancy may transfer some or all of the holdings into a new limited liability company, which may be formed in partnership with one or more major landowners in the area. The land transfer would include a perpetual conservation easement to be retained by the Conservancy or provide that an eventual land transfer by company would include a conservation easement.

C. The Conservancy may retain portions of the acreage and convey settlement area parcels to individual buyers or conservation-minded investors. In this event, the Conservancy would retain and record a conservation easement on the properties conveyed, and would provide reciprocal legal assurances on the lands retained by the Conservancy.

D. The Conservancy may sell one or more of the properties outright to conservation-minded investors, and retain a conservation easement.

In addition to the above properties, the Conservancy expects to secure conservation easements on four other properties for which plans have been developed under the grant. The Conservancy is now negotiating with the owners of these properties, including:

Goshen Farm
Pittsfield Farm
Custis Farm
Wilson Property

Between 1985 and 1992, the Conservancy had acquired and resold eight Eastern Shore properties subject to conservation easements. The Conservation Easement Program has significantly increased the Conservancy's capacity to secure additional easements on priority seaside farm and village properties.

8. Develop Conservation Easement Program Manual and Plans for Program Expansion. The Conservancy has completed and printed 2000 copies of "Partners in Protection -- Virginia's Eastern Shore Seaside Farms -- A Conservation Easement Program." This professionally-developed, full-color manual was specifically designed to continue and advance the work of the Conservation Easement Program. The manual was developed for three key audiences: landowners, potential seaside farm buyers, and conservation practitioners working in other coastal and riverine areas. Even prior to its publication, the Conservancy has received requests for copies of the manual, including Conservancy state offices, bioreserve project offices, the ACE Basin Task Force, and other land conservation organizations. The manual will be used in training sessions at the Conservancy's annual bioreserve conference, as well as workshops on sustainable development and coastal ecosystems.

   Moreover, the Conservancy has hired a full-time Director of Land Programs to continue the Conservation Easement Program work. Peter Rowe, an experienced Norfolk attorney has moved to the Eastern Shore and begun work in this position. In addition to having served as a member of the Virginia Marine Resources Commission and as President of the Virginia Wildlife Federation, Peter is uniquely qualified for the program. Peter was the first person to purchase a Conservancy seaside farm subject to a conservation easement.

Finances

100% of the budgeted funds for contractual expenses and equipment for the program were expended or contractually committed as of December 31, 1993. In addition, Conservancy professional staff provided hundreds of hours of in-kind support for completing the above tasks.

Enclosures

* Conservation Easement Program manual
* Report on computer mapping project
* Greens Creek - Upshur Creek - Phillips Creek Seaside Farms Concept Plan
* Final financial report and invoices

Conservation Easement Program
Geographic Information System (GIS)
Computer Mapping Project

Under the Conservation Easement Program grant, the Conservancy has developed Geographic Information System (GIS) computer mapping capability which is suitable for detailed, site-scale land use planning for seaside farms and villages.

Hardware and Software

* Gateway 2000 486DX2-66 computer, with 16 Mb RAM, 424 Mb hard drive, 1.44 Mg 3.5" DD drive, VESA local bus video, ATI Ultra Pro II image display board, DOS 6.0 and Windows 3.1

* 17" Nanao flexscan monitor

* Erasable optical drive unit with interface card and cartridge

* Altek 36" x 48" +/- 0.010 AA lite line digitizer with manual operation base

* HP PaintJet XL 300 color printer with 11" x 17" paper tray

* MIPS (version 3.33) and TNT-MIPS (version 4.2) computer mapping software with printer support

North Broadwater Macrosite -- Computer Mapping Project

The initial computer mapping project encompassed the seaside farms and villages in the northern half of the Broadwater Macrosite. This area contains the Conservancy's highest priority tracts on the seaside of the Virginia Eastern Shore, including a number of properties for which conservation easement plans are being developed. The area extends for approximately five miles along Hog Island Bay and the Machipongo River -- from Phillips Creek to the village of Willis Wharf.

The Conservancy's land planning consultant -- Paradigm Design -- collected geographic information for the planning area. Six vector data sets have been digitized -- at a very fine scale (1" = 800') -- which is necessary for site-level land use planning. This scale picks up individual tree lines, small buildings and driveways.

The digitized data sets, and their sources, include:

* Landforms — USGS 7.5 minute series quads; streams and marshes were updated using aerial photos

*	Tree Cover	Aerial photos at 1" = 800'
*	Topography	USGS quads
*	Roads	USGS quads as geo-reference controls for main roads; aerial photos to pick up smaller roads and driveways
*	Property Lines	County tax maps
*	Buildings	Aerial photos

These data sets are displayed on the enclosed map. Other data was analyzed using existing manual maps, and will be digitized in the future as separate data layers: soils, flood hazard areas, and watersheds. All digitized data sets will be provided to the Commonwealth of Virginia in digital format as MIPS files.

A North Broadwater Macrosite Composite Map (enclosed) was produced, which plotted all of the data sets together.

Using the GIS data sets, a composite site map was also produced for a designated portion of the North Broadwater Macrosite, an area encompassing the Green's Creek, Upshur Creek and Phillips Creek Seaside Farms. Using the data sets and maps, supplemented by site visits, a detailed land use concept plan for this area was developed by the Conservancy under the Conservation Easement Program (see separate report). This concept plan will serve as a model of future seaside farm plans to be developed by the Conservancy.

Based upon this concept plan, an even more detailed site land use plan was produced -- using the computer mapping capability -- for a sub-section of the Greens Creek, Upshur Creek, Phillips Creek Seaside Farms called Nassawadox Farms (see section three of Conservation Easement Manual). Nassawadox Farms is an assemblage of four properties which are now owned or under option by the Conservancy. To produce this map, Paradigm Design used the above data sets, and plotted a new composite layer that isolated the Nassawadox Farms planning area. For the detailed site plan, new data layers showing proposed roads, trees and buildings were then plotted onto the base map. This plan an illustrates the high-level of resolution which the GIS computer mapping system can produce for detailed, site-level planning on the seaside farms.

Long Term Computer Mapping Benefits

As the Conservancy continues to implement the Seaside Farms Conservation Easement Program over time, the GIS computer mapping capability will provide a number of important benefits in contrast to manual cartography and site design. These benefits include:

* The ability to produce base maps and site plans at a substantially lower cost per site, thereby enhancing the Conservancy's long-term conservation easement capacity.

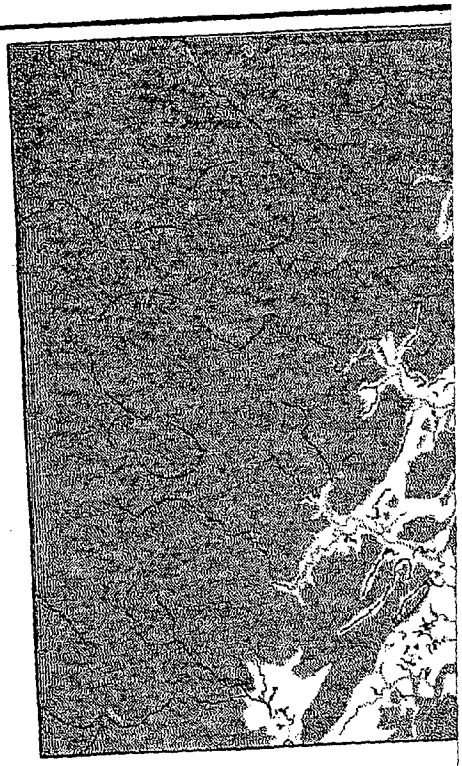
* The ability to expand and modify site plans easily, without requiring costly redrawing of the maps.

* The ability to produce three-dimensional "birds-eye" views of the landscape from all directions, thereby providing an invaluable site planning perspective that far surpasses traditional two-dimensional planning maps. (Three dimensional maps can be produced manually, but at a high labor cost).

* The ability to import data from the Natural Heritage data base, from extensive GIS databases being developed by the Commonwealth, the LTER progam and others into our computer mapping system -- augmenting our information about the landscape and allowing us to share land use planning data with state and county agencies.

* Eventually, the GIS system will allow the Conservancy and its research partners to do analysis and modeling of alternative land uses and their impacts on the coastal watersheds. The Conservancy is now developing a comprehensive watershed research program in the Upshur Creek watershed.

In summary, with the new GIS computer mapping capability, the Conservancy will produce better conservation planning products and enhanced long-term conservation easement capacity for the seaside farm and villages.



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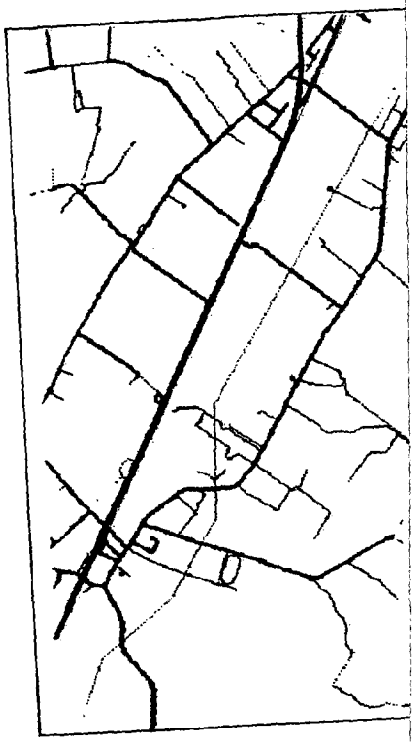

Composite Base

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Map was funded, in part by the Virginia Council on the Environment's
tal Resources management Program through Grant #NA27OZ0312-01
e National Oceanic and Atmospheric Administration, Office of Ocean
Coastal Resource Management, under the Coastal Zone Management Act
72 as amended.

PREPARED FOR

Green's Creek-Upshur Creek-Phillips Creek Seaside Farms Concept Plan

Conservation Easement Program
Northampton County, Virginia

Greens Creek - Upshur Creek - Phillips Creek Seaside Farms

Description

The expanse of farmland, forests, wetlands and human settlements which include the Greens Creek, Upshur Creek and Phillips Creek Seaside Farms encompasses approximately 1,900 acres. An estimated 700 acres are in farmland, 800 acres in forests, 370 acres in wetlands, and a small amount of acreage includes working farm facilities and residences.

Location

The area extends for almost three miles along the Seaside Road (Route 600), and is bisected by Brownsville Road (Route 608). The properties extend westward to U.S. Route 13 at the northwest. The area is bounded by the town of Nassawadox at the southwest. The Nature Conservancy's 1400 acre Brownsville Farm adjoins the area towards the east, as does the Machipongo River and Hog Island Bay.

Ownerships

The Seaside Farms include three family farms now in private ownership -- Woodlands Farm, Custis Farm and Lewis Farm -- along with ten other land parcels and three residential parcels.

Status

The Nature Conservancy has secured a conservation easement on Woodlands Farm, has acquired or optioned five parcels which form an assemblage called Nassawadox Farms, is negotiating to acquire two other parcels, and has had positive contacts and discussions with all of the remaining owners.

Zoning

Under the current Northampton County zoning ordinance, part of the area is zoned "Agricultural" and part is zoned "Rural Residential." The current ordinance would allow *an estimated 640 new residential units* to be developed within the area -- primarily 20,000 square foot lots in the rural residential district, along with five-acre and one-acre lots in the agricultural district. In contrast, the Conservancy's concept plan provides for a substantially lower overall density of development (approximately 75 total dwelling units) in order to assure protection of the coastal waters, along with clustering of residential settlements in order to preserve farmlands, forests and the area's rural character.

Greens Creek - Upshur Creek - Phillips Creek Seaside Farms
Concept Plan

Planning Overview

The Conservancy worked with Paradigm Design, its land planning consultant, to develop a Geographic Information System (GIS) computer mapping program for the North Broadwater Macrosite, including the Greens Creek - Upshur Creek - Phillips Creek Seaside Farms. Using the GIS data, the Conservancy developed a base map and overlay maps showing various environmental conditions for the area. Additional mapping data was also collected, and several on-site evaluations were conducted by Conservancy staff and land planners. The Conservancy held a two-day planning "charette" with its planners and other consultants to develop the following concept plan for the Greens Creek - Upshur Creek - Phillips Creek area. This concept plan is designed as a holistic and comprehensive approach to sustainable development.

Goals

The Conservancy seeks to create a working model for conservation and compatible development in the Broadwater Macrosite, its highest priority area on the Eastern Shore mainland. The Greens Creek, Upshur Creek & Phillips Creek Seaside Farms provide an ideal location for the prototype. The farms include the required physical characteristics for such a program. Moreover, the Conservancy has substantial land holdings in the area, as well as excellent relationships with all major landowners.

The Conservancy's goal is to demonstrate a successful pilot initiative for conservation and compatible economic development which:

- Conserves the coastal ecosystem.
- Maintains productive farmland, retains a viable farming community and provides a working demonstration of sustainable agriculture.
- Supports compatible human uses and employment opportunities.
- Provides a demonstration of sustainable nature tourism and education.
- Maintains the area's rural character, historic resources and traditional settlement patterns.
- Provides a diversity of housing opportunities.
- Serves as a community model for good land use.
- Provides economic values for landowners and the community.

Proposed Land Uses -- Concept Plan

The enclosed draft concept plan for the Greens Creek - Upshur Creek - Phillips Creek Seaside Farms envisions an array of human uses showing how people can live and prosper in harmony with nature. Creative planning and conservation easements will provide for the following uses, which represent a vision of the seaside farms of the future:

- Conservation and use of productive farmlands
- Working farms with sustainable agriculture and value-added production
- Sustainable nature tourism and education programs
- Residential settlements, with low density on the waterfront
- Appropriate wastewater treatment demonstrations
- Applied scientific research programs and facilities
- Historic preservation
- Affordable rural homes
- Forest conservation, planning and management
- Network of hiking trails and interpretative areas
- Demonstration of compatible water access and use
- Design guidelines which reflect indigenous architectural patterns

Farmland, Forest and Wetland Conservation Areas

Under the seaside farms concept plan, the vast majority of the acreage would be set aside as farmland, forest and wetland conservation areas. All of these areas would be assured protection either by Nature Conservancy ownership or by perpetual conservation easements.

Lodge

A site in a location with good deepwater access would be serve as a lodge facility for "Eastern Shore Experience" nature tourism, education programs and professional conferences. Five-day and weekend programs would be offered, including workshops in natural history and sustainable development. The facility would include a meeting building which is authentic to the place, plus simple cottages of appropriate character within walking distance. All facilities would be designed be in scale with the surroundings.

The meeting house facility would be designed to accommodate 12 people, expandable to 24. Four cottage units would provide a total of seven bedrooms.

The lodge would also include a trail system linked to seaside farm settlement and interpretative areas, as well as a dock, parking area and storage barns.

Settlement Areas

The seaside farms concept plan seeks to maintain and enhance the economic value for both the landowners and the whole community. Rather than allow conventional development patterns which would destroy the area's rural character, subdivide productive farm fields, and degrade the coastal ecosystem, the plan provides for clusters of residential settlements which are consistent with the Eastern Shore's traditional settlement patterns. Seaside farm residents would be living within a permanently protected landscape. A network of trails would link the settlement areas to the lodge, interpretative areas and sustainable development programs. Four major types of settlement areas are proposed -- town settlements, historic home settlements, farm settlements and wilderness settlements. The approach serves as a model demonstration of the local comprehensive plan and sustainable land use.

1. Town Settlements

Description Town clusters of 12 to 18 residential units, in or adjoining town. Residential units organized around a green, framed by trees, with private views in rear. Some duplex units to provide more affordable housing.

Market Retirees, families with children, others who want an easy walk to town and access to larger community of people, yet also want to have access to adjoining protected open spaces, Broadwater Macrosite amenities.

Architecture Eastern Shore town design guidelines. Units facing a green, front porches, fences. Pedestrian-scale streets.

Places Two clusters adjoining town of Nassawadox

Number 22 single family units; 8 duplex units (26 total residential sites)

Size Half-acre

Price $50,000 for single family parcel; $25,000 for duplex

2. Farm Settlements

Description Farm clusters of four residential units, integrated into part of a working Eastern Shore farm which is deploying new sustainable agricultural programs. Located at end of clamshell driveway, landscaped with mature trees.

Market Persons attracted to the farm environment, fewer neighbors, surrounding rural open spaces, access to Conservancy programs.

Architecture Based upon traditional Eastern Shore farm cluster -- farm house, guest house, and other outbuildings, all of which would be designed as functioning residential units.

Places Custis Farm and Nasswadox Farms

Number Five clusters, totalling 20 residences

Size One acre residential parcels

Price $75,000

3. <u>Historic Home & Farm Settlements</u>

Description Historic Eastern Shore homes, along with surrounding acreage, allowing two or three additional guest houses. There may be an occasional historic home with a pattern of outbuildings that would form a cluster of residences or serve some other appropriate use, such as an education or research facility.

Market A person interested in historic preservation, seaside farm ownership, and Broadwater Macrosite programs.

Architecture Based upon the original historic home and outbuildings.

Places Woodlands Farm and others

Number Three

Size Historic house plus 10 to 40 surrounding acres

Price $300,000 to $600,000

4. <u>Wilderness Settlements</u>

Description Much greater privacy, near waterfront or some focal point, in a location which provides a salt marsh or wilderness experience, surrounded by Conservancy-owned lands. Each site would allow for one to three residential units with secluded views. Sites to be retained under single ownership. Private driveway into the area, private dock or screenhouse where suitable.

Market	Nature Conservancy supporters.
Architecture	More rustic design integrated into existing landscape with little disturbance; designed to minimize impact of views from water. A traditional Eastern Shore hunting lodge may be one prototype, or smaller cottages with cedar siding.
Places	Suitable secluded locations on seaside farms.
Number	Four locations, totalling six parcels
Size	Five to fifteen acres
Price	$125,000 to $600,000

Other Uses

In addition to the conservation areas, settlement areas and lodge, the seaside farms concept plan provides for other compatible uses which meet the environmental, economic and community goals. Among these uses are:

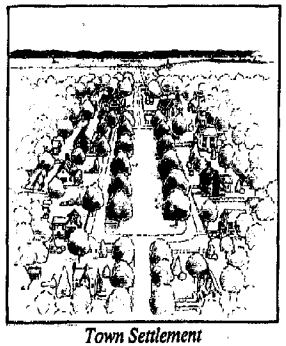
- New sustainable agriculture areas and facilities, which might include small greenhouses, designated plots for sustainable crops, and a farm office.
- Existing working farm facilities.
- Locations for affordable rural homes.
- Conservation and sustainable development research conducted on the farms, including a comprehensive watershed research program. The Virginia Coast Institute could have its headquarters facility in the area.
- A community facility at a special waterfront location for educational programs, community oyster roasts and other gatherings.
- Boat storage and a nearby ramp for landowners.
- A network of hiking trails and interpretative areas available to all landowners, including cross-farm trails linking the farms to the town of Nassawadox and to Brownsville.

A homeowners association, with Conservancy participation, would oversee management of the common areas and facilities.

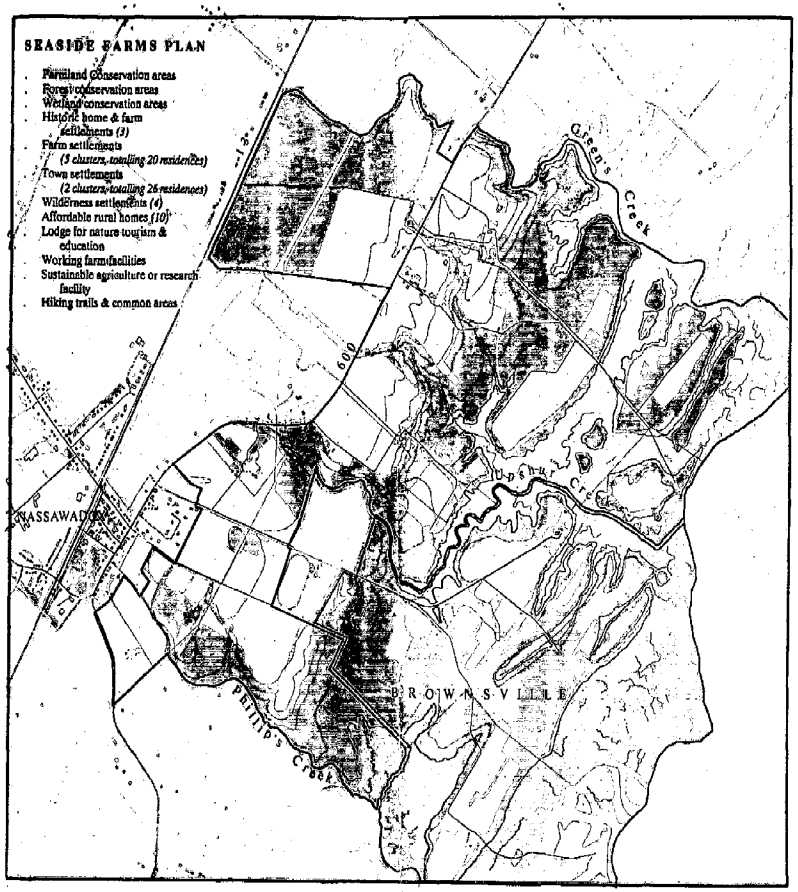
Farm Settlement

VISION

To create a successful community -- including towns, villages and rural settlements within a landscape of farms, forests, marshes, and coastal bays -- which is environmentally and economically viable, which reflects the goals and culture of the local people, and which serves as a model for conservation and compatible development.



Town Settlement



Historic House Settlement

SEASIDE FARM GOALS

- Conserve the coastal ecosystem
- Maintain productive farmland
- Support compatible human uses & employment opportunities
- Maintain rural character & traditional settlement patterns
- Provide economic values for landowners & community

Wilderness Settlement

VIRGINIA EASTERN SHORE BIOSPHERE RESERVE

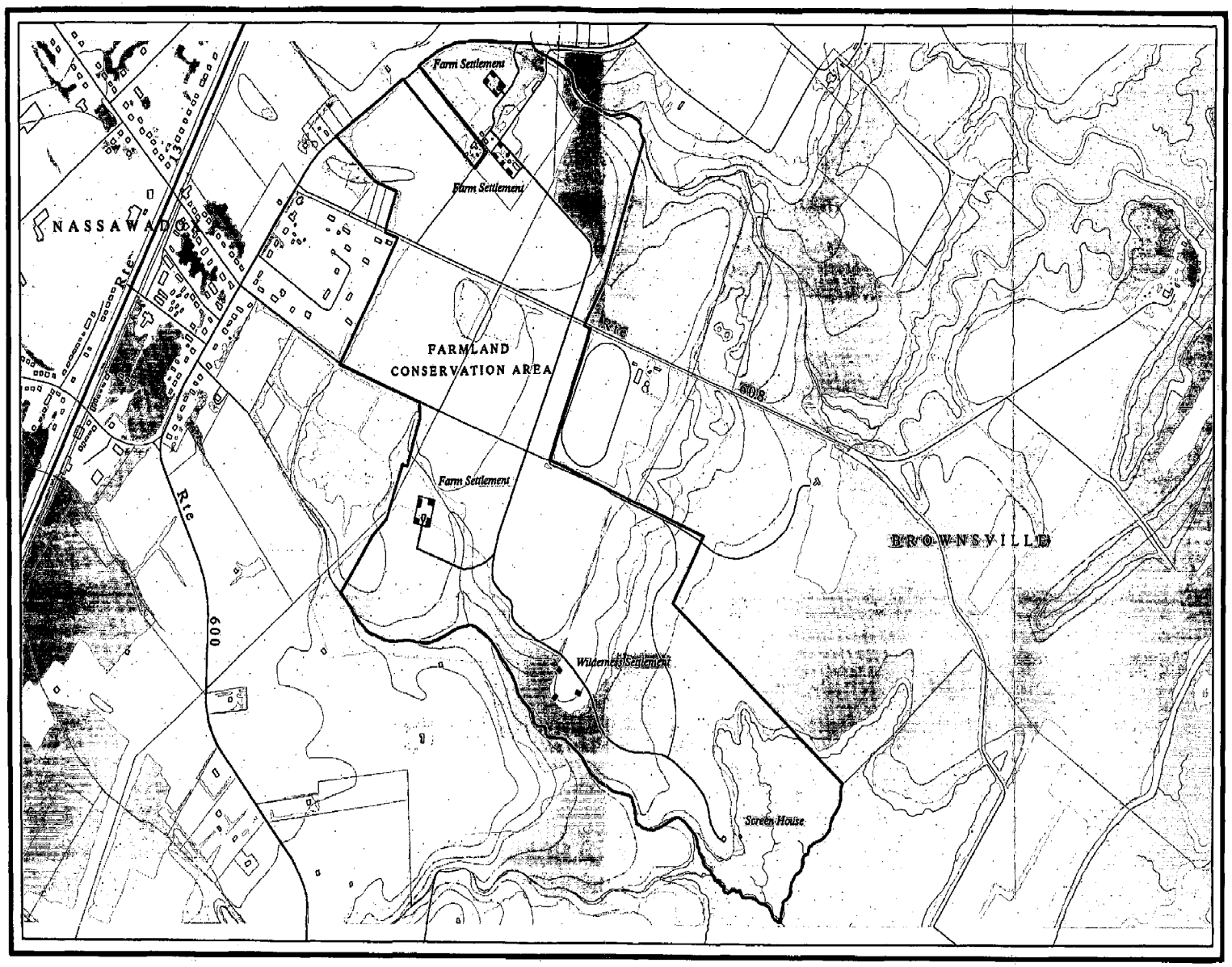
GREEN'S CREEK / UPSHUR CREEK / PHILLIP'S CREEK SEASIDE FARMS

The Nature Conservancy

DRAFT CONCEPT PLAN

This Map was funded, in part, by the Virginia Council on the Environment's Coastal Resources Management Program through Grant #NA27OZ0312-01 of the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource management, under the Coastal Zone Management Act of 1972 as amended.

PREPARED FOR THE NATURE CONSERVANCY PREPARED BY PARADIGM DESIGN FEBRUARY 1994 © 1994 COMMONWEALTH OF VIRGINIA



VIRGINIA EASTERN SHORE BIOSPHERE RESERVE

NASSAWADOX FARMS

The Nature Conservancy

DRAFT CONCEPT PLAN

PREPARED FOR THE NATURE CONSERVANCY - PREPARED BY PARADIGM DESIGN - FEBRUARY 1994

This map was funded, in part by the Virginia Council on the Environment's Coastal Resources Management Program through Grant #NA27OZ0312-01 of the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management, under the Coastal Zone Management Act of 1972, as amended.

Green's Creek - Upshur Creek - Phillips Creek Seaside Farms
Plan to Secure Conservation Easements

The Greens Creek - Upshur Creek - Phillips Creek Seaside Farms assemblage includes a total of 16 different ownership parcels. These properties include three family farms now in private ownership -- Woodlands Farm, Custis Farm and Lewis Farm -- along with ten other farm parcels and three residential parcels.

The Nature Conservancy plans to secure conservation easements over all of these properties according to the following plan:

1. The Conservancy has already secured a conservation easement on the largest and most critical property in the assemblage -- Woodlands Farm. Woodlands Farm is a 616 acre farm which extends from Route 13 to the Machipongo River along the northern border of the area. Woodlands is one of only two properties with deep water access, and the only parcel which combines deep water access with substantial upland acreage. This property was acquired by the Conservancy and resold at the Conservancy's cost with a perpetual conservation easement.

2. The Conservancy has acquired five other key parcels. These properties include the 25 acre Thomas' Wharf tract -- which is the other parcel with deep water access, and which adjoins Woodlands Farm. In addition, the Conservancy has acquired four parcels totalling 329 acres which comprise the Nassawadox Farms assemblage along Phillips Creek and Brownsville Road. The Conservancy has an option to acquire an additional 40 acre parcel in this assemblage, and is negotiating to acquire two other parcels.

   The Conservancy's ownership assures the perpetual conservation of these properties as part of the seaside farms buffer zone; a conservation easement will be provided under one or more of the following scenarios, depending upon the outcome of current negotiations with key landowners:

   A. The Conservancy may transfer some or all of these holdings during 1994 to the new Virginia Eastern Shore Sustainable Development Corporation, as part of its commitment to provide $500,000 worth of land towards the capitalization of the corporation. The land transfer would include a perpetual conservation easement retained by the Conservancy.

   B. The Conservancy may transfer some or all of the holdings into a new limited liability company, which may be formed in partnership with one or two other major landowners in the area. As in the case above, the land transfer would include a perpetual conservation easement to be retained by the Conservancy.

C. The Conservancy may retain portions of the farm acreage and convey settlement area parcels and common areas to individual buyers or conservation-minded investors. In this event, the Conservancy would retain a conservation easement on all of the properties conveyed, and would provide reciprocal legal assurances to the buyers.

3. Finally, the Conservancy has had positive contacts and discussions with all of the remaining landowners. It is currently negotiating with two of the three major owners to determine their interest in participating in the proposed concept plan for the area (e.g. by forming bi-lateral partnerships, a limited liability company, or other means). The third owner now lives on the family farm property, and has expressed a willingness to work with the Conservancy at a future date. Under any implementation scenario, the Conservancy will secure ownership or conservation easements on all properties which participate in the concept plan.

Green's Creek - Upshur Creek - Phillips Creek Seaside Farms
Financial Analysis

The Conservancy seeks to design land use plans which maintain economic value for owners of seaside farms, while protecting ecological values with conservation easements. To meet this goal, the Conservancy analyzes the financial results of alternative seaside farm plans. It looks for a compatible development plan which protects the natural resources, maintains prime farmland, preserves the area's rural character, and also produces an adequate economic return.

The Conservancy's preliminary financial analysis indicates that an economically viable conservation and compatible development plan can be implemented for the planning area as illustrated in the enclosed draft concept plan.

The financial analysis includes estimates of revenues and expenses. Revenues would be earned from the resale of parcels located in settlements on different areas of the farm. The remainder of the property -- over 90% of the land -- would be protected as farmland, forests and open space, subject to a permanent conservation easement.

The expenses are associated with the costs of the land and interest; the costs of various improvements to the property -- such as clamshell drives, farm roads, a network of trails, etc.; and property taxes, marketing and administration.

The difference between revenues and expenses is the cash flow. Cash flow is negative in the early years -- that is, expenses exceed revenues -- due to the up-front cost of land acquisition and improvements.

Projected sales of 56 land parcels, generally located in clustered settlement areas, would occur over a period of eight years. Most of the land parcels command premium prices because they are surrounded by protected open space and part of the Conservancy's conservation easement program. The Conservancy has also developed tentative plans to provide for some additional lower-cost units.

The "internal rate of return" calculates the return on investment from the stream of cash flows over the eight year period. The investment of funds made in the first two years begins to yield positive cash flow in subsequent years. The estimated internal rate of return is 7%.

The financial analysis indicates that a compatible development plan can be implemented on the Green's Creek - Upshur Creek - Phillips Creek Seaside Farms which achieves conservation and sustainable development goals. The plan yields a reasonable economic return to landowners, while maintaining the neighborhood's rural character, keeping prime farmland in production, and protecting the coastal watershed.

NORTH BROADWATER MACROSITE - PHASE 1
Cash Flow

	#	# DUs	Amount	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTALS
EXPENSES												
Improvements												
Improved Roads (feet)	4800		$40		$96,000	$96,000						$192,000
Clamshell Drives -- new (feet)	9500		$10	$47,500	$47,500							$95,000
Clamshell -- upgrade (feet)	7500		$5	$37,500								$37,500
Farm Roads (feet)	10000		$5	$50,000								$50,000
Causeway Improvement	2		$25,000	$50,000								$50,000
Trails (feet)	16800		$3	$25,200	$25,200							$50,400
Landscaping (units)	56		$2,500	$35,000	$35,000	$70,000						$140,000
Electricity (feet)	28000		$3	$21,000	$21,000	$42,000						$84,000
Docks	3		$25,000	$75,000								$75,000
Screenhouse	1		$35,000	$35,000								$35,000
Boat Storage & Ramp	1		$40,000	$40,000								$40,000
Thomas Wharf Facility	1		$50,000	$50,000								$50,000
Survey/Engineering	56		$2,000	$112,000								$112,000
Site Planning	1		$48,000	$48,000								$48,000
Subtotal Improvements				***$626,200***	***$224,700***	***$208,000***	***$0***	***$0***	***$0***	***$0***	***$0***	***$1,058,900***
Contingency (% of improvemts)			5%	$31,310	$11,235	$10,400	$0	$0	$0	$0	$0	***$52,945***
Marketing				$20,000	$20,000	$20,000	$20,000	$15,000	$10,000	$10,000	$10,000	***$125,000***
Property Taxes												
Commons			1%	$9,163	$9,163	$9,163	$9,163	$9,163	$9,163	$9,163	$9,163	$73,304
Unsold Parcels			1%	$22,080	$38,028	$27,278	$16,528	$8,778	$5,278	$2,278	$1,210	$121,458
Subtotal Property Taxes				***$31,243***	***$47,191***	***$36,441***	***$25,691***	***$17,941***	***$14,441***	***$11,441***	***$10,373***	***$194,762***
Land Purchase				***$852,000***	***$852,000***	***$852,000***	***$852,000***					***$3,408,000***
Mortgage Interest			6.0%		***$153,360***	***$102,240***	***$51,120***					***$306,720***
TOTAL EXPENSES				**$1,560,753**	**$1,308,486**	**$1,229,081**	**$948,811**	**$32,941**	**$24,441**	**$21,441**	**$20,373**	**$5,146,327**
CASH FLOW				-$344,583	-$842,316	-$137,911	$142,359	$758,229	$341,729	$294,729	$170,797	**$383,033**
CUMULATIVE CASH FLOW				-$344,583	-$1,186,899	-$1,324,810	-$1,182,451	-$424,222	-$82,493	$212,236	$383,033	
INTERNAL RATE OF RETURN												***6.8%***

NORTH BROADWATER MACROSITE - PHASE 1
Cash Flow

	#	# DUs	Amount	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	TOTALS
REVENUES												
Land Sales Income												
Woodlands Manor & Waterfron	1	3	$575,000	$575,000								$575,000
Greens Creek Wilderness	1	3	$600,000				$600,000					$600,000
Lodge Site	1	4	$500,000	$500,000								$500,000
Insitute "Campus"	1	4	$300,000					$300,000				$300,000
Upshur Creek Wilderness	1	3	$500,000			$500,000						$500,000
Farm Cluster Lots	16	16	$75,000		$150,000	$225,000	$225,000	$225,000	$150,000	$150,000	$75,000	$1,200,000
Affordable Rural Lots	2	2	$25,000		$25,000	$25,000						$50,000
Town Settlement												
Single Family Lots	22	22	$50,000		$100,000	$150,000	$200,000	$200,000	$200,000	$150,000	$100,000	$1,100,000
Duplex (half lots)	8	8	$25,000		$50,000	$50,000	$50,000	$50,000				$200,000
Phillips Creek Wilderness	3	3	$125,000	$125,000	$125,000	$125,000						$375,000
Subtotal	***56***	***68***		***$1,200,000***	***$450,000***	***$1,075,000***	***$1,075,000***	***$775,000***	***$350,000***	***$300,000***	***$175,000***	***$5,400,000***
Lease Income												
Farmland Leases				$16,170	$16,170	$16,170	$16,170	$16,170	$16,170	$16,170	$16,170	$129,360
Subtotal				***$16,170***	***$16,170***	***$16,170***	***$16,170***	***$16,170***	***$16,170***	***$16,170***	***$16,170***	***$129,360***
TOTAL REVENUES				**$1,216,170**	**$466,170**	**$1,091,170**	**$1,091,170**	**$791,170**	**$366,170**	**$316,170**	**$191,170**	**$5,529,360**

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