

APPENDIX A

LETTERS OF COORDINATION
RECEIVED PRIOR TO
COORDINATION OF THE
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United States Department of the Interior

FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

IN REPLY REFER TO:
ES

Federal Building, Fort Snelling
Twin Cities, Minnesota 55111
March 12, 1974

Col. James M. Miller
District Engineer
U. S. Army Engineer District
Chicago
.219 South Dearborn Street
Chicago, Illinois 60604

Dear Col. Miller:

This responds to your letter of February 7, 1974, requesting our comments on maintenance dredging of Green Bay Harbor, Wisconsin. About 980,000 cubic yards of material will be dredged from selected areas of the harbor and placed in the approved land spoil areas known as Atkinson Marsh. Our following views are submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The role of wetlands providing high quality fish and wildlife habitat is well known. They also contribute heavily to the aesthetics of an area, serve to improve water quality by recovering and recycling nutrients, and form an important link between land and water environments.

In this case the several hundred acres of viable Type 3 and 4 wetlands remaining in Atkinson Marsh provide excellent habitat for both terrestrial and aquatic forms of wildlife. Cattail, sedge, smartweed, and arrowhead interspersed with dogwood, willows, and alder typify the marsh vegetation.

Deer, cottontail rabbit, pheasant, foxes, and especially muskrats are present in harvestable numbers and, occasionally, Hungarian partridge utilize the marsh. Reliable nesting habitat is used by several duck species, and in addition the marsh offers food and shelter for a considerable number of swans and Canada geese, as well as for ducks that migrate through the area.

Substantial use of Atkinson Marsh also is made by nongame forms of wildlife. For example, the snowy owl, uncommon to most of Wisconsin, often concentrates in the area to the extent that its numbers encourage bird banding. The marsh, too, receives concentrated use by the yellow headed blackbird. People travel for miles to observe this beautiful



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bird which is disappearing in the State in proportion to the loss of wetlands. Other birds common to the area are the least bittern, lesser yellow-legs, purple martin, and several species of sandpipers, plovers, terns, and gulls.

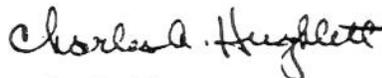
We recognize that in 1966 the Bureau of Sport Fisheries and Wildlife did not object to using portions of Atkinson Marsh for spoil disposal. We further recognize that diking off a portion of this particular marsh has had the effect of increasing the habitat value of its remaining acreage since the area is now protected from destructive wave action. The adjacent mudflats provide food and nesting opportunities for a large number of shorebirds and the remaining marsh acreage also offers excellent possibilities for improving conditions for wildlife through regulating water circulation and tree plantings.

Although time appears to be of an essence, we believe that a serious attempt must be made to salvage the remaining portion of Atkinson Marsh before, it too is destroyed. It would seem appropriate for your office to release a draft Environmental Statement on the maintenance dredging of Green Bay Harbor for review as a preface to performing further dredging operations. A possible short-term alternative would entail utilizing the east end of the low land area which lies between Tower Drive and C&NW Railroad tracks. The road and tracks lie in the vicinity to the south of the present disposal area and could serve as dikes.

We believe, too, that it would be appropriate to consider new alternatives for future dredge spoil disposal as soon as possible. The present spoil placement is compatible with the City of Green Bay's plans to develop an industrial trans-shipment area in this section of the harbor; new alternate spoil sites could also be coordinated with the City's plans. For example, slight modifications of marine design Alternatives A and B listed in the Brown County Planning Commission's Project Bay Port (March 1973) would help protect remaining marsh areas and provide additional space for future ship docking.

Personnel in our Green Bay Area Office of Ecological Services are ready to assist you in developing such modifications and plans (Bureau of Sport Fisheries and Wildlife, University of Wisconsin--Green Bay, Green Bay, Wisconsin 54301). We are prepared to conduct a new biological evaluation of the entire spoil disposal program that involves coastal wetlands in the entire Green Bay area.

Sincerely,



Charles A. Hughlett
Acting Regional Director

cc: Reg. Admin., EPA, Chicago
Reg. Director, BOR, Ann Arbor
Secretary, Wisconsin DNR, Madison



City of Green Bay

WISCONSIN
5 4 3 0 1

DEPARTMENT OF PUBLIC WORKS
ENGINEERING - SANITATION - STREET DEPARTMENT
ROOM 210 - CITY HALL - 437-7611

March 27, 1974

F. J. EUCLIDE P. E.
Director of Public Works

Colonel James M. Miller
District Engineer
U.S. Army Corps of Engineers
219 Dearborne Street
Chicago, Illinois 60604

Dear Colonel Miller:

A meeting was held in my office at 10:00 A.M., March 27, 1974, relative to the Bay Port Spoils Disposal area located in the City of Green Bay. The meeting was arranged by Mr. James P. Jones of your staff at the request of the Fish and Wildlife Service of the Bureau of Sport, Fisheries and Wildlife as per their attached letter to you of March 12th. Attached hereto is the roster of those in attendance.

After review of the contents of the Regional Director of the Bureau of Sport, Fisheries and Wildlife and hearing their comments, I wish to submit the following statement relative to the City's stand:

We must admit that the present day situation in this area is substantially as indicated in the letter. There is a considerable amount of vegetation, both terrestrial and aquatic. There is also a considerable amount of animal life of one type or another in the area. I must point out that this situation has developed because of the filling that has been taking place in this area since 1966. At that time, the only vegetation existing was marsh grass growing to a height of four to five feet, with a few box elders near the bay shore.

As to the wildlife existing at that time, according to the records established at the time of the hearing for the establishment of the Southwest Shore Bulkhead Line, a staff member of the Wisconsin Public Service Commission stated that it was a natural habitat for wildlife. Upon cross examination, he stated that he personally observed under a half day period "two flights of a single duck". Therefore, it was obvious that any wildlife in the area was minimal. The type of fill that has been placed in there has stimulated a remarkable and luxuriant

Colonel James M. Miller
Page 2
March 27, 1974

vegetation growth which has also induced other wildlife to come into the area; but bear in mind that this is only because of our filling operation that we undertook.

Continued filling of this area and consequent industrial development will eliminate this temporary state of affairs.

The City of Green Bay has invested a considerable amount of money in this area for the express and only purpose of industrial development. It is my obligation as a member of the City Administrative staff to do everything possible to encourage industrial development within the city to take care of the future growth requirements necessitated by population increases and its consequent industrial expansion with the required expansion of the tax base.

The suggestion was made by a representative of the Bureau of Sport, Fisheries and Wildlife that a dike be installed in a North and South direction diking off the Westerly 1/5 area or less to maintain it in its present condition. This would be a fruitless effort on the part of the Corps of Engineers as we presently have an agreement to fill the entire area to elevation 102 City Datum and intend to see that it is done and that prior commitments of the Corps of Engineers are met. Should you be forced by the biased and opinionated viewpoint of the Bureau of Sport, Fisheries and Wildlife to this procedure, we would more or less proceed to fill the area for its original intended purpose.

I must, in addition, point out the fact that the area involved which they wish to maintain in its present condition is already partially filled, part of it in its extreme quarter of only three to four inches of fill, and ranging to as much as one foot or more. It cannot reasonably be restored to its original area and the Bureau of Sport, Fisheries and Wildlife maintains that it is in better condition for their purpose than it originally was.

We would expect that as a minimum we should be reimbursed by the U.S. Department of the Interior the sum of \$15 Million to replace its potential afforded to the City of Green Bay.

I must further point out that there is an area immediately to the North of Duck Creek which lends itself most admirably to their intended use or non-use, depending on interpretation.

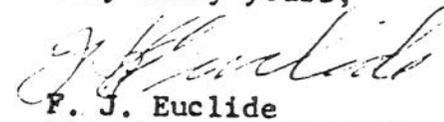
Michael James M. Miller
Page 3
March 27, 1974

This area is in the Brown County Regional Plan for that purpose. The Department of the Interior should be encouraged to expend their efforts in placing that area as a wildlife preserve and sanctuary.

As the Bay Port Spoils area will be completely filled within three to five years, efforts should now be made to explore other possibilities for maintaining dredging spoil disposal areas. The bay disposal area lying between Little Tail and Long Tail has the necessary sanctioning by all state departments, including the State Legislature. However, perhaps other areas could be investigated and this office will make inquiries on the state level as to its utilization after the spoil disposal area was developed in conjunction with further development of Project Bay Port. These long range plans should be initiated shortly as it will possibly take all of the time available in Project Bay Port before a new area can be approved.

In summary the City of Green Bay unwaiveringly and unconditionally refuses to permit any change in the Project Bay Port Spoils Disposal area and intends to fill it to the proper grade either with the assistance of the Corps of Engineers or on our own.

Very truly yours,


F. J. Euclide
Director of Public Works

FJE/pt

enc.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

IN REPLY REFER TO:
ES

Federal Building, Fort Snelling
Twin Cities, Minnesota 55111
April 23, 1974

Col. James M. Miller
District Engineer
U. S. Army Engineer District
Chicago
219 South Dearborn Street
Chicago, Illinois 60604

Dear Col. Miller:

Your letter of February 7, 1974, asked for our comments on the maintenance dredging proposed for Green Bay Harbor, Wisconsin. This letter supplements our letter of March 12, 1974, on the subject.

On March 27, 1974, personnel from our Green Bay Area Office participated in a meeting with representatives from your District Office and the City of Green Bay. The meeting was called to discuss alternative means of spoil disposal which would preserve the remaining cattail area of Atkinson's Marsh (now called the Green Bay Disposal Area). However, the gentlemen representing the City of Green Bay stated that the City of Green Bay would fill in the remainder of Atkinson's Marsh if the Corps of Engineers does not.

A declaration of Intent to destroy environmental values by a non-Federal entity does not, in our opinion, justify such environmental degradation by the Federal Government. The Bureau of Sport Fisheries and Wildlife cannot condone the destruction of Atkinson's Marsh and other similar wetlands. For this reason, and to conform with Section 101(a) of the National Environmental Policy Act of 1969, we believe that it would be more prudent for the Federal Government not to participate in further destruction of environmental values at Green Bay Harbor, Wisconsin.

Accordingly, we recommend that an immediate moratorium of Federal Agency spoiling of dredge material in Atkinson's Marsh be invoked until a dike can be constructed to contain additional spoil material in the non-cattail portion of the marsh which has already been filled. We ask that all additional spoil material be deposited on the filled-in side of this dike.



Save Energy and You Serve America!

Regarding the Environmental Impact Statement which your staff is preparing, we offer our assistance in the review of preliminary drafts whenever they become available.

Thank you for the opportunity to comment on fish and wildlife resources of mutual concern.

Sincerely,

Galen L. Buterbaugh

Galen L. Buterbaugh
Acting Regional Director

cc: Environmental Protection Agency, Chicago
Bureau of Outdoor Recreation, Ann Arbor
Wisconsin Department of Natural Resources, Madison

28 May 1974

Mr. Jack E. Hemphill
Regional Director
U.S. Department of the Interior
Fish and Wildlife Service
Bureau of Sports Fisheries & Wildlife
Federal Building, Fort Snelling
Twin Cities, Minnesota 55111

Dear Mr. Hemphill:

This is in reference to letters from your office dated, 12 March and 23 April 1974, and the meeting held in the office of Mr. F. J. Euclide, Director of Public Works for the City of Green Bay on 27 March 1974, concerning the continued filling of a portion of the area known as Athlason Marsh with material from maintenance dredging in Green Bay Harbor.

The location of the disposal area is as shown on the inclosed sketch with the red lines representing the existing dikes which completely inclose the site. This area has been in use for disposal purposes since 1966. The entire area has been filled to varying degrees with about 50 percent completely filled and only about 30 acres remaining that might still be considered a wetland. The high lake levels of recent years are primarily responsible for the existing wet conditions which will disappear with a return to more normal lake levels.

The present condition of the disposal area does provide an excellent terrestrial habitat primarily for birds with a large variety and amount of vegetation. However, this habitat was created as a direct result of our disposal of dredged material. Prior to the filling operations, the area was covered primarily with marsh grass with little diversity of vegetation or wildlife.

The proposed alternative between Tower Drive and the C & NW Railroad tracks would probably not be feasible. This is private property owned by the Chicago and North Western Transportation Company, which we do not believe would be made available for our use. Also, the time required to work out such a scheme would be unacceptable because of the critical need for maintenance dredging at Green Bay Harbor. The only

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Mr. Jack E. Hemphill

28 May 1974

other alternatives involve construction of containment structures in Green Bay which requires a lead time of three to five years. We will shortly begin pursuing these alternatives because the existing disposal area would only last about three years.

Inclosed for your information is a letter we have recently received from the City of Green Bay stating their position. They are, of course, interested in completely filling the area because of their future plans and have stated that they will continue filling even if we halt our operations. All of the above information as well as the city's position was thoroughly discussed at the referenced meeting.

The recommendation that a dike be constructed to isolate and preserve the 30 acres of land presently wet does not appear reasonable in view of the City's stated objective of filling the area anyway. The dike construction would cause a serious delay in starting the critically needed maintenance dredging which is presently scheduled to begin in July.

Based on an analysis of the available information, it is believed that it is in the public interest to proceed with our planned dredging program this summer. We would be happy to discuss this with you personally; perhaps a meeting at the disposal site would be of use.

Sincerely yours,

- 2 Incl
1. Ltr dtd 3/27/74
fr City of Green Bay
2. Sketch

GEORGE F. MILLER
LTC, Corps of Engineers
Acting District Engineer



United States Department of the Interior

FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

IN REPLY REFER TO:

Federal Building, Fort Snelling
Twin Cities, Minnesota 55111
June 28, 1974

Colonel James M. Miller
District Engineer
U. S. Army Engineer District
Chicago
219 South Dearborn Street
Chicago, Illinois 60604

Dear Colonel Miller:

I enjoyed meeting you and Mr. Jones on June 25, and hope to be able to visit your office in the near future. Bureau personnel who attended the meeting were appreciative of the congenial and cooperative atmosphere in which this problem was approached by you and your staff. Continued interagency cooperation of this nature cannot help but result in better understanding of each others problems and more comprehensive decision making.

In the interest of improving communications between our agencies, I am taking this opportunity to review the events leading to our meeting and the agreements reached with reference to the Green Bay Harbor dredging operations.

In our letters of February 7 and March 12, we described the value of the remaining cattail marsh in the Atkinson's Marsh disposal area and requested that efforts be expended to preserve this habitat from further destruction. Your reply of May 28 indicated that (a) no practical disposal site alternatives are readily available and (b) sufficient time is not available to plan alternatives because of the critical need for this maintenance dredging. In addition, the City of Green Bay has stated in writing they will continue to fill in the area even if your operations were discontinued. Based on these and other facts, you determined that it is in the public interest to proceed with the planned summer dredging of Green Bay Harbor. We recognize the prevailing factors which led to your decision and I am sure you understand our basic position regarding the high value of ever dwindling marshlands in the Great Lakes.



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In early June, our Green Bay Area Office discovered that at least one large colony of Forster's terns was nesting in the remaining open water of the marsh. Mr. Sam Robbins, an expert on birds in Wisconsin, stated that this is probably the only large breeding colony of this species left in the entire state. A pair of Little Gulls also appear to be nesting in the marsh. There has never been an authenticated nesting of these birds in the United States. Dr. Ruth Hine, Chairman of Wisconsin Department of Natural Resources' Endangered Species Committee, indicates that the tern species probably will soon be placed on the Department of Natural Resources' "changing status" species list which is analagous to a "Threatened Species" listing.

Concern for these birds was expressed in a telephone discussion on June 18 between our Green Bay Office and your Operations Branch in which we requested that steps be taken to protect the newly hatched terns in order to help insure the existence of a viable Wisconsin population. Shortly thereafter, Mr. James Jones, Chief of Operations, called Mr. William Martin, Regional Supervisor of our Ecological Services Division, to see if we might be able to discuss the situation in an interagency meeting. As a result, the June 25 meeting was held in my office.

The problem of how to protect the nesting terns was discussed most thoroughly during this meeting and several alternatives were considered. We understand that your operational responsibilities and our fish and wildlife resource responsibilities could both be met by the following procedures:

1. Dredge pumping will not begin before July 8.
2. Spoil will be placed inside of an existing diked triangular shaped section at the southwest end of the disposal area until the incubating tern eggs hatch and the young are adequately developed to be able to escape destruction. By containing the spoil in this area until at least August 1, preferably August 8, approximately 80 percent of this year's tern production could be saved from immediate destruction.
3. A weir apparatus or overflow dam of some nature will be designed and installed by the Corps at the western point of the triangle. The apparatus will be built and continually upgraded during the dredging process in a manner that will allow excess water to escape and retain the maximum amount of solids.
4. Once the triangular area is filled to capacity, fill will be placed in the southern most portion of the remaining

spoil area first and then continued in a northern direction, unless a preferred alternative method is worked out in advance with our Green Bay Area Office.

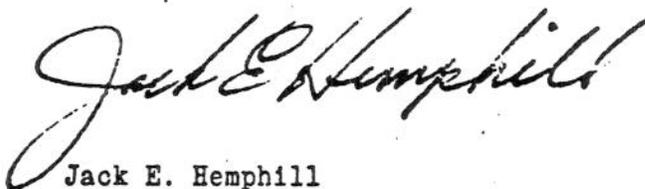
5. Operations after August 8 will be performed in a manner to provide open water resting areas during August and still disrupt the remaining marsh so as to deter the terns from nesting in this area again next spring.

One suggestion, that was not discussed at the meeting, but which would promote disruption of nesting next year and also prevent water pollution, is to block off the culverts existing in the northwest corner of the dike around August 8 of this year. Closure of the culverts might provide additional water for migrating waterfowl to rest in this fall as well as promoting better settling of the suspended solids in the dredging effluent.

The location of above procedures Nos. 2, 3, 4, and 5 have been depicted on the attached sketch.

Thank you for taking time out of your busy schedule to fly up to Minneapolis and attend this meeting. Should a problem arise on this or any future projects please feel free to contact us immediately.

Sincerely,



Jack E. Hemphill
Regional Director

Enclosures

12 July 1974

Mr. Jack E. Hemphill
Regional Director
Fish and Wildlife Service
Bureau of Sport Fisheries & Wildlife
Federal Building, Fort Snelling
Twin Cities, Minnesota 55111

Dear Mr. Hemphill:

In reference to your 28 June letter on the Green Bay Harbor dredging and disposal problem, the procedures outlined are essentially as discussed and agreed upon at our meeting. We are proceeding with the work in accordance with them.

Your suggestion of blocking off the culverts along the northwest dike after 8 August would not be possible. We introduce large quantities of water into the site during our operations because the work is done hydraulically and must provide an outfall for the excess water. We will, however, install elbows and vertical pipe to the culverts to the highest practical elevation. This will provide maximum water retention and settling of suspended solids.

I appreciated your agreeing to meet on such short notice to discuss this important problem and look forward to meeting you in Chicago in the near future.

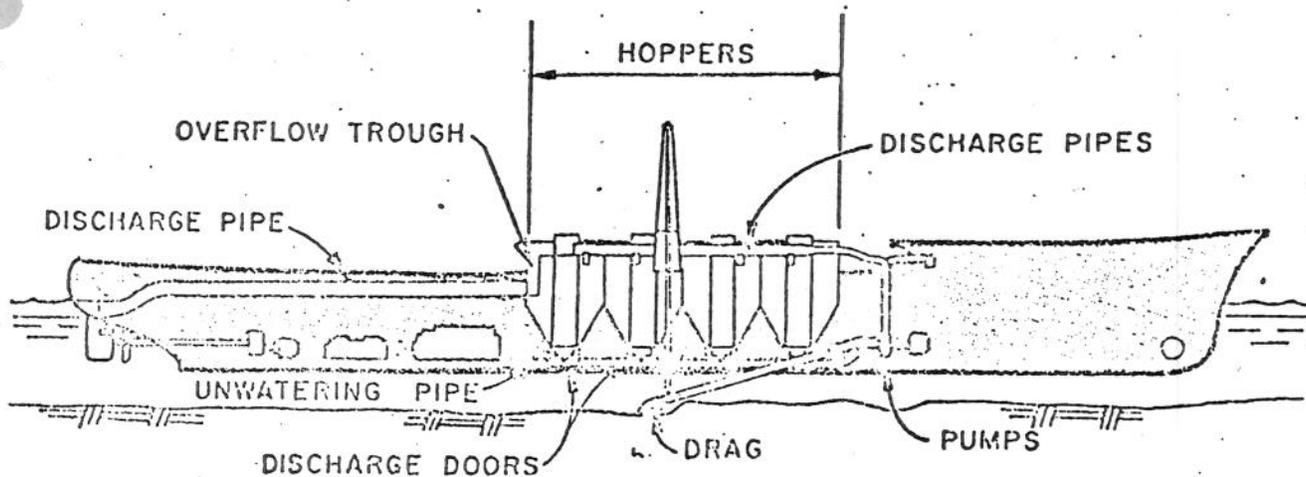
Sincerely yours,

JAMES M. MILLER
Colonel, Corps of Engineers
District Engineer



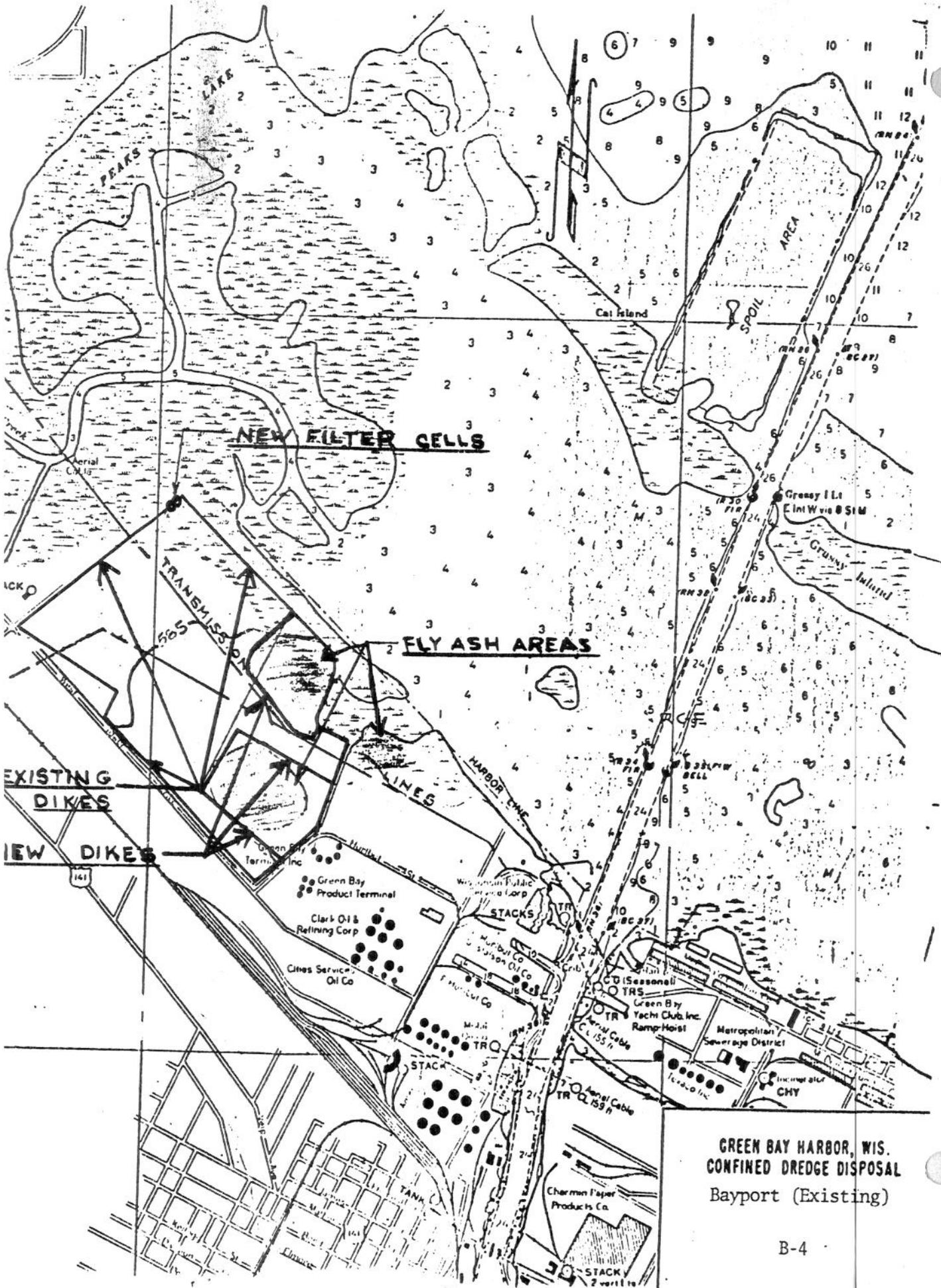
APPENDIX B
MAPS AND ILLUSTRATIONS





Hopper Dredge

A hopper dredge is a self-propelled ship which employs hydraulic suction to remove sediments from the channel bottom. The dredging apparatus consists of one or more dredging pumps located in the hold. Each pump is provided with a suction pipe leading out through the side of the hull to a flexible connection that permits raising and lowering the external portion of the suction pipe, which is equipped with a drag head at its intake. A hopper dredge loads and retains the dredged solids in onboard hoppers and then hauls the material to the pump-out station where the dredgings are pumped through a pipeline to a shore disposal area. During dredging the sediments are pumped into the hoppers as a slurry of mud and water. After the hoppers have been filled initially, pumping continues for a period of time to increase the density of the material in the hoppers to obtain an economical load. As a result of the additional pumping, excess sediment-laden water overflows the hoppers and discharges behind the dredge (U. S. A. C. E , 1969).



GREEN BAY HARBOR, WIS.
 CONFINED DREDGE DISPOSAL
 Bayport (Existing)

APPENDIX C

BIOTA



The Following List was Taken From:

WISCONSIN SOCIETY FOR ORNITHOLOGY

Field check-list for birds of Wisconsin.

Area Surveyed: ATKINSON MARSH

Observer: Edwin D. Cleary
De Pere, Wisconsin

Time Period of Survey: 1940 through November, 1972

* Rare; published reports average five or less records per year.

LOONS

Common

GREBES

Horned

Pied-billed

PELICAN, White*

CORMORANT

Double-crested

HERONS

Great Blue

Green

Cattle Egret*

Common Egret

Black-cr. Night

Least Bittern

Amer. Bittern

SWAN, Whistling

GEESE

Canada

White-fronted*

Snow

Blue

DUCKS

Mallard

Black

Gadwall

Pintail

Grn.-wing. Teal

Blue-wing. Teal

Amer. Widgeon

Shoveler

Wood

Redhead

Ring-necked

Canvasback

Greater Scaup

Lesser Scaup

Com. Goldeneye

Bufflehead

Oldsquaw

Ruddy

MERGANSERS

Hooded

Common

Red-breasted

HAWKS

Goshawk

Red-tailed

Rough-legged

Golden Eagle*

Bald Eagle

Marsh

Osprey

Sparrow

PHEASANT

Ring-necked

PARTRIDGE, Gray

RAILS

King

Virginia

Sora

GALLINULE

Common

COOT

PLOVERS

Semipalmated

Killdeer

Golden

Black-bellied

Ruddy Turnstone

SANDPIPERS

Woodcock
Common Snipe
Whimbrel*
Upland Plover
Spotted
Solitary
Willet*
Gr. Yellowlegs
Les. Yellowlegs
Knot*
Pectoral
White-rumped
Baird's
Least
Dunlin
S-bill. Dowitcher
L-bill. Dowitcher
Stilt
Marbled Godwit*
Hud. Godwit*
Sanderling

PHALAROPES

Wilson's
Northern

GULLS

Glaucous*
Herring
Ring-billed
Franklin's
Bonaparte's

TERNs

Forster's
Common
Caspian
Black

DOVES

Rock
Mourning

CUCKOOS

Black-billed

OWLS

Snowy
Saw-whet*
Burrowing*

NIGHTHAWK

SWIFT, Chimney

HUMMINGBIRD

Ruby-throated

KINGFISHER

Belted

Woodpeckers

Flicker
Red-headed
Yel-b. Sapsucker
Hairy
Downy

FLYCATCHERS

East. Kingbird
Crested
Phoebe
Yellow-bellied
Acadian
Least
Wood Pewee

LARK, Horned

SWALLOWS

Tree
Bank
Rough-winged
Barn
Cliff
Purple Martin

JAYS

Blue

CROW

CHICKADEES

Black-capped

NUTHATCHES

White-breasted
Red-breasted

CREEPER, Brown

WRENS

House
Winter
Long-b. Marsh
Short-b. Marsh

CATBIRD

THRASHER

Brown

THRUSHES

Robin
Hermit
Swainson's
Gray-checked
Veery
Bluebird

KINGLETS

Golden-crowned
Ruby-crowned

WAXWINGS

Bohemian*
Cedar

SHRIKES

Northern

STARLING

VIREOS

Red-eyed
Warbling

WARBLERS

Black-&-White
Tennessee
Nashville
Yellow
Magnolia
Cape May
Myrtle
Black-thr. Green
Blackburnian
Chestnut-sided
Bay-breasted
Blackpoll
Palm
Ovenbird
No. Waterthrush
Connecticut
Yellowthroat
Wilson's
Canada
Redstart

SPARROW, House

BLACKBIRDS

Yellow-headed
Red-winged
Baltimore Oriole
Rusty
Brewer's
Grackle
Cowbird

TANAGER, Scarlet

FINCHES, etc.

Cardinal
R-br. Grosbeak
Even. Grosbeak
Purple Finch
Pine Grosbeak
Com. Redpoll
Pine Siskin
Goldfinch
R-sided Towhee

SPARROWS

Savannah
Vesper
Slate-col. Junco
Tree
Chipping
White-crowned
White-throated
Fox
Lincoln's
Swamp
Song

LONGSPUR

Lapland

BUNTING, Snow

1950

1951

1952

1953

1954

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