

U.S. Army Corps
of Engineers
Baltimore District

Public Notice

In Reply to Application Number
CENAB-OP-RMN (MD DNR, FISHERIES SERVICE/SHELL
RECOVERY PROGRAM)200703638-M24

PN-07-80

Comment Period: December 26, 2007 to January 26, 2007

THE PURPOSE OF THIS PUBLIC NOTICE IS TO SOLICIT COMMENTS FROM THE PUBLIC ABOUT THE WORK DESCRIBED BELOW. AT THIS TIME, NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT A PERMIT WILL BE ISSUED.

The Baltimore District has received an application for a Department of the Army Permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344), as described below:

APPLICANT: Maryland Department of Natural Resources
Fisheries Service
580 Taylor Ave. B-2
Annapolis, Maryland 21401

LOCATION: Chesapeake Bay and tributaries

WORK: This project will permit the Maryland Department of Natural Resources (MD DNR) to recover previously planted oyster shells that have become buried with sediment over time and which are no longer providing suitable habitat for oysters. Previously planted shells are those originating from the Department's dredged shell program which utilized buried shells primarily from the upper Chesapeake Bay, or from the Department's fresh shell program which utilizes shells from oyster processing plants. Only buried shell plantings will be recovered.

Buried oyster shells will be recovered from up to 1-foot below the bottom surface using hydraulic dredging equipment. The shells will be transported to suitable nearby oyster bars for replanting. The purpose of this project is to rehabilitate oyster bar habitat to enhance natural recruitment and/or provide a foundation for seed oysters to work toward the reestablishment of an abundant and self-sustaining oyster population in support of the Chesapeake Bay Program 2000 Agreement and the 2005 Oyster Management Plan. Shell recovered from this program, upon coordination with the Tidewater Oyster Committees composed of oyster harvesters and the Oyster Advisory Commission, may be used to supplement the fresh shell supply for spat production at the University of Maryland's Horn Point Oyster Hatchery.

Permit Time Period: A 10-year period from 2007 through 2016 is being requested with the provision that this new program will only continue beyond the third year after an impact (positive and negative) assessment and cost-benefit data are provided to the permitting agencies, the Oyster Advisory Commission and the Tidewater Oyster Committees and it is determined by the permitting agencies that continuing the program is justified.

Permit Areas for Shell Recovery: Approval is requested for all shell planting sites in the Chesapeake Bay and its tributaries made by MD DNR since 1960 (Attachment 2) with the condition that only heavily sedimented sites will be considered for shell recovery under this permit. Heavily sedimented sites are those where entire shells are obscured and only parts of individual shells, if any, protrude above the sediment.

The identification of sites for shell recovery will be coordinated on an annual basis with Maryland's Tidewater Oyster Committees, the Oyster Advisory Commission and other interested parties, and will be consistent with the guidelines provided in the Chesapeake Bay Program Oyster Management Plan. This annual process provides oyster harvesters from specific counties or regions an opportunity to advise the Department of their support for this program or preference for not having this program occur in their area or to restrict activities as needed. Only those sites on the annual list will be dredged for shell recovery.

Shell recovery areas may occur within the following oyster bar management designations: sanctuaries, harvest reserves and open harvest areas.

Amount of Shell to be Recovered and Size of Shell Recovery Areas: Authorization is requested for the recovery of 1.5 million cubic yards of buried oyster shell during the 2007-2016 permit time period. This volume may require an estimated 1,670 acres for the 10 year permit time period. This estimate assumes a potential recovery of 6" of shell per acre dredged to a 1' depth (900 cu yds per acre). The first year of recovery will refine these estimates due to actual field data from the projects.

Since previous shell plantings were typically 20-40 acres in size, the individual shell recovery sites under this permit will be of similar size. Attachment 3 illustrates a hypothetical recovery site. This activity will occur predominantly in depths of 8' to 20' since these are the depths at which the shells were originally planted. No reclamation will occur in depths less than 8'.

The amount of shell that will be recovered annually will be based upon the objectives and strategies of Maryland's oyster recovery program as well as the available funding. For each 1 million dollars of funding, an estimated 62,500 cu yds will be recovered per year requiring a potential 70 acres dredged per year.

Methods for Shell Recovery and Planting: Hydraulic and/or mechanical dredging equipment will be used to recover buried shell from up to 1-foot below the bottom surface. The following two methods are currently being considered and will be evaluated during the 3-year study interval of this 10 year permit.

1) *Industrial Shell Dredge:* Shells will be recovered using a dredging barge equipped with a cutter head and/or vacuum head that swings left and right. The barge will move forward as it dredges, most likely using spuds and create a dredged area that is approximately 500 feet wide. Consecutive dredged pathways will occur through the buried site until the shells are recovered. Shells will be moved by conveyor from the dredging barge to another barge for replanting.

2) *Shellfish Harvesting Dredge:* Shells will be recovered using large workboats equipped with dredges pulled by the boat. The dredges will have water manifolds on the dredge directed into the bottom such that the high-pressure water from the manifold excavates the buried shells, which are then collected by the dredge. If shell recovery can occur using regular dredges without high-pressure water, they will be used. Buried shells will be loaded on the deck of the boat by individual dredge loads. Boats will work through the buried site until they have worked

the area and recovered the shells. An optional method using workboats would be to use a hydraulic clam rig that also has a high-pressure water manifold to excavate shells and bring them up to the boat.

In method 1, the shells and shell fragments will be separated on site from the finer sediment materials and retained on a shell barge. The sediments will be discharged with the wash water that is used to clean the shells on the barge. The shells and shell fragments will then be transported to another site for planting, using high pressure water hoses or cannons to wash the material off the shell barge onto the oyster bar. In some cases (small sites) the shell material may be planted using a crane, excavator, or similar equipment to unload the barge.

In the case of method 2, the shells and shell fragments will be retained by the dredge as it moves across the bottom. Finer sediment materials will pass through the dredge as it moves across the bottom and as it is brought to the surface. The shells and shell fragments on the boat will then be transported to another site for planting, using high-pressure water hoses to wash the material overboard onto the oyster bar.

If other shell recovery strategies become available, MD DNR will present the new information to the permit agencies and Oyster Advisory Commission for review to facilitate a determination by the permitting agencies as to whether or not the implementation of these strategies could be approved through an amendment to this permit, or if a new permit application would need to be submitted.

Mitigation of Shell Recovery Sites: MD DNR will mitigate, to the extent feasible and for which funding is available, the impact of the removal of up to 1 foot of material at the shell recovery site by placing alternate materials in the dredged site and/or using other strategies that might be identified, and evaluate the effectiveness of such mitigation.

Shell Planting Sites - Location and Size: Replanting of the recovered shells will occur within the following oyster bar management designations: sanctuaries, harvest reserves and open harvest areas. The identification of shell planting sites will be coordinated on an annual basis with Maryland's Tidewater Oyster Committees, the Oyster Advisory Commission and other interested parties, and will be consistent with the guidelines provided in the Chesapeake Bay Program Oyster Management Plan.

Assuming that the recovered shell will be replanted at an average thickness of 3-inches (450 cubic yards per acre), and assuming the full 1.5 million cubic yards of requested volume will be utilized it is estimated that 3,330 acres will be planted over the 10 year time period of the permit. Shell planting (replanting) will occur in depths predominantly from 8' to 20' since this is where oyster bars and oyster populations mostly occur, but shell planting may occur in some cases as shallow as 6'. The thickness of the shell will be from 3" to 6" in most cases but may be up to 1' in some cases. No shell mounds or obstructions to navigation will be created.

The amount of recovered shell that will be replanted on an annual basis will be based upon the objectives and strategies of Maryland's oyster recovery program as well as the available funding. For each 1 million dollars of funding, an estimated 138 acres of oyster bar habitat could be rehabilitated per year.

Time of Year that Shell will be Recovered and Planted:

Year Round: Approval is requested to recover and plant oyster shells year-round to provide flexibility for shell acquisition.

April – September: To optimize the use of recovered shell for the hatchery program, this time period will be utilized to recover and plant shells to prepare sites with a shell base to receive plantings of hatchery seed. April and May will be emphasized in order to have sites ready for the hatchery seed.

June-mid July: To optimize the use of recovered shell for natural spat set, this time period will be utilized so shells are available for the settlement of oyster larvae through natural reproduction, which occurs in the summer months.

If significant adverse impacts arise from activities during the above time periods i.e. based on the Water Quality Certification from the permitting agencies, the MD DNR will coordinate with the permitting agencies and Oyster Advisory Commission to develop alternative plans.

All work is to be completed in accordance with the enclosed plan(s). If you have any questions concerning this matter, please contact Ms. Mary Frazier at 410-962-5679 or Mary.A.Frazier@usace.army.mil.

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 04-267), requires all Federal agencies to consult with the National Marine Fisheries Service (NMFS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely effect essential fish habitat (EFH).

The project site lies in or adjacent to EFH as described under MSFCMA for Scophthalmus aquosus (windowpane flounder) juvenile and adult; Pomatomus saltatrix (blue fish) juvenile and adult; Paralichthys dentatus (summer flounder) juvenile and adult; Peprilis triacanthos (Atlantic butterflyfish) eggs, larvae, juvenile and adult ; Centropristus striata (black sea bass) juvenile and adult; eggs, larvae, juvenile, and adult stages of Sciaenops ocellatus (red drum), Scomberomorus cavalla (king mackerel), Scomberomorus maculatus (spanish mackerel), and Rachycentron canadum (cobia), all managed species under the MSFCMA

The project has the potential to adversely affect EFH or the species of concern by loss of nursery, forage and/or shelter habitat. The project may have an adverse effect on Essential Fish Habitat as described under the Magnuson-Stevens Fishery Conservation and Management Act for the species and life stages identified above. However, the District Engineer has made a preliminary determination that site-specific impacts would not be substantial and an abbreviated consultation will be conducted with NMFS. This determination may be modified if additional information indicates otherwise and would change the preliminary determination.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain

values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The applicant is required to obtain a water quality certification in accordance with Section 401 of the Clean Water Act from the District of Columbia Department of the Environment. Any written comments concerning the work described above which relate to water quality certification must be received by the Water Quality Division, District of Columbia Department of the Environment, 51 N Street, NE, 5th Floor, Washington, DC 20002 within the comment period as specified above to receive consideration. Written comments concerning the work described above related to the factors listed above or other pertinent factors must be received by the District Engineer, US Army Corps of Engineers, Baltimore District, PO Box 1715, Baltimore, Maryland 21230-1715, within the comment period as specified above to receive consideration. The 401 certifying agency has a statutory limit of one year to make its decision.

The applicant must obtain any State or local government permits which may be required.

A preliminary review of this application indicates that the proposed work will not affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act as amended. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

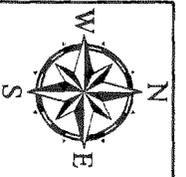
The Maryland Historical Trust is reviewing the project to assess its effects on historic properties pursuant to Section 106 of the National Historic Preservation Act of 1966. Currently unknown archeological, scientific, prehistoric, or historical data may be lost or destroyed by the work to be accomplished under the requested permit.

The evaluation of the impact of the work described above on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 of the Clean Water Act. Any person who has an interest which may be adversely affected by the issuance of this permit may request a public hearing. The request, which must be in writing, must be received by the District Engineer, US Army Corps of Engineers, Baltimore District, PO Box 1715, Baltimore, Maryland 21203-1715, within the comment period as specified as above to receive consideration. Also, it must clearly state forth the interest which may be adversely affected by this activity in the manner in which the interest may be adversely affected.

It is requested that you communicate the foregoing information concerning the proposed work to any persons known by you to be interested and not being known to this office, who did not receive a copy of this notice.

A handwritten signature in black ink, appearing to read "V. G. Hobbs". The signature is fluid and cursive, with the first and last names being clearly legible.

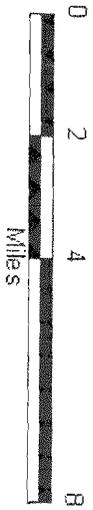
VANCE G. HOBBS
Chief, Maryland Section Northern



MAP A

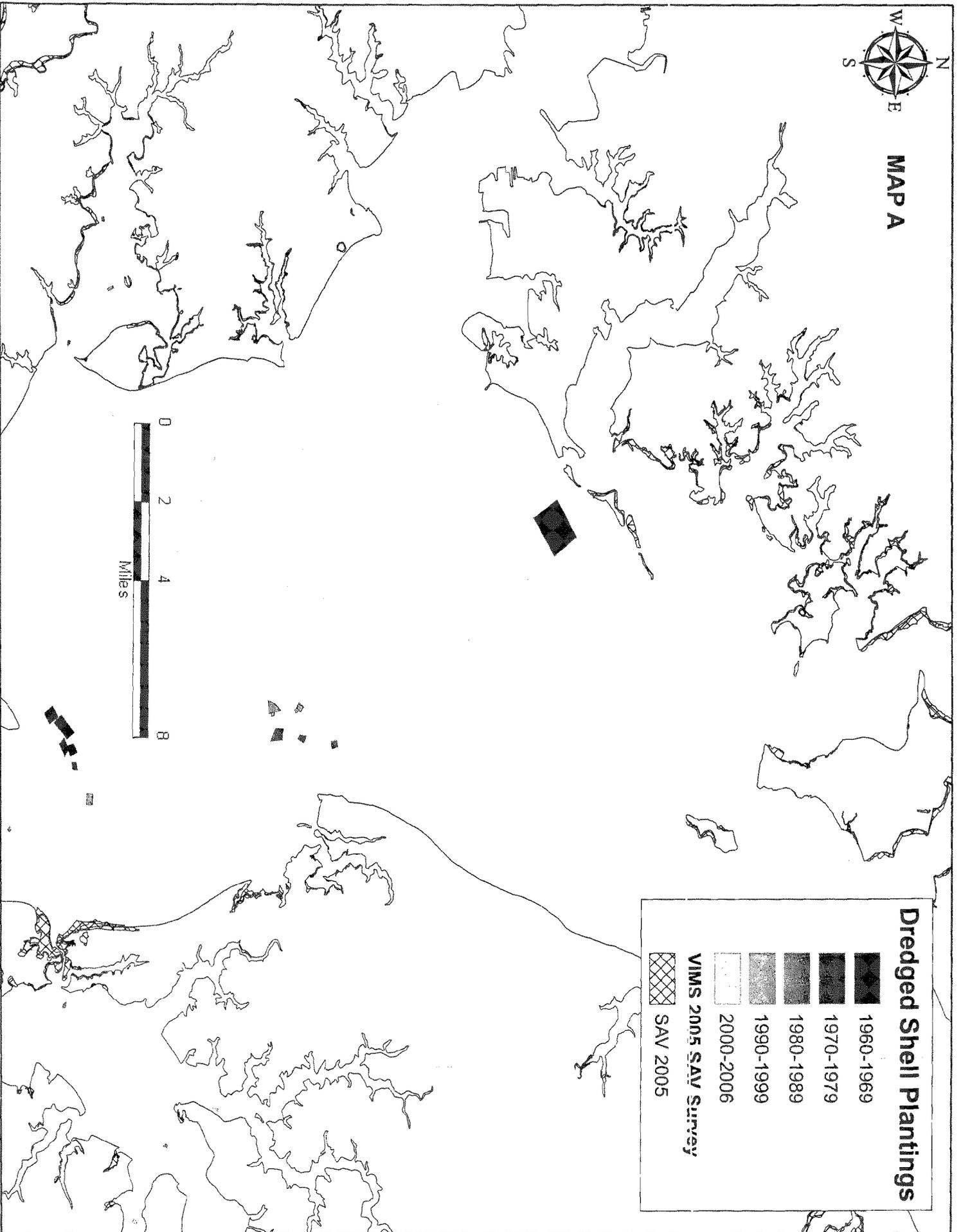
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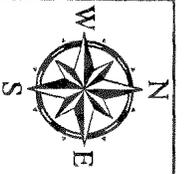
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Dredged Shell Plantings

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| | 1960-1969 |
| | 1970-1979 |
| | 1980-1989 |
| | 1990-1999 |
| | 2000-2006 |
| | VIMS 2005 SAV Survey |
| | SAV 2005 |





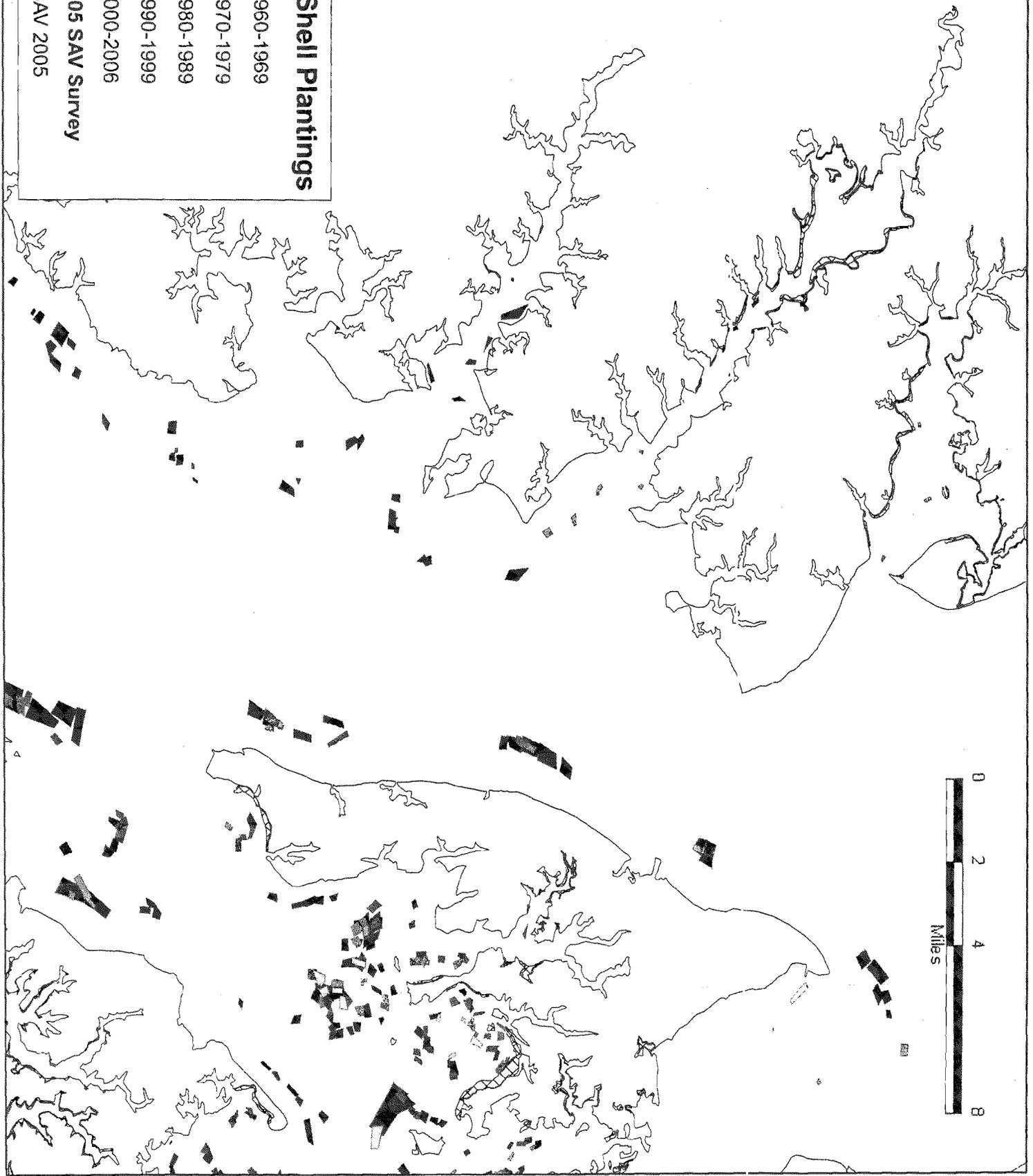
MAP B

Dredged Shell Plantings

| | |
|---|-----------|
|  | 1960-1969 |
|  | 1970-1979 |
|  | 1980-1989 |
|  | 1990-1999 |
|  | 2000-2006 |

VIMS 2005 SAV Survey
 SAV 2005

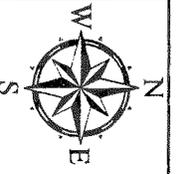
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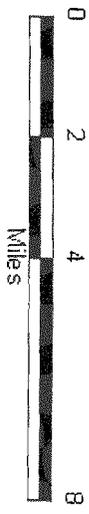


MAP C

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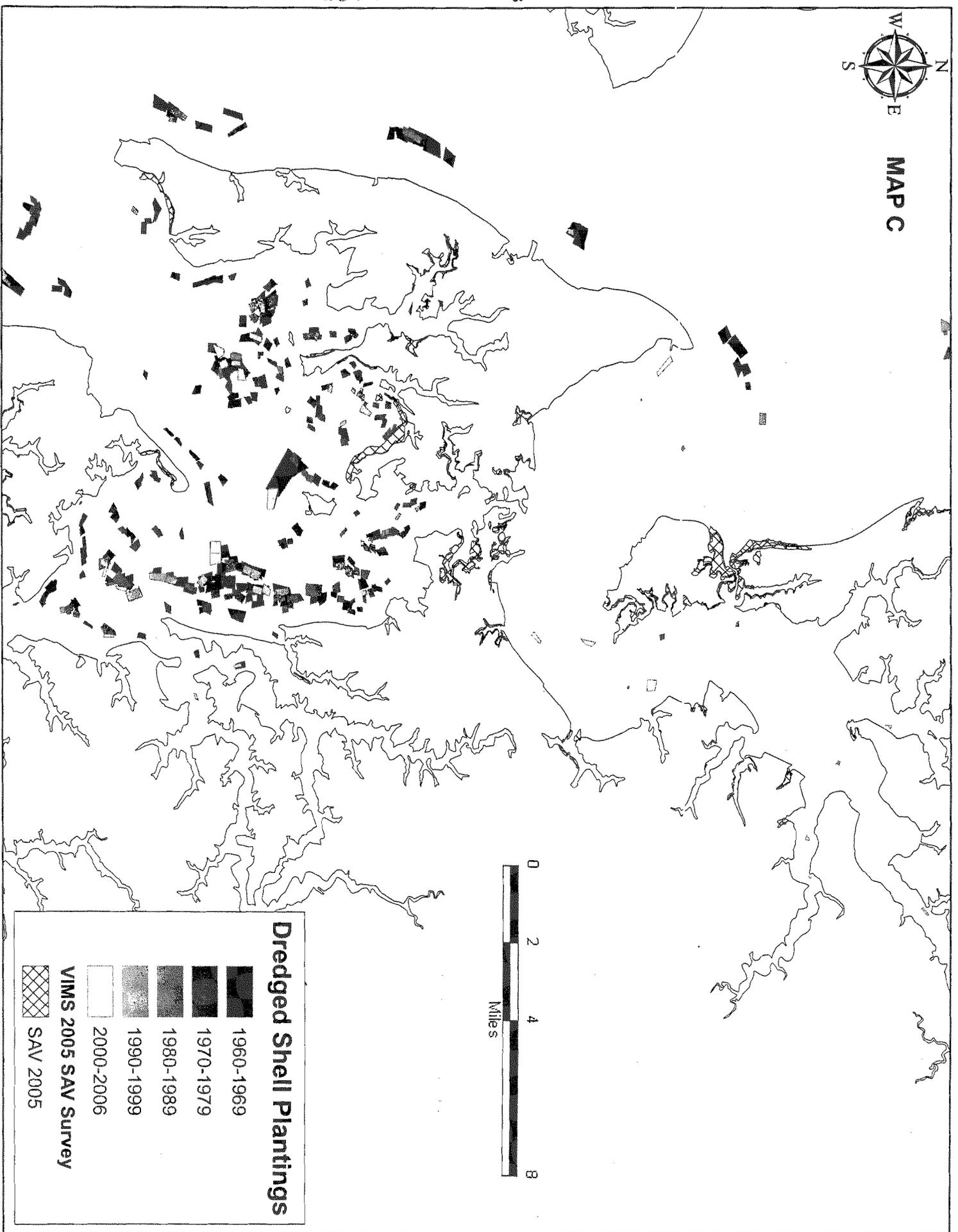
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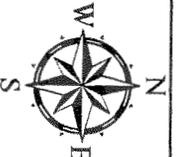
A



Dredged Shell Plantings

| | |
|--|----------------------|
| | VIMS 2005 SAV Survey |
| | SAV 2005 |
| | 1960-1969 |
| | 1970-1979 |
| | 1980-1989 |
| | 1990-1999 |
| | 2000-2006 |

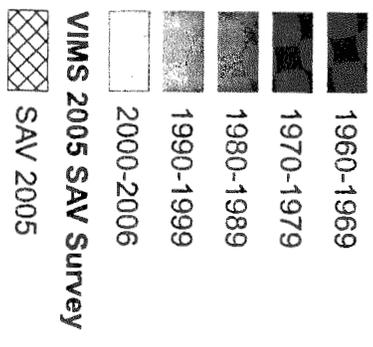




MAP D



Dredged Shell Plantings

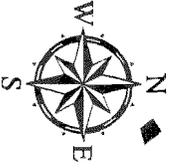


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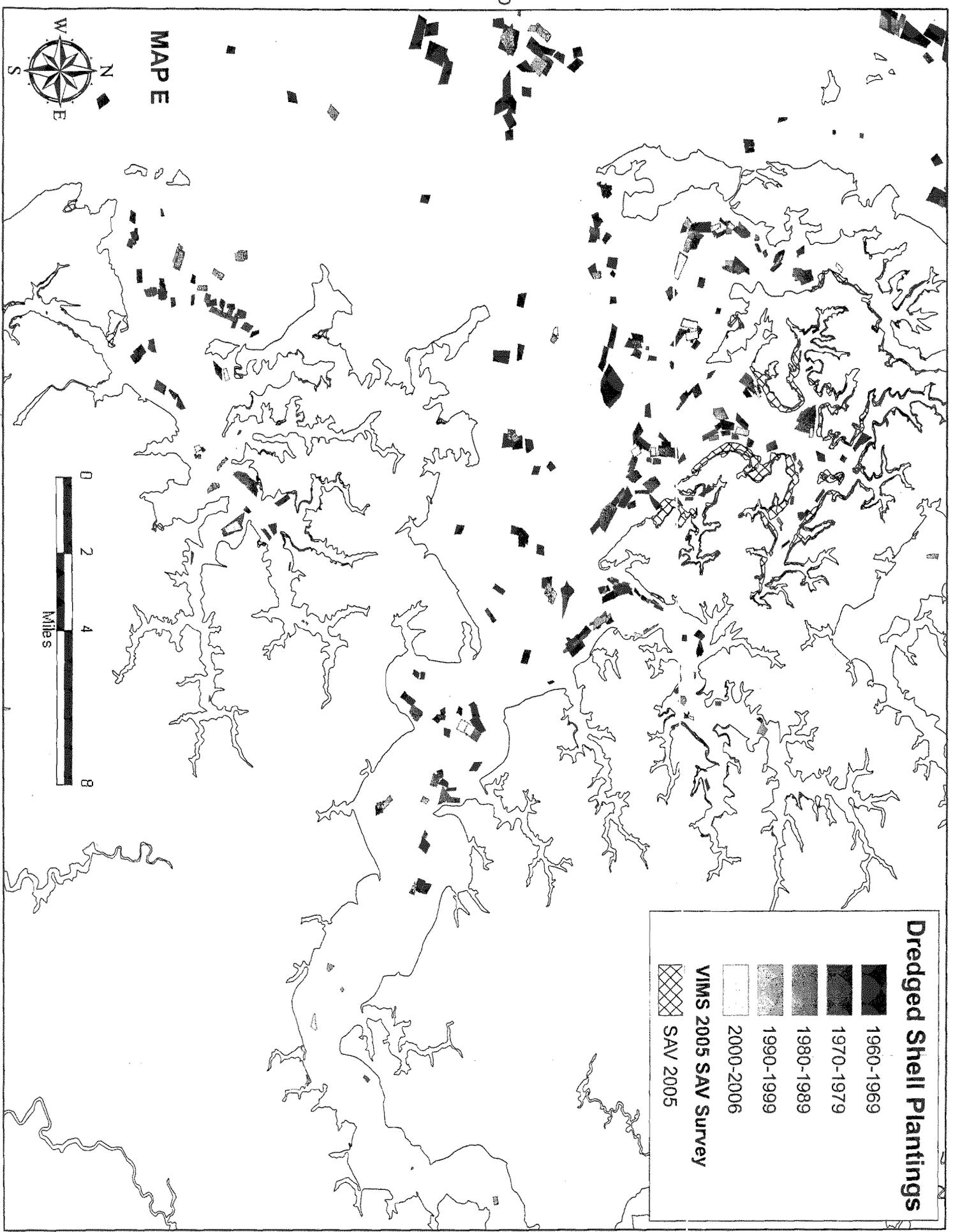
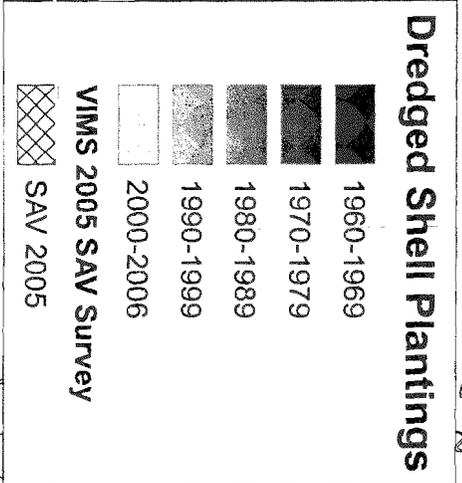
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E

MAP E



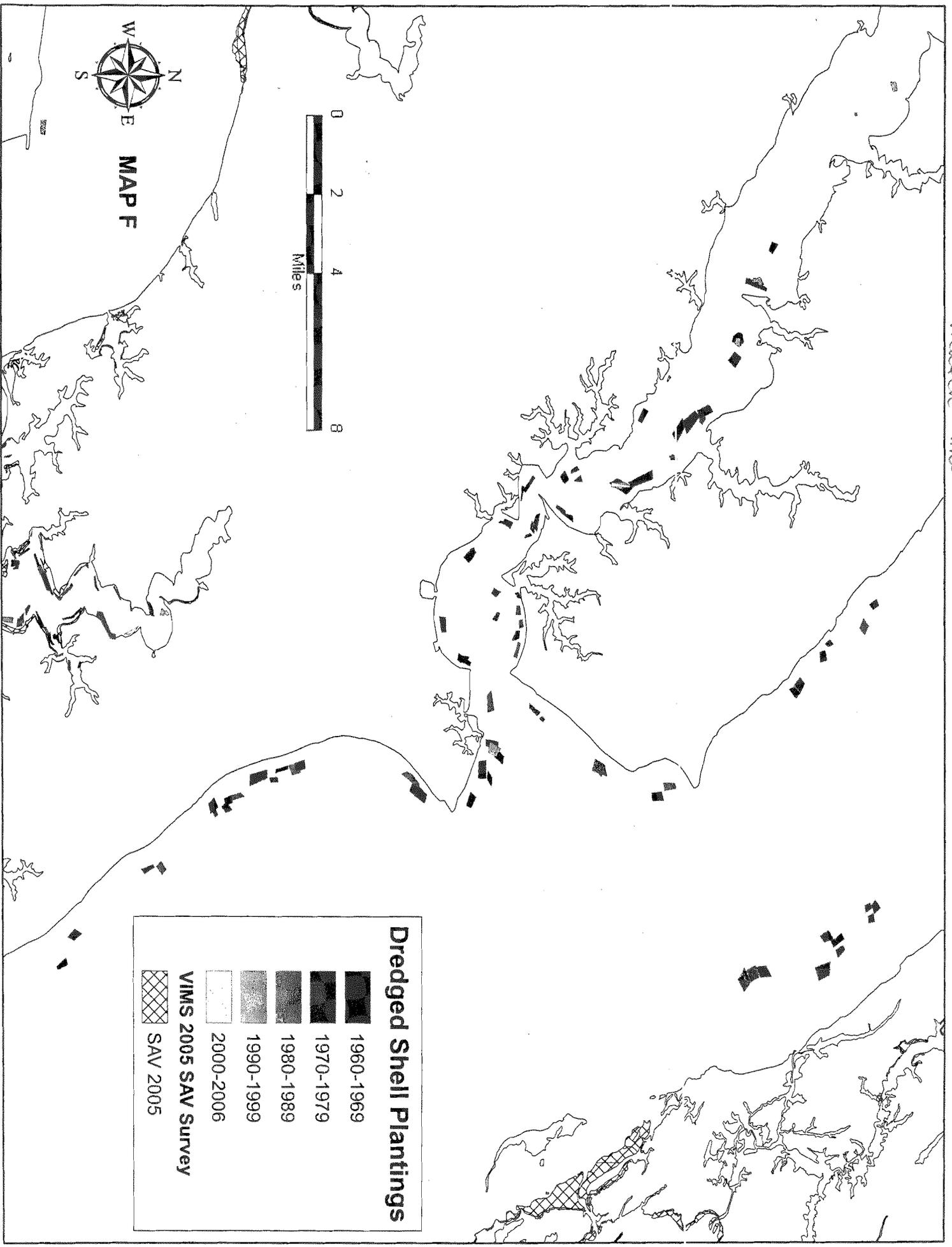
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C

D

G



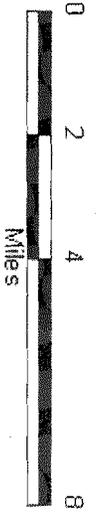
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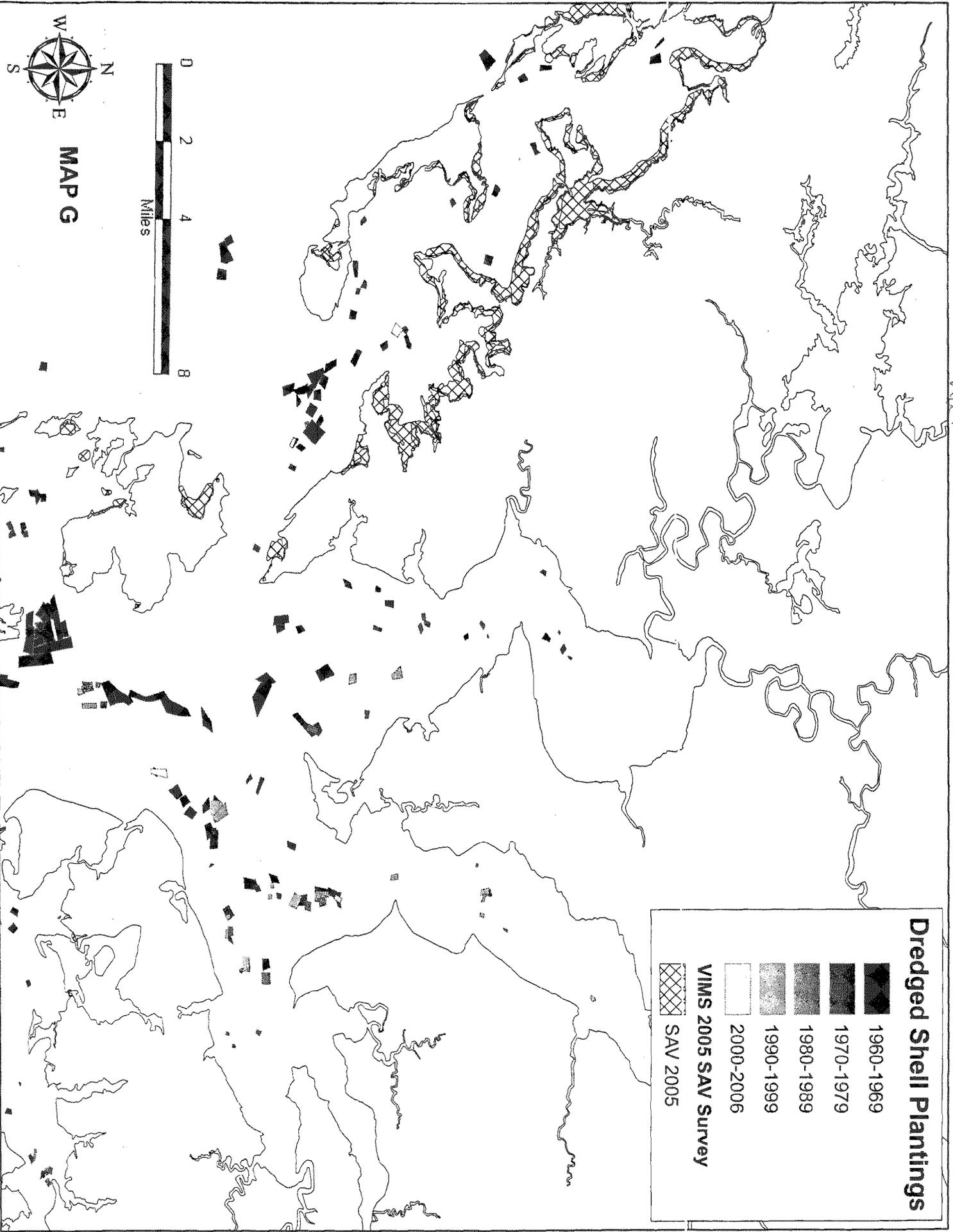
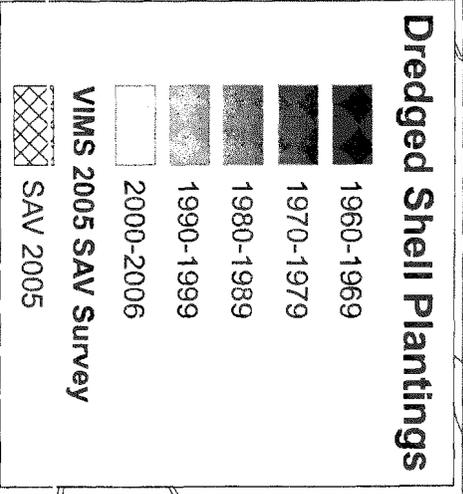
Dredged Shell Plantings

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| | 1960-1969 |
| | 1970-1979 |
| | 1980-1989 |
| | 1990-1999 |
| | 2000-2006 |
| | VIMS 2005 SAV Survey |
| | SAV 2005 |

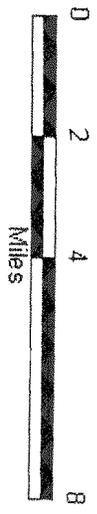
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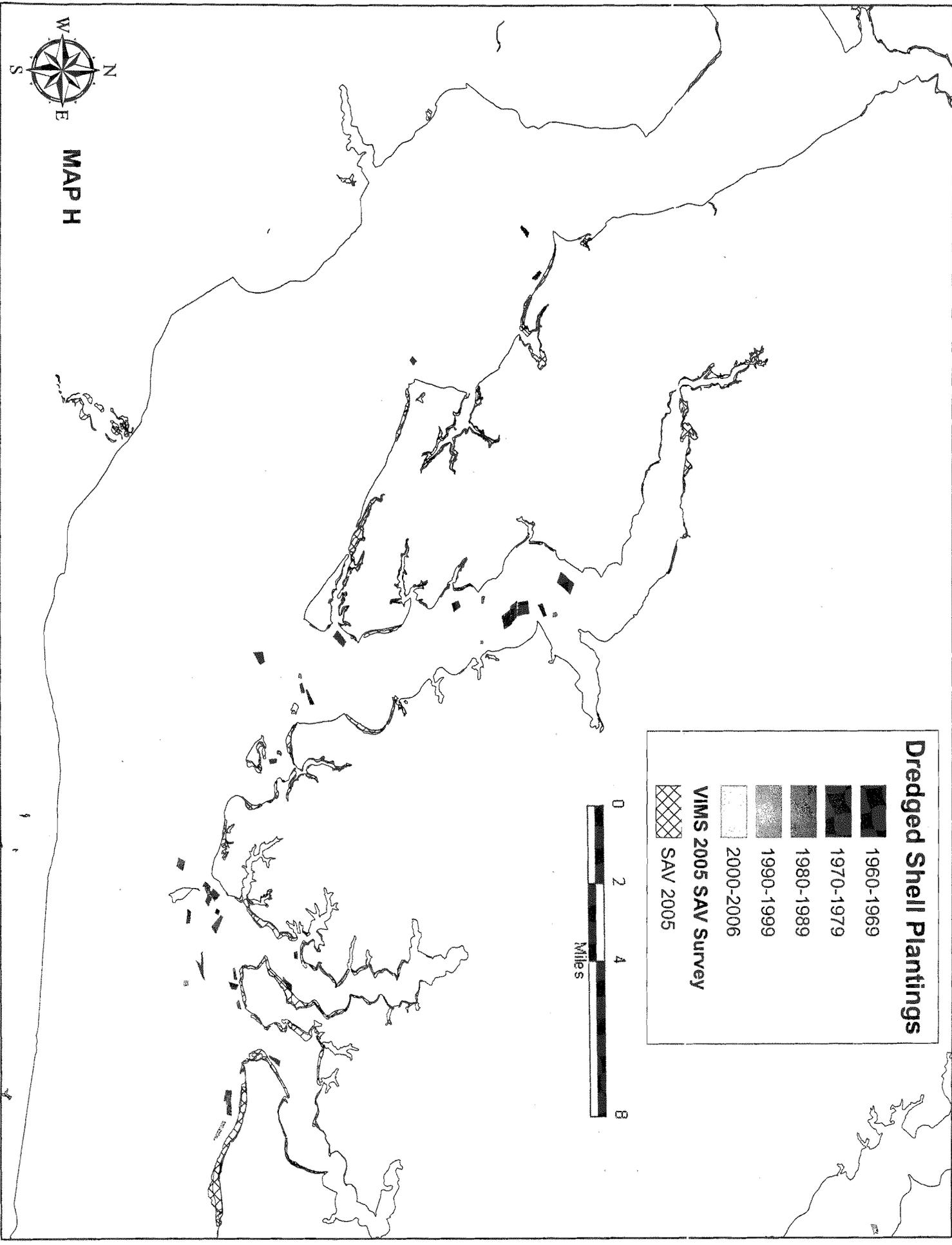


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MAP G



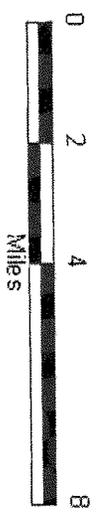


MAP H

Dredged Shell Plantings

-  1960-1969
-  1970-1979
-  1980-1989
-  1990-1999
-  2000-2006

VIMS 2005 SAV Survey
SAV 2005

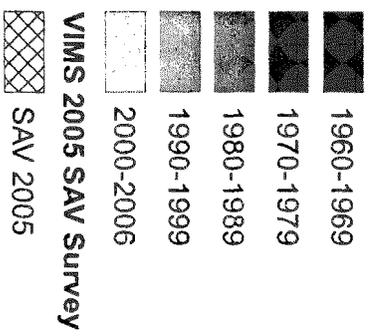


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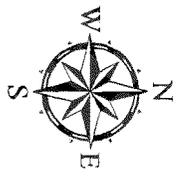
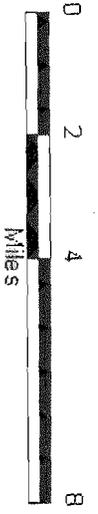
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Dredged Shell Plantings

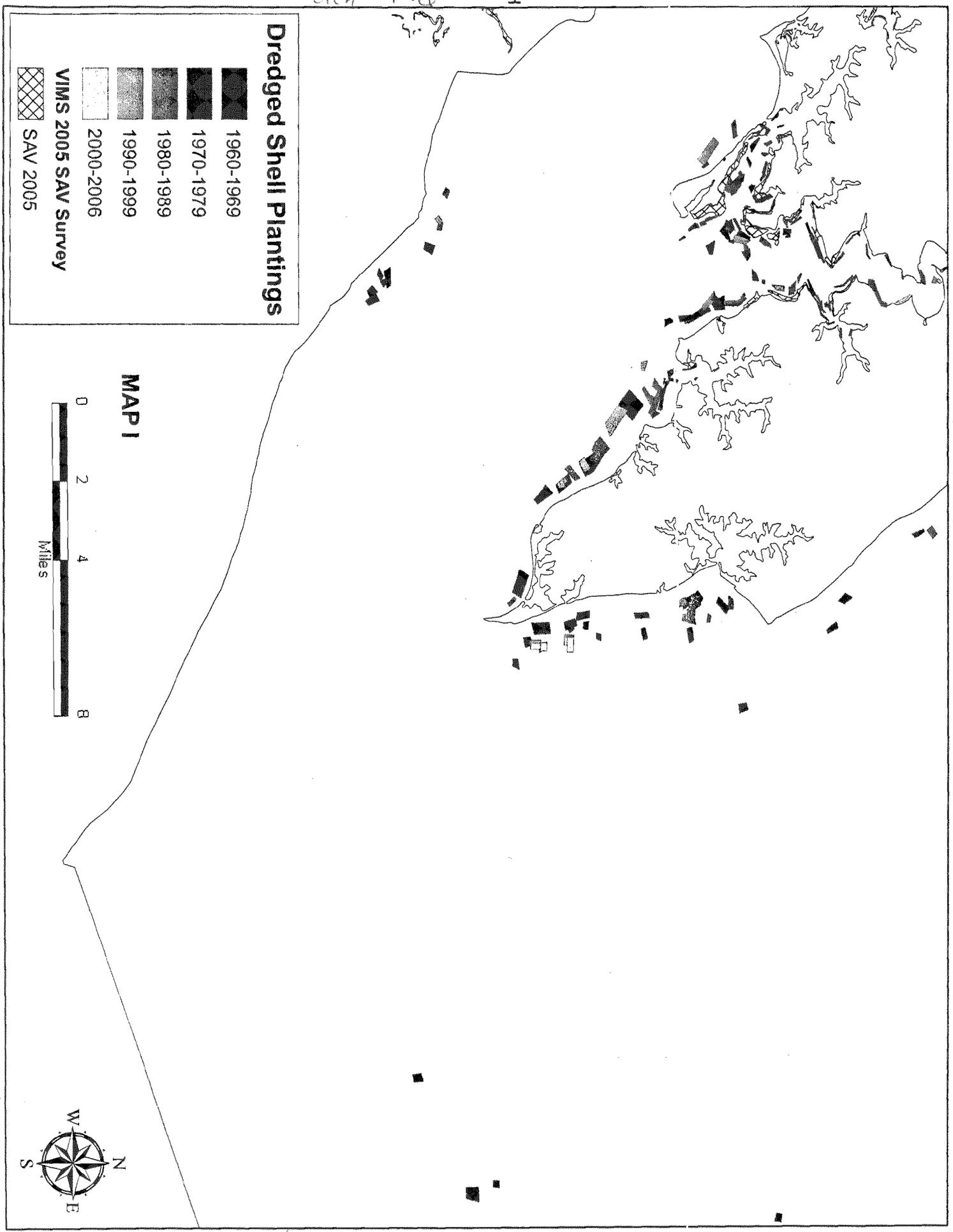


MAP I



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J



match line

6

