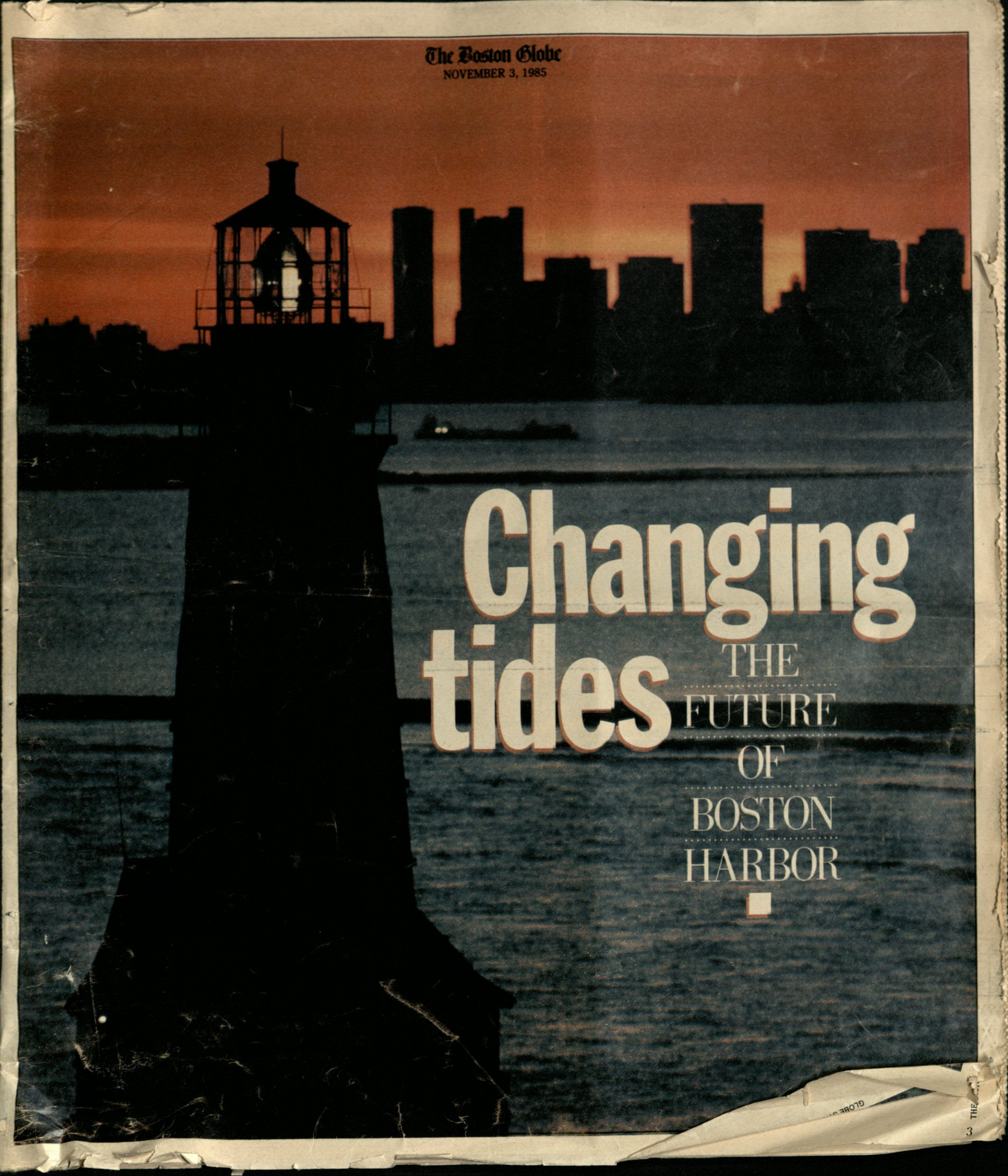


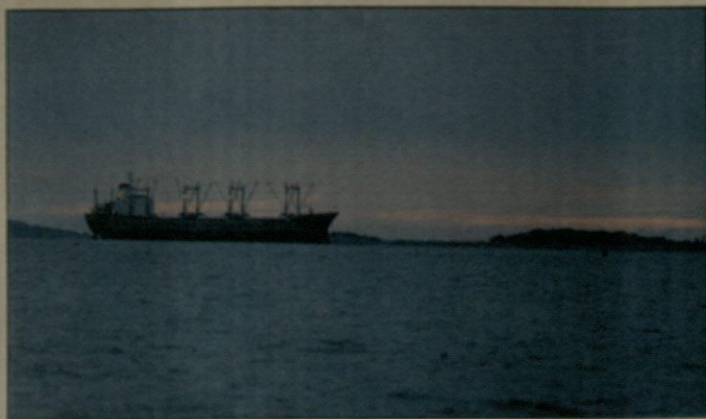
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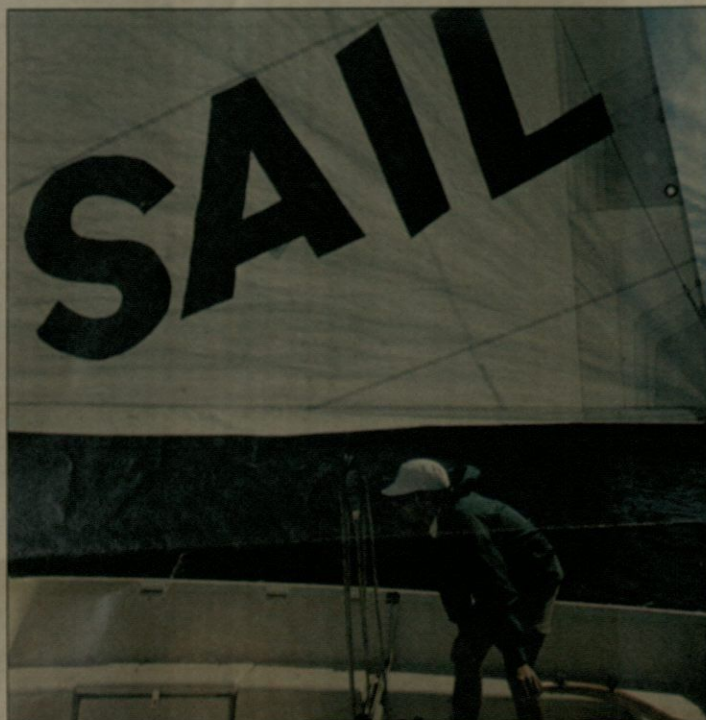
Changing tides

THE
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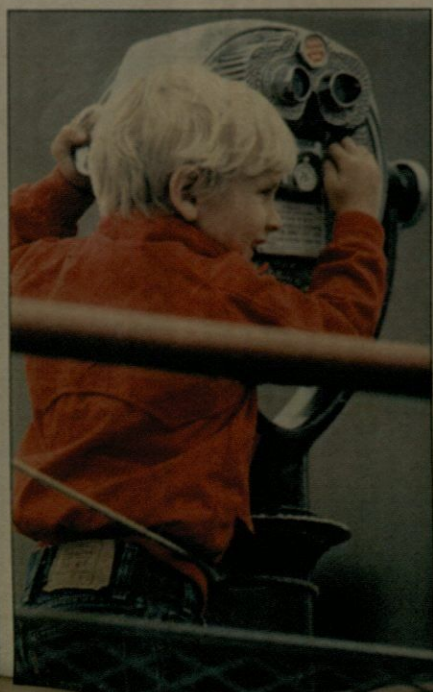




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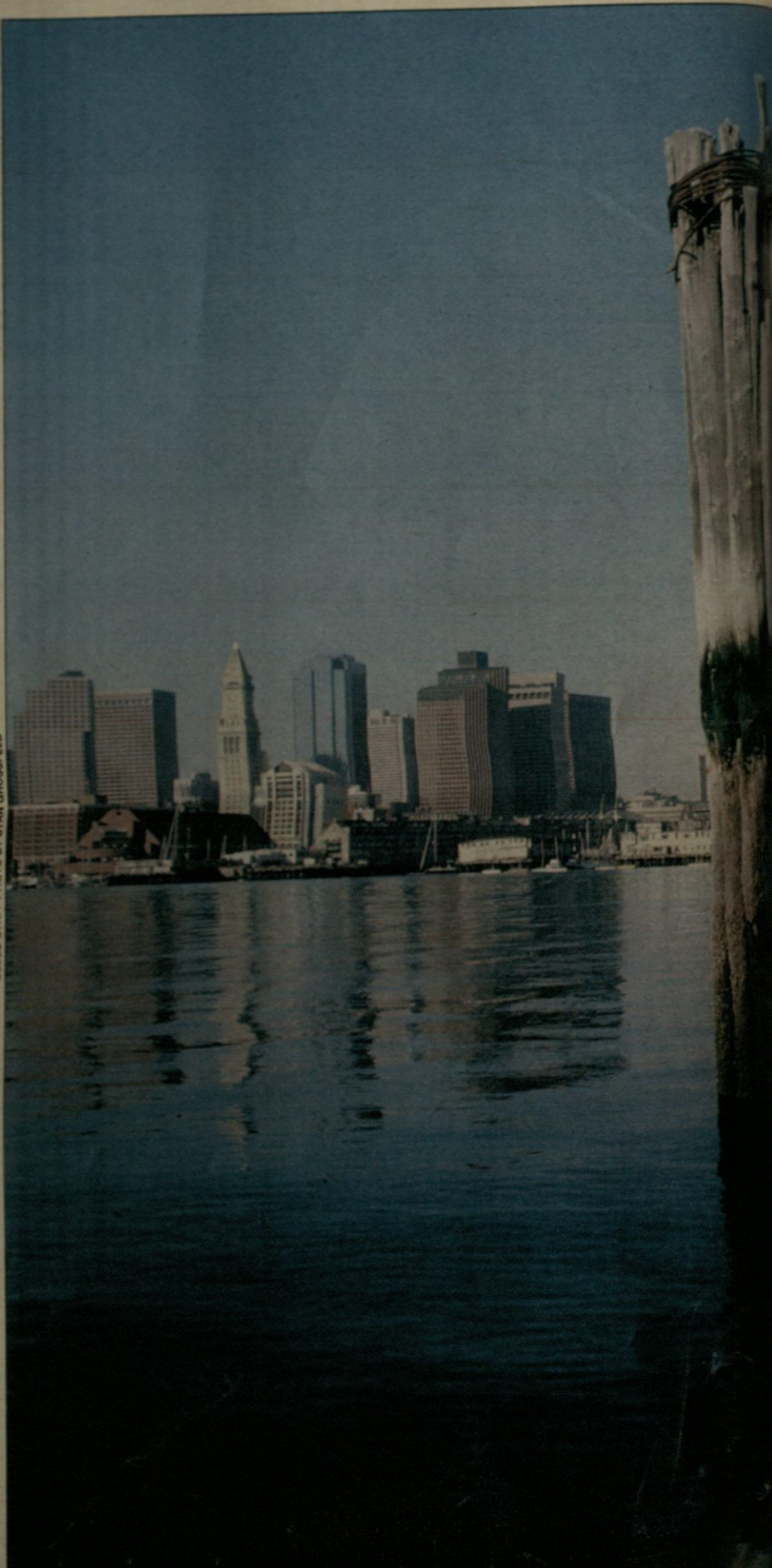


LEFT: BOY CLINGS TO VIEWER ON DECK OF NANTASKET CRUISE BOAT.

ABOVE: ONE OF THE SAILBOATS FOR RENT ALONG BOSTON'S HARBOR-FRONT.

TOP: A DRY BULK CARRIER IS MOORED IN THE HARBOR.

RIGHT: BARNACLES AND ALGAE COVER ABANDONED PIERS IN EAST BOSTON.



GLOBE STAFF PHOTO BY STAN GROSSFELD



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GLOBE STAFF PHOTO BY DAVID RYAN

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COVER PHOTO:
 Stan Grossfeld
*Boston Light on Little
 Brewster Island:*

► PERSPECTIVE

FOR MORE THAN THREE CENTURIES, BOSTON'S WATERFRONT WAS IMPORTANT FOR THE GOODS BOUGHT, SOLD, AND SHIPPED THERE. BUT TODAY, NOW HOMES, OFFICES, AND PARKS ARE THE LEADING ITEMS TRADED.



LONG WHARF, CIRCA 1910, SHOWS A BOSTON ELEVATED STATION, POSSIBLY STATE STREET. VIEW IS FROM EITHER THE GRAIN EXCHANGE BUILDING OR CUSTOM HOUSE.

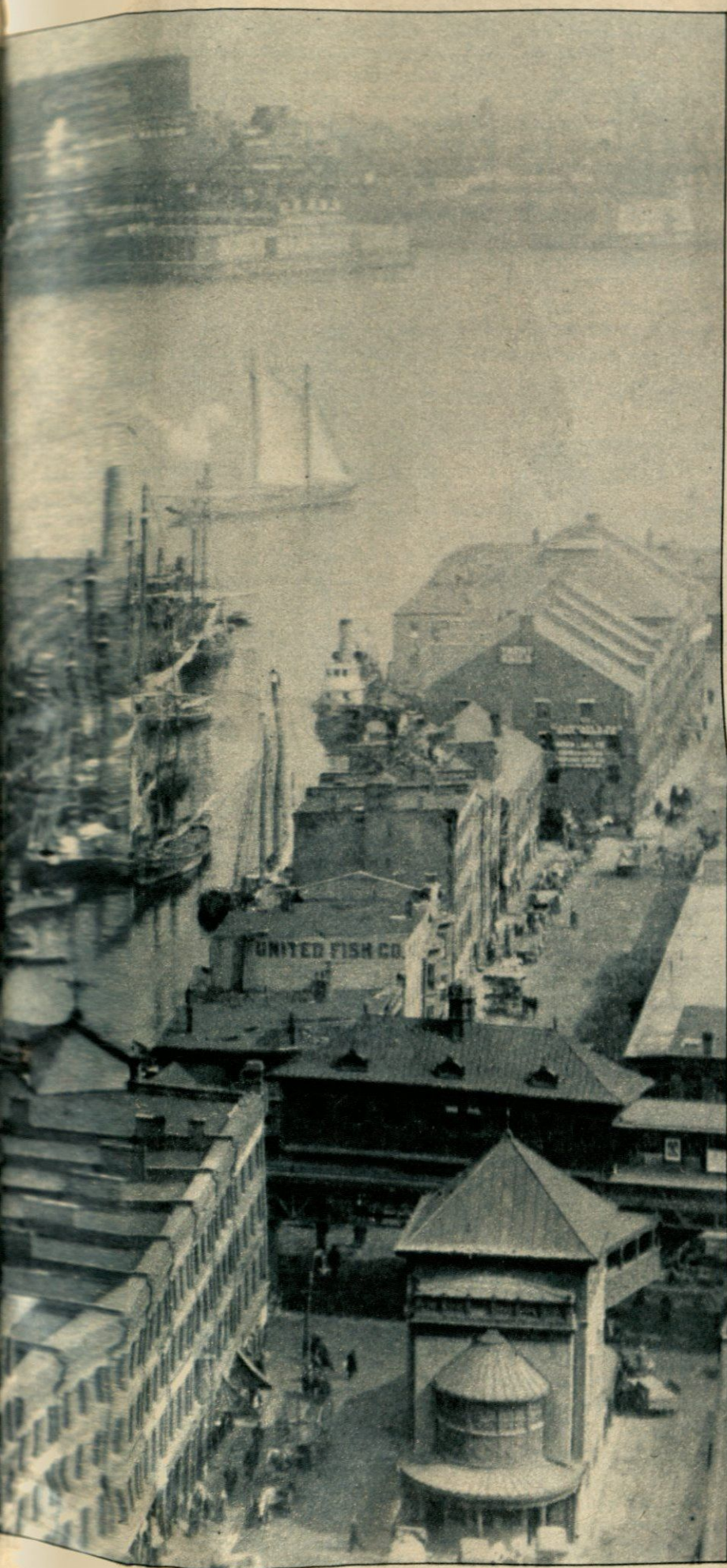


PHOTO COURTESY OF THE BOSTONIAN SOCIETY/OLD STATE HOUSE

Commerce, community, and condos

By Charles A. Radin

Mayor John F. Collins trained his sights on Boston Harbor in the 1960s from the deck of the battleship Urban Renewal. With the business community at his side, he would start to revitalize the

nearly lifeless waterfront with high-rises.

Next came Mayor Kevin H. White, cruising into harbor issues, conceptually, on a sleek, exclusive powerboat. A pulse was returning to Boston's downtown, and he would entice the daytime occupants of new office buildings to make their homes in posh condominiums on the old piers.

Now comes Mayor Raymond L. Flynn on a sailboat, riding winds of public demand for a clean, accessible waterfront and waves of investors seeking some of the hottest development action in the United States — the rebirth of Boston Harbor. He would have the harbor be all things to all people.

The imagined flagships of recent mayors reflect far more than the different perspectives and approaches they brought to reversing the general decline. Times, tastes and economic realities in the harbor changed fundamentally during their terms.

For more than 300 years, harbor issues were primarily issues of commerce, quantifiable in dollars made and tons shipped. Now, there is a change.

The harbor remains a crucial element in the evolving culture and character of Boston and eastern Massachusetts. This is the Bay State; the harbor is the heart of the bay, a place where founding families



"I grew up and depended upon this harbor for my livelihood. As a youngster I used the beaches. My father was a longshoreman, and I unloaded ships too. I want to see a renaissance in the harbor so that Boston will again be known around the world as a prosperous port."

**RAYMOND L. FLYNN,
MAYOR OF BOSTON**



established their fortunes, where in America's infancy great banks and businesses of the nation's future began to raise capital.

In the 1630s, the large, safe port was key to establishment of Puritan culture here. In 1790, *Columbia*, first American vessel to sail around the world, returned laden with tea, giving Boston a leading role in the China trade. From this, in turn, evolved Boston's role as birthplace of the clipper ships.

The city's eminence in trade began to ebb with the clippers' passing, and though this was offset for a time by the heyday of the fishing industry in the 1920s and 1930s, by the end of World War II every area of waterfront enterprise was in serious decline.

TODAY'S ISSUES INVOLVE THE HARBOR as a community resource — for recreation and residential space — as well as a place for the industries of the future. It has become a boon to the urban tax base and a place where the upper middle class flooding back into the city likes to make its homes.

Results of these changes — burgeoning private construction, redoubled government efforts at cleanup, broad and still-growing public interest — make the years just ahead a decisive period in the 300-year history of the harbor and a challenge for those who would control it.

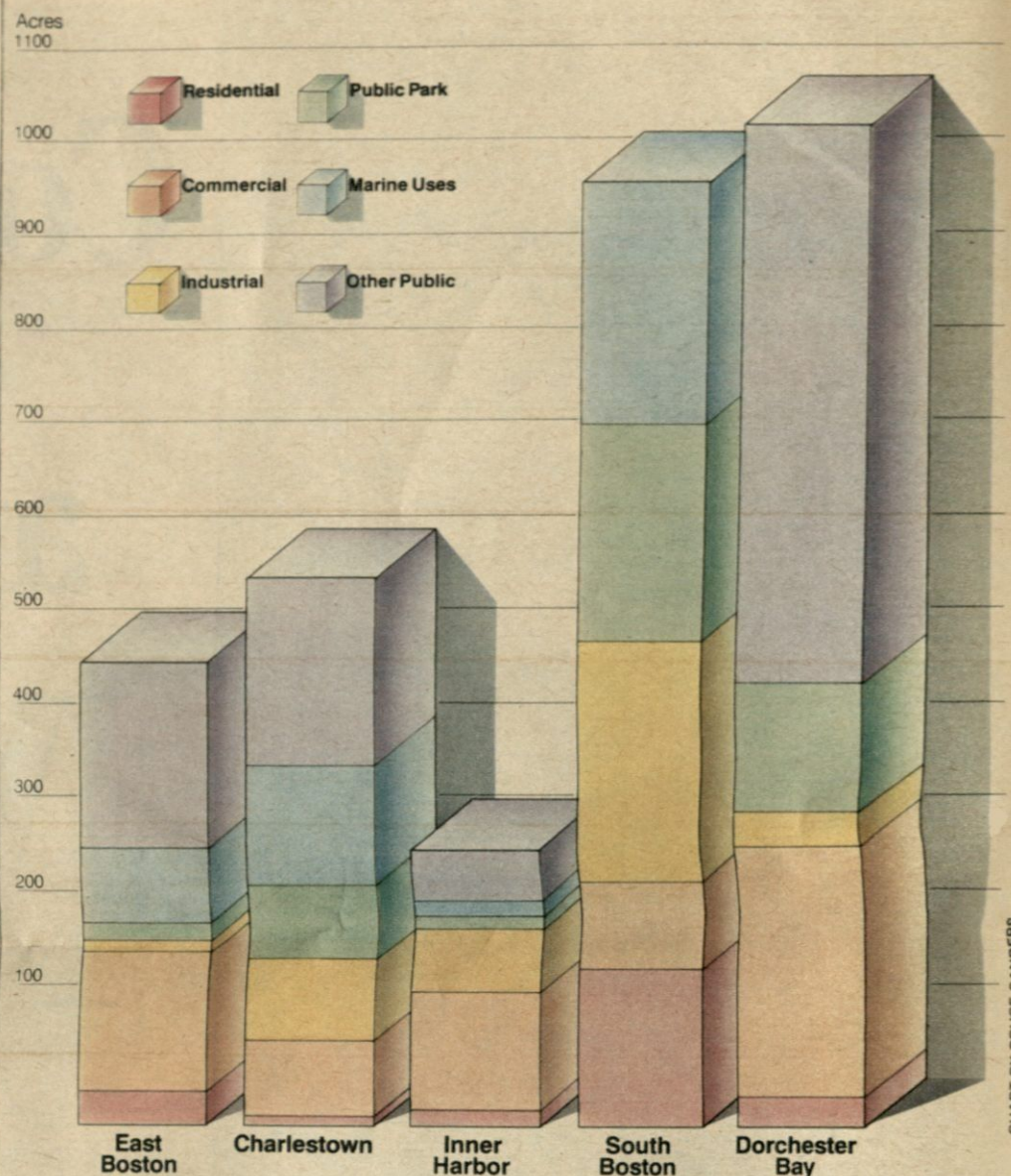
"We're not sitting on a boom," says Boston Redevelopment Authority director Stephen Coyle, who believes the term "boom" seriously understates the size and significance of what is happening in the red-hot waterfront economy. "It sometimes takes a regional economy four or five decades to build up to what's happening now. That's what it took here. It may be four or five decades again before you see the like of this phenomenon. This is a very unique period. It takes a little risk-taking attitude. It's epochal."

"This is a phenomenon that many factors have contributed to — positive and negative factors — and finally it's coming together, in the harbor and in the community. We either seize it, direct it in a way that it doesn't become burdensome for those people who are actually carrying out the enterprises, or we lose it."

Almost everyone has the same general dream for the harbor of the future: Clean water, revitalized commerce, greatly enhanced public access by land and sea, an excising of the rot that spread ever farther around the waterfront from Civil War days until the 1960s. Where questions arise is in the building of something real on the foundation of those dreams.

Which issues are top priority? Which can wait? Will a region and state that repeatedly have broken promises to curb the gross pollution of the harbor over the last 15 years redeem those pledges now? Will a city that hasn't been able to relocate the Charles Street jail in years of trying, even in the face of court orders, now prove able to move the much-larger Suffolk County House of Correction from Deer Island to clear the way politically for construction of a proper sewage treatment plant?

Waterfront land use in Harborpark communities: 1985



Source: Boston Redevelopment Authority

Will the myriad public and private interest groups and agencies involved increasingly squabble over physical and political turf, or put aside those struggles to deal with the largest, richest and possibly most fragile resource with which they have ever grappled?

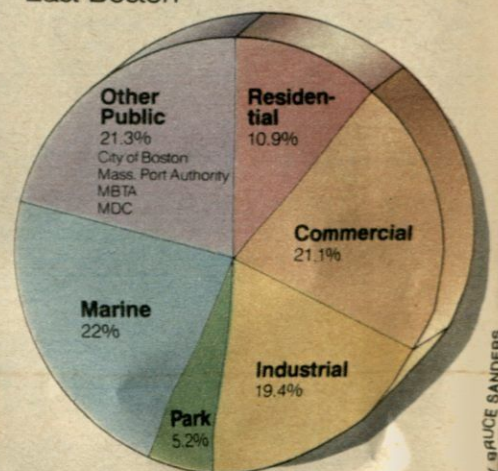
No one disputes that one turning point has been reached and passed: The harbor of the next few decades will be a vast improvement over that of the decades just past. Decisions of the next few years will determine how big an improvement, and for whom.

Mayor Flynn and Gov. Michael S. Dukakis have dreams of future public access to the harbor which are virtually identical. The mayor sees "Elderly walking, people with baby carriages walking," the governor sees "kids, strollers, grandparents."

Their ordering of other top priorities is significantly different, though this is not immediately apparent when they and the leading members of their administrations seem intent on having the harbor be everything to everyone.

Harborpark land use

From Conley Container Terminal in South Boston to Jeffries Point Park in East Boston*



*Not including Logan Int'l Airport, Bird Island Flats—Mass. Technology Center or Columbia Point housing project.
Source: Boston Redevelopment Authority

The governor's vision of the future harbor is very general: "A place that is clean, attractive, exciting — busy commercially and recreationally." The mayor's is more specific: A place that provides "balanced development, jobs . . . affordable housing."

Interviews with city and state officials and with private interests involved in harbor revitalization suggest that, while such statements are not contradictory, there is greater emphasis at the State House on making the waterfront accessible to minorities and on environmental issues ranging from sewage treatment to controlling traffic on land routes to the harbor, and more stress at City Hall on economic matters ranging from increasing property-tax revenues to creating blue-collar jobs and housing.

Not that Flynn is unaware of pollution. A lifelong South Boston resident, he says his commitment to a cleanup is based on the fact that "I've been diving into polluted water since I was four years old. My kids are doing it now . . ." Yet, this spring, he took a position against state-of-the-art sewage treatment, primarily for reasons of cost.

Nor is the Dukakis administration unaware of the importance of affordable housing and amenities on the waterfront. Is harbor planning "complete enough if it does not address economically fair access to the waterfront? . . . I guess the answer is no," says Alden S. Raine, whom the governor describes as "the quarterback" of harbor redevelopment. But, Raine adds, "it is hard to do . . . It is not as though we are rolling in resources."

City and state leaders all insist they support traditional waterfront enterprises such as shipping and fishing. But Raine says, "If at all possible, we want to maintain" surviving activities of this nature, and Flynn says he is absolutely committed to maintenance and will actively seek expansion. "Ray Flynn looks to the day when, through political decisions, economic impossibilities are made possible," Coyle says.

FROM THE DAYS OF THE CHINA trade and even earlier, private money and initiative have been dominant in this harbor. Now, as throughout Boston's history, private enterprise holds the lion's share of the waterfront, and the amount of available public money is paltry when compared with the private capital on tap.

So, affordability emerges as a key consideration of public policy in issues ranging from preservation of traditional maritime occupations to cleaning up pollution to making sure access to the refurbished waterfront extends to poor and lower middle class residents. Consider that:

► While government leaders are firmly committed to maintaining and stimulating shipping and related industries, BRA director Coyle estimates that using a parcel of land for commercial office space generally creates 20 times as many jobs as using that parcel for marine-industrial purposes.

► While there is virtually limitless demand for market-rate housing on the waterfront, funding for low-income housing is in

decline everywhere. For moderate-income units, such funding is nonexistent. The only low-income units currently planned are 400 at Columbia Point, all of which would be occupied by families already living in dilapidated buildings there, and 112 at the Charlestown Naval Shipyard, which are reserved for the elderly.

► While the city plans a continuous, eight-mile Harborwalk as the centerpiece of its public access effort, the entertainments and amenities along the central section of that route already are resolutely upscale. Even a frugal day on the downtown waterfront for a Boston family of four might require \$3.40 in subway fares, \$16 for a morning at the New England Aquarium, \$12 for lunch and \$14 for an afternoon at the Children's Museum. With a lemonade here and a balloon there, that's a 50-dollar day.

And even assuming some residents may be entertained sufficiently by a long walk around the harbor, city officials acknowledge that an investment of between \$70 million and \$100 million will be required to make the Harborwalk a reality and that Boston can't contribute much to the total.

"The city share should be about 10 percent," Coyle contends. "We think the feds and the state should do the rest, along with the private sector."

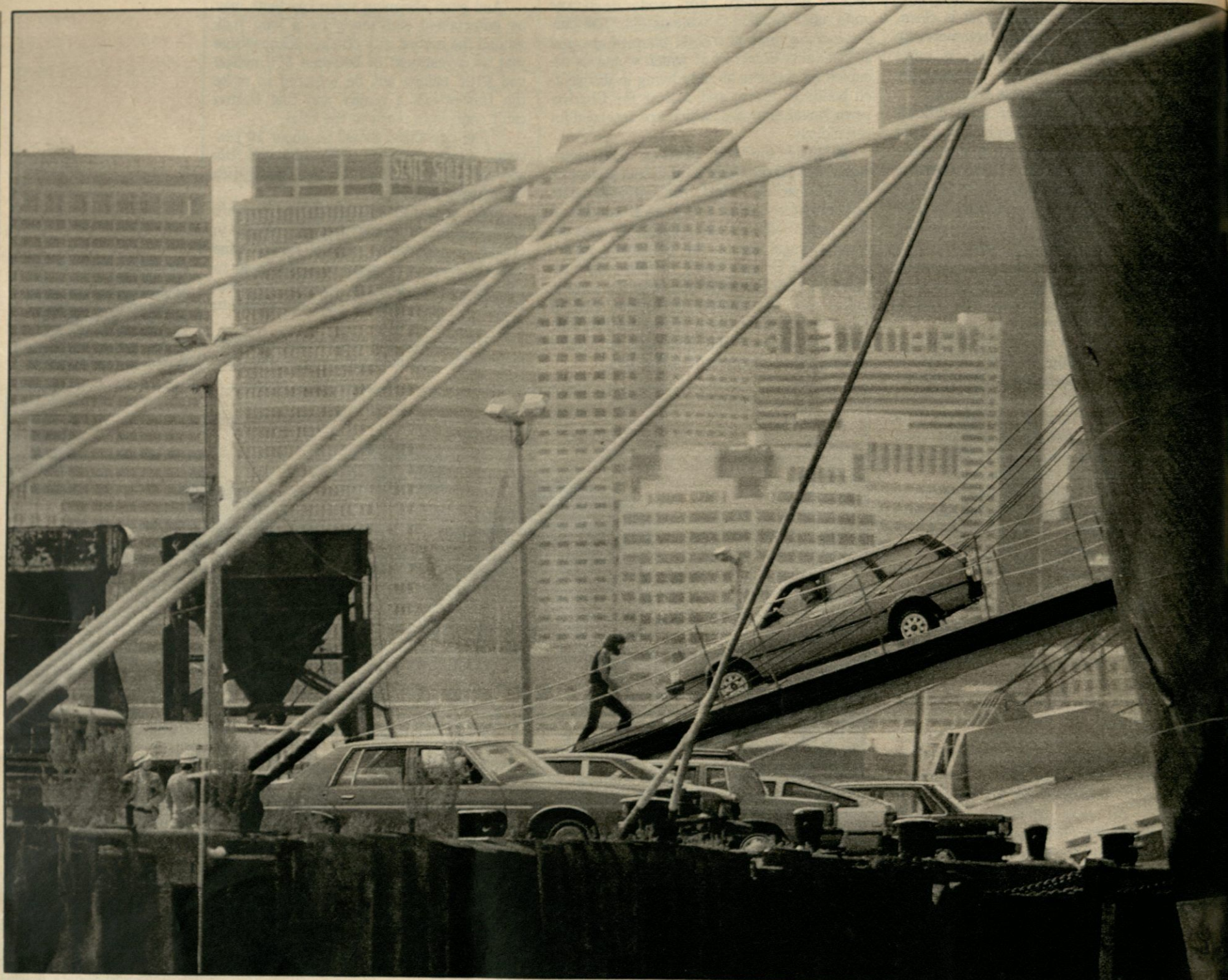
With regard to maintaining the harbor's traditional maritime activities, the officials in charge of waterfront renewal acknowledge that realizing their goals requires them to run against the grain of national economic trends and local history. They are willing to pay a price for that.

"Will the jobs and taxes being sacrificed to preserve the possibilities for a maritime

COLUMBIA POINT IS THE SITE OF THE ONLY LOW-INCOME HOUSING UNITS CURRENTLY PLANNED, AND WOULD BE OCCUPIED BY FAMILIES ALREADY LIVING IN DILAPIDATED HOUSING THERE.



GLOBE STAFF PHOTO BY DAVID RYAN



**JAPANESE CARS ARE UN-
LOADED AT DOCKS IN
THE INNER HARBOR.**

economy ever be recouped? Probably not," Coyle says. "But do societies have a right to make these political choices? Certainly they do. We haven't got a proof that shows this is a rational policy."

"In the final analysis, I think we can't escape the subjectivity of these tradeoffs," says Raine. "I think what we're saying, as a matter of state law and as a matter of public policy, is 'we want to do it' There are lots of places for condos and restaurants. There are not lots of places for lobstermen and shipyards You have to make thoughtful, essentially political . . . decisions."

South Boston now is an area of primary concern for virtually every kind of harbor revitalization activity. Beaches there are seen by the state as major portions of a new park which will run from Castle Island to the Ne-

ponset River, at the southern end of the city waterfront. Just west of Castle Island are the sites where the Massachusetts Port Authority believes the future of Boston's maritime industries lies. And on the Fort Point Channel, where South Boston borders downtown, the largest development project in Massachusetts history — the Fan Piers — is in the works. In this neighborhood, concepts of access, both for minorities and the middle class, will be tested.

"Things along the waterfront in most downtowns tend to be upscale things The Fan Piers, with this canal and all, will probably be an upscale paradise," says Raine. "If good water taxi service is developed, I can see people coming there from other parts of the waterfront. Will the people in South Boston use it? I don't know how to answer that."

Someone who says he does is City Councilor James M. Kelly (South Boston-South End). His perspective reflects an insularity that is to be found in various forms and degrees in many longtime residents of his own and other neighborhoods — South Dorchester, East Boston, Charlestown — as residents warily survey the possible results of government attempts to "spread" development from downtown and to increase general public access. The causes of their caution are as diverse as the heavy-handed efforts of early urban renewers and the rebellion against school desegregation. It is wariness of "improvements" offered by outsiders.

"I don't see people going down there," Kelly says of the Fan Piers project, whose developers plan to raise four or five hotel-commercial-residential buildings on a parcel where ships once transferred their goods to



GLOBE STAFF PHOTO BY JANET KNOTT

around the harbor could go out of control.

More visceral feelings come to the fore in Kelly's views on the Metropolitan District Commission's plans for a continuous shoreline park from the Neponset River, at the southeastern border of the city, to Castle Island. The park is a central element of the state's contribution to increased access to the harbor for city residents.

"I don't think that's all that necessary," Kelly says of the park. "There are too many people out there already. South Boston people can't get out to Castle Island now because there are too many tourists."

"Do I want to exclude some people? No. Do I want Castle Island to become a major tourist attraction? Absolutely no. And if anyone is going to suggest that this park is going to somehow bring people [from around the city] together — if that's what they're thinking, I just don't see it happening. I look on it as an effort to preserve the waterfront as we know it. We're talking about connecting white Savin Hill and white Neponset with white South Boston. The benefit is it will prevent construction of high-rise along beachfront areas."

THERE IS QUITE A DIFFERENT PERSPECTIVE in the office of James S. Hoyte, who, as secretary of the executive office of environmental affairs, oversees the agencies responsible for defining and safeguarding "the public interest" on the waterfront.

"We have an increasingly large minority community in Boston, and when you take a look at the harbor now it is an essentially white usage," Hoyte says. "In encouraging people to use it, we should encourage the general population that lives here, as well as the tourists . . ."

"All those beaches in South Boston, Dorchester and south ought to be general-use beaches, not strictly local beaches . . . There is agreement everywhere in the administration that a worthy goal is to increase access for everyone . . ."

Mayor Flynn says he emphasizes public access because "access to the harbor can link the city's neighborhoods together." But would he encourage blacks to use the South Boston beaches? "They do it now," he says. "You'll find an enormous number of minority people there now."

Raine says soberly: "In some way, I know, the state, city, and MDC are all going to be more than rhetorically committed to open public space. How we get them there may be painful. I hope not."

Two less-charged issues — pollution and parking — also have the potential to disrupt seriously what has so far been a virtual love-in among state, city, and community leaders involved in revitalizing the waterfront.

City and state officials tout the creation of the Massachusetts Water Resources Authority and a pledge by Flynn to move the Deer Island House of Correction as evidence that a harbor cleanup finally is in the works. Yet, they acknowledge, it will be 10 to 15 years before harbor water is significantly cleaner, and the United States Environmental Protection Agency seems increasingly

discontent. The soft line of the agency during the 1970s seems in retrospect to be a major reason that the cleanup was not launched long ago.

"As you look across the country, the reality is that major cities like New York and Baltimore are far closer to having their waters cleaned up than is Boston," says Michael R. Deland, head of the EPA in New England. Noting that federal courts played a major role in harbor cleanup in both those cities, he asserted: "I cannot help but conclude that if there had been court involvement here we would be much farther along."

In a move roundly criticized by city and state officials, who argue that the new state water authority should be allowed time to clean up the harbor voluntarily, the EPA has secured a court ruling which could lead to cleanup occurring under the direction of a federal judge. It is "critical that the harbor be something more than a cesspool, and right now it is fast becoming a cesspool," Deland says. "Scientists can't say when the breakpoint will come, but common sense says it will come sooner rather than later."

That breaking points are reached and passed is a fact. While the Baltimore cleanup has proceeded rapidly in recent years, the court order which started that effort came too late for the bottom-dwelling organisms of Baltimore Harbor, of which all but a few worms died.

Parking also is emerging as a divisive issue, in this case between the city and the state.

As is apparent almost daily, the streets and expressways of downtown Boston already are taxed beyond capacity. Coyle of the BRA says 10,000 new spaces are needed just to service existing needs and create the possibility of moving parked cars off the streets, and thousands more will be needed as the public attractions of the revitalized harbor take shape.

But there is a prohibition against building new parking spaces in the central city as a result of the federal Clean Air Act. In addition, Fred Salvucci, Massachusetts secretary of transportation, is firmly opposed to creation of more parking, on the ground that more spaces would encourage more people to drive. "It certainly appears to me that there is no capacity for any significant increase," Salvucci says.

"You have to put aside the utopian view of mass transit," Coyle contends. "With more internal parking, we could clear some of this" congestion from the streets. "When are we going to look at what people really do and make that the basis for planning? Cars have a place too, Freddie. They're out there, they're everywhere, they're on the rise. Let's acknowledge that."

Parking aside, the pressure from an ever-growing volume of traffic which threatens to choke the downtown area seems certain to be doubly problematical in waterfront areas, where there are few streets larger than one lane each way. Salvucci says that "the only solution" is the long-sought, but still not approved, plan to build a third harbor tunnel



"We have an increasingly large minority community in Boston, and when you take a look at the harbor now it is an essentially white usage."

**JAMES S. HOYTE,
SECRETARY, STATE
EXECUTIVE OFFICE
OF ENVIRONMENTAL
AFFAIRS**



a now-defunct railroad. The site, now used as a parking lot, is owned by Anthony Athanas and abuts his landmark waterfront restaurant, Anthony's Pier 4.

While he supports the project and especially praises Athanas's openness in dealing with the South Boston community, Kelly says that the project "is not part of the neighborhood. No."

In this sentiment, Kelly could as easily be a Townie explaining why longtime Charlestown residents haven't gravitated en masse to the public amenities at the former naval shipyard there, or a Dorchesterite talking about why condos don't belong in the tiny neighborhood at Port Norfolk. He doesn't oppose the \$700-million project — by far the largest development project in Massachusetts history — but speaks of neighborhood residents' concern that redevelopment

and to widen and depress the Central Artery. Without the tunnel, he asserts, traffic poses a serious threat to the health of the regional economy — an economy whose major area of expansion, at present, is on and near the harbor. "There is no contingency plan," he warns.

There is no contingency plan if the city fails to relocate the Deer Island House of Correction, either. That troubles EPA administrator Deland, who notes that plans for the largest single component of the harbor cleanup, a new \$1-billion-plus sewage treatment plant on Deer Island, is wholly contingent on removal of the prison.

No one ever expected the multibillion-dollar revitalization of the harbor to be care-free, but all of these situations have the potential to be seriously disruptive. Should anything be done by way of a master plan or a formalized central planning process to avoid future troubles?

Officials involved are unanimous in their disinterest in creating any sort of agency for such a purpose. Even Deland, who among the leading officials is most concerned that the promise of the present enthusiastic support for harbor renewal may not be realized, foresees "no need to create another layer of bureaucracy."

Yet one does not have to go back far in waterfront history to find results of informally coordinated, parcel-by-parcel renewal efforts that don't look very good today.

Edward J. Logue, director of the Boston Redevelopment Authority in the Collins administration, recalls that "there were supposed to be three or four Harbor Towers" — isolated, high-rise residential buildings on India Wharf in the heart of the inner harbor. "Considering the outcome, I'm just as glad there are only two.

"I trusted I.M. Pei [the renowned architect who designed the project] on that one. I asked him [afterwards] what happened. He says he just wasn't that interested in housing then."

From the big picture windows and airy breezeways of the city's chronic disease hospital on Long Island in the far south of the harbor, and from the decrepit piers of East Boston, the view of the city is much different than that downtown, in Charlestown or in South Boston — the areas where development pressures are intense and where discussions now focus on the height of a specific hotel tower here or the size of a specific dock there.

From Long Island and East Boston, the views are more expansive. All around is space as yet unclaimed by office buildings or the yachts of the wealthy, land to which the growth companies and builders of the future will turn when the redevelopment of the close-in areas is complete.

The challenges of inner-harbor revitalization look no less significant from the outer edges. Rather, the long views serve as reminders that there is much action to come, and that the choices are going to get harder and more complex as the amount of open land and water dwindles.

▶ ACCESS

CITY RESIDENTS
LOST TOUCH
WITH THEIR
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NOW, AS
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WATERFRONT
SHOULD BE.



GLOBE STAFF PHOTO BY STAN GROSSFELD

Neighborhoods "want it all"

By Jonathan Kaufman

Skyscrapers, shrouded in fog, sit silently across the water from East Boston. Seagulls roll lazily through the sky. Sun breaks through the clouds, and glints off the water. Mary Ellen Welch looks out at the view from the living room of a friend.

"The colonists had the right idea with the Common," she says. "You need open space to live."

THE SAILING VESSELS *COURAGEOUS* and *Defender*, berthed in Charlestown for the summer, head out for a sail. Stephen Spinetto passes by, pausing at a small coffee shop before sitting down on a bench on the public pier.

"It's beautiful out here," he says. "My wife and I used to come here every morning for breakfast." He gestures to small day-fishing boats and commercial pleasure boats sitting idle in the water, a contrast to the sleek, luxurious racing ships, their owners on the dock, chatting over coffee. "But these guys are dying because no one knows they're out here."

IN THE BRIEF WALKING TOUR OF port Norfolk, a slice of Dorchester wedged between the Southeast Expressway and the Neponset River, Jim Maloney points out where the state plans to build a new waterfront park and private developers a new marina. "If your wife is getting to you, it'll be a place to sit and look out at the water," he says with a smile.

His mood turns dark as he comes to the part of the waterfront that will be turned over to luxury condominiums, cutting off his view of the water from his back yard. "You can drive five minutes anywhere — to Weymouth, to Quincy — and there are acres and acres of land to build on. But they want to build here, on the waterfront, the only waterfront we have."

BOSTON'S HARBOR AND BOSTON'S neighborhoods, long estranged, are drifting back together.

Along City Square in Charlestown, green and white signs announce creation of a new Harborpark that will run from the Charlestown Navy Yard, through the North End and downtown area, over to Dorchester's Teanean Beach and beyond. City officials talk of building a carousel on the water to bring people from the neighborhoods downtown, of

ABOVE: AS SEEN FROM EAST BOSTON, FOG CLINGS TO THE SHOULDERS OF TALL BUILDINGS NEAR BOSTON WATERFRONT.

FACING PAGE: TWO MEN FISH FROM REMNANTS OF ABANDONED PIER NEAR SUMMER STREET, SOUTH BOSTON.



GLOBE STAFF PHOTO BY DAVID RYAN

THE BOSTON GLOBE, NOVEMBER 3, 1985



GLOBE STAFF PHOTO BY THOMAS LANDERS



"We need breathing space. We're a congested community. . . . We want a space that's open, not a place that you can only walk one foot in front of the other."

**MARY ELLEN WELCH,
EAST BOSTON
ACTIVIST**

bike and jogging paths that will run more than eight miles along the water.

But between the city's vision of the harbor and the vision of the neighborhoods, a wide gulf is emerging.

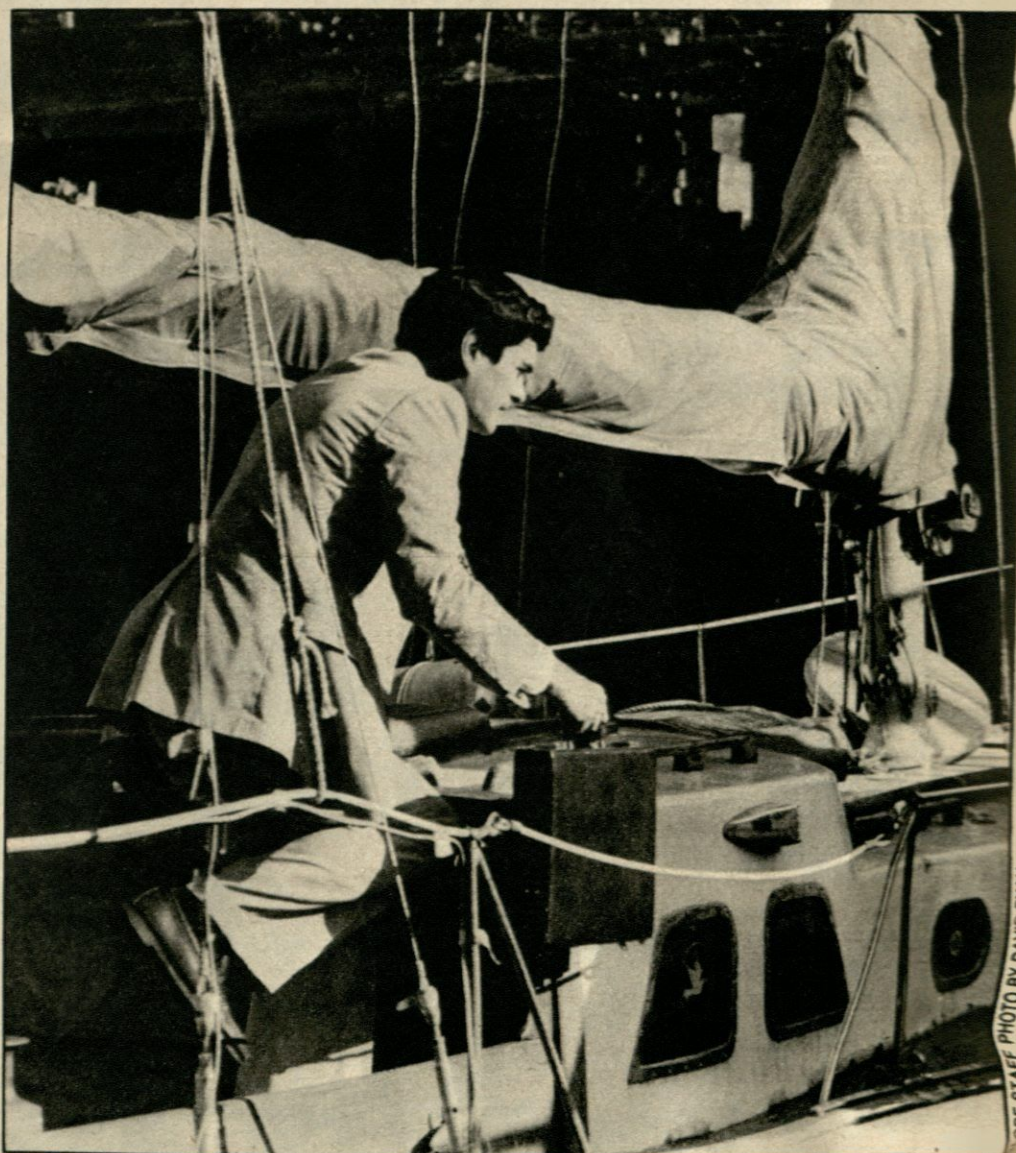
While city officials and developers talk about architecturally distinctive waterfront "signature buildings" and luxury condominiums, neighborhood groups talk of open space and parks.

While city officials talk about using the waterfront to connect the city and open up the neighborhoods, residents of communities like South Boston talk of "protecting" their beaches and discouraging traffic and visitors.

While city officials talk of a "mixed-use" waterfront that mingles housing, boutiques, parks, marinas, and walkways, neighborhood groups are digging in their heels, and setting their sights on the last undeveloped space in Boston.

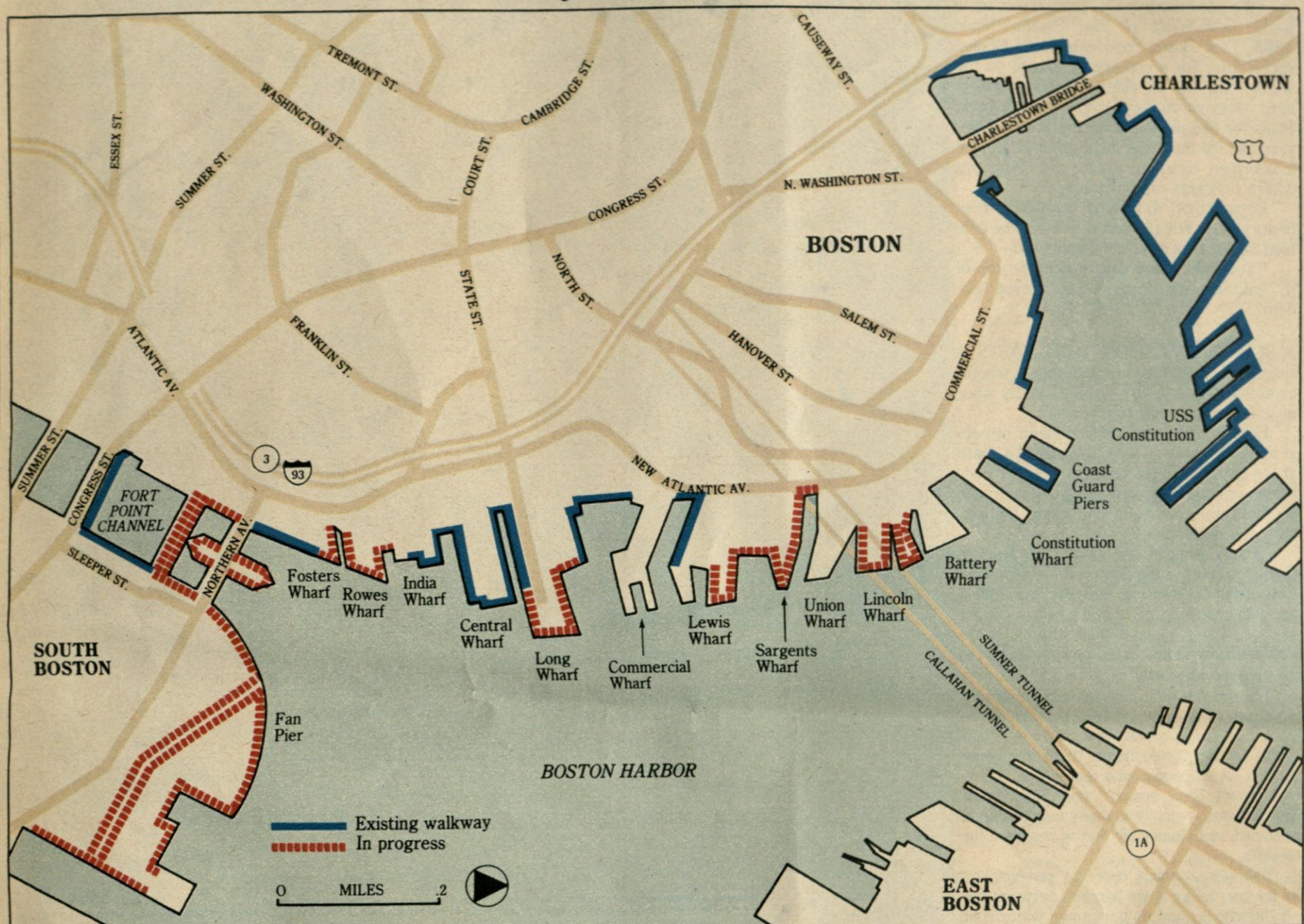
Before the Second World War, the harbor was an integral part of the life of many Boston neighborhoods. The Charlestown Navy Yard employed hundreds of Charlestown workers. Ferries plied the harbor during the 1930s, offering a ride and a fresh sea breeze on a hot summer night for a nickel. In Dorchester's Port Norfolk, residents could slide a boat from their cellar down into the water at high tide. In the North End, Emilie Pugliano, a lifelong resident, remembers leaping off the iron railing of the Women's Pier and swimming over to Charlestown.

Today, only South Boston, with its winding beaches, jogging paths, and L Street Bathhouse, retains that sense of being tied to the life of the waterfront. After the Charlestown Navy Yard closed in 1973, it lay dormant for a while before its sweeping views of



GLOBE STAFF PHOTO BY DAVID RYAN

Public walkway along Boston harbor



FACING PAGE, TOP: LOCATED IN THE NEPONSET SECTION OF DORCHESTER, PORT NORFOLK (IN FOREGROUND) IS THE SITE CHOSEN FOR A NEW PARK.

FACING PAGE, LEFT: MARK TEAGAN, WHO LIVES ABOARD HIS SAILBOAT DOCKED IN THE NORTH END, HEADS FOR WORK IN THE MORNING.

the downtown area turned it into an enclave for the well-to-do, with construction of waterfront condominiums that today sell for \$300,000. Office buildings and condominiums cut off physical and visual access to the waterfront in the North End and along other parts of the harbor. The beach along Port Norfolk is now taken up by a paper company, warehouses, and a private yacht club.

"You can throw stones from our houses to the Neponset River, but there's no way to get there unless you belong to a yacht club or work for Suffolk Services [the paper company]," said Maloney.

The desire to reconnect the harbor to the neighborhoods is at the root of the city's Harborpark proposal. Under Harborpark, the city will control development along the waterfront, beginning with the so-called Inner Harbor, running from Logan International Airport in East Boston to Castle Island in South Boston. Plans call for an eight-mile pedestrian walkway, known as Harborwalk, that will snake in and around the Charles-

town Navy Yard, the downtown waterfront, and the new Fan Piers development on the Fort Point Channel, connecting pedestrians to shops, open space, housing, office buildings, and water taxi service.

In discussing the potential importance of an eight-mile Harborwalk for Boston, planners at the Boston Redevelopment Authority invoke the "Emerald Necklace" designed by Frederick Law Olmstead, the collection of parks that includes Jamaica Pond and Franklin Park.

But Olmstead never had to deal with community groups or with the political and racial realities of Boston in the 1980s. Between the grand vision of the harbor outlined by the city and the gritty reality, say residents and activists, lie several questions of access — physical, psychological, and racial.

Physical access to the waterfront is the subject of most concern to neighborhood residents.

"We're being walled in," said Robert Cucchiella, a restaurant owner and landlord

in the North End. From outside his restaurant on Commercial Street, Cucchiella can see a sliver of the harbor across the street — through an alleyway between buildings of the Coast Guard station. With land on the waterfront going for record-breaking prices, residents worry that high-rise buildings, which cut off harbor views and harbor walks, can only increase.

Referring to the recent announcement that the Bay State Lobster Company's landmark North End site is up for sale, Cucchiella said, "No one's going to pay forty-two million dollars for that unless they can build to the sky."

City officials say redevelopment of the harbor is necessary to power the city's future growth. A report for the Boston Redevelopment Authority estimates development along the harbor can produce one-third of Boston's growth over the next five years, creating 8,000 new apartments for 12,000 new residents.

But such plans bump up against neighbor-

hood complaints that Boston is already congested enough and that the city needs more open space.

"We need some green, some trees, some land," said Welch of East Boston. Since 1968, East Boston residents have lobbied successfully for a community school on the waterfront, for an elderly housing project with water views, for a large, open-air park. Plans for five piers next to the Boston Shipyard call for moorings for a group of Boston lobstermen, including a store and restaurant where residents can buy lobster.

Beyond that, Welch said, community residents worry: Will the rest of the land be gobbled up for expensive condominiums?

"You fight every day to keep on top of it," said Blossom Hoag, an East Boston resident.

A SECOND QUESTION THAT CASTS A shadow on the future of the harbor is whether developers and city planners really want neighborhood people to enjoy it.

For several years, condominium owners at the Charlestown Navy Yard placed a guard at the entrance to the public street that leads inside, effectively discouraging neighborhood people from coming in and using the city park and public piers.

"I was stopped one day," said Stephen Coyle, director of the Boston Redevelopment Authority. "I drove in, the guy says 'What are you doing here?' I said, 'You work for me.' ... I said, geez, if they stop me at the gate with my family, what do they do to the people who live here?"

The guard was subsequently removed, but fears of such psychological barriers remain. "I worry about how [as] you open things up for development, there are going to be a lot of people who feel it [the waterfront] isn't their space," said Spinetto of Charlestown — much as many neighborhood residents feel Quincy Market is reserved for tourists.

Baltimore, which recently redeveloped its harbor, broke down barriers between the neighborhoods and its downtown waterfront development by inviting every neighborhood to hold its ethnic festival along the water.

"I was down in Baltimore recently and there were a lot more people there at [their] Harborplace who are clearly from the neighborhoods than are at Quincy Market," said Spinetto. "There are certainly a lot more minorities." Boston must emphasize the harbor as a place for citywide activities — fireworks, parades, the proposed annual Harborpark day — in order to draw neighborhood people to the waterfront, neighborhood activists contend.

THE QUESTION OF MINORITY ACCESS remains one of the most difficult issues surrounding waterfront use. Most of the neighborhoods bordering the water — Charlestown, the North End, South Boston, southern Dorchester — have been scenes of racial confrontations and incidents in the past. James Hoyte, secretary of the Executive Office of Environmental Affairs, complains that in a city with increasing minority popula-





tions, harbor use now is "essentially white."

City planners like Coyle maintain that the very design of Harborwalk, with its jogging paths and walkways joining South Boston to Columbia Point to Dorchester, and Charlestown to the North End to the downtown area, will bring the city together and encourage blacks and whites to mingle.

Coyle invokes the dreams of earlier urban planners like Olmstead, who believed in designing the city with an eye toward "communicativeness."

"Now, what was communicativeness?" said Coyle. "It was the notion that, instead of coming in the front door with reform, and saying, 'You must do this, you should do that,' coming in the back door."

"Plan and design the city in such a way that people will come together. It is not the reformer's job to say, 'Your day must include two hours of talking to your neighbors.' It is to say, 'There will be a great esplanade by the river. It will be beautiful and you will enjoy it. And whether you are a Catholic, a Protestant, a Jew, a black, a brown or a white, a landlord or a tenant, a manufacturer or a laborer, you will take your family out here on a Sunday afternoon and you will behave in a way that doesn't encourage confrontation or conflict.'"

But representatives of South Boston's largest neighborhood group, while denying they are motivated by bigotry, oppose any efforts to encourage people from other neighborhoods to use Carson Beach or Castle Island, areas which blacks have traditionally avoided.

"We can't stand any more traffic," said Nancy Yotts, head of the South Boston Neighborhood Association, which recently turned out 1,000 people for a meeting on the future of the harbor. "We can't stand any more congestion." Already, Yotts and others say Castle Island is so crowded on a warm weekend that South Boston residents find it unpleasant to go there.

"Communicativeness" bumps up against community — the determination of many people in South Boston to preserve their waterfront for their neighborhood.

The potential of the harbor has stirred deep feelings in the neighborhoods. Cut off from the water for so long, residents are showing a fierce possessiveness toward the narrow strips of land that offer visual and physical access to the harbor.

Emilie Pugliano remembers the sandy beach that used to run along Commercial Street in the North End opposite the Charlestown Navy Yard. She played on that beach as a little girl. Today it is paved over, home to a community pool and some playing fields.

"I'll make my stand there," she said. "The day is going to come when you can swim in the harbor again. I'm not giving up that area because someday that will be our beach again."

Her vision of Boston's waterfront and her idea of the role of the neighborhoods in its development is simple.

"We want it all," she said.

FIREWORKS DISPLAY OVER THE CITY, AS VIEWED FROM EAST BOSTON.

GLOBE STAFF PHOTO BY STAN GROSSFELD

► DEVELOPMENT

DEMAND FOR SPACE TO BUILD UPPER-CLASS CONDOS AND OFFICE-RETAIL SPACE IS ENORMOUS. BUT IS IT STRONG ENOUGH TO PERSUADE DEVELOPERS TO PROVIDE FOR MIXED-INCOME HOUSING AND RETAIN THE SMELL OF FISH?

Bending



AERIAL VIEW OF BOSTON HARBOR AND DOWNTOWN; EMPTY AREA TO LEFT OF HARBOR TOWERS, AT THE MOUTH OF FORT POINT CHANNEL, IS ROWS WHARF DEVELOPMENT AREA.

GLOBE STAFF PHOTO BY TED DULLY

builders to public purposes

By John Powers

When John Hancock owned it and fictional apprentice Johnny Tremain worked along it, Lewis Wharf in the North End was crowded with sail lofts,

tradesmen's shops and counting houses. In the 19th century, clipper ships left from there for California, Russia and China, and harbor pilots used it as a headquarters.

Now, a one-bedroom condominium with fireplace, sauna and Jacuzzi on Lewis Wharf costs \$375,000, and a Roche Bobois furniture store shares a building with the Boston Shipping Association, which fears that its members may soon be crowded off the waterfront by wine libraries, hair studios, and public parks.

"What worries me," says Lorraine Downey, chairwoman of the city's Harborpark Advisory Committee, "is what I call the pink-and-greening of the waterfront."

Beyond the rhetoric of the cargo-or-es-cargot argument — the debate over whether Boston must choose between sagging maritime industry and burgeoning commercial development — lies a more pressing challenge. How does the city apportion the precious downtown waterfront space in areas where the day of maritime industry is clearly past?

Apartment-dwellers, corporate firms, lobstermen, hotelkeepers, shippers, strollers, restaurateurs, and excursion boat operators all want a piece of it. The city's planners say there is room there for all.

"We haven't reached the point yet where it's either-or," says Boston Redevelopment Authority director Stephen Coyle. "There are many uses for the waterfront and many ways to accommodate them. It's like a water hole. Lots of different animals go there. It's not just the lions and zebras."

The challenge is to keep the lions from crowding out everybody else. With commercial developers lining up to build on every acre of land from the rotting East Boston docks to the South Boston Fan Piers, the temptation for City Hall to favor them and their larger tax payments and job rolls is strong.

Some harbor planners feel that, purely economic considerations aside, the waning of blue-collar enterprises poses practical and aesthetic dangers to the waterfront.

"You can sterilize your waterfront if you're not careful about keeping the things there that people come down to see," says Downey. "If you're going to spend \$300,000 for a condo on a wharf, you'd better be prepared for the odor of fish. If you can't accept that, you don't belong there."

The state and city have been giving that same message to developers, backed by newly clarified Chapter 91 of the General Laws — the tidelands licensing statute — which stipulates that each project must include a water-dependent use and a public benefit.

"The law is so strong that there really are no permitted uses unless there is water dependency," says Anthony Pangaro, a partner in Macomber Development Associates, developers of the \$130-million Massachusetts Technology Center on the East Boston-Logan Airport waterfront. "Chapter 91 makes the state de facto planners. So the question is, do they know what they want to do?"

Though most new planning guidelines are still in the talking stages, the state and city do know one thing: nobody will be allowed to create a building which turns its back to the sea and walls the public out.

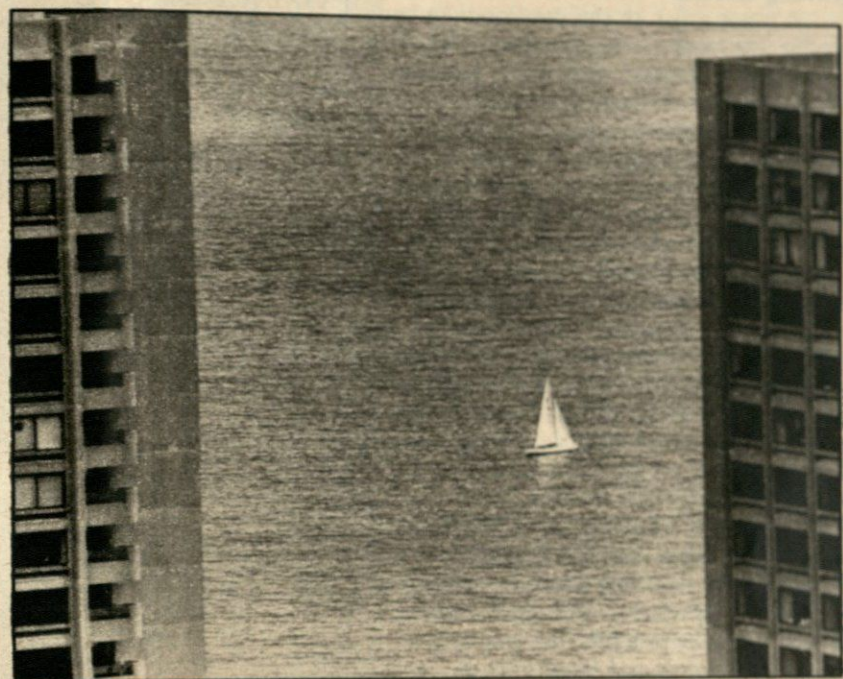
"Public access is like motherhood," said Alden S. Raine, the governor's development director. "You have to guarantee it, even if there's an economic cost to it."

THE CITY, WHICH IS REZONING THE waterfront through its ambitious Harborpark plan, promises to guarantee such public access with a continuous eight-mile walkway. But the issue goes beyond brick promenades, to height limits, building design, and parking concerns.

"There'll be a demand that the new zoning laws really have teeth," predicts Thomas Ennen, executive director of the Boston Harbor Associates. "And that's going to be painful because there are some people who went out and bought waterfront property under the assumption that there wouldn't be any zoning and that they could build anything they wanted there."

But the day when Boston mayors virtually begged developers to build on the water has passed. With more than \$1 billion invested along the downtown wharves in the last decade and even more than that on the planning boards for the next few years, the city can make unprecedented demands upon developers in exchange for the privilege of building along the water.

What City Hall wants from developers these days is \$100 million in public amenities



like parks, walkways, marinas, ferry terminals, and winter gardens.

For example, two-thirds of the embryonic 665,000-square-foot complex at Rows Wharf will be open to the public, and the site will include a ferry terminal and pavilion, a dinghy dock, and water taxi service to Logan Airport.

Those extras have made the project decidedly more costly, but developer Edwin Sidman sees corresponding benefits. "I have an enlightened self-interest in seeing a successful water taxi between Rows Wharf and Logan," he says. "Our hotel people will see it as a convenience. Our office people will say it's a fantastic amenity and our condo people will love it."

Every other proposed waterfront project — from Lincoln Wharf to the Fan Piers — will have to include similar public facilities, and the public will have considerable say in their form and scope. If a developer wants to build in Boston, he now has to accept that.

"THERE IS A NEW ATTITUDE AND style toward public participation," says Carpenter Properties head Richard Friedman, one of the principals in the Fan Piers project. "Developers were once resentful and fearful. Once, you only sat down with the community after they sued you. Now you know as a matter of course that you're going to do it from the beginning."

The amenities question grows complicated, though, when it comes to housing. The city and state both want at least 30 percent

▼
"This is not going to be (San Francisco's) Marin County, where half the work force comes down to the bay with martinis and sails off into the ozone."

STEPHEN COYLE,
DIRECTOR, BOSTON
REDEVELOPMENT
AUTHORITY

SAILBOAT APPEARS BETWEEN THE HARBOR TOWERS, IN PHOTO TAKEN FROM A HIGH LOCATION AT 60 STATE STREET.

of new waterfront units to be set aside for low- and moderate-income residents. That's considerably more demanding than asking for a carousel.

Affordable housing is the centerpiece of the Flynn administration's push to give the public a permanent piece of the waterfront. Yet in a time when the federal government is phasing out of the housing business, getting developers to build mixed-income units is growing difficult.

"It's not a risk to the developer to have low-income units," Raine says. "They're paid for [by federal and state subsidies]. What's difficult is getting moderate-income units without killing the profitability. Even with a lot of leverage over developers in a superheated environment, you shouldn't have illusions about what the market will bear."

Building mixed-income housing in which all economic brackets are represented requires special expertise, as well as the patience to spend years arranging for government subsidies. The proposed transformation of Dorchester's failed Columbia Point projects to a mixed-income complex called Harbor Point is a prime example.

THOUGH A DEVELOPER — CORCORAN, Mullins, Jennison Inc. of Quincy — has signed on and financing has been arranged, the process has already consumed more than a decade, and not a brick has been laid.

Housing is only one issue, though, in the larger debate over just what constitutes public benefits. "I don't think they've decided yet what that term means," said Carl Koch, president of the Boston Educational Marine Exchange. "Originally, it meant public commercial interests, not public recreation. Now, it seems to mean sitting down and looking at the sea. The problem is, we might wind up with a lot of benches and nothing to look at."

The possibility of winding up with a toy harbor, lined with upscale shops and cafes, is real. "Look at those idiotic bollards at Waterfront Park, these handsome-looking, completely useless amenities," says Koch. "Meanwhile, there's no ramp in downtown Boston where you can get a small boat into the water."

Planners promise that such deficiencies will be rectified as the harbor renaissance takes shape over the next decade. They are, after all, rebuilding a waterfront that took a century to decay, and they are doing it mostly by feel.

"It's virgin territory to a point," says Raine. "We're all new at this. When you confront a lot of these questions, it's the first time anybody's looked at them."

Yet public officials have also become aware of how easily the long view can be blocked by short-term concerns. "You can do the model master plan of all time and still wind up with a waterfront for the rich if you don't think about it," concedes Raine. "The whole thing can't be a restaurant and a condo. If you wind up without a port, you've made a big mistake along the way."

A pile of permits is required

CITY AND STATE OFFICIALS SAY PUBLIC REVIEW OF HARBOR PROJECTS SHOULD BE SIMPLIFIED.



CONSTRUCTION WORK IN PROGRESS ON THE ROWS WHARF COMPLEX.



GLOBE STAFF PHOTO BY DAVID RYAN

Before Boston developer Edwin Sidman began building his \$180-million Rowses Wharf complex along the city's downtown waterfront this year, he needed a dozen special federal, state, and city permits. Sidman's master plan will cover more than five acres with hotel rooms, luxury condominiums, office space, an underground garage, a public observatory, walkways, and a marina.

But even if he'd wanted to build a seafood shack, Sidman would have had to go through the same process, spending hundreds of hours in hearings, many of them redundant.

Sidman knew what the rules were before he started, and accepts them. "Nobody makes a developer do this," he said. "He does it of his own free will."

But city and state officials now agree that there has to be a better way to move waterfront projects through the approval process. "Permits should be concurrent, not consecutive," said Stephen Coyle, director of the Boston Redevelopment Authority. "Everybody has a right to do their review, but there should be a limited number of evidentiary hearings."

Over and above the normal approvals, a developer wanting to build along the water needs permits from the United States Army Corps of Engineers, the state's Department of Environmental Quality Engineering and Executive Office of Environmental Affairs and the city's Conservation Commission and harbormaster. Too often, critics say, each approval process takes place in a vacuum, with public agencies largely working apart.

"We have to have a Treaty of Paris," said Coyle, whose staffers have been talking to their state counterparts about how to streamline the permit maze and reduce the number of hearings. They were expected to have some answers this fall, but solving that maze may be trickier than it seems.

"One-stop shopping and comprehensive permitting is a concept that probably talks better than it works," said Sidman. "A lot of these things require more information than is available early in the process."

Still, builders and public officials agree that much of the red tape can be cut away. "A developer should know that his Harborpark review, his BRA design review, his Chapter 91 review, and his MEPA [Massachusetts Environmental Policy Act] review are all happening at the same time," said Alden S. Raine, the governor's development chief. "He should know that the human beings who run the processes are sitting down and talking on some regular basis. The megasurprise, where you're done with the city but the state doesn't like it, or vice versa, doesn't serve anybody well."

— JOHN POWERS

Commentary

Giving meaning to the harbor

IF THE LAND AND WATER ARE TO INTERACT, THERE NEEDS TO BE FISHING AND SWIMMING, FERRIES AND COMMERCE.

By Robert Campbell

FORT INDEPENDENCE

DATING FROM 1634, CALLED CASTLE WILLIAM IN HONOR OF KING WILLIAM III OF ENGLAND. PRIOR TO THE REVOLUTIONARY WAR. USED AS A GARRISON FOR BRITISH TROOPS UNTIL 1776. REDEDICATED BY PRESIDENT JOHN ADAMS IN 1799 AS "FORT INDEPENDENCE." THE FIRST HOME OF THE BOSTON MARINE. (NOW U.S. PUBLIC HEALTH SERVICE) HOSPITAL. (1799-1804) THE FOURTH OLDEST HOSPITAL IN THE COUNTRY WHICH WAS ESTABLISHED THROUGH THE EFFORTS OF THE BOSTON MARINE SOCIETY. FOUNDED IN 1742.

GLOBE FILE PHOTO BY PAUL CONNELL

PLAQUE ON CASTLE ISLAND INFORMS VISITORS ABOUT THE ORIGINS OF FORT INDEPENDENCE.

THE L STREET BATHHOUSE ON DAY BOULEVARD, SOUTH BOSTON.

So much has disappeared from the once-densely built Boston waterfront that our bias, now, probably should be to save just about everything that's left. That will be the only way of maintaining a connection between the waterfront of the future, already beginning to develop, and the working waterfront of the past.

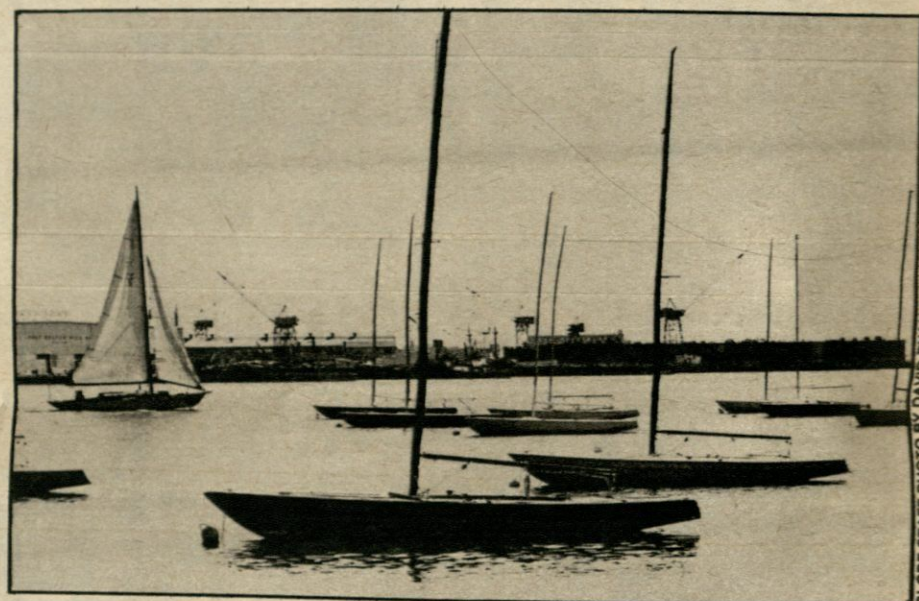
That means being broad-minded enough to save some things that don't, yet, look very historic. The waterfront is an anthology of bridges and gasworks, wharves and warehouses, boat clubs and small houses. Few of these are great architecture, yet collectively they give history and meaning to the water.

We should be sure, for instance, to save the Dorchester Gas Tanks. No Boston structure is more often used as a landmark reference. The traffic forecasters, who broadcast over the radio from their helicopters, refer to them all the time. The gas tanks have big, simple shapes and light colors that give them

real presence against the vast sweep of ocean and harbor. And, of course, one of them sports the famous mural by Corita Kent, a memory of the politics of another era because of its profile of Ho Chi Minh.

Another kind of homely architecture that should be saved is that of the bathhouses and yacht clubs along Day Boulevard in South Boston. Besides the well-known L Street bathhouse, interesting mainly as social history, there is a row of four yacht clubs all built in the same year of 1899. They're the Shingle-Style Puritan Yacht (formerly Canoe) Club, the Colonial-Revival-cum-Bungalow South Boston Yacht Club, the Queen-Anne-ish Boston Harbor Yacht Club and the Columbia Yacht Club. They represent a continuing use of the water that has gone on for nearly a century.

Then there is all the unused detritus of the industrial era. As industrial America begins to recede into the past, we begin to



GLOBE STAFF PHOTO BY DAVID RYAN

A CLUSTER OF SAIL-BOATS MOORED IN BOSTON HARBOR.



GLOBE FILE PHOTO BY EDWARD JENNER

appreciate more the visual power of the great artifacts it leaves behind. In Seattle, a former gasworks has been converted into a children's park; in Detroit, huge cement silos on the Detroit River stand as sculptures on a lawn.

Boston is rich in such survivals: The bridges of Fort Point Channel, for example, especially the incredible rusting hulk of the Old Colony Railroad Bridge, one of the most arresting objects in a purely visual sense in all of Boston. The Old Colony was what experts call a "rolling bascule" bridge, meaning it had a concrete counterweight that dropped to force the bridge up.

At the harbor end of the Channel is another trio of bridges, all of which operate differently: the Northern Avenue rotates, the Congress Street goes up and down, and the Summer Street is another bascule that bends up like a crane.

A few years ago, when the Transporta-



THE CHILDREN'S MUSEUM AT MUSEUM WHARF, CONGRESS STREET.

BOSTON GAS SUPERVISOR FOR LNG PLANT AT COMMERCIAL POINT CLIMBS 140 FEET TO TOP OF ONE OF TWO GIANT TANKS IN DORCHESTER.

tion Building was on the Channel, some romantic proposed that all three should be put in working order and set to operating continuously as a living demonstration of American bridge technology — an impractical but appealing idea.

The East Boston and Mystic River waterfronts have bridges, piers and transformer stations that fall into the same category of industrial archaeology. And on Columbia Point is one of the least-known of Boston's truly remarkable buildings, the Columbia Point Pumping Station, a massive, Romanesque pile of beauty and power that contains within it a great, multistoried Piranesian interior space.

As for the rest of the waterfront, it no longer needs any defense. The Navy Yard is already being recycled, and so are the remaining piers, wharves, and warehouses of the downtown waterfront. It's astonishing to remember just how daring it seemed 20

years ago, when two architects — Tim Anderson at the Prince Macaroni Building and Carl Koch at Lewis Wharf — first suggested the crazy notion that these old buildings could be successfully made into apartments.

Across from the downtown, in South Boston, too, there seems now no danger to the wonderful neighborhood of brick buildings that once housed the Boston Wharf Company and the Boston Factory Company, and which later were home to Boston's printing, bookbinding, and the wholesale furniture businesses. These buildings are now the Children's Museum, artists' lofts, galleries, restaurants, and condominiums. This remarkable neighborhood, laced by old viaducts and rail lines, has as much character in its own way as Beacon Hill.

Farther along the South Boston coast come Commonwealth Pier and the amazing Fish Pier, the latter a building of 1914 that looks, from the ocean side, like a French architectural fantasy of 1800, by the visionary architects Boullée or Ledoux, for a rational new neoclassical community. Both piers are being converted to new use. Finally, out at the end of South Boston, comes Castle Island with Fort Independence, a landmark that has been restored and is open to public tours.

Preservation of the Boston waterfront means much more than saving buildings or bridges, however. It means saving the edge of the water as something useful and meaningful. Nothing is drearier than parts of the San Francisco waterfront, converted into a playground for tourists, or the waterfront of Columbus, Ohio, made into a continuous strip of empty green park.

Water needs to be used to have meaning. There need to be fishing and swimming, ferries and commerce, if the land and the water are to interact. If they don't interact, the water becomes mere blue surface, something to be looked at like a painting or movie.

We have lost our sense of the richness of the experience of water. To stand next to water in the city is to be caught up in a mixture of fantasies. You think of floating, of buoyancy, and therefore you think of when you were a baby; you think of birth. And you think of drowning, and therefore of death. There's both attraction and risk, a sense that the water is at the edge of life.

The water closes over its wounds, and thus is a symbol of continuity and renewal. It laps in its own rhythmic music. It flows, a symbol of time and of the river of life. It sparkles and reflects light, yet is cool in the heat, and dark and mysterious within its depths. We enjoy the sparkle yet have a need to see into the depths. And the water is the blank place in the city, the empty and fallow quarter, the foil to the busyness all around it.

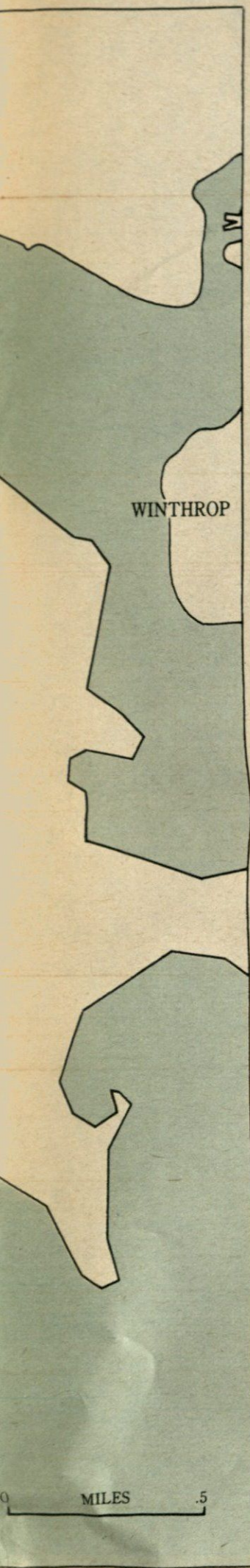
For all these reasons and more, water in the city possesses a strange power to inspire contemplation. After many decades of neglect, we are regaining contact with this psychological necessity of life. We should do so in a way that reduces the water neither to a trivial playground nor a merely visual easement to be looked at and strolled past.



GLOBE FILE PHOTO BY STEVE HAINES



Major features of Boston's waterfront



Mixed use office-residential-retail

1. EAST BOSTON PIERS 1-5: Mixed-use development on 56 acres of decayed Massport piers; includes a so-far-undetermined mix of residential, commercial, and marine uses, park and lobstering facility.

2. SCHRAFFT'S CENTER: \$20-million conversion of former candy plant into 570,000-square-foot research-and-development facility, with water transportation, sailing facilities and public space. Under construction.

3. CHARLESTOWN NAVY YARD: \$400-million redevelopment of 105-acre former naval facility, the country's largest historic rehabilitation project. It will include 1.2 million square feet of office space, 225,000 square feet of retail space, 1,300 housing units, 350-room hotel and marinas. Completion expected in 1990.

4. CONSTITUTION PLAZA: \$18-million complex at Hoosac Pier in Charlestown, including 160,000 square feet of office space, waterfront restaurant, marina and public space. Recently completed.

5. SARGENT'S WHARF: Major park with possible housing and underground parking envisioned by city.

6. LEWIS WHARF: Marina, sailing club, and office-commercial-residential space now in use. Addition of walk-in public athletic club and pool and renovated office space proposed.

7. ROWES WHARF: \$190-million complex including residential units, office and retail space, hotel, marina, ferry terminal, and public observatory. Under construction; estimated completion in 1987.

8. FAN PIERS: Proposed \$700-million complex on 17 acres includes hotel, 1,000 condominiums, office space, restaurant, marina, water transit facilities, public space, canal.

9. SOUTH BOSTON PIER 4: Proposed \$300-million-plus office and retail space, hotel, residential units, restaurant, garage.

10. COMMONWEALTH PIER-WORLD TRADE CENTER: \$100-million-plus World Trade Center with large ship docking facilities, office space, restaurants, retail outlets.

11. FISH PIER: \$19-million Massport renovation including modernized fish-processing facilities and office space. Under construction; completion expected next year.

Parks and recreation sites

1. CHELSEA YACHT CLUB

2. MDC PARK

3. WINTERGARDEN: Proposed by major developers of Charlestown Navy Yard as a \$28-million, all-weather public botanical garden.

4. CHARLESTOWN SHIPYARD PARK: 16-acre park adjacent to USS *Constitution*, has public marina, playground, fountain, other open space.

5. CONSTITUTION MARINA: Private docking on frontage leased from Massport, contains some live-aboard boats.

6. NORTH END PLAYGROUND: Renovation proposed under city's Harborpark plan. Public bocci courts, pool.

7. WATERFRONT PARK AND ROSE KENNEDY PARK: Heavily used open space at the center of the downtown waterfront.

8. NEW ENGLAND AQUARIUM: Perhaps the most popular waterfront attraction; 80 percent of its visitors are from outside Route 128.

9. CHILDREN'S MUSEUM

10. CASTLE ISLAND PARK: Interior rebuilding by Metropolitan District Commission recently completed.

General industry

1. LOGAN SOUTH: Includes \$130-million, million-square-foot Massachusetts Technology Center, fireboat and ferry terminal, proposed 270-room conference hotel, parking for 1,100 cars. Partially complete and occupied. Completion scheduled in 1989.

2. US GYPSUM CO.: Receives gypsum rock from Nova Scotia.

3. SCHIAVONE SCRAP TERMINAL: Exports scrap cars to Japan to be recycled; handles up to 350,000 tons a year.

4. ATLANTIC CEMENT: Distributes cement to outfalls along Eastern seaboard.

5. REVERE SUGAR SITE: Former sugar refinery for which industrial redevelopment is being encouraged.

6. AMERICAN (DOMINO) SUGAR: Only remaining sugar refinery in Boston.

7. BOSTON MARINE INDUSTRIAL PARK: 170-acre site owned by the city's Economic Development and Industrial Corp. Has 1.6 million square feet of work space; is home to 40 companies in metal fabrication, ship repair, printing, and garment manufacture. Massport leases 47 acres which it subleases to Subaru of New England and Subaru of New York for unloading and retrofitting cars. 2,000 employees in park now, expected to reach 3,000 in two years.

8. BOSTON ARMY BASE: 24-acre site owned by the city Economic Development and Industrial Corp. Its 1.7 million square feet include industrial center and will contain design center expected to open in 1986. Massport is developing a new passenger cruise terminal, now in operation but still partially under construction. 700 jobs now on premises, 2000 expected within two years.

9. BOSTON EDISON POWER PLANT

10. MBTA POWER PLANT: Currently inactive, a temporary dock for the Archdiocese of Boston's lobstering cooperative.

Residential

1. LINCOLN WHARF: \$26-million transformation of old power station into 192 units of mixed-income condominiums and Italo-American museum. Under construction; scheduled for completion next year.

2. UNION WHARF: Rehabilitated, with new housing and office space. Completed and occupied.

3. COMMERCIAL WHARF: Rehabilitated housing and office space completed and occupied. Some further development expected.

4. INDIA WHARF: Harbor Towers high-rise condominiums. Completed.

Cargo terminals

1. MYSTIC PIERS: Pier 1, which will be undergoing a \$6-million renovation, handles imported newsprint. Piers 40-50 handle salt.

2. MORAN CONTAINERSHIP TERMINAL: Opened in 1972; New England's largest container terminal, handling 45,000 containers a year.

3. MASSPORT MARINE TERMINAL: New container terminal on site of old South Boston Naval Annex used for handling imported Subaru automobiles.

4. CONLEY CONTAINERSHIP TERMINAL: 101-acre facility handles general cargo, automobiles, lumber, and bulk commodities.

Marine Industrial-Maritime

1. BOSTON SHIPYARD CORP.: Ship repair, overhaul, and conversion.

2. BOSTON FUEL TRANSPORTATION CO.: Barge carrier of fuel to other communities in New England and New York.

3. GENERAL SHIP CO.: Ship repair using floating drydocks.

4. BOSTON TOW BOAT CO.: Handles most of oceangoing vessel docking and undocking in harbor.

5. NEW ENGLAND MARINE CO.

6. PERINI DOCK

7. BOSTON HARBOR-MASTER: In charge of docking, mooring and police activities in the harbor and of city-owned harbor islands.

8. CRUISE SHIP DOCKING

9. US COAST GUARD STATION: Including Constitution Wharf, where USS *Constitution* was built.

10. BATTERY WHARF: For sale. The last working pier on the downtown waterfront, it is the home of Bay State Lobster Co.

11. FIRE BOAT PIER: Proposed for renovation by a developer who would construct housing here and at neighboring wharf.

12. LONG WHARF: \$16-million, public development, including park, docking space for ferries, commuter and excursion boats, and visitor center. Under construction.

13. OLD NORTHERN AVENUE BRIDGE: Proposed for renovation for public marine and commercial use.

14. GENERAL SHIP CORP.: Ship repair, using former US Navy drydock.



Day of reckoning at hand

By Dianne Dumanoski

In 1656, Boston's city fathers laid down the law on wastes that were creating a public nuisance. Henceforth, they ordered, butchers would be fined if they dumped "their beast entrails and garbidg" anywhere but Mill Creek, where swift waters would carry the offal away. So began the practice of seeking solutions to waste problems in the Boston Harbor and its tributaries.

The solution of one generation, however, inevitably became a problem for the next. At first, storm drains seemed a convenient way to get rid of sewage, but this practice created a health hazard on nearby shorelines.

After a cholera scare in 1866 and growing concern with sanitary conditions, a sewer commission was established, which decided to build pipes to carry these wastes farther out into the harbor. But as the area grew, and more communities were connected to the metropolitan sewerage system, this too proved intolerable.

The next solution involved sewage treatment plants and even more distant outfalls. Now, that too has failed; Bostonians are still faced with a polluted harbor.

Indeed, Boston Harbor today enjoys the dubious distinction of being one of the most polluted in the country — if not the very worst.

Though the problem clearly is not new, it has become more obvious and urgent in the past 15 years as the city has reclaimed its waterfront and more people have looked to the harbor for recreation.

With growing public use, observers say, the pressure to stop the harbor pollution will continue to increase. But all agree the task

promises to be a daunting one.

Harbor pollution is not a single problem but a tangle of problems stemming from a neglected, antiquated, and sprawling sewerage system and the unpoliced use of sewers for industrial wastes.

Undoing this tangle, participants caution, will require tremendous amounts of money, perhaps two decades of time, and the determination of public officials. It will also depend on the willingness of the sewer users, many of them distant from the harbor, to shoulder some of the costs.

Moreover, the cleanup process is beginning under a cloud of financial uncertainty, stemming from the Reagan administration's desire to end federal grants for sewer construction and Congress' countervailing efforts to extend some sort of grant and loan program for another nine years.

On the other hand, a number of recent developments make harbor cleanup more feasible and likely than it has ever been.

Foremost was the creation last year of the Massachusetts Water Resources Authority with a mandate to take over the Metropolitan District Commission's water and sewer responsibilities. Independent of the Legislature, the authority is free of the state's civil service system, has separate borrowing power, and can charge users for the full cost of treating wastes.

One of the authority's first actions was a vote to build a \$1-billion treatment plant on Deer Island. This step was perhaps as important for its symbolism as its substance, since it signaled a willingness to confront tough decisions.

Moreover, with a September ruling by US District Court Judge A. David Mazzone, the federal court, with its enforcement powers, will be overseeing the cleanup process.

BOSTON AREA SEWERS ARE ANTIQUATED AND THEIR USE IS UNPOLICED, AND FEDERAL FUNDING FOR IMPROVEMENTS IS SHRINKING. THE GOOD NEWS IS THAT SUPPORT FOR A CLEANUP IS BROAD AND GROWING.

FACING PAGE: DEAD FISH AND SEAWEED AMONG DEBRIS IN OIL SLICK AT SQUANTUM HARBOR.



"The kids I'm worried about are the ones swimming in the harbor every day. They don't have homes on the Cape."

LORRAINE DOWNEY, CHAIRWOMAN, HARBORPARK ADVISORY COMMITTEE

YOUTHS DIVE FROM PIER AT CHELSEA NAVAL HOSPITAL PARK, CHELSEA.

BLOTCHES AND REFLECTIONS IN OIL SLICK AT SQUANTUM HARBOR.

While a broad consensus exists for tackling harbor pollution, strong differences of opinion about priorities persist. Central to this continuing controversy is the question of how much a new \$1-billion treatment plant will do for water quality and whether it will be worth the huge cost.

In one form or another, this debate has been going on for the past eight years. Instead of scrambling to get the big cleanup projects under way while they were still eligible for 90 percent federal subsidy, the MDC elected to seek a waiver from the federal law requiring more expensive and thorough "secondary treatment" of sewage. The strategy was seen by critics as a stalling tactic. Last April, the federal Environmental Protection Agency denied the waiver.

Preoccupation with the level of treatment and the location of the outfall eclipsed the more fundamental question of how best to clean up Boston Harbor. With diminishing federal assistance, some argue, this question is more important than ever.

"EPA is selling secondary treatment as what is going to clean up Boston Harbor. It isn't," said Lorraine Downey, a Boston environmental official. She explained that she has opposed the secondary treatment plant because she fears it will divert money from projects that will, in her view, do more to improve the harbor for those who use it.

Downey said she would first tackle another major source of pollution — the 108 combined sewer overflow pipes in Boston and neighboring communities that don't have separate sewers for storm water and sewage. When the sewers become overloaded during storms, the excess — a mixture of raw sewage and rain water — spills out along the shoreline through these relief pipes. "I can't justify spending a billion dollars on a treatment plant and still have overflows going onto the bathing beaches and clam flats," she stated.

"We need both treatment for the combined sewer overflows and a secondary treatment plant," replied Michael Deland, the regional administrator for the federal Environmental Protection Agency. Because of the great volume of waste, which comes to the harbor from 43 cities and towns in the region, Deland warned that it's unclear that even secondary treatment will suffice. "We



FLOUNDER CAUGHT NEAR OUTFALL POINT AT DEER ISLAND SUFFERS FROM CANCEROUS TUMOR.

Sewage treatment systems compared

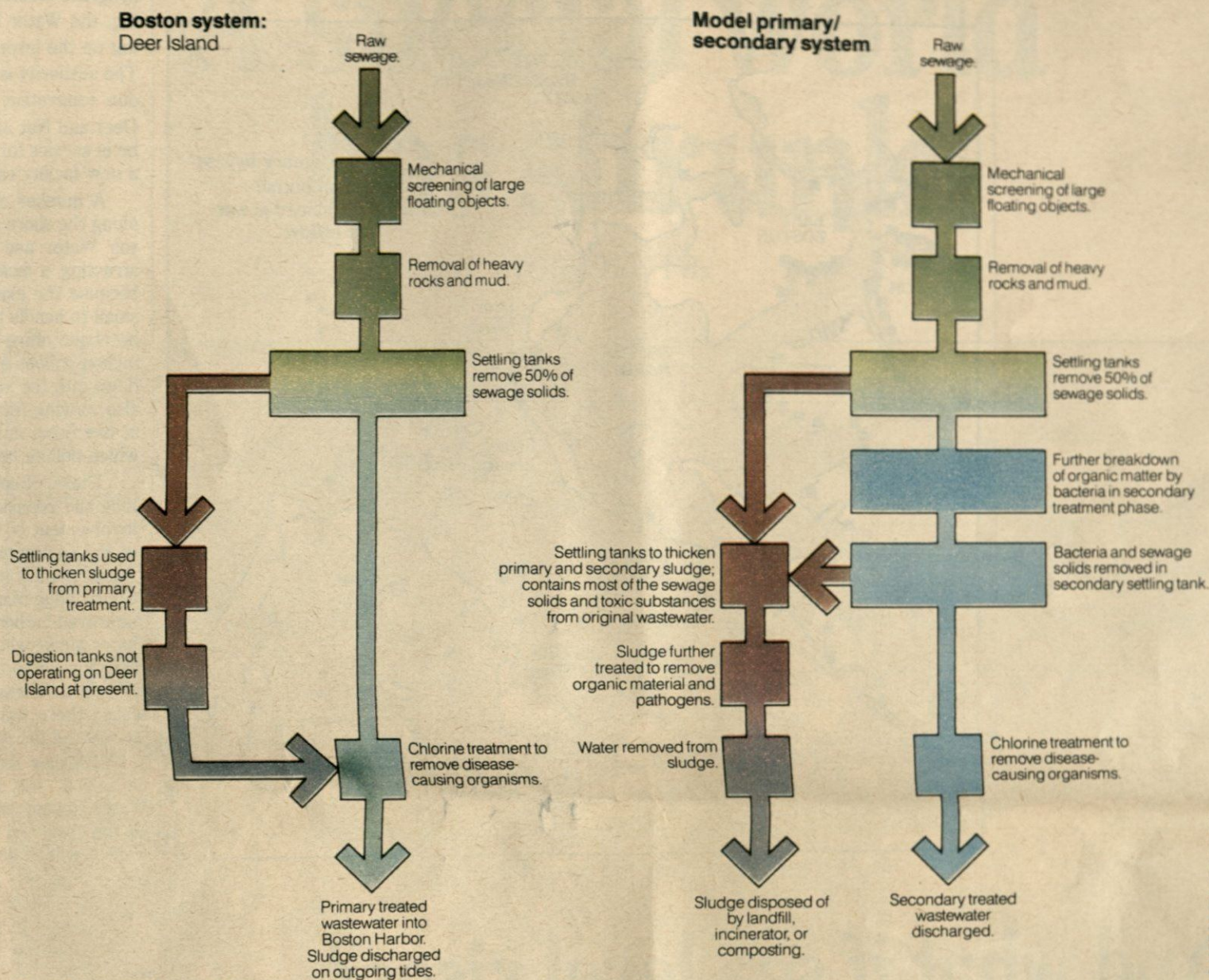


CHART BY BRUCE SANDERS

could conceivably need a long pipe on the end of that secondary discharge" to meet water quality standards, he added.

But Charles Button, the chief engineer for the Boston Water and Sewer Commission agrees with Downey. "We don't have an infinite amount of money. Society has got to make choices. If we want to achieve the maximum amount of cleanup, secondary treatment is not the best way to do that," he said.

Peter Shelley of the Conservation Law Foundation counters that secondary treatment is "inevitable" because Boston Harbor won't be able to meet federal clean water standards without it. Setting wise priorities and getting the most for the money isn't as simple as it sounds, however, especially in the absence of a basic understanding about how the harbor works as a natural system. "We're still pretty ignorant about what's going on in the harbor," observed Gordon Wallace, a scientist from the University of Massachusetts at Boston.

When asked what would be needed to provide a solid basis for policy choices, Wal-

lace and his colleagues said this would require at least a five-year, multidisciplinary study costing between \$500,000 and \$750,000 a year. When one keeps in mind that \$2 billion of public funds are at stake, such an expenditure might be well justified, Wallace observed.

Philip Shapiro, the transition director for the Water Resources Authority, agreed about the lack of information. "That's absolutely right. Nobody knows which of the cleanup options will do the most. We don't have enough data."

One source close to the cleanup expressed the hope that, despite the EPA requirement for secondary treatment, the issue might be reconsidered if scientific data showed that spending the money in another way would yield a cleaner harbor.

But, stresses James S. Hoyte, state secretary of Environmental Affairs and chairman of the Water Resources Authority Board, "it's going to take many years to construct a new treatment plant, but that doesn't mean there aren't many, many improvements that can be made along the

way."

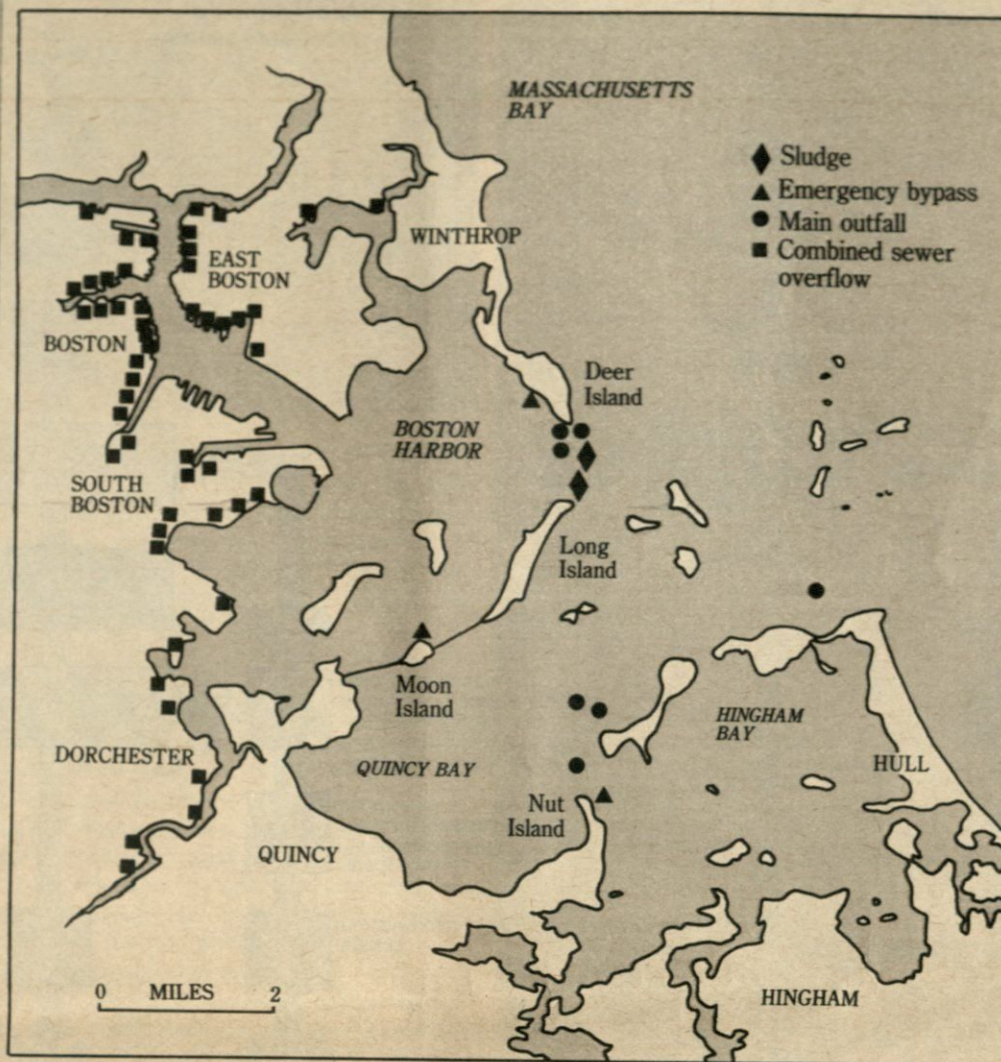
There is general agreement about a number of things that might be done to gain noticeable improvements in water quality.

Putting an end to the disposal of sludge in the harbor is at the top of a priority list drawn up by Thomas Ennen, of Boston Harbor Associates, because it will make "a huge difference" in the short term. Boston Harbor is one of the two remaining places in the country where sludge — the concentrated solids that remain after the treatment of sewage — is still dumped. Because more than 25 percent of the waste treated at Deer Island comes from industries, its sludge contains not only organic matter but significant quantities of heavy metals and toxic chemicals, which have contaminated the harbor's sediments and marine life.

In the long term, the Water Resources Authority will have to find a permanent way to get rid of the sludge. A suggested solution in the shorter term is dumping it at a site 106 miles off New Jersey, but this will require EPA approval.

Another priority is controlling the indus-

Sources/locations of discharges to Boston Harbor



Another pressing priority is controlling the industrial wastes, which are contaminating the sludge. Since the MDC's monitoring program suffered from chronic understaffing, the Water Resources Authority is beefing up the inspection and enforcement staff. The authority is also engaged in a long-overdue renovation of the treatment plants at Deer and Nut islands, since they will have to be in service for another decade or two, until a new facility can be built.

A number of projects to stop overflows along the shore are also under way. The Boston Water and Sewer Commission is constructing a main sewer to serve downtown because the existing century-old pipe is too small to handle the flow created by the city's hotel and office boom. So, the excess — 7.5 million gallons of raw sewage a day — overflows into the inner harbor. The authority is also moving forward with projects targeted at overflows in Dorchester and East Boston which pollute beaches after storms.

These, of course, are just first steps in a long and complicated cleanup. But given the involvement of the federal court, Doug Foy of the Conservation Law Foundation, which was a plaintiff in the suit before US District Court Judge Mazzone, believes that a greatly improved harbor is just a matter of time. Debates about whether to fix combined sewer overflow or to build a secondary treatment plant are "a waste of time," in his view, because there will likely be no choice but to address all the major sources of pollution.

"The law requires that these problems be solved," he continued. "And either the Water Resources Authority will solve them or the court will solve them for it. I'm confident it will be done."

And what if sea level rises?

FEDERAL SCIENTISTS ARE INCREASINGLY CONVINCED IT WILL HAPPEN, AND LOCAL OFFICIALS ARE UNAWARE.

Though Boston Harbor's immediate environmental problems seem like enough to worry about, a long-term problem looms that could dwarf the current woes. Within a century, waterfront communities could be contending with sea levels that are three to five feet higher than at present, if the projections of scientists and federal environmental planners are correct.

The discussion about rising sea level had been confined to scientific circles until recently, but now the federal Environmental Protection Agency is undertaking a program to educate coastal communities and encourage them to consider this possibility in their planning.

"We're trying to get the word out," said James G. Titus, who is in charge of sea-level rise at EPA. "We've projected a one-foot rise in the next 30 to 40 years and three to five feet in the next 100." Titus said cities like Boston should take this into account "anytime they're building anything new," adding that houses, bridges, port facilities,

airports, and office buildings built in the next decade may be in use for the next century or longer.

Rising sea levels will result from a warming of the earth's climate, caused by increasing amounts of carbon dioxide and other gases in the atmosphere. These gases trap the sun's warmth much like the glass of a greenhouse, so this phenomenon is often referred to as the "greenhouse effect." Carbon dioxide is building up because great quantities are being released in the combustion of fossil fuel.

"The National Academy of Sciences concluded that the earth will warm four degrees Centigrade," Titus said. "That's as much as the earth has warmed since the last Ice Age."

Jeffrey Benoit, a coastal geologist for the state's Coastal Zone Management program, believes sea-level rise is a serious concern for Boston, because large areas rest on low-lying land created by filling. Likely trouble areas, he said, would include the waterfront,

the financial district, and Logan Airport. He added that the state has never been able to obtain federal grant money to do a detailed study of how this might affect Massachusetts.

Ideally, he said, "any facility along the water's edge should be designed for projections of sea level." The difficulty, however, rests in the uncertainty of those projections, which makes it difficult for public officials to impose building requirements.

Not one of the local officials questioned was aware of the sea-level issue.

"The big question" in the future, Benoit said, "is who is going to foot the bill to protect all of our waterfront area. Everything is being built now as if the sea level is going to remain the same. We aren't going to let Logan [Airport] flood, or the downtown. Someone is going to have to build massive walls to prevent the flooding. Where is the money going to come from?"

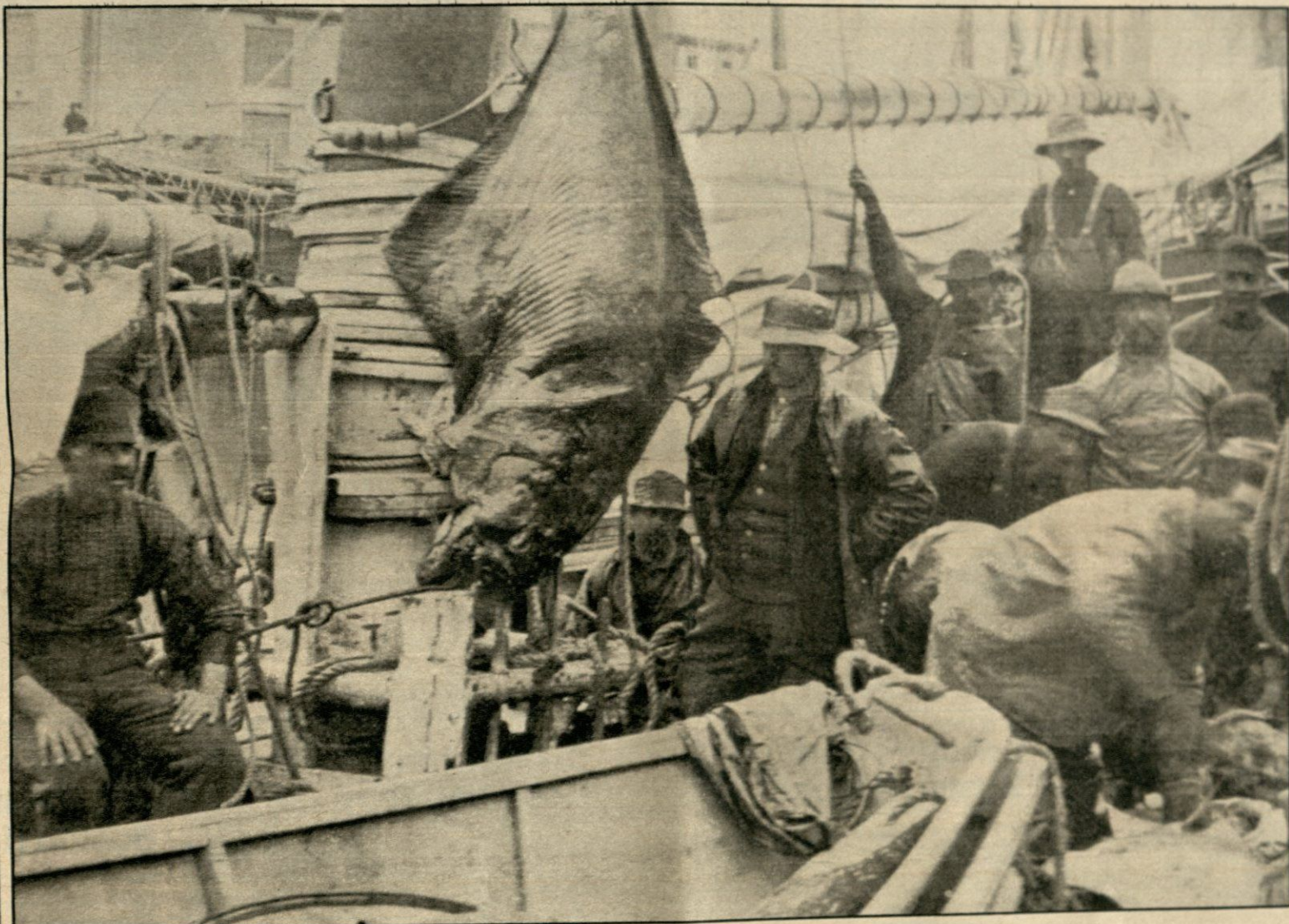
— DIANNE DUMANOSKI

► FISHING

IN TERMS OF POUNDS CAUGHT AND JOBS CREATED, POLLUTION HERE AND BETTER FISHING ELSEWHERE HAVE DAMAGED THIS LOCAL INDUSTRY SEVERELY. AND WHAT'S A HARBOR THAT DOESN'T SMELL LIKE FISH?

A special world has shrunk

By Wendy Fox



GIANT HALIBUT IS PART OF CATCH BROUGHT TO BOSTON HARBOR IN HEY-DAY OF THE FISHING INDUSTRY.

The photograph in Anthony Ciulla's office at Super Snooty Seafood Corp. tells the story at a glance.

It's an aerial view of the Boston Fish Pier, taken in 1915. No less than 50 commercial fishing boats, their big sails furled, crowd the water around the pier, three and four deep, ready to unload their freshly caught cargo. The pier itself is crowded with cars, evidence of bustling activity inside.

A picture taken today would show quite a different scene. Half a dozen boats — motorized, no sails — would arrive on a good day, and only a handful of cars and trucks would park on the pier, symptomatic of the shrunken trade.

In 1930, at the peak of the Boston fishing industry, fish landings — the amount of fish brought in on boats — totaled about 285 million pounds.

By 1952, according to the National Marine Fisheries Service, when Boston was the fifth largest US port in terms of landings, they had dropped to 173 million pounds worth \$14.3 million.

And in 1984, the city ranked 32d among

US fishing ports. Landings were 20.2 million pounds, worth \$11.2 million.

Those figures do not include the increasing amount of fish trucked into Boston from other ports, seafood which accounts for about 60 percent of all the fish processed here, but they do point to changes in the industry, the decline in the number of boats coming into Boston, and the dwindling importance of the fishing industry in the city's greater economic scene.

"Boston almost doesn't need it now," said Frank Foley, owner of the M. F. Foley seafood company, which his father founded 79 years ago. "We're just peanuts. When I was a kid, we were big. But not now."

PHOTO COURTESY OF FELICIA CLARK



"We love it here. We've got a place. It's exactly what you'd need for lobstering. No landlords yelling at you. . . . The fishing, that's the easy part. The hard part is finding a place to tie up."

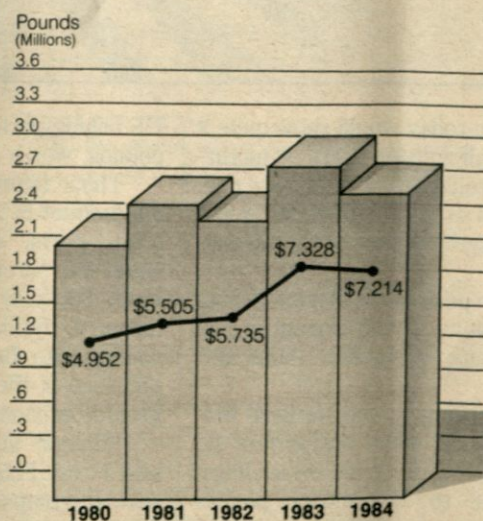
**CHUCK HOLLER,
LOBSTERMAN**



**TRUCKS AND WAGONS
LINE BOSTON'S FISH PIER
IN THIS PHOTO TAKEN
CIRCA 1920. IT WAS ONE
OF THE LARGEST FISH
MARKETS IN THE WORLD
AT THAT TIME.**

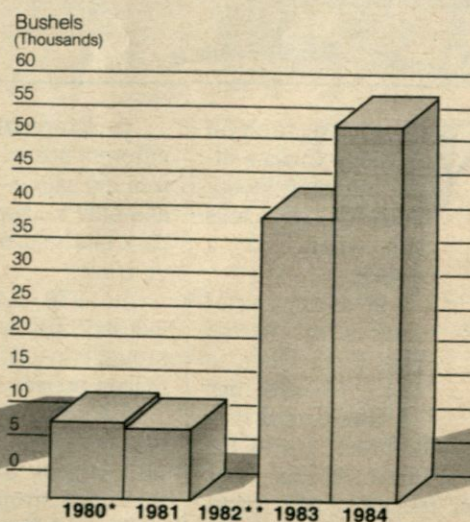
GLOBE FILE PHOTO BY CHARLES MCCORMICK

Lobsters from Boston Harbor:



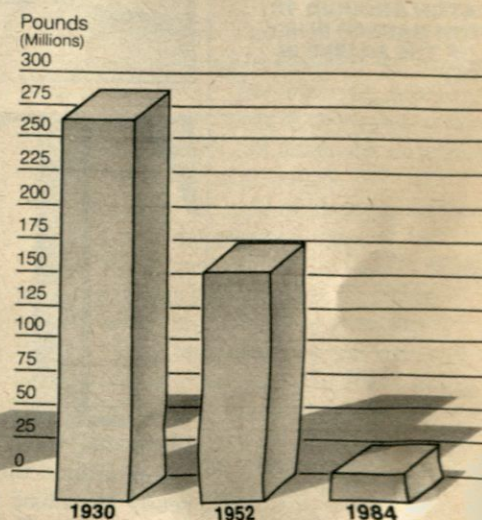
Source: State Division of Marine Fisheries

Clams from Boston Harbor:



*From July 1980 to June 1981
**Purification plant under construction
Source: National Marine Fisheries Service

All fish and shellfish from Boston Harbor:



Source: National Marine Fisheries Service

CHART BY BRUCE SANDERS

The reasons for the changes are complicated. Foley and others point to the computer firms along Route 128 and the high-tech industry which has become the primary force behind Boston's economic growth, eclipsing the seafood industry in the process.

But it also is true that the US fishing industry as a whole has fallen on hard times. Overfishing, foreign competition, pollution problems, environmental changes, and soaring insurance rates all have contributed, and Boston has not been immune.

In 1976, the federal government extended US fishing rights 200 miles from shore, barring foreign vessels from fishing within that area. But last fall, the World Court gave Canada exclusive fishing rights to the lucrative northeast corner of Georges Bank, a loss the Boston-area fishermen feel acutely.

"We're struggling right now," said Danny Bramante, whose family owns six of the approximately 20 offshore fishing boats based in Boston — boats which numbered in the hundreds in the harbor's heyday. The family has postponed acquiring more vessels, he said, because "we don't know what's going to happen" in the industry. "We're in limbo."

The Bramantes' boats are draggers which pull nets along the ocean bottom to snare groundfish such as haddock, cod and flounder. Draggers are allowed inside Boston Harbor only between January 1 and April 1, when lobster fishing is at a minimum and the chance of catching lobster traps in the nets is diminished.

Gill netters also fish offshore, dropping nets in the water and checking them every few days, as do a handful of seiners. Thirty years ago, seining — an energetic brand of fishing that involves trapping mackerel and sometimes pogies in shallow nets which are pulled every few hours — was popular, but the popularity of mackerel has dropped in recent years, and Bramante said he hasn't seen a seiner in quite a while.

Inside the harbor, the only year-round commercial fishing is for lobsters and clams, shellfish which continue to flourish largely because they feed on the plants and bacteria that thrive in water with a high coliform count.

About 150 licensed diggers work the 2,864 acres of state-approved clam beds around the harbor, which yielded 57,000 bushels of clams during the year ended June 1. Although the number of acres available for clamming has stayed about the same over the years, temporary closings due to pollution — usually brought on when heavy rains increase storm sewer run-off and overtax the sewage treatment plants — have increased.

Another 1,826 acres of clam beds which the state terms "grossly contaminated" have been closed permanently. If pollution in the harbor abates, some of those flats conceivably could reopen.

James Malick of Quincy, who's been digging clams for most of his 72 years, said the clam beds which are open are over-dug: "We used to take 100 barrels a day off Wollaston Beach. Now a whole bunch of us are lucky to



GLOBE STAFF PHOTO BY DAVID RYAN

get 14 to 16 barrels."

With soft-shell clams fetching anywhere from \$40 to \$75 a barrel, and clambers able to dig one or two barrels a day with little overhead, Malick said, a clammer can make between \$60 and \$100 a day.

Virtually all of the clams from the harbor must go through the state purification plant at Plum Island before being sold, although clambers and state officials both acknowledge that bootlegging — selling unpurified clams or clams dug without a license or from

a nonapproved area — is not uncommon.

Lobsters from the harbor — 2.8 million pounds worth \$7.2 million were taken last year — need no purification, although shell damage has been detected. So far, according to state officials, no cancers or sores have been found in lobster meat, and they say the crustaceans pose no health danger to humans.

As waterfront development in the past several years has spread, the operators of Boston's approximately four dozen lobster

AL SABELLA UNLOADS FISH AT BOSTON'S FISH PIER.

boats, scattered throughout the harbor, have been shunted from one mooring spot to another. Last year, the Archdiocese of Boston found a temporary home for the boats next to the Boston Edison plant in South Boston.

About 20 lobster boats are now moored there, and more are expected in the future. When the state ruled that Boston Edison could not expand that plant to a coal-burning facility, the lobstermen said they preferred to stay, rather than move to a smaller tract in East Boston offered by the state.

"We love it here, we've got a place," said lobsterman Chuck Holler. "It's exactly what you'd need for lobstering. No landlords yelling at you. The atmosphere with everybody working together. Security's good. . . . The fishing, that's the easy part. The hard part is finding a place to tie up."

However, those state officials who want to develop South Boston's deep water areas for other seaport purposes would like to move the lobstermen, who can manage in shallower water.

"It's always been clear that that South Boston site is temporary," said Frederick P. Salvucci, Massachusetts secretary of transportation and construction. "It's a deepwater site. It is not an appropriate place for lobstermen."

Lobsters are sold directly by those who catch them to wholesalers, hotels, or restaurants. Most of the fish brought into Boston, on the other hand, is sold through the Fish Exchange, which holds a daily auction at the Fish Pier.

The auction starts at 6:30 a.m. as dealers bid on fish that has come in by boat or truck. Trucked-in fish is important to the dealers because fish stocks have diminished and popular species such as haddock are in very short supply.

"More and more over the last ten years, there's no fish out there," said Kevin Baumeister of Seaside Fisheries Inc., a wholesaler on the Fish Pier. "It's basically fished out."

The amount of fish trucked into Boston depends on the prices wholesalers here are willing to pay for it. The fish also can go to ports such as Gloucester or New Bedford, depending on where it will bring the best price.

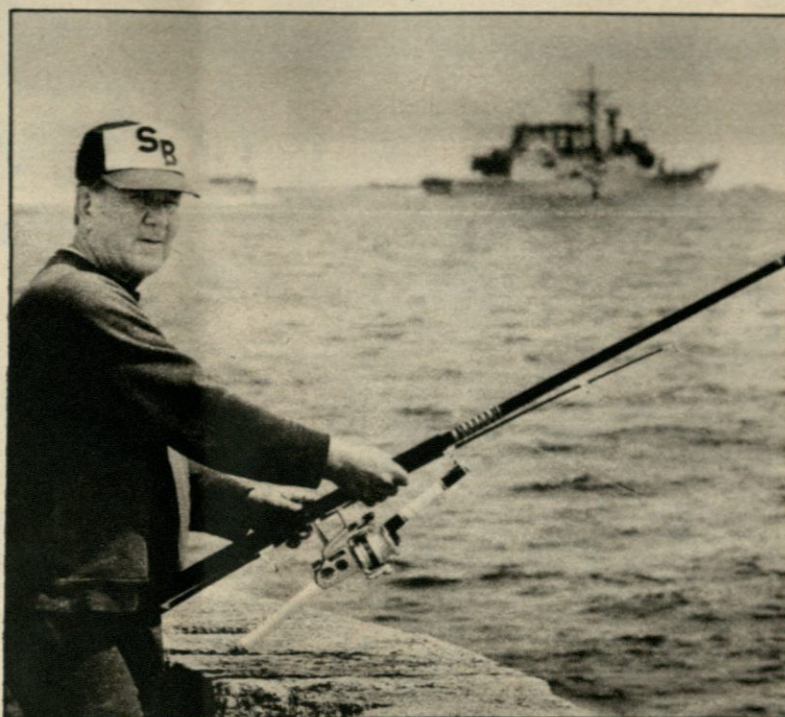
Dealers also worry about the quality of fish coming in. With the fish population low, boats often stay at sea longer, trying to fill their holds before returning to port.

"There are some who stay out 10 or 12 days," said Ciulla of Snooty Seafood, "which is too long. The best quality fish you can get is from the short trips."

In short, the fishing industry here is troubled. But the people who live by it continue to believe in it.

"I feel it's food, and with the population going the way it is, you're going to constantly need it," said Bramante. "It's something I wouldn't want to see go away. It's a different life altogether. It's a world unto itself."

Fun and fears for sportsmen



GLOBE STAFF PHOTO BY GEORGE RIZER

POLLUTION IS AFFECTING THE HEALTH OF FISH, AND SOME ANGLERS ARE GROWING WARY.

For all the amateur anglers around the shores of Boston Harbor, for all the blues and cod and winter flounder they catch each year, for all the money they spend on fishing tackle and bait, surprisingly little is known about either the fishermen or the fish.

What is known, and is cause for growing concern, is that the health of the fish appears to be threatened. Liver lesions are found in about 20 percent of the harbor flounder, and slightly more than a third of those are cancerous.

Leigh Bridges, assistant director for research at the state Marine Fisheries Division, says, however, that even the noncancerous lesions are considered bad omens because they are unnatural and are thought to be capable of becoming cancerous.

"There are all kinds of signs of increasing degradation — sewage, chemicals, heavy metals, airplane fuel — which is manifest in a very definite disproportionate amount of liver cancer in flounder," said Walter E. Bickford, state marine and recreational vehicles commissioner.

But, Bickford added, "there is no correlation between using that flounder resource and cancer in humans."

Nonetheless, said Pete Houlson, 44, as he cast from the Sugar Bowl in South Boston recently, "I look 'em over to see how they look. Lately, I haven't been eating them. Last year they started tasting bad. It's a sin."

Some toxic chemicals in bluefish have reached levels just below federally acceptable standards, but Randy Fairbanks, assistant director of recreational fisheries for the division, acknowledges that information on

those problems as well as others is woefully inadequate.

Bridges estimates the recreational flounder-fishing industry at about \$4 million a year, including money spent on bait and tackle, motel rooms and box lunches.

And Fairbanks guesses that most of the estimated 10 million winter flounder caught in Massachusetts waters each year are snared by recreational fishermen in the harbor.

But that's about it.

"Despite the fact that we have all this coastline and offer some of the best recreational fishing opportunities on the East Coast, from the standpoint of access and diversity of the fish, it's always amazed me that we've never seen fit to spend much of any money on it," Fairbanks said.

But, he added, that may be changing. Under new federal legislation, Massachusetts's salt-water fishing programs will qualify for about \$300,000 to \$400,000 a year in assistance through a federal tax on fishing tackle and related gear.

And the state is again considering the sale of salt-water fishing licenses, a highly controversial step. Recreational salt-water fishing is now free. With the federal money, Fairbanks hopes, the commonwealth will buy land and develop it for fishing and boat ramps, facilities which are now nearly nonexistent, and will institute educational and informational programs for anglers.

"West Coast states have budgets ten times ours," he said. "They're into a lot of very nice programs. The East Coast seems to be really lagging."

If the state doesn't have a clear picture of the recreational fishing industry, the anglers themselves have strong opinions. Polluted harbor waters are generally thought to be responsible for the problems in flounder, and anglers, who generally feel that the harbor fish populations have decreased greatly over the past several years, blame pollution for that as well.

"If they'd clean up our water, all the rest of our fish will come back," said Joseph Nee, 66, of South Boston, casting a popper from rocks near Castle Island in search of a blue. "There were no flounder in here at all this year."

And a tall, lean man in a shirt and tie, casting into Reserved Channel from the Summer Street Bridge one afternoon, said: "You used to be able to come here and catch any fish you wanted on any tide you wanted. But you can't do that anymore. The thing that amazes me is that the fish can tolerate this water at all. I think they come in and the water's bad and they go out where it's better."

— WENDY FOX



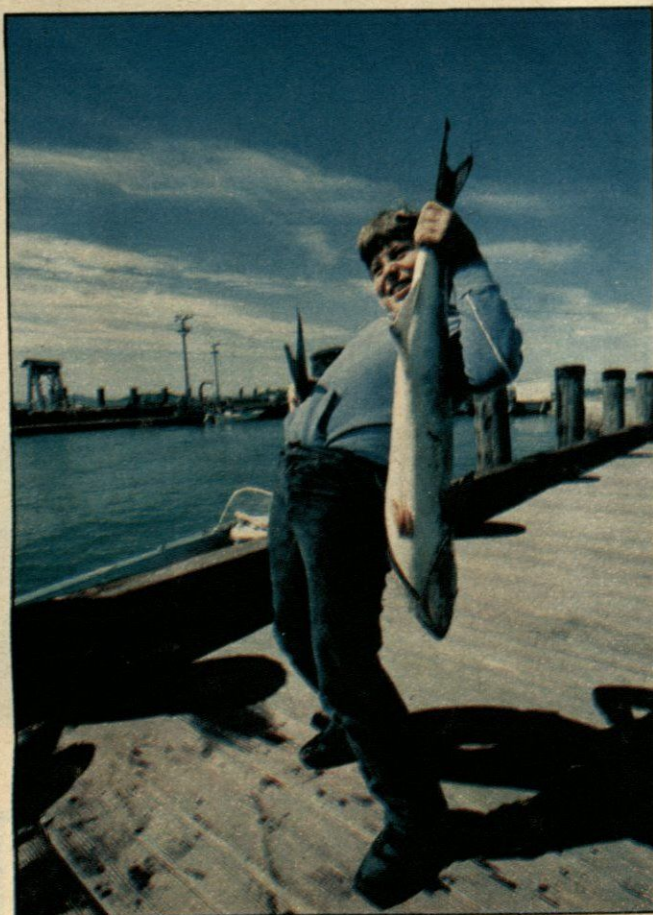
GLOBE STAFF PHOTO BY BILL BRETT

ABOVE: CLAM DIGGERS WORK THE MUD FLATS AT LOW TIDE IN QUINCY HARBOR.

RIGHT: AT GEORGES ISLAND, JEFF JOY, 9, HEFTS BLUEFISH HE CAUGHT FROM BOAT IN BOSTON HARBOR.

FAR RIGHT: ON A RAINY DAY, A MAN FISHES FOR BLUES ON CARSON BEACH, SOUTH BOSTON.

FACING PAGE: JOE NEE FISHES NEAR CASTLE ISLAND, SOUTH BOSTON. PART OF VISITING NATO FLEET CAN BE SEEN IN BACKGROUND.



GLOBE STAFF PHOTO BY JOHN BLANDING



GLOBE STAFF PHOTO BY STAN GROSSFELD

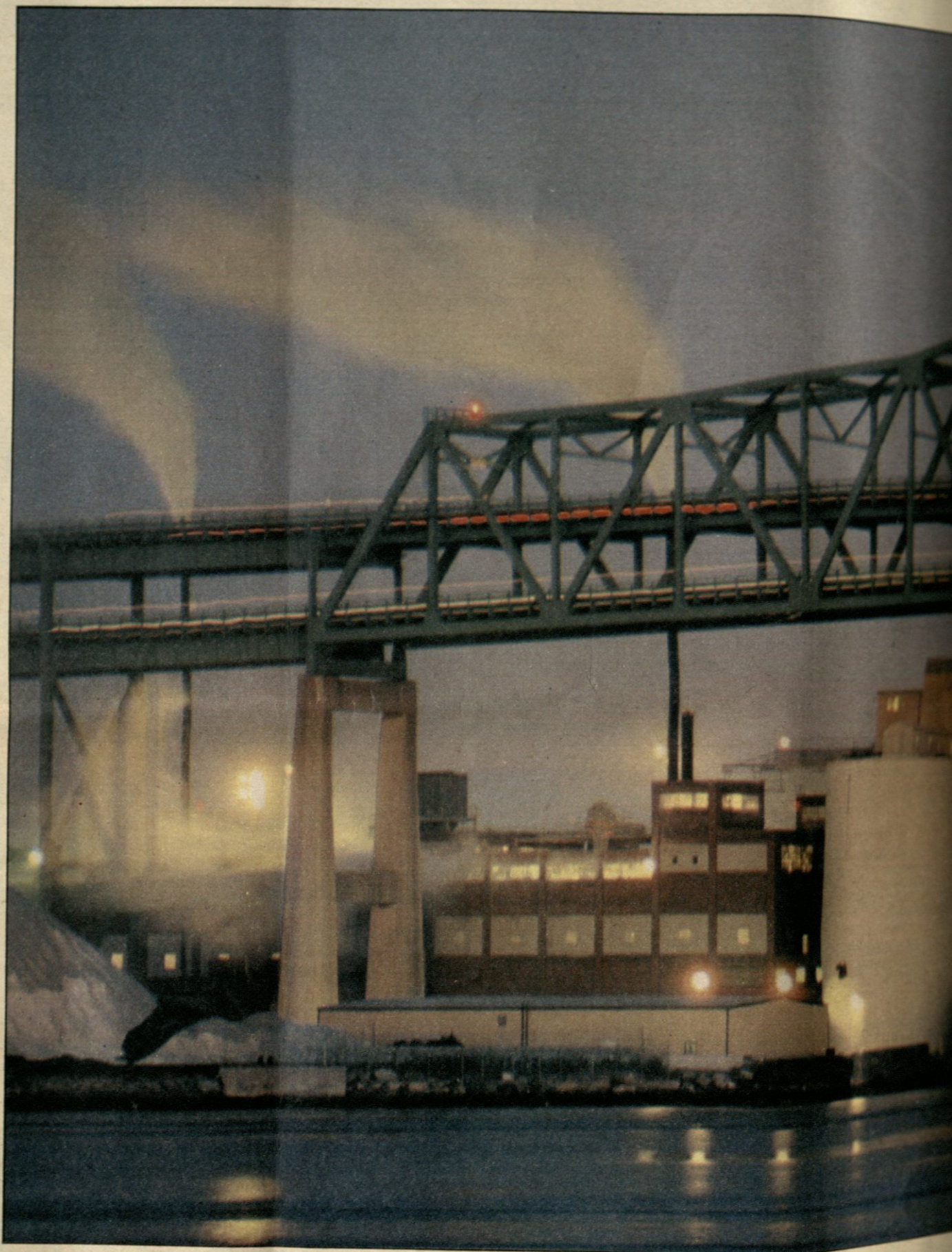
"When I first started, you could dig the clams and take them home, and the clams were really good. They used to say they tasted like sugar. Today, they're half dead when you take them out."

JAMES MALICK OF QUINCY, MASTER CLAM DIGGER

► **COMMERCE**

THERE'S NO GREAT BOOM IN THE HEAVY INDUSTRY AND SHIPPING THAT ONCE DOMINATED THE HARBOR ECONOMY, AND SPOKESMEN FOR THESE SECTORS FEAR THEY'RE BEING CROWDED OUT.

By Bruce Mohl



Blue-collar pier pre



GLOBE STAFF PHOTO BY JOHN TLUMACKI



GLOBE STAFF PHOTO BY DAVID RYAN

EARLY MORNING ACTIVITY AT THE MYSTIC RIVER BRIDGE, AS VIEWED FROM THE MERIDIAN STREET BRIDGE.

SCRAP METAL PILED HIGH ALONG MYSTIC RIVER IN EVERETT, BEFORE LOADING ONTO SHIPS.

Harborpark, the official title of the city of Boston's blueprint for waterfront development, is a terrible choice of words.

It conjures up images of open spaces, scenic vistas, picnics, and relaxation, all of which it includes. But it doesn't bring to mind the scrap metal terminals and the cement plants along the Mystic River, the oil tanks along Chelsea Creek, or the container cargo facilities in Charlestown and South Boston.

Harborpark, the word, gives the jitters to waterfront businesses already edgy about the encroachment of office buildings and condominiums on what they consider to be their turf. The Harborpark planning report even warns that most heavy industrial and general manufacturing businesses will not be tolerated in the future along many parts of the waterfront.

Arthur Lane, the crusty shipping agent who followed in his father's footsteps at the firm of Peabody & Lane, said the real issue behind Harborpark is money — tax money for the city wrapped in a sugar coating of community involvement, recreation, open spaces, and public walkways.

"As a present-day public relations catchword," Lahe told the Propeller Club earlier this year, "Harborpark has been joined into one word, as unnatural a combination as a pair of Siamese twins."

Marc Older, senior project coordinator for Harborpark, said the meaning has been misunderstood. "It is not a park. We don't want it to be a park," he said. Harborpark is a planning and development concept that encompasses "the industrial park, the residential park, the office park, and even park park," he said.

Yet words give shape to a debate, and the choice of the word Harborpark certainly

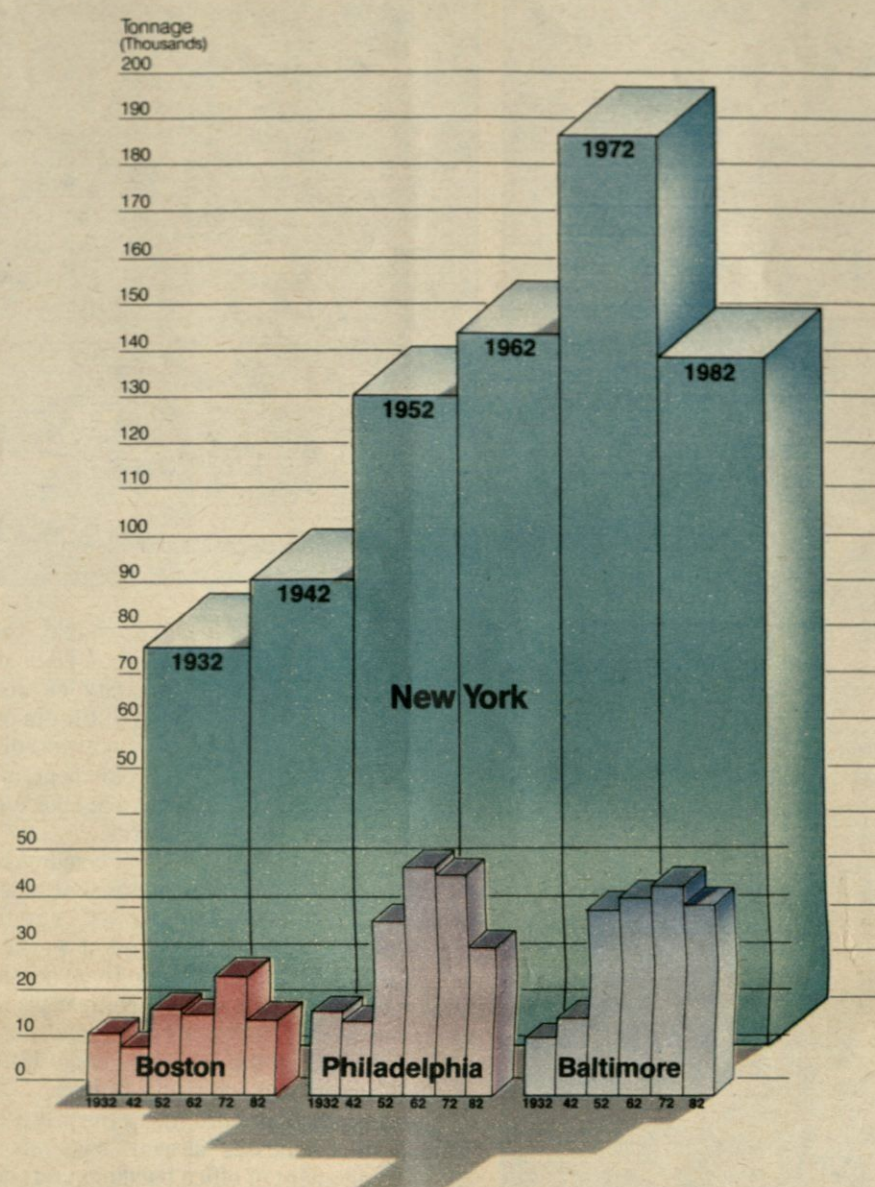
ssures



"Hotels and office buildings. That's the direction of the modern economy. That's where the economy is headed."

MARC WEBB, PLANNING AND ZONING DIRECTOR, BOSTON REDEVELOPMENT AUTHORITY

Four East Coast ports tonnage over time



Source: U.S. Army Corps of Engineers

nudges the waterfront debate away from container ships and cement plants. There is plenty of talk about affordable housing, office space, retail shops, and public access. But where does the maritime industry fit in on Boston's waterfront, if at all?

The port of Boston, which ranked second in the nation in 1900, has fallen to 21st in terms of cargo volume and 17th in cargo value. It still is as much a part of the region's transportation infrastructure as the airport, the railroads, or the highways, but its role is grossly misunderstood.

Its supporters sometimes talk like wild romantics, yearning for the days when the port of Boston was the gateway to a nation. Others, with no less interest in the waterfront, exhibit intense cynicism, ridiculing its rotting piers, constant labor disputes, and years of neglect.

What is lacking is a rational, thoughtful, and thorough public debate about where the port fits in amid the current storm of harbor development and changing shipping patterns.

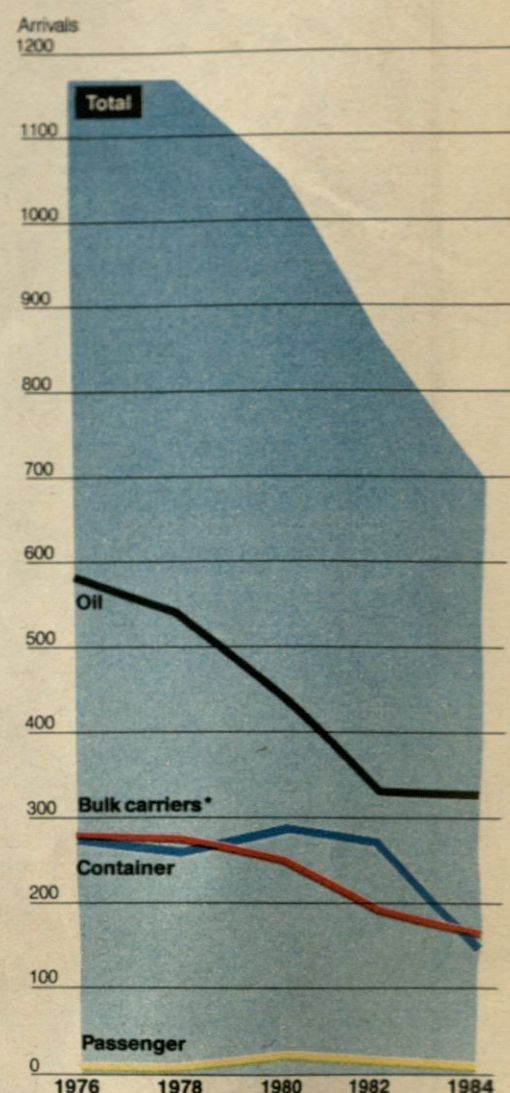
LIKE THAT SCENE FROM THE MOVIE *The Graduate* in which the executive tells Dustin Hoffman the future is in plastics, Marc Webb, planning and zoning director of the Boston Redevelopment Authority, leaned over and confided: "Hotels and office buildings. That's the direction of the modern economy. That's where the economy is headed."

Office buildings, unlike sugar, gypsum, or scrap metal plants, can be pleasing to the eye. Developers, moreover, are so hungry for waterfront space that they are willing to accede to such city demands as height restrictions, waterfront walks, and linkage payments.

Jobs and taxes are what really set the office economy apart in the eyes of city planners. Stephen Coyle, director of the Boston Redevelopment Authority, calculates that there is a 20-1 job differential between office buildings and maritime industrial uses.

The Authority estimates that the 11 million square feet currently devoted to private marine uses and the sizable container and

Vessel arrivals at port of Boston



*Includes sugar, salt, gypsum, autos, lumber, newsprint, etc.
Source: Massachusetts Port Authority

dock facilities owned by the Massachusetts Port Authority, also known as Massport, will generate but \$2.4 million in taxes and in-lieu payments this year. By contrast, the Rowes Wharf complex, a single project on the downtown waterfront, with 665,000 square feet of residential, office, retail, and hotel space, is expected to yield \$3.6 million in annual tax revenues.

Holding up an architectural rendering of Rowes Wharf project, Coyle said: "It would be the easiest thing to do to build eight more of these."

No one at City Hall is suggesting that eight more should be built, at least not yet. Mayor Raymond L. Flynn, in fact, is on record in favor of a working waterfront.

Coyle called the mayor's decision a "political value judgment." The city has not developed any detailed cost-benefit analysis of that decision or tried to weigh the value of a maritime industry against the cost of it in terms of forsaken office jobs and tax revenue. Instead, Flynn's support for marine industry stems largely from his close family

CHART BY BRUCE SANDERS

CHART BY BRUCE SANDERS

ties to the seaport.

"My family was dependent on the waterfront for its livelihood," said Flynn. "My father, all his brothers, my wife's father, all her uncles . . . my brother is a longshoreman. I've seen a once-thriving port — Boston was dependent on it . . . families were dependent on it — that has been lost.

"But, nevertheless, balanced development should include aggressive efforts to stimulate more jobs in the inner harbor. I know there's a shift in the country away from that. One-third of the harbor, the inner harbor, is deep water, and I wouldn't want to see [the maritime-industrial potential of] that lost."

THE PORT OF BOSTON IS THE CONDUIT for the region's gasoline, fuel oil, lumber, sugar, shoes, gypsum, Subarus, Toyotas, and even its Heineken. In fiscal 1984, the port handled more than 1 million tons of valuable, nonbulk, general cargo for the first time since 1972. In recently completed fiscal 1985, the trend continued upward to 1.1 million tons.

Despite this growth, the port is not living up to its potential. Massport, the state authority established in 1956 to promote the port of Boston, likes to portray Boston as a port for a region, yet the larger part of the region's cargo does not go through Boston.

New England as a region ships and receives more than 2 million tons of cargo a year — not counting low-value bulk commodities such as energy products, sugar, and salt. Of this, only about 44 percent is handled through the port of Boston. The rest is split among New York (32 percent), Montreal (8 percent), and the West Coast (15 percent), and delivered by rail or truck.

Further, of the 44 percent of nonbulk cargo which the port does handle, in more than half these shipments Boston acts as a conduit to or from some larger North Atlantic port.

The port, therefore, is not the gateway to a nation or a region. It is a secondary port, an adjunct in many cases to New York and Montreal. In fact, the terminal of just one of New York's shipping lines, Sea-Land Corp., is bigger than all of Boston's public port facilities put together.

The most important factor now affecting the port of Boston, according to James Brennan, a maritime consultant with Temple Barker & Sloane Inc. in Lexington and an advisor to Massport, is the deregulation of the transportation industry.

Prior to deregulation, Brennan said, rates between North Atlantic ports and most foreign destinations were fixed. The only variable cost was getting the goods to a port. Since Boston was close, many shippers chose Boston.

But now rates vary and shipping lines are struggling to keep their costs down. The dominant strategy is to build giant ships that carry more containers, thus reducing a shipping line's cost per container. Consolidation as a cost-cutting strategy is occurring on land, too. The giant ships stop at fewer and fewer ports, which act as terminals for cargo

arriving by rail, barge, or truck from inland destinations or secondary ports.

New York, not Boston, has become the East Coast hub and the preferred destination for most ships today. As a result, the number of ships calling at the port of Boston has declined 59 percent since 1980. Only four shipping lines regularly sail direct to Boston now, only one of them weekly.

The danger of the continuing concentration in New York is that Boston might someday lose all direct and indirect service. Already, it has lost service to Puerto Rico. As a result, Stride-Rite Corp., the Cambridge shoe manufacturer and retailer, is forced to

import goods from Puerto Rico into Jacksonville, Florida. It then hires its own trucks to carry the goods to its plants in New Bedford and Cambridge.

If Boston were to someday lose service to Europe and the Far East, its two major trading areas, the added cost for Boston-area companies of getting goods to ports that did service those regions could be considerable.

"There's nothing wrong with Boston as a port," said Myles Slosberg, international vice president at Stride-Rite Corp. "In fact, I would prefer Boston over the New York-New Jersey congestion. The problem is that Boston just does not have the frequency of

ALGERIAN LNG TANKER IS BACKED INTO TERMINAL NEAR MYSTIC RIVER BRIDGE.



GLOBE STAFF PHOTO BY BILL CURTIS

sailings."

Massport is attacked regularly for doing a poor job.

A. W. Petterson, who makes shipping decisions at Polaroid, blasts the authority for lack of effort. F. Lee Fitzpatrick, president of W. N. Proctor Co., which handles customs paperwork for importers and exporters, claims Massport lacks vision. Even Massport employees say privately that their agency is preoccupied with the more exciting and profitable airport at the expense of the port.

Ann D. Aylward, Massport's maritime director, concedes that the authority tends to react rather than act. It sometimes waits for business opportunities to come to it, rather than aggressively seeking them out. The agency's last in-depth planning document on the port was issued six years ago; the authority is at work on another now.

Leading ports in 1984

in millions of dollars

Port	Value*	% increase over 1983
1. New York	47,425	11.0
2. Long Beach, Ca.	23,749	18.1
3. Seattle	20,428	42.1
4. Houston	19,852	10.6
5. Los Angeles	19,510	26.1
6. Baltimore	14,630	14.3
7. New Orleans	12,050	7.7
8. Oakland, Ca.	11,809	23.7
9. Norfolk, Va.	8,031	-6.8
10. Philadelphia	6,484	4.5
11. Savannah, Ga.	6,406	33.9
12. Charleston, S.C.	5,925	24.1
13. Portland, Ore.	5,080	15.8
14. Tacoma, Wa.	4,494	29.3
15. Jacksonville, Fl.	4,440	9.3
16. Corpus Christi, Tx.	3,624	16.4
17. Boston	2,976	9.9
18. Marcus Hook, Pa.	2,921	9.9
19. Baton Rouge, La.	2,844	2.9
20. Galveston, Tx.	2,744	-1.0
21. Tampa, Fl.	2,448	26.4
22. San Francisco, Ca.	1,961	15.1
23. Paulsboro, N.J.	1,951	33.4
24. Wilmington, N.C.	1,806	7.9
25. Richmond, Ca.	1,477	-2.5
26. Mobile, Ala.	1,350	-7.6
27. Newport News, Va.	1,342	-22.2
28. Portland, Me.	1,073	-44.6
29. Stockton, Ca.	152	13.4

* Total foreign water-borne commerce
Source: Maryland Port Administration

It might be said in Massport's defense that the port is not a moneymaker. Each year the authority kicks in roughly \$3 million to keep the port running, and Massport officials are wary of investing more at a time when the industry is in such upheaval.

"Anyone who knows where the industry is going to be five years from now has a sixth sense no one else has," Aylward said.

Even when the authority does act to boost port facilities, as it did when it built the Conley container terminal in South Boston, positive results are not always promptly forthcoming. The terminal sat empty for nearly three years while Massport and the longshoremen negotiated manning levels. When a contract was finally agreed upon last year, it ushered in a new era of relative stability.

But the anarchy that dominates labor re-

lations on the waterfront and helped Boston become known as a high-cost, low-productivity port, is never far from the surface.

Just last August, for example, a longshoreman was fired at Mystic Pier, where newsprint arrives from Canada. Unhappy with his treatment and not satisfied with the response from his union, he took matters into his own hands and set up a one-man picket line. When his fellow longshoremen saw him, they too walked off the job and remained off for four hours, until the fired longshoreman was convinced he would get a hearing.

WHAT THE FUTURE HOLDS FOR THE port of Boston is hard to fathom right now. But pier pressure is building, most recently in East Boston. The state asserts that poor access to piers 1, 3, 4, and 5 makes them inappropriate for seaport activities. The state wants to convert the abandoned, rotting piers into a home for the city's lobstermen, a park, and residential housing.

The shipping community considers the state's plan a terrible waste of a natural deep-water resource. It wants the land banked for possible future marine uses, much the way the state buys development rights from farmers to prevent farm land from being developed. But there is no evidence so far that future marine uses for the East Boston piers will materialize.

What is missing is any strategic planning. There is no agreed-upon goal for Boston's maritime industry, no consensus about the future. There isn't even agreement on the number of workers employed by marine-related industries, with estimates ranging from 6,000 to 11,000.

Aylward said the biggest task facing the port is to find common ground among the myriad of regulatory agencies and business interests involved with the port. A Massport conference on the port in October was the first step in that direction.

"Getting a public dialogue going on Logan Airport is never a problem," Aylward said. "But with the port you always have to start at zero. You always have to start by explaining to people that we do have a port here."

She worries that the fighting over waterfront land will exhaust everyone, leaving no energy for the business of the port. "We always seem to do a better job of slitting each other's throats than figuring out how to increase international trade," she said.

Coyle of the Boston Redevelopment Authority acknowledges that without some agreement about the future the projects on the drawing board now may someday become monsters that will haunt future city planners.

"It's easy to draw the line now," he said of the mayor's commitment to preserve the city's maritime industry. "But ten years from now, maybe the pressures will be different. Maybe there will be a point in time when the continued failure to develop the maritime economy... will lead another generation of planners to make different choices."

New England's top 10 export and import commodities in 1984

Exports

In Thousands of Dollars

Commodity	Value
Hides, skins, furs	155,594
Photo equipment	152,750
Electronic data processing, number and address machinery	136,161
Paper, paperboard, waste paper	133,696
Electronic products	110,425
Granite	38,731
Aluminum rods, forgings scrap	36,626
Drilling mud and soil materials	36,011
Abrasives	26,971
Sulfite, sulfate paper	10,149

Source: Massachusetts Port Authority

Imports

In Thousands of Dollars

Commodity	Value
Footwear	685,880
Electronic data processing, number and address machines	274,327
Frozen beef, meat	257,558
Toys, games	252,803
Steel, steel products	201,740
Fish, shellfish	174,737
Wools	160,015
Wines	152,268
Fabrics, raw cotton	131,672
Furniture	107,256

Source: Massachusetts Port Authority

THE TENSION OF MOVING LARGE SHIPS INTO SMALL PLACES IS A ROUTINE PART OF TOW BIZ.

A day

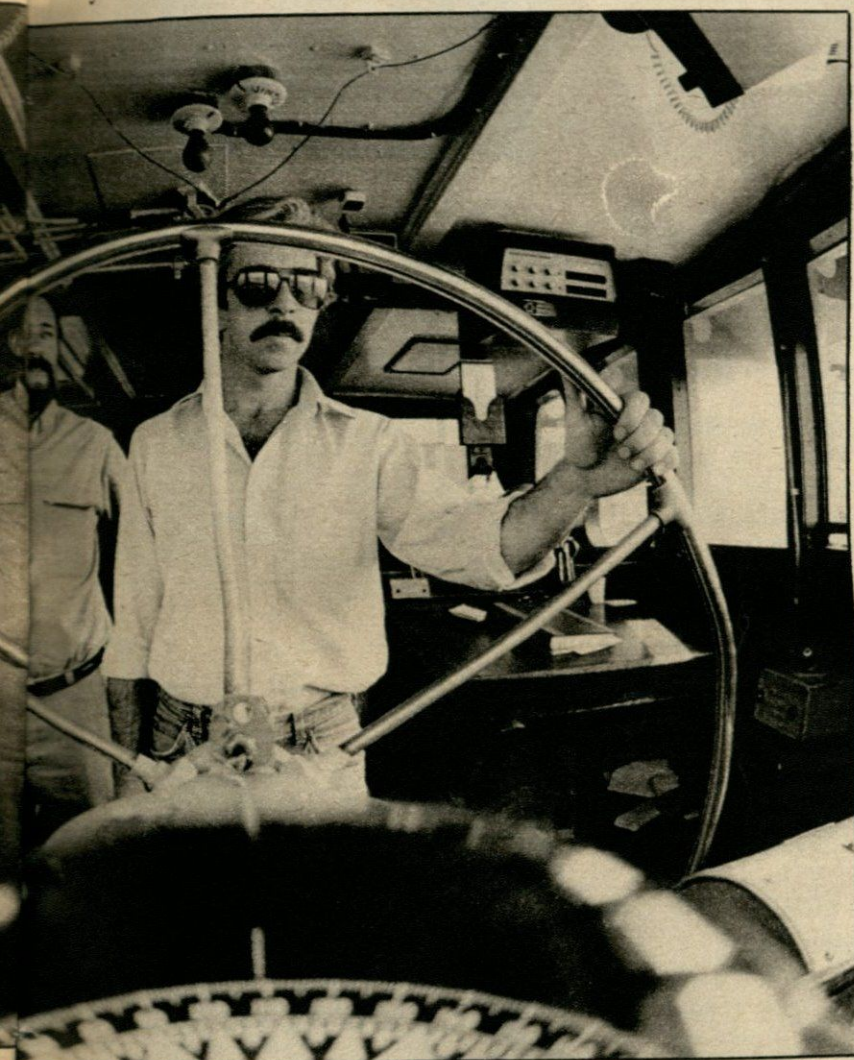


DAVID GULMAN, DOCKING MASTER, BOSTON FUEL TRANSPORTATION INC., STANDS BESIDE CAPT. DICK BRADY AT A TUG WHEEL.

CHART BY BRUCE SANDERS

in the life of a tug

By William Coughlin



“On a recent Sunday, a guy I know had a 638-foot scrap ship to handle. When he asked for a Coast Guard escort, they were too busy with sailboat races to provide an escort.”

DAVID GULMAN,
DOCKING MASTER,
BOSTON FUEL
TRANSPORTATION INC.

Doughty busybodies, tugboats seem the bustling housekeepers of the harbor. For Vincent D. Tibbetts Jr., 38, such tugs and tasks are what he calls, simply, the “tow biz” — a fleet of nine red, black and buff tugs and their corresponding barges and coastal tankers known officially as Boston Fuel Transportation Inc. of East Boston.

His fleet — begun in 1952 with a 55-foot launch owned by his father and a partner — finds itself still busy, even in shipsick Boston Harbor. Between Tibbetts’s own boats and those of his principal competitor, the six-boat, 128-year-old Boston Tow Boat Co., there is usually a tug working somewhere every hour of the day and night.

On one Friday morning, the crew of the 105-foot *Karen Tibbetts*, which bears his wife’s name, had been at work since midnight. And the same-sized, 1,700-horsepower *Cornell*, which had just landed an empty

barge from Salem, had been working since the day before. On the *Karen*, quiet-spoken, 33-year-old Dick Brady of Hingham was skipper, and husky, outspoken John Delwing of Saugus was in the *Cornell*’s pilot house.

The onshore dispatcher had just told them to aid the oceangoing Philadelphia tug *Patriot* in squeezing an empty — and potentially dangerous — 368-foot gasoline barge down Chelsea Creek. It had to be angled through the 97-foot-wide Chelsea Street Bridge and the somewhat wider McArdle Bridge. With a 66-foot beam (leaving but 15 feet between the bridge and each side of the barge) it would be a snug fit. The tugs would make it look easy.

Commands came quietly. There was no “toot-tooting,” as was once the case; just a three-way talk among the captains, and an understanding that timing is crucial. With the *Patriot* backing and the *Karen* and the *Cornell* holding firm amidships, the barge is turned in swirls of dirty, green water and heads downstream.

As the *Patriot* shoves slowly ahead, the barge and her chaperones approach the tight opening. The wind fights the efforts of the tugs to hold her in center channel.

The sequence happens quickly. *Cornell* suddenly lets go of the port side and charges ahead, squeezing through the gap just seconds ahead of the barge’s bow. *Karen*, still fast on the starboard side, applies right rudder to hold the barge’s head up in the stiffening wind. The gap, once yards, is now measured in feet.

Brady instructs *Karen*’s deckhand Joe Lombardi to get an axe — in case the line securing tug to barge must be cut to prevent the *Karen* from being dragged against the bridge, crushed, or swamped. Tug and barge slide within 50 feet of the opening. Brady orders, “Okay, let’s go!” Lombardi casts off. The *Karen*, freed, falls astern as the *Patriot* rams the barge through with her twin, 3,000-horsepower engines wide open.

Downstream, at McArdle Bridge, they do an encore. None of this drama, however, is caught in the *Karen*’s log. It reads simply: “1005 — Assist tug *Patriot* and *Sonat 81*, Gibbs Revere to Stream.”

On a rainswept Monday, Capt. Doug Moore and Capt. Dave Gulman, the docking master, are aboard the tug *Miriam*. With the *Karen*, this time under Capt. Chuck Delorey, they nose down the harbor to take on a Goliath — the 646-foot *TFL Adams* of Trans Freight Lines, one of the largest vessels to call on Boston Harbor.

The *Adams*, arriving from Copenhagen, was swaying under 426 twenty-foot containers and 463 forty-footers. She would unload some and pick up some empties. By radio, the captain of the *Miriam* speaks to the *Adams*’s captain, confirming her maneuverability and the fact that a Jacob’s ladder, for pilots boarding at sea, is ready.

The 42-year-old Gulman, a clever ship handler, has been a docking master since 1978, a towboat skipper and a pilot for a dozen years and a chief mate on ocean voyages. He holds a cherished “mealticket,” a coastwise pilot’s license and pilotage for

Boston, Norfolk, Philadelphia, New York, Fall River, and Salem.

From the *Adams*’s bridge, Gulman will direct the *Miriam* and the *Karen*, the ship’s own captain, Fleming Peterson of Copenhagen — 42 years as a seaman, and 19 as a master — and his Danish crew in docking the ship weighing 20,600 gross tons.

It will be a delicate balancing of wind, position, and leverage against the huge bulk of the ship and tugs — just an hour’s work, if all goes well. The *Adams* draws 33 feet and 11 inches. There are 33-foot-deep spots in the Reserved Channel at Castle Island. But the tide has been flooding since the ebb at 8:04 a.m.

Five decks up on the *Adams*’s bridge, Gulman works via walkie-talkie with the tugs. Captain Peterson translates commands into Danish, and also repeats them in English for an English-speaking crewman.

The *Miriam* is sent to the port quarter, the *Karen* to the *Adams*’s bow. Commands are quick, quietly spoken.

“Slow ahead.” Then: “Hard a-starboard.”

The *Adams*’s helmsman spins an incongruously tiny, eight-inch-diameter steering wheel. Another seaman swings the engine room telegraph handle. The response is smart. Captain Peterson watches every move as he follows the docking master across his bridge. “Starb’d thruster,” Gulman says as the giant carrier edges close. On the outer berth at Castle Island lies a McAlister tug out of New York, nursing a half-emptied container barge.

“*Miriam*, work ahead easy,” Gulman speaks into the radio.

“Hard a-port,” Gulman says, and the steersman responds. “Thruster hard starboard . . . Slow astern,” Gulman orders.

A boil erupts from under the *Adams* as the 1,000-horsepower, side-mounted propeller in her bows digs in and her 20,000-horsepower main engines start reversing. The container-piled bow is swinging off now, toward the airport. The 20-knot wind helps. “*Karen*, come ahead on the port bow now.”

Both Gulman, a master of estimating huge tonnages and tides in inches, and the *Adams*’s captain watch the big vessel twist.

“Stop engines,” Gulman says.

Then he orders the ship’s main engines again: “Slow astern.”

Then: “*Miriam* stop. Go around on the other side. Easy on the *Karen*. Stop the thruster.”

A lacey water collar encircles ship and tug as *Miriam* races around her stern to the starboard side. A DC-10 screams overhead as the big, blue vessel angles slowly, carefully backward toward Castle Island’s container cranes.

“Stop engine,” Gulman orders, and Captain Peterson relays the command in Danish.

“Hard a-starboard. Slow ahead.” The helmsman spins the wheel. The ship trembles a little as her propeller bites and her sternward movement slows.

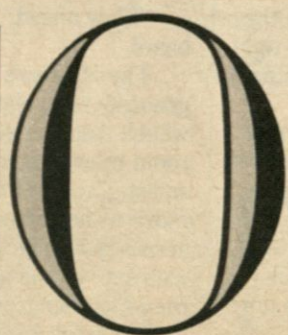
Now, yards become feet and then inches. The *Adams*’s blue side flattens against the pier.

► TRANSPORTATION

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Ferries: Back to the future

By Fred Pillsbury



centuries.

With the opening of the Tobin Bridge three years earlier, it looked as though local water transportation had gone the way of the horse and steam train. And the opening of the Callahan Tunnel in 1961, paralleling the older Sumner Tunnel under the harbor to East Boston, seemed to reaffirm its obsolescence.

Now, 32 years later — faced with overcrowded highways and tunnels — water transportation in Boston is striving to make a comeback. On July 1, harbor ferry service — the Airport Water Shuttle between the South Shore, downtown Boston and Logan Airport — was revived on an experimental basis by the Massachusetts Port Authority. It was part of a trend that appears to be slowly moving ahead in a number of coastal cities.

In San Francisco, for example, ferry service was discontinued after the Oakland Bay and Golden Gate bridges were opened in 1936 and 1937, but by 1970 the Golden Gate, like Boston's Central Artery and tunnels, was becoming seriously overcrowded.

The goal in San Francisco — to avoid building a second level to the bridge — was to reduce bridge traffic by 4,000 cars a day. The alternatives were few — double-deck the present bridge, build a new one, buy 500 buses, or go back to the water.

The Golden Gate Bridge Authority finally went back to the water, at a cost of \$32 million, and then went into the bus business as well. The goal was achieved temporarily,

on Jan. 1, 1953, Mayor John B. Hynes discontinued Boston's harbor ferry service in Boston Harbor, putting an end to a form of water transportation that had survived the previous three

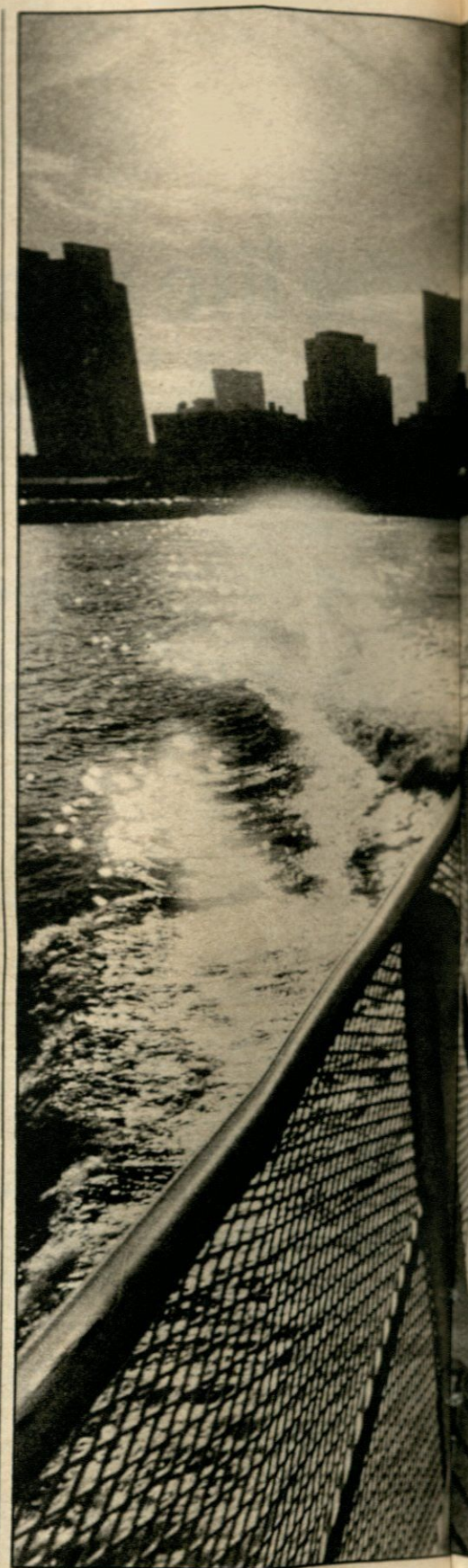
centuries, according to authority spokesman Bruce Selby, but now traffic is getting out of control again and proposals to build a second deck have been revived.

Massport's Airport Water Shuttle, which was so successful during the summer that the authority continued the service to December 1, is tiny when compared with services in San Francisco, where three 725-passenger vessels owned by the authority are in service.

In Boston, three boats with a total capacity of about 500 passengers, owned and operated by two private companies, have been used. On the best days during the summer about 200 passengers were carried on the trips between the South Shore, downtown and Logan Airport, and on one day in September, when the rides were free, it carried nearly 500.

SUPPORTERS OF WATER TRANSPORTATION — some of them hard-headed transportation experts and some of them people who just seem to like boats — expect it to grow and become an important way to get around the city. Patrick B. Moscaritolo, director of government affairs at Massport, which more than any other agency is involved with the harbor, visualizes a day "when we have a fully functioning water transportation system that not only connects the downtown and the airport but connects the hotels that are springing up here."

Assuming it catches on, the water shuttle is expected ultimately to ease other traffic problems, including the growing parking problem at the airport. On half a dozen occasions in the last year when holiday and business travel peaks coincided, parking space at Logan has run out and some travelers have been forced to park their cars off the airport at Suffolk Downs race track. The fact that the parking and the buses provided by Massport to take them back to the terminals were free was little consolation to those who missed their flights.



Spurred on by airline deregulation, which has encouraged many people to fly who might not have done so before, and a healthy economy, Logan's passenger traffic has jumped from about 10 million in 1976 to more than 20 million in 1984. As a result, the emphasis at Massport, as at many other major airports, has switched from the air to the ground as they try to figure out how to get passengers to and from their airplanes. The water shuttle, remote parking lots



COMMUTERS RELAX ON DECK OF COMMUTER BOAT LEAVING ROWES WHARF AND HEADING FOR HINGHAM IN LATE AFTERNOON.

served by buses and limousines, people-movers at the airport, and an improved Airport MBTA station are several of the contemplated solutions. Towering above all of these, in purpose as well as in size, has been the Dukakis administration's proposal for a \$2.2-billion project for a third harbor tunnel and the depression of the Central Artery.

It is more ambitious by far than the plan for a tunnel alone, the one put forth by the administration of former governor Edward J.

King (who, incidentally, has supported the Dukakis plan, although he says his successor is asking for too much). Dukakis administration officials insist that the two are inseparable.

"Our figures show that the Central Artery is the most congested highway in America," says Michael Shea, assistant secretary of transportation. It "simply wouldn't work" to separate them. The tunnel alone "would provide relief but it would not solve Boston's

essential traffic problem," he said.

If the project as planned goes through, it would be at least 10 years before it could be completed and — though there is a clever scheme to build the new artery under the old facility while the latter continues to operate — nobody pretends that Boston's downtown traffic would flow smoothly in the meantime.

But the project, because of its related traffic problems, could be still another stimulus for water transportation and one that, given that it could last a decade, would build the foundation for a permanent water transportation system. Thomas Hennen, executive director of Boston Harbor Associates, goes so far as to describe water transportation as "an extraordinary winner that almost can't be denied. It has so much potential over time, it's really an extraordinarily good response to so many landside problems, whether it be parking or traffic congestion or getting from A to B quickly. And it's still the cheapest way to move people around."

HOW MANY PASSENGERS MIGHT BE served finally by a well-developed water transportation system in Boston is difficult to predict. Last year, before the water shuttle began, only 300,000 passengers, including those riding on excursion vessels, were carried on the harbor. In contrast, 3.5 million were ferried in Vancouver, a city smaller than Boston, and 60 million were carried in Rio de Janeiro, 250 million in Hong Kong, and 18 million in New York.

John N. Case, an engineer and authority on ferry systems, said at a meeting on water transportation here last spring that the greater Boston Harbor "is a unique area capable of producing an efficient water transportation network." He predicted that in time "the state of new growth in downtown Boston will settle down and point the way for a more stable marine transit system in the future."

Case, who supplied the passenger numbers for the various cities, did not venture any numbers for Boston, except to say that the 300,000 figure does not reflect the harbor's potential. Hennen guesses three million annual passenger trips. Marc L. Older, senior project coordinator for the Boston Redevelopment Authority and planner for the city's Harborpark plan, says two million, but adds that "it's a hard number to estimate." Two or three million would not make Boston a rival of Hong Kong or Rio, but it could mean a significant number of cars off the highways and the parking lots.

"I think we'll see heavy traffic out on the water," Older said. "There will be water tax-is in the literal sense. You make a phone call, a launch picks you up and takes you where you want to go. From your home in Dorchester you could take your date to a new restaurant in the Charlestown shipyard. It will add elegance as well as efficiency; we're very excited about that." Harbor Associates has already proposed a "cultural boat bus" that would take people to the Kennedy Library and Constitution Museum and other educational destinations.

GLOBE STAFF PHOTO BY JOHN TLUMACKI

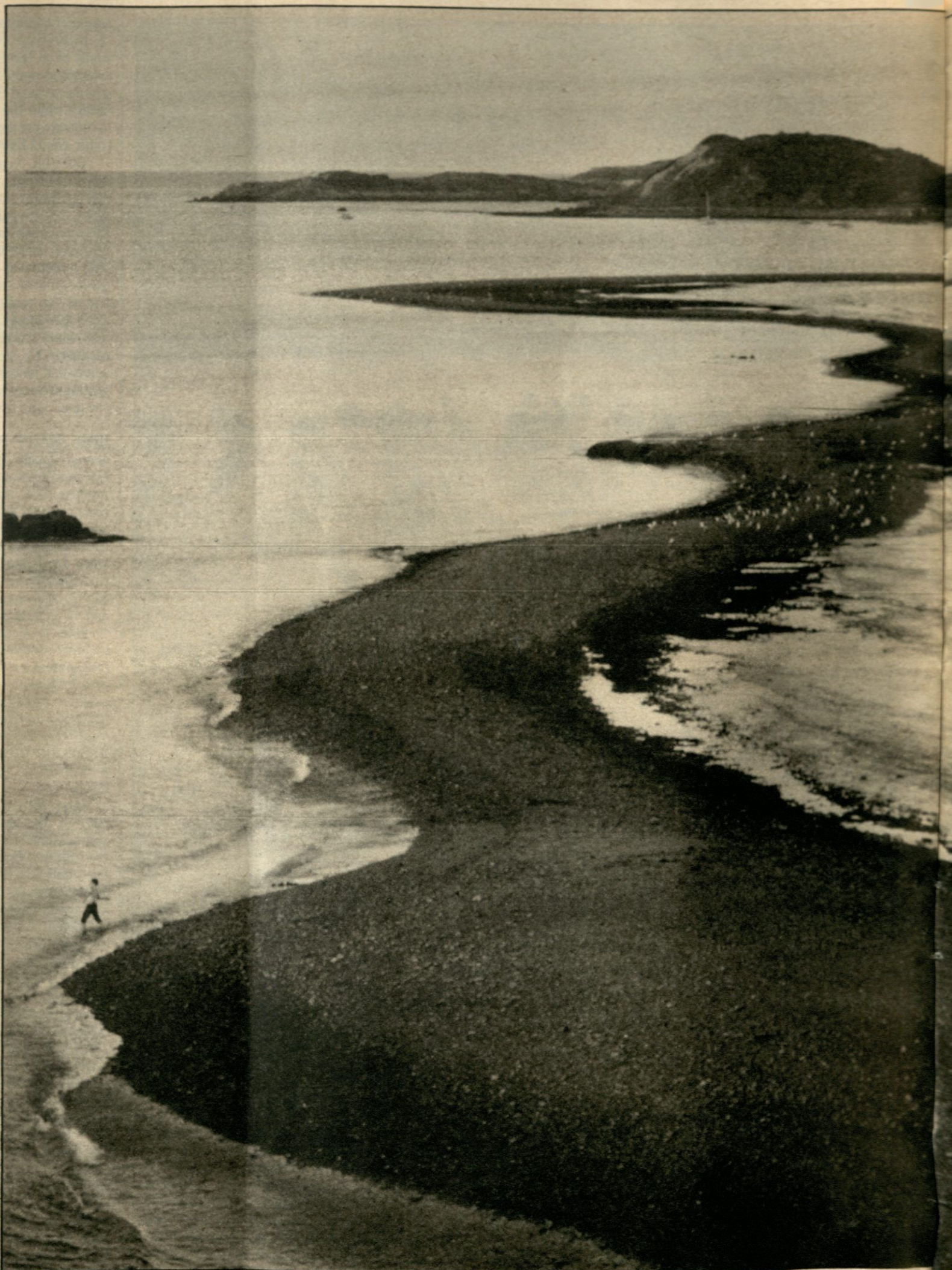


"The key issue is whether we can maintain a vital momentum of interest without spoiling what makes these islands special. There's no reason we shouldn't be able to rival Copenhagen's Tivoli Garden. But you can't have it unless you can picture it."

**JAMES GUTENSOHN,
COMMISSIONER,
MASSACHUSETTS
DEPARTMENT OF
ENVIRONMENTAL
MANAGEMENT**

**SERPENTINE SAND SPIT
EMERGES AT LOW TIDE
OFF GREAT BREWSTER
ISLAND.**

GLOBE STAFF PHOTO BY STAN GROSSFELD



► ISLANDS

HOW TO ACCOMMODATE THE PUBLIC WITHOUT SPOILING THE PARK IS AN INCREASINGLY PRESSING PROBLEM FOR MANAGERS OF THE ISLANDS.

The big crowds yet to come

By David Arnold



GLOBE STAFF PHOTO BY JOHN BLANDING

Crowds of suntanned visitors step from three ferries clutching lawn chairs, fishing rods, coolers, and baby strollers. All the picnic tables have been claimed so the latest arrivals scramble for the shaded areas of the island's trim lawns.

The audience gathered around the aquarium display is several shoulders deep; the line for the water-taxi to other islands is so long that some visitors will have to wait for

the next boat.

Georges Island on this sunny August Saturday seems like a summer balloon ready to pop.

Georges is one of the 12 principal islands at the city's doorstep in the Boston Harbor Islands State Park, where the number of annual visitors since the park's formation in 1970 has exploded from an estimated 10,000 to almost 200,000 last summer.

Planners envision that, especially if the harbor's polluted waters begin to clear, usage could almost triple over the next 15 years. Preserving the semiwilderness environment of islands subjected to the rising pressures of public use is the focus of a mas-



ON A SPARKLING SUMMER DAY, CRUISE BOAT DOCKS AT GEORGES ISLAND. AT LEFT, PEOPLE LEAVE THE ISLAND AFTER GUIDED TOURS, PICNICS, AND OTHER KINDS OF RECREATION.

ter plan, still in revision, which proposes a \$34-million, 10-year program of land reclamation and minimal development to make the Boston Harbor Islands State Park a national showcase.

"This park has been a sleeping giant out there that is finally waking up," said James Gutensohn, commissioner of the Massachusetts Department of Environmental Management, which is steward for all the state parks. His department shares ownership of the islands with the Metropolitan District Commission and the City of Boston. Thompson Island, also in the park, is privately operated by the Thompson Island Education Center.

"The key issue," Gutensohn said, "is whether we can maintain a momentum of interest without spoiling what makes these islands special. There's no reason we shouldn't be able to rival Copenhagen's Tivoli Garden. But you can't have it unless you can picture it."

Many of the islands are uninhabited, their nearly 900 acres of meadows, forests, salt marshes, and bluffs supporting a panoply of flora and fauna. Island history is told in remnants — of quarantine hospital and prison foundations, tombstones, century-old graffiti, and arrowheads.

The late Edward Rowe Snow, a prolific chronicler of Boston's maritime history, wrote in 1935: "Strange how these islands, each an isolated pulpit, figured so prominently in our past yet seem so destined for anonymity." That destiny did not materialize.

The isolation that once made the islands the domain of outcasts is now their greatest asset, offering a visitor solitude in an archipelago that may be unique in the hemisphere.

THE MASTER PLAN TO PRESERVE THE park's natural beauty was completed for the Department of Environmental Management last year but was not released for political reasons because Long Island, a key player in the park's future, was being considered as a site for the new sewage treatment plant. In July, the state Water Resources Authority opted to keep the plant on Deer Island. The master plan is now under revision and is expected to be released by the end of the year, Gutensohn said.

The draft of the master plan proposes building several new ferry terminals and dividing park into three tiers of usage — light, moderate, and heavy — routing visitors by ferry to the less environmentally fragile habitats. Planners believe that the 20 managers who camp in the park each summer can control and direct private boaters, who now comprise roughly one-third the total visitors.

Continuation of low use (150 daily visits) is contemplated on Slate Island, most of Peddocks Island, and the group of Brewster islands. Moderate use (300 visits) is contemplated for Gallops, Lovells, Grape and Bumpkin islands.

Vital to the plan are the islands that planners say can handle as many as 3,000 daily visitors. The tested veterans include Georges Island, where all ferry routes to the

park converge, and Thompson Island, a privately owned, 157-acre enclave in Dorchester Bay specializing in nonprofit outdoor educational programs for city youth. Three newcomers in this category would be the east head of Long Island, Spectacle Island, and the eastern third of Peddocks Island.

"These islands play a major role in the scheme of things," said James Purdy, an associate with Wallace, Floyd, Associates Inc., the Boston-based planning firm that developed the park's master plan. "Without them, we've got problems."

The islands would offer not only new experiences for the visitor but would be escape valves when public use of the park increases, particularly as plans for a cleaner harbor begin to take effect and the \$9-million construction on Long Wharf, which includes a park information center, gets under way.

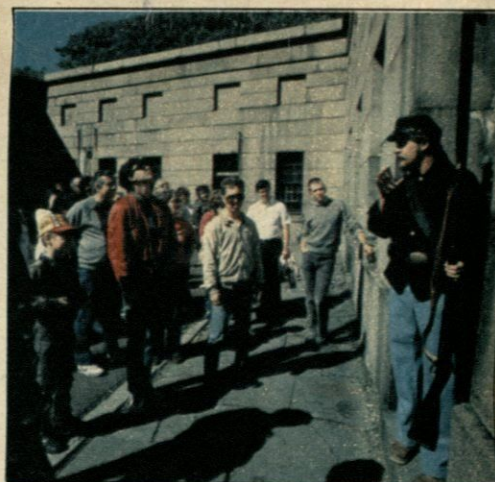
Whether these three new locations, which are expected to accommodate 90 percent of the expected tourist traffic by the year 2000, actually become viable parts of the park is far from resolved.

► Peddocks Island, owned by the Metropolitan District Commission, is under a short-term lease with the Peddocks Island Trust, which returned responsibility for managing the island to the MDC last summer when its funds dried up. The trust hopes to establish a multimillion-dollar, nonprofit marine education center within the enormous brick barracks buildings of old Fort Andrews. To visit the island would cost several dollars.

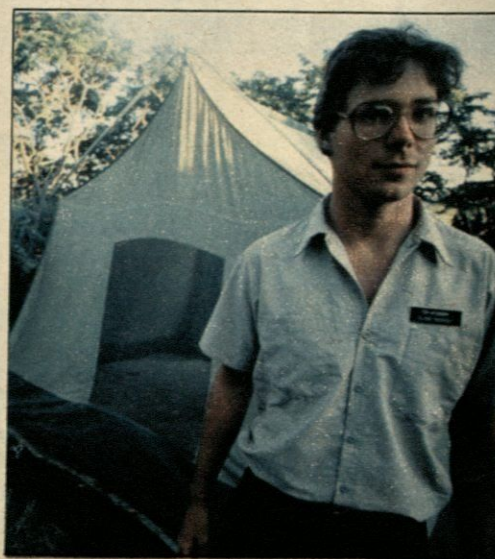
Large donors have shied from the project



ABOVE: AERIAL VIEW OF GEORGES ISLAND, WHERE A REENACTMENT OF A CIVIL WAR EPISODE AT FORT WARREN, LEFT, IS HELD FOR VISITORS.



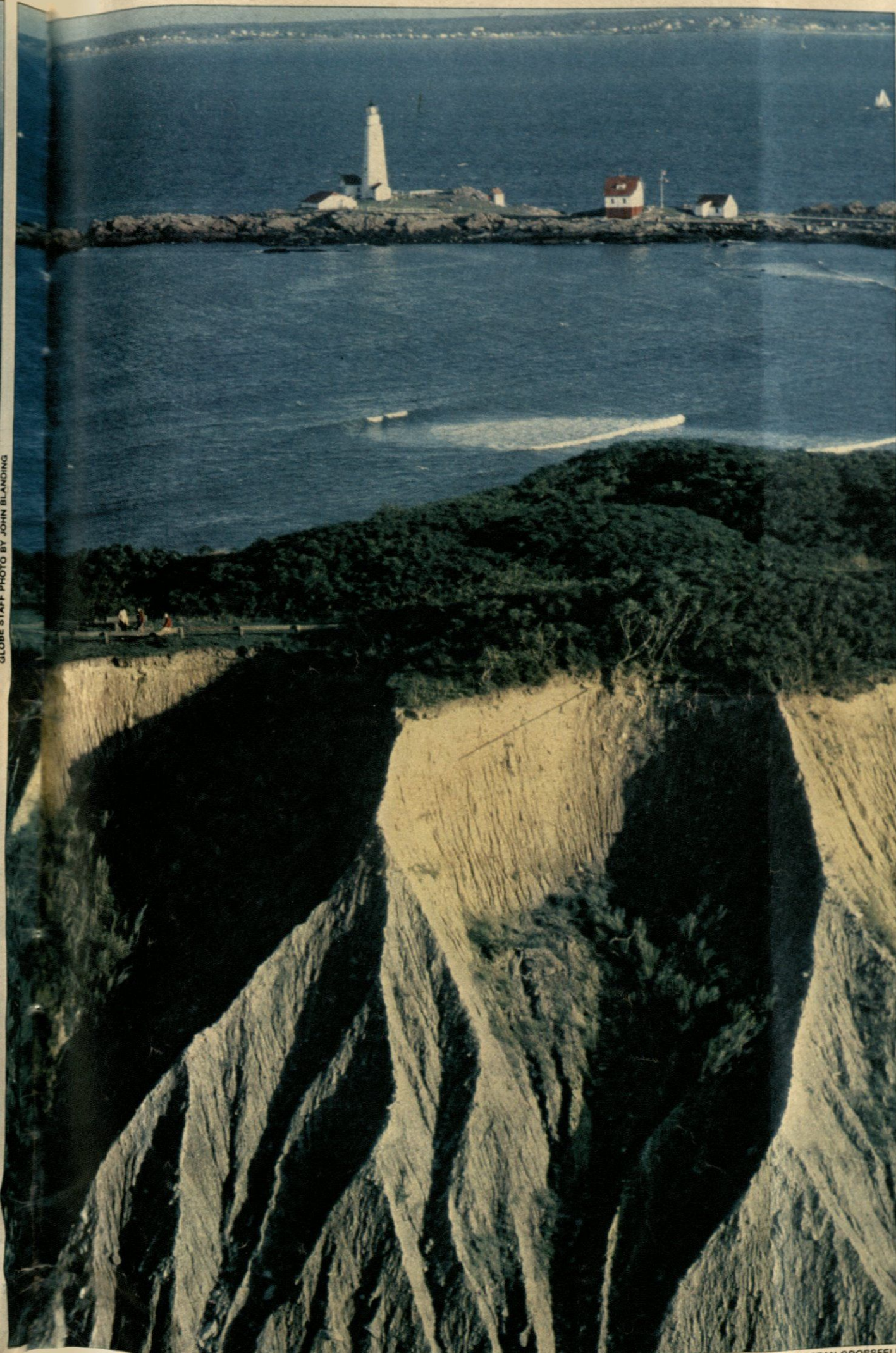
GLOBE STAFF PHOTO BY STAN GROSSFELD



TOM WICKHAM, ISLAND MANAGER AT GREAT BREWSTER ISLAND.

FACING PAGE: A VIEW OF THE CLIFFS AT GREAT BREWSTER ISLAND.

GLOBE STAFF PHOTO BY STAN GROSSFELD



GLOBE STAFF PHOTO BY STAN GROSSFELD

until the state Legislature grants the MDC permission to lease the island long-term (a period of 45 years is now under debate), according to trustees. But whether the dream comes true, the likelihood of attracting 3,000 people each summer weekend day, who are willing to pay admission on the only island where a fee would be charged — while not competing with programs on other islands — is still questionable. "Still, I think the trust deserves a fair shot at it," said MDC Commissioner William Geary.

► Spectacle Island, the city's garbage dump for seven decades, was abandoned in 1960. A thin layer of vegetation now covers 98 acres of the island's center, a 70-foot-deep stratum of ash, glass, steel, cinder, and brick, its interior perhaps still smoldering from spontaneous combustion. The top growth is so feeble that it frequently gives way to a human footstep.

The reclamation plan basically requires that the island be "capped" with a layer of clay, a \$3-million engineering feat that might use dredgings from a major excavation such as a Central Artery/Third Harbor Tunnel project. But the tunnels depend on federal funds that have been slow in coming. According to several sources, new life for Spectacle is many years away.

► Long Island, owned by the City of Boston, figures heavily in the park's future because it is the system's largest land area, with 214 acres. Also, it is linked by road to the mainland, it has a diversity of natural habitats, and it includes a promontory on the east head which could be serviced by a major ferry terminal.

Long Island has escaped at least the initial threat of becoming the site of the city's expanded sewage treatment plant, but is a possible site for the House of Correction now located on Deer Island. Some planners believe a prison here would sound the death knell for future recreation on the island. Boston's chronic disease hospital is expected to remain.

"I guess we become another big 'if' in the big picture of things," said Lorraine M. Downey, chairwoman of the city's Harbor-park Advisory Committee. She believes Boston should have some role in the island's management so as to enhance public access.

Gutensohn is not overly concerned that ownership and management of the park is shared by a private trust (and perhaps resolution of the Peddocks trust will make it two), the city of Boston, and two state agencies. "I'll have to admit that the MDC these days is really giving us a run for our money," said the commissioner.

It is a competition in which the public is clearly a winner and will continue to benefit if political leaders can sustain the vision that a showpiece park is within arm's reach, Gutensohn believes.

Such potential had not escaped Michael Parks of Winthrop, who was picnicking on Georges Island one day last summer.

"I doubt there's any place in this world where you can be so close to a city yet feel so far away," Parks said. "What a gift. Imagine what could be done with it."

NONPROFIT PRIVATE INSTITUTIONS WANT TO MAKE PEDDOCKS ISLAND'S FORTIFICATIONS INTO AN EDUCATION CENTER.

Public island, private interest

The sun has set behind a Boston skyline that glitters in surreal silence just across Dorchester Bay, but still Peddocks Island hums with activity.

From the boat building school comes the thwack of mallets, while over in one of the youth hostels, Boy Scouts belt out the refrain of a sea chantey. Lectures continue at the marine sciences building in classrooms lit by wind power, and not even the seals, squabbling in their solar-heated aquarium,

seem willing to call it a day.

The foregoing is a dream, a vision of how Peddocks Island's resources could be used according to a plan developed by the Peddocks Island Trust.

The trust obtained an interim lease on the island from the Metropolitan District Commission in 1982. But three years after taking over Peddocks, the trust is out of money, without a director, and absent from the island.

"It has been a learning experience for everyone concerned," said John Bok, director of trustees for the trust. "But there's no reason in the world to expect that we can't make this dream come true."

The trust has a \$20-million plan to convert the two dozen stout brick barracks of the 19th-century Fort Andrews into a non-profit marine education center. The buildings, many of which are leaky and lack plumbing and wiring, require so much capital for restoration that former MDC commissioner Guy Carbone suggested five years ago that the site be made into a gambling casino — a proposal that might have attracted a lot of private investment had it not promptly cost Carbone his job.

Membership in the current enterprise includes the New England Aquarium, the Children's Museum, and Tufts University, institutions that have talked of creating a unique learning environment on the second-largest island, with 188 acres, in the Boston Harbor Islands State Park. The trust assumed management of Peddocks June 3, 1982, on an experimental basis that terminates December 31, 1985.

It was assumed by both the MDC and the trust that the state Legislature would have approved a long-term lease by now, but the bill died with many others last year and it is being moved along through committees again. Failure to obtain the lease is the primary reason the trust has refrained from embarking on a major fund-raising campaign, according to Bok.

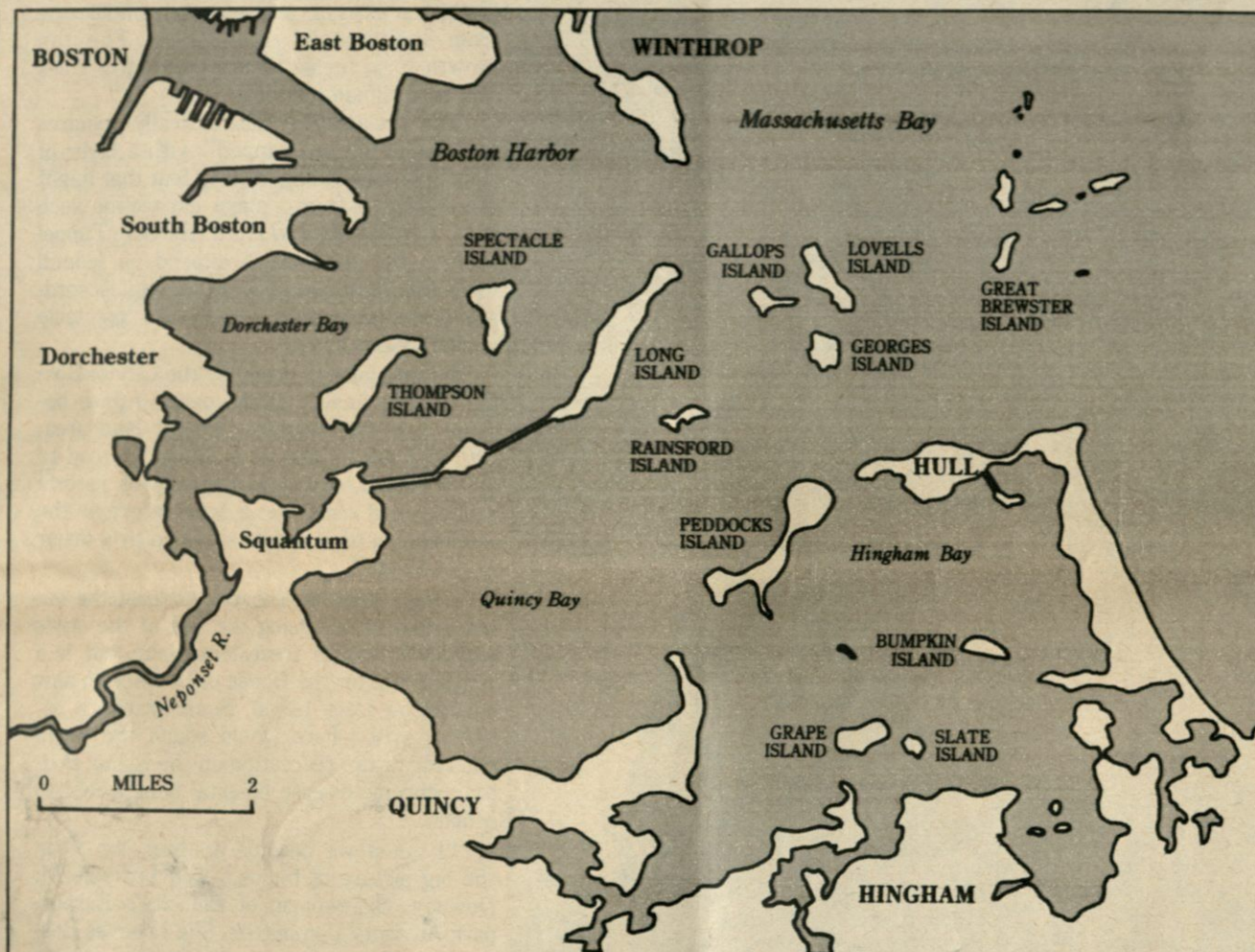
But questions remain beyond the matter of the lease. Are the trust's goals too ambitious? Frank White, executive director of the decade-old Thompson Island Education Center, believes there isn't enough foundation money available to support another major outdoor marine education program for city youth.

Will Peddocks, the only island proposing to charge an admission, be able to attract the numbers called for in the master plan, thereby relieving the pressure on islands with more fragile habitats?

"It's certainly an issue," said Gary Van Wart, director of resources and interpretive services for the MDC. "People go to the islands for picnics, ball fields, and nature walks — Peddocks is going to have to offer some impressive new resources to charge a fee."

MDC Commissioner William Geary nevertheless throws his full support behind the trust — at least for the moment. "It's a noble idea that hasn't been given a legitimate shot," he said. "Their vision is a gamble that is going to need some public assistance, but I'm going to bat for them only after I see some major investment — and I mean some big money."

— DAVID ARNOLD



The Boston Harbor Islands State Park

BUMPKIN: 35 acres of campsites, ruins and meadows owned by DEM; to continue at moderate-use levels.

GALLOPS: 16 acres of trails, old foundations and promontories, owned by DEM; to continue at moderate-use levels.

GEORGES: 28 acres, including the historic Fort Warren, owned by the MDC; to continue at high-intensity use levels.

GRAPE: 50 acres of campsites and nature trails owned by DEM; to continue at moderate-use levels.

GREAT BREWSTER: 23 acres of campsites and cliffs (largest of 9 islands in the Brewster group) owned by DEM; to continue at low-use levels.

LONG: 214 acres owned by the City of Boston. High-intensity use proposed for Long Island Head, and moderate use proposed for beaches and pine groves on West Head.

LOVELLS: 62 acres of campsites, beaches, ruins, and picnic areas, owned by MDC; to continue at moderate-use levels.

PEDDOCKS: 188 acres owned by the MDC. Lease is pending to the Peddocks Island Trust, which proposes a marine education center on East Head. West Head to remain a wildlife refuge.

RAINSFORD: 11 acres of open meadows owned by the City of Boston; to continue at low-use levels.

SLATE: 12 acres of wilderness owned by DEM; to continue at low-use levels.

SPECTACLE: 97 unused acres owned by the City of Boston; once the city's dump, the island is to be "capped" with clay in preparation for high-intensity use.

THOMPSON: 157 acres of open fields, forest, and a former boy's academy owned by Thompson Island Education Center; to continue at high-intensity use levels.



GLOBE STAFF PHOTO BY STAN GROSSFELD

Sources for information about Boston Harbor

BOSTON EDUCATIONAL MARINE EXCHANGE
54 Lewis Wharf

Boston 02110 (523-7611)

BOSTON HARBOR ASSOCIATES
PO Box 1824

Boston 02205 (426-5025)

BOSTON CHAMBER OF COMMERCE
125 High Street

Boston 02110 (426-1250)

BOSTON SHIPPING ASSN.
223 Lewis Wharf

Boston 02110 (523-3762)

ENVIRONMENTAL INTERN PROGRAM
25 West Street

Boston 02111 (426-4783)

FRIENDS OF THE BOSTON HARBOR ISLANDS
15 Sellers Street
Cambridge 02139 (868-6362)

HARBORPARK ADVISORY COMMITTEE
c/o Boston City Hall — 9th floor

Boston Redevelop. Auth. (722-4300)

**MASSACHUSETTS BAY MARINE
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PO Box 110

Cambridge 02142 (253-7090)

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349 Lincoln St., Bldg. 45

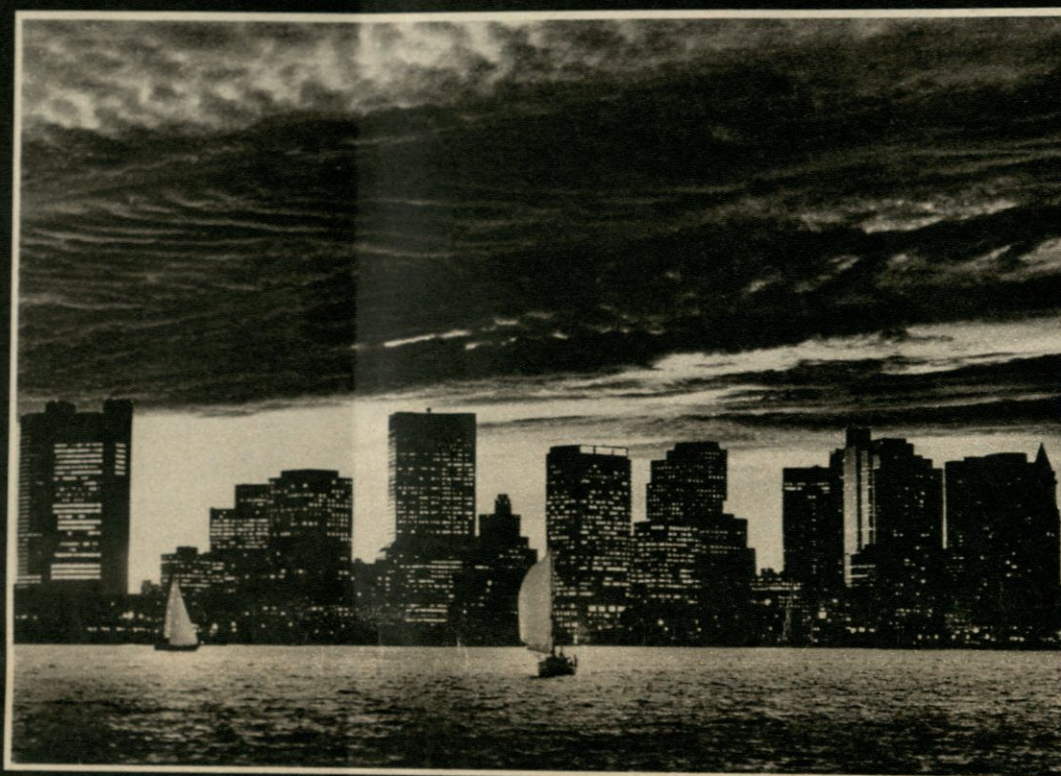
Hingham 02043 (740-1605)

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SUN SETS OVER DORCHESTER BAY. DIRECTLY ACROSS THE WATER ARE CARSON BEACH, SOUTH BOSTON HIGH SCHOOL, AND DORCHESTER HEIGHTS MONUMENT.



The Boston Globe