

**PEDDOCK'S ISLAND
RE-USE FEASIBILITY**

Provided for:

**THE ISLAND ALLIANCE
ON BEHALF OF THE
METROPOLITAN DISTRICT COMMISSION**

By

**THE NEW ENGLAND CHAPTER OF
THE COUNSELORS OF REAL ESTATE**

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Table of Contents

SUMMARY OF CONCLUSIONS	1
INTRODUCTION AND PURPOSE.....	6
DESCRIPTION OF ASSETS.....	9
MAINLAND LINKS	13
VISITOR PROJECTIONS	16
PHASES OF DEVELOPMENT.....	18
DEVELOPMENT MODEL.....	24
FUNDING AND IMPLEMENTING PEDDOCK’S TEN-YEAR PLAN	35

SUMMARY OF CONCLUSIONS

obvious change!

As stewards of Peddock's Island for many years, the Metropolitan District Commission has worked hard to preserve and protect Fort Andrews. Their management has included the search for partners to facilitate the protection and management of the resources over the years. Recently, they have worked with the Island Alliance and the Counselors of Real Estate to study the adaptive re-use of the turn of the century buildings. The public, private and non-profit sectors have come together to address the need to maximize public and private investment without diminishing the public trust.

Our Feasibility Study identifies the critical steps to successfully implement several different phases, that will save the buildings and implement a program that will make Peddock's Island a centerpiece of the new Boston Harbor Islands National Park Area. **Success depends on planning for the highest and best use, partnering with a non-profit, securing significant funds and continuity over several decades.**

Planning for the highest and best use requires balancing the public's right to access the island and its improvements. We recommend only one portion of the island be available for "development" of amenities. Private investment is needed to supplement public funding with revenues. If public financing had been sufficient to protect and manage the natural and historic resources this would not be necessary. However, as the condition of Fort Andrews demonstrates, this has not been the case. **Additional funds must be raised to complete the necessary market study and comprehensive plan to begin attracting public and private investors to develop and preserve the beautiful buildings of Fort Andrews.**

revise as appropriate

sounds like you're ROI

Our major findings are as follows:

- We suggest several phases of re-use. The "Beachhead" phase program **anticipated is a low-level use which would provide public access, raise consciousness, and generally promote the Island.** This consists of the utilization for active recreation including camping, hiking, boating, and increased daily use. In order to achieve this, a minimum amount of permanent staffing is necessary on the Island for management and security.

Looks like this is done

In this report, we have provided a pro forma showing potential revenues and expenses for this level of operation. From our analysis, it is clear that this level of activity will not generate enough revenue to amortize expenses. However, with public investment, operating expenses can be sustained from operating revenues. **This level of rehabilitation and use is a critical first step in the process.**

- In order for anything to start on Peddock's Island, a minimum amount of expenditure and effort must be made to stabilize the situation. This includes the creation of a visitor's kiosk, the beginning of rehabilitation of several buildings, the mothballing of many buildings for future use; and the demolition of several buildings. Further, much of the overgrown brush and saplings must be cleared so that future maintenance and security are more easily implemented. Required funds total approximately \$8-\$10 million. *- done!
15 million*
- An initial level of infrastructure must also be established on the Island. This includes drilling of wells for water supply; re-utilization of the existing septic system for up to 1,000 visitors per day; generator and/or solar power for electric, pending the potential utility system being brought from Hull. *?*
- With a first low-level use such as described above, the stage is set for "expansion" of other new potential uses. These would include institutional uses such as Native American Studies Center, laboratories, bed and breakfast, retreat facilities, more intensive recreational use including small marina and so forth. It is our opinion that these uses would be achievable in a longer timeframe as visitation to the Island increases. However, it is not realistic to assume that this could happen within the next few years, unless there is substantially more investment made in the Island than would otherwise be justified through normal private sector activities. This expansion phase of development is the most difficult level to sustain at this time. It is typically made from mid level businesses and developers who would normally respond to requests for proposals for uses on the Island. However, it is this same mid level that would have difficulty sustaining these activities without subsidization. *Where are we now?*
- We refer to a phenomenon in our report which we characterize as the potential "lightning bolt" that sparks a more intensive level of development. This concept is when a major development or interest is taken in an area which otherwise would take longer to realize. Parallels can be drawn to such things as hotels and convention centers in areas such as South Boston and re-use of buildings in areas like Charlestown Navy Yard, etc. In the context of Peddock's Island, one such example would be active interest by the New England Aquarium for an animal release facility or educational facility. *done!*

In today's strong economy and environment, this high level lightning bolt may be possible for Peddock's. It is evident that there is enormous interest in development of the seaport area from Fort Point Channel into South Boston. There is national interest in the islands. Leadership in and around these projects have indicated there should be physical and financial linkage between waterfront development there and usage of the Harbor Islands. This is a unique opportunity, and we consider it critical that this relationship be fostered.

- Under the existing situation, The Metropolitan District Commission (MDC) alone can not manage, develop and fund the needed improvements of infrastructure, programming, and countless other

aspects required for a better visitor experience. The MDC has a wide mission of stewardship. Recognizing that the MDC will not have the necessary staffing or financial resources for Peddock's, MDC senior staff asked us not only to estimate necessary cost for improvements, but also identify the market opportunities, other funding sources and potential partners to make the transformation of Peddock's into a tourist destination possible.

- **The MDC needs assistance now to jump-start the planning and development for the island.** What resources the MDC does have available should be dedicated to opening up camping on the island, clearing selected overgrown areas and making the island more hospitable and safe. New planning and development functions will be expensive and require dedicated focus. We recommend that the MDC find a non-profit sponsor (through an RFP or other form of solicitation) to help with the planning, development, programming and infrastructure improvements for the island. The Island Alliance with its designation in the National Boston Harbor Islands Legislation as a 501c3 is well suited for these tasks. Other non-profits, such as the Trust for Public Land, the Aquarium, the Boston Natural Areas Fund, the Nature Conservancy, the Audubon Society and other groups could play supportive roles. It is clear that the right non-profit could help fill out a master plan, undertake a market study, offer educational programming and most critically, raise new sources of funds for the island and specific projects. The non profit partner, accountable to MDC, has the capability of raising and spending funds effectively, tapping funding resources (such as from other state Agencies) for which MDC is ineligible, and working in a dedicated project focused manner. ✓
- **Under this a partnership arrangement, the MDC will have significant oversight responsibilities.** The MDC will need to work cooperatively, decisively, and authoritatively with its partner (s) as expensive financial commitments are made by the private sector. With the long term protection and public use of the islands still its mission, the MDC will need to find the right balance for the following:
- **To attract the private sector, long term leasing authority, requiring Legislative approval, is absolutely necessary.** No private sector investor, or donor for that matter, will make the multi-million dollar investments without an unshakable long-term lease. With a long-term lease a private sector partner can obtain financing and grow the various projects to a self supporting and profitable stage. Examples of such legislative authority are found for the MDC's own Elm Bank with the Horticultural Society and The Department of Environmental Management's Greylock Center Project. Other critical aspects of this legislation should include the right to sublease to other private ventures (such as for camping, inn accommodations, marina operations etc.), the right to keep revenue rights so that surplus revenues may be retained for Peddock's and the Harbor Islands rather than the General

Possibilities
are?

Fund, and clear contracting, sponsorship and development authority that is reviewed by the MDC and countless other oversight state agencies.

- **We recognize that the MDC can only provide for \$200,000 to \$500,000 a year for special projects on Peddock's.** As a State agency, MDC is not eligible for many funding sources. A non profit partner, under contract with MDC or with some legal interest (in some cases simply a special permit), could possible raise federal money from the National Park Service, the EPA, the ISTE A-2 program, state money from the Conservation Service, The Massachusetts Historical Commission, the Environmental Trust, and local money. The most significant future funding sources, however, may be from corporate and foundations grants and private partners seeking development interests. As shown in this report, our cost estimates for the various phases are \$8-\$10 million for initial stages and \$25 million and more for later development.

Updates in this area over last 20 years.

A funding strategy for securing these funds is as follows:

- Harbor Islands Federal Funding
 - MDC
 - Federal ISTE A, EPA and other funding sources
 - Urban Self Help, Historic grants
 - Corporate and Foundation Donations
 - Private Sector Development
- **We recommend, and want to be sure that it is clearly understood, that the public sector should seek private sector operation of camping, future hospitality, marina, concession and other activities.** For example, to help achieve a higher use of the islands, private sector camping fees of approximately \$15- \$20 will need to be charged. The Commonwealth camping rates are about half of this, and camping is free on the other islands.
 - **Continued and open public access to the island needs to be assured.** The public and Legislature may fear the island will be lost to private sector interests. Assurances of access will need to be part of the Legislative structure with the private sector. These fears, however, may be overstated. The private sector partners will likely seek public visitorship from all income sectors. Day trips will be promoted. Even if exclusive retreats are planned for an inn and conference center, other parts of the island will be open, and designated times for access to the retreat areas would be possible.

The proposed Peddock's Island Project offers exceptional opportunities— island seclusion only a few miles from Boston, magnificent views of the city, trails, beaches, historic buildings, camping, and wonderful natural features of an island ecology. It could be enjoyed by young and old, families, teens, walkers, fisherman, boaters, naturalists, birders, campers, hikers, historic buffs and many more. The recommendations included herein will result in a an island experience

that must be well managed and generate the confidence and support of public and private sector investors, elected officials, municipal employees and the public at large.

INTRODUCTION AND PURPOSE

INTRODUCTION

The Peddock's Island Report is the work effort of individuals from the New England Chapter of The Counselors of Real Estate (CRE). The Counselors of Real Estate are a national organization of the country's most experienced and knowledgeable real estate consultants. Because of the CRE background, the effort focuses on the real estate aspects of the re-use of Peddock's Island. This effort has been "pro bono", and is the result of many site visits, monthly meetings, discussions and analyses from the Spring of 1998 through the Winter of 1998-1999. Counselors involved include: Daniel V. Calano, Maurice Freedman, Robert T. Kenney, David S. Kirk, John Kline, Richard F. Perkins, Peter Smith and Jack Sylvester.

During this timeframe, the CRE's met independently as well as within a larger group consisting of representatives from the Metropolitan District Commission, The National Park Service, and the Island Alliance, the non-profit group sponsoring our effort.

PURPOSE

The purpose of the project is to set priorities for start-up and to provide a framework for evaluating future concepts of re-use for the Fort Andrews area of Peddock's Island. At the outset, we recognized that there is no single best concept for use of the Island and that adaptive reuse of historic fort buildings will require significant investment.

Our work is based upon existing data and plans. We have updated the information to be consistent with current technology, market situations, financial context, etc. Our goal is to determine basic feasibility of a range of uses and propose a context for evaluating future proposals. We recognize that some of the recommendations will be difficult to implement because of existing jurisdictional and political issues. However, we make these recommendations as something to work towards.

still very!

We also recognized from the beginning that our effort should NOT be:

- A design process or a site plan for the Island.
- A proposal for a single concept plan, since we recognize the dynamic change liable to occur within all of the islands over the next several years.
- Complete recommendations for a political strategy for implementation, as that will be an ongoing process.

We do, however, suggest parts of implementation strategies that seem important to move the project forward. These are outlined in our Summary of Conclusions.

BACKGROUND/SUMMARY

At the outset, we established an overall agenda of focus areas for the work. These areas consisted of the following:

- **Overview Presentation** – The Island Alliance and the Metropolitan District Commission presented the history of, and information from, past Peddock's Island planning efforts. This presentation and discussion occurred over the first two meetings, and included an initial site visit.
- **Reviews of Existing Available Information** – There have been many Harbor Island plans as well as specific proposals for Peddock's Island. Much of the work was completed in the early 1980s. Some of the implementation steps from those early plans have been taken, such as the construction of a new pier on the Island. However, many of the proposed steps from the 1980s were not implemented. There was a very useful Building Study done in 1990, which we update important costs.

already updated

Useful information included historical data, geography, marine environment, as well as fully developed concept plans. One of the major efforts was completed by Sasaki Associates, of which one former principal is a member of the Counselors team.

part done

- **Immediate Steps** – After site visits and review of available information, it was clear that there were certain basic and immediate steps that needed to be taken. Most critical was the stabilization of existing buildings. On this basis, the planning effort developed immediate steps, followed by a short-term plan, followed by a longer-range analysis.
- **Infrastructure** – It was clear from the outset that increased use of the Island would require adequate infrastructure. This is a separate element in the plan based on its importance. The Island needs adequate water, power, and sewage treatment, for anything new to happen. There are several possible ways to accomplish these needs, which differ with low intensity use of the Island versus high intensity use of the Island. Sustainable development was considered important, and infrastructure considerations were partly tailored to this goal.
- **Water Transportation** – We immediately conducted a review of water transportation. Our finding was that this was a rapidly growing industry, and recreational traffic currently supported transportation to other islands. It was determined that, with modest recreational use, water transportation would be adequate at a minimum and sought after competitively by companies at best.

status ? beyond power

still critical

Companies are currently poised to provide these services at different levels.

- **Market Feasibility** – CREs have had broad experience in market analyses. Within the group, there was substantial experience in hotel and tourism industry, general recreation, and other potential uses. Full market analyses were beyond the scope of this effort, but enough information is available to test certain scenarios.
- **Economic Model** – One of the main goals of this report is to provide an economic model to evaluate future alternatives. We recognize that plans and proposals will vary over the next several years, and an overall general model was needed to review new proposals.
- **Implementation** – Implementation strategies focus on the short-term. Long-term strategies will vary depending upon how the political process evolves for use of all the islands. Our focus was to determine what short-term steps were needed to ensure that longer-term efforts become and remained viable.
- **Funding** – A minimal amount of start-up funding is required immediately, both to stabilize the resource as well as create basic usage and visibility. Simultaneously or subsequently, a higher lever is required. The initial funding will have to be public or donations, before any private entrepreneurial capital will be invested. It is our conclusion that market driven economic returns to the land will not be generated until these initial primary investments are made.

Initial funds are in the \$8-\$10 million range, with immediate infusion of at least \$1 million for initial stabilization.

DESCRIPTION OF ASSETS

GENERAL

Peddock's Island is approximately 187 acres in size, comprising five (5) drumlins connected by low land marsh and a sandy spit of land. The East head, comprising two drumlins and approximately 90 acres, is the site of Fort Andrews, an early 20th century coastal defense fort. The middle head comprising 25 acres, is the primary location of the existing cottages on the island. The west head, comprising 42 acres, is densely covered with trees and bushes, an unspoiled wildlife refuge. Peddock's is one of the largest of the Boston Harbor Islands and has the longest shoreline (23,200 linear feet). It also has a beach area of over 400,000 square feet, most of which is rocky.

The island was settled in 1622 by Leonard Peddock. In colonial times it provided excellent pasture land. In the 1800's the island was a summer resort and included several inns. In 1897 the US Government acquired the east head to establish Fort Andrews which consisted of two mortar batteries to guard Boston Harbor. In World War II it provided a defense for the area. Mothballed by the US Army in 1947, it was privately acquired and then sold twenty-one years later to the Metropolitan District Commission (MDC) in 1968.

The former Fort Andrews comprises 26 buildings totaling approximately 218,000 square feet. Most of the buildings have solid brick walls, but many roofs and windows are badly deteriorated. Little in repairs or stabilization has been accomplished during the last fifty years since the Army closed the fort.

The cottages on the middle head number approximately forty-seven (47). The land underneath is owned by the MDC and tenants who resided in the cottages in 1990 can remain for their lifetime, but cannot transfer them to others. Recently a dozen or so have decided to leave and have sold their lease rights to the MDC.

Peddock's Island has for a long time been considered one of the most developable of the harbor islands due to its size, location, and interesting topography. The island is located in the Town of Hull, close by Pemberton Point, across the Hull gut. It is also close to the Houghs Neck peninsula in Quincy. The harbor islands ferry terminal in Hingham is also close by, and this accessibility should enhance development options. As one of the largest harbor islands, Peddock's can support a number of uses such as camping, boating, nature walks etc. along with broader commercial possibilities. The restoration of some of the very attractive brick buildings will provide a charming environment for visitors.

BUILDING REUSE

The twenty-six (26) buildings at the former Fort Andrews are seriously deteriorated and are continuing to worsen. Those supporting preservation agree that it is important to retain the ensemble effect of the buildings as they relate to each other. This can be accomplished through actual rehabilitation as well as graphic representation with pictures, videos and etc. However, if private development is to be encouraged, some of the buildings must be demolished. No developer or entrepreneur will invest private funds if there are numerous deteriorated buildings in the area.

What is needed is agreement on what buildings should be demolished and/or mothballed prior to private investment. As outlined on the attached Building Summary we are suggesting that seven (7) buildings be demolished, and an additional fourteen (14) buildings be securely mothballed for future use. Five buildings are recommended for early rehabilitation for maintenance, administration, vehicle storage and a visitor center. The total square footage recommended to be retained is approximately 150,000. Estimated costs for rehabilitation of \$2,500,000 were based on the 1990 More-Heder Architects Inc. report to the MDC and to DCPO. Those costs were then escalated forward to the present time at 3% per year.

Mothballing includes roof repairs, boarding of all windows and doors, masonry patching, and removal of dilapidated porches and stairs. In 1990 mothballing was estimated to cost \$346,000. Because of escalation and increased deterioration it is now estimated to cost somewhere between \$500,000 and \$750,000. Funds also must be expended to repair walkways, remove overgrown bushes and weeds. Some of this work is being undertaken by the MDC this season. A summary of expenses follows:

**PEDDOCK'S ISLAND
BUILDING SUMMARY**

BLDG. #		SQUARE FEET	1990 COSTS +30% (1)	FUTURE USE
4	Stable	4,160	\$7,946	Mothball
7	Work Shop	3,080	\$343,714	Vehicle Storage
8	Bakery	2,700	\$14,154	Mothball
10	Barracks	16,420	\$28,448	Mothball
11	Barracks	16,420	\$21,663	Mothball
14	Duplex Apts.	2,560	\$21,385	Mothball
15	Duplex Apts.	2,560	\$14,599	Mothball
16	Doctor's House	1,800	\$291,031	Residence
17	Hospital	18,500		Demolish
18	Housing	4,794		Demolish
19	Officers Housing	7,180		Demolish
20	Officers Housing	7,180		Demolish
21	Officers Housing	8,850	\$25,000	Mothball
22	House (C.O.)	5,550	\$25,000	Mothball
25	Gym	12,375	\$15,632	Mothball
26	Admin. Bldg.	10,400	\$12,528	Mothball
27	Duplex Apts.	2,560	\$14,620	Mothball
28	Duplex Apts.	2,560	\$20,658	Mothball
29	Barracks	16,420		Demolish
30	Officers Housing	10,350		Demolish
31	Guard House	6,300	\$1,164,535	Admin. And Visitor Center
33	Fire Station	875	\$61.225	Maintenance & Fire
34	Duplex Apts.	3,108		Demolish
35	Duplex Apts.	3,108	\$19,843	Mothball
36	Warehouse	45,000	\$14,827	Mothball
39	Church	3,434	\$272,470	Meeting Rooms
	Site	0	\$182.000	
		218,244	\$2,570,918	

(1) Source More-Heder Architects Inc. Report - 1990

Map

MAINLAND LINKS

GENERAL

The current 1998 visitation to the Boston Harbor Islands National Recreational Area, consisting of over 30 islands, was approximately 100,000. Of this number of visitors, about 90% used the Boston Harbor Cruises to reach the islands. Limited visitors reach the island by private boats at this time.

In contrast to Harbor Island visitorship numbers, the Massachusetts Office of Travel and Tourism reports 13.8 million visitors to the Boston Metropolitan area yearly. The Boston Harbor Islands are thus drawing less than 1% of the tourist visitorship to the area. In addition to tourists, there are more than 3 million residents of the metropolitan area who are potential visitors. For purposes of further comparison, visitorship counts for selected tourist sites are shown below:

The New England Aquarium	1,155,000
Walden Pond	550,000
Plymouth Plantation	497,000
Horseneck Beach	550,000+
Salisbury Beach	1,000,000
Historic Salem	700,000 (57,000 by boat)

These comparisons point out the potential for greatly increased visitorship to the Boston Harbor Islands. Current projections call for an increase to 500,000 visitors per year in the next few years. For increases of this magnitude, many key things need to happen—more awareness of island features, convenient and inexpensive transportation links, and more programs, experiences and services when people get to the islands.

WATER TRANSPORTATION DEPARTURE POINTS

Convenient, reliable, user friendly and inexpensive water transportation is critical. Under the current schedule, ferry service is provided to the islands during the summer season from June 20 to September 7. The rates are \$8 for adults, \$7 for seniors and \$6 for children under 12. Departures are nearly every hour beginning at 10:00 am from Boston, Hewitts Cove in Hingham less frequently and the Heritage State Park in Lynn on a weekend schedule. Ferry service is also provided, but only on the weekends, during the shoulder seasons of May 2 through June 19 and September 8 through October 7, 1998. After arriving at George's Island, visitors can take a free water shuttle to Bumpkin, Gallops, Grape, Lovell's and Peddock's Islands.

RELATED COMMUNITIES

Visitorship to the islands will increase, and the selection of new departure points will be important. Some of the more important criteria are as follows:

- Tourism infrastructure. Allowing for easy access to the islands in terms of convenience for parking cars or arrival through public transportation. Restrooms, restaurants, good signage and other tourism infrastructure will be needed.
- Reliable, efficient and timely water transportation. Offering known and predictable water transportation service to and from the islands at a reasonable cost for the boat and parking.
- Preview potential and linked tourism experience. Gateway communities for the islands should provide tourist attractions and conveniences in their own right while tourists are en route to the islands.

Hull

As an “abutter” to Peddock’s Hull is interested in becoming a destination community affiliated with the Boston Harbor Islands. The town is interested in promoting tourism through connection to the Harbor Islands, and offering services (attractions, parking etc.) for more tourists.

However, it is 20 miles from Boston, though more like an hour plus commute so that it is not as convenient as other locations for a gateway. Via ferry service, Boston is only 5 miles away.

A direct train from South Station to Nantasket junction is under consideration. Hull could handle additional tourists but at some point, Hull would need to make major accommodations for tourists arriving by car. Given the difficulties of driving to Hull, versus the competitive departure points of Hingham or Quincy, this community needs to capture tourist traffic from the ferryboats. As such it is more a destination than a departure point necessary to be a gateway.

Because Hull is very close to Peddock’s Island, (400 yards), it and can also offer services of electricity, water and sewage disposal once the connections to the mainland are made. Using Peddock’s Island as a satellite facility for services based in Hull may make strong economic sense on behalf of the MDC. For example, a Hull marina might want to set up additional moorings and marina floats on Peddock’s as an extension of the Hull based operation. Water taxi service could be part of the operation. A further benefit is that marketing, management and maintenance capacity for a marina (and other operations) would already be in place for the Hull facility to serve Peddock’s.

Hewitts Cove, Hingham

Hewitts Cove in Hingham is currently the most active departure point on the South Shore. Departures are nearly every hour in the summer. On the weekend a high-speed boat is used so that it is possible to get to George's Island in 15 minutes. Hewitts Cove also offers the critical advantages of free, safe and unlimited parking. Hewitts Cove is far more convenient than Hull to the Southeast expressway. Because of this convenient access, Hingham may capture much of the future auto traffic to the islands

Quincy

Quincy is also a potential South Shore gateway access point. The infrastructure is in place and more convenient to Boston. Strong success of the Harbor Express boat service, based in Quincy makes this a strong candidate for a gateway community.

VISITOR PROJECTIONS

Revise and update

Initial Phase – “Beachhead”

In the initial phase of redevelopment of Peddock’s Island, an average 600 to 800 day visitors are projected. This would of course be less during the week and highest on weekends. Some peak week-ends could reach 1,000 visitors per day. The breakdown is as follows:

75 campsites @ 3 people per site	=	225 people
Day visitors	=	300 people
Staff	=	5 people
Boaters = 50 moorings @ 4 people per boat	=	<u>200 people</u>
Total day visitors, rounded to say	=	800 people

The above projections assume that Peddock’s Island would initially be open from May to September and that the total maximum visitor loading would be 22,400 people per month or 112,000 visits per year on a seasonal basis. Activities would include swimming, fishing, hiking, camping, windsurfing, sailing, sea kayaking, etc.

Later Phases – Expansion and Realization

Once Peddock’s Island has established itself as a recreation destination, and a higher level of infrastructure including water, sewer, electricity and telephone, cable/fiber optic connections to the town of Hull are in place, the peak day visitation will likely approach:

- 3,000 people per day during the peak summer months of July and August with 300 overnights and 2,700 day visitors including those from moored boats and/or boats located in a marina.
- In June and September the number would likely decrease to 1,500 visitors including 250 overnights.
- Depending on the development of conference centers, bed & breakfasts and other research and/or marine related facilities, off season visitation could range from 300 to 400 people with 50 to 100 overnights and 250 to 300 day visitors.
- Peak visitation is projected at 84,000 per month during July and August, 40,000 during June and September and approximately 5,000 to 10,000 people per month for the eight months between October and May.

These projections were based upon a review of available information and comparison to other facilities. While they could be refined, they serve as a realistic basis on which to make our development phase projections.

PHASES OF DEVELOPMENT

Revise and update

After much consideration, it is the opinion of the CRE group that an incremental approach to the use of Peddock's Island makes the most sense. It is clear that available funds and/or entrepreneurial interest will not materialize all at once for a "complete" project. On the other hand, in order to start the process, credibility must be built, and some immediate small steps must be taken.

The first critical step is to "civilize the Island." The first major step has been taken with the MDC's investment in a major docking facility. However, as a visitor steps off the dock there is abandonment all about. Making it a friendly place for people to visit, gather, and participate in activities will build upon itself creating a vibrant usable amenity in Boston Harbor.

"BEACHHEAD"

The following described amenities represent a low level of infrastructure required for the initial reopening of the island to recreational users as the initial phase of development. These amenities are believed appropriate to support the average 700 to 800 people per day that are projected to visit the island during peak months of its initial phase of development.

- Visitors Center

The proposed visitors' center on Peddock's Island is located in a brick building originally constructed by the military as part of Fort Andrews. This building is ideally located at the end of the new \$2,000,000 pier with visual prominence and in a location which would provide maximum surveillance and security. However, while it is habitable and in use, it is in major disrepair, although MDC and grant money has been obtained to replace the badly deteriorated roof. Significant additional investment will be required including mechanical systems and interior retrofit needed to support typical visitor center activities including signage, exhibits, retail sales and service areas, restroom facilities, etc. While this type and size facility is required for planned intermediate use in the development of the Island, its cost and lead construction timeframe is potentially prohibitive for inclusion into first phase infrastructure.

Work should not be delayed because of a lack of funds for this key element. An important alternative visitors center for use during phase one development should be some type of a kiosk. This building could be either a low cost temporary building, possibly modular or of marginal construction, and which should be fast tracked for use in the summer of 1999. It should contain signage, limited display area, sales such as retail ticket camping permit. Restroom facilities could be located outside of the building. The location would be strategic, i.e. near the future visitors' center with the same visual prominence and providing the same

Island security and oversight to the new pier, marina and any potential or mooring facilities. It should relate to the future visitor center, provide a focal point and create interest in the rehab of the other buildings.

- **General Clean-up**

In addition to the presently planned MDC clearing operation, an expanded clearing program should be undertaken to better open the island to recreational users for the purposes of establishing a reasonable initial visitor base. This would involve strategic clearing for campsites, a trail system with appropriate signage, and areas for picnics, sport fields, beach access, etc. and opening up view vistas of the Boston skyline. This effort was originally planned for the spring 1999, but has been delayed. We emphasize the importance of moving forward on this critical initial step.

- **Basic Amenities**

In addition to the visitors center described previously, the initial infrastructure required for the beachhead development of Peddock's Island should include the following:

- Create temporary Site Supervisor quarters and housing for additional staff of two to three people. During the early phase of development, these uses could likely be accommodated in the current visitor center building providing that a kiosk or modular visitors' center is used temporarily. A modular building or trailer is also a short term alternative for both a supervisor and staff. A supervisor manager would eventually be relocated to permanent quarters in a remodeled officers dwelling with staff being relocated to a remodeled duplex dwelling.
- Rehabilitate and connect on-site sewerage disposal system
- Renovate existing sewer and water lines or installation of new lines, drilling of two wells with pumps, renovation of the existing elevated water tank or construction of a new facility.
- Acquire of a diesel electric power plant which can be used as back-up emergency in latter phases.
- VHF and cell phone telecommunications.
- Construction of approximately 75 campsites.
- Provide 50-70 boat moorings (This will have to be through arrangement with Hull.)
- Construct playing fields and/or other recreation.
- Renovate the fire station and maintenance building.

- **Sustainability**

Peddock's Island offers a special opportunity to demonstrate sustainable development—from alternative forms of energy generation, sewage technology, indigenous landscaping, energy conservation in building technology etc. Peddock's has development potential but is lacking in infrastructure. Ultimately, connections to electric power, the sewage treatment plant and water lines in Hull may make the most sense. But in the interim, and in remote locations where the cost of traditional water, sewer and power lines would be prohibitive, alternate technologies are recommended. This should be considered for all phases, but some make particular sense with the "beachhead" and expansion phase in order in order to generate interest.

A commitment to sustainability offers numerous benefits.

- Public funding may be available for these technologies—either from the state and federal government or from private industry that is looking to showcase new products. These potential programs should be explored.
- Visitors will appreciate the opportunity to see these new technologies. Peddock's Island already features wonderful opportunities for environmental education relating to historic, cultural and natural resource features. Features of sustainable development can add futuristic dimensions to environmental education offerings. The self-contained qualities of Peddock's as an island will help dramatize and circumscribe the environmental education story.

The island ecology is fragile and, although Peddock's is one of the most developed islands, there still may be concern about over development. An honest and abiding commitment to sustainable development will ease environmental fears about development of the island.

“EXPANSION”

- Establish a Site Supervisor dwelling, with park ranger housing. This is an expansion of staff as visitors increase. Second, create a building as a maintenance building where equipment can be stored securely.
- Demolish the non-usable buildings and secure the usable buildings in such a manner that they appear cared for and do not create nervousness among visitors as well as protecting visitors from the safety consequences of exploration in them.
- Cluster construction and rehabilitation near the docking facility with continuing clean-up efforts expanding outward. Major public utility infrastructure should not occur until usage demands it. It may be important to rehabilitate key buildings away from the dock as well in the early state. Priorities should be set for building rehabilitation.
- Set up several packages or itineraries for people wishing to use the Island. Such itineraries would include:
 1. Camping program with improved campsites and basic supplies available at the visitor center; staffing and security would be provided by the MDC.
 2. Striped bass fishing program with basic supplies available along with “best fishing” locations, tidetables, and availability of guides;
 3. Trail walking with planned loops ranging from handicapped accessible to broad ranging incorporating all three pods of the Island;
 4. Beaches with at least one area of beach set aside for tours, special events, etc.;
 5. Small boating program package which could include sea kayaking, small sail- boating, and windsurfing with instruction available;
 6. Nature study package including interpretative stations along the trail network and possibly a naturalist guide service available;
 7. Marina with moorings for day and overnight use, creating a destination for boaters.

Each of these activities as well as many others could be incorporated into the plan and would build an awareness and love of the Island and would create the friendly feeling necessary to generate activity. These activities can be offered on a public service basis and at the same time could be offered in special packages for convention and conference attendees at on-shore hotels as well as to tour operators and event planners. We believe an amenity package offered through the Boston and surrounding gateway communities would create special reasons for holding meetings in the Boston area and would draw additional people and economic benefit to the area. Ideas such as this are already being considered with the seaport development.

Towards the end of this phase, private sector interest should be expanding. Requests for proposals will be generated, leading into the next phase we have called "Realization."

"REALIZATION"

A ten-year program will evolve to be expansive and yet responsive to the natural and man-made resources of the island. The plan and the various elements of the development will make the island a place to stop, to visit and, for some, to stay and enjoy and learn. Recreation and education are the objectives; sustainable development is one thematic core with a focus on the past as represented by Peddock's history, and a focus on the future as represented by Peddock's natural resources and location in the Boston Harbor. Redevelopment in a five- to ten-year format will need at least \$25 million of public and private investment.

A long-range view will include the major infrastructure for the buildout of the island and the initial components of a potential retreat and a potential marine lab. Major restoration of the balance of Fort Andrews buildings will occur in the longer term. This phase also will include additional island staff accommodations.

Within four to five years the island will indeed be open for business and the character and limit of the plan will be clearly established. Subsequent phases for a potential retreat and lab are considered integral to the success of the plan in creating a critical mass for activity for the island and for the interaction of the island community as a component of the overall Harbor Island development.

Building development may be phased as follows:

- Explore strategic alliance with institutional uses. Discussions with New England Aquarium indicate initial interest in utilizing a site for mammal rehab, a research test site, or laboratory, etc.
- Provide an alternative energy technology demonstration site, based on systems of self-sufficiency for remote locations. This would attract visitors as well as provide partial utilities during the initial stage.
- Consider a center for environmental education. This could bring both day and overnight visitors, the demand for transient housing would increase thereby allowing for new construction of a Bed-and-Breakfast type facility or the conversion of an existing buildings worthy of such effort.

We considered other more intensive uses as yet longer range possibilities, but also considered them "lightening bolts", that is, potential developments that could occur at any time as momentum and interest builds. These uses include:

- A corporate retreat center;

- A college facility for parks education;
- A major restaurant and/or inn facility;
- Seasonal retail specialized to focus on the historic aspects of the Harbor Islands also linking art and artisans to the locale;
- A commercial children's camp possibly focused as a learning center for environmental studies;
- A Native American Cultural Center;
- Sports fishing/sports club as adjunct to Boston water oriented hotels.

Building the Island's uses as adjunct to onshore hotels, conference centers, event planners, non-profit educational organizations, etc. will be the surest route to success. We recognize that the delicate balance between private for fee use and public access will have to be worked out. A model of such a balance is working at the Elm Bank Reservation as conceived and carried out by the MDC and Massachusetts Horticultural Society.

We also believe that presenting a plan to the Federal level political delegations that shows a link between the on-shore enhancement of economic activity and the Harbor Island National Park area would give the delegation strong reason to promote funding and encouragement of the plan.

DEVELOPMENT MODEL

ASSUMPTIONS

The programming and infrastructure improvements have been contemplated to take place over a period of time. As described, the first stage is referred to as "Beachhead" and "Expansion" and is totally dependent on the islands natural resources, with no umbilical connections to the mainland. The next phase will occur as the island matures in the public's perception, and moderate permanent recreational development, supported by infrastructure connected to the mainland takes place. As discussed previously, the program upon which low-level infrastructure is based is as follows:

- Availability of new pier,
- Site Manager dwelling and visitors center,
- Maintenance and security facility,
- Demolition of non-useable buildings,
- Securing of useable buildings,
- 50 to 100 campground sites with good views and access/security, etc.,
- Picnicking area for day trippers and boaters,
- Clean beaches which provide opportunities for swimming, fishing, softball, etc.
- Moorings for independent boating access.

It is anticipated that this "Beachhead" opening of the island to recreational users will be a test marketing phase; requiring only a modest capital and operating budget and will help to heighten public perception of the island's opportunities and potential. Water shuttle, private boat and scheduled, but limited, ferry operation will provide access during this initial phase. Once a reasonable visitation base has been established (assumed to be two to three years) regularly scheduled ferry service will supplement private boat and water taxi access and a higher level development and infrastructure program is contemplated.

INFRASTRUCTURE PROJECTIONS

With over forty inches of annual rainfall and extensive deposits of permeable soils, potential for the limited low level development exists for on site water supply and sewage disposal, meeting all current state regulations. Electric service can be by conventional diesel generation or photo-voltaic and/or wind power. Communications can be by cellular phone or, for marine emergencies, by VHF radio. Therefore, all initial infrastructure services can be provided on site, with no connection to the mainland for this level of usage.

Based on Title V (state sanitary code) the following sewage loadings have been calculated for the beachhead program:

• Site Manager dwelling - 2 bedrooms @ 110 gpd	= 220 gpd
• Visitors center - 300 visitors @ 10 gpd	=3,000 gpd
• Maintenance and security - 3 people @ 20 gpd	= 60 gpd
• Campground sites - 75 @ 75 gpd per site	<u>=5,625 gpd</u>
TOTAL	9,125 gpd

The above loading is below the 10,000 gpd maximum limit established by the new Title V regulations for on site sewage disposal via septic tank and leaching field; therefore, rehabilitation and use of the on-site sewage disposal is acceptable. If the Clivus-Multrim or other innovative sewage disposal techniques are used they will further reduce the sewage loads calculated above. Water consumption is assumed to be 10% greater than sewage loads or about 10,000 gpd, with a peak requirement of about 35 gpm, likely requiring two wells.

The existing 6-inch water line to the island from Nut Island had been destroyed by dredging a number of years ago and has not been replaced. There is no electrical connection to the mainland and no waste treatment facilities are present. However, a 200,000 water tank, dating from 1941, is reported to be on the East Head hill. An extensive system of vitrified clay sewer pipe (six and eight inches in diameter) and extensive network of cast iron water pipes had also been constructed in 1941 in the area of Fort Andrews. With appropriate inspection and repairs it is assumed that the existing water and sewer network could be put back in service to serve both the low level and moderate infrastructure needs of rehabilitated Fort Andrews buildings or new buildings placed in this location at East Head. If the 200,000 gallon water tank can be renovated it would provide adequate supply for fire protection, capable of delivering over six hours of flow at 500 gallons per minute (gpm) or 1,000 gpm for over three hours.

Infrastructure and Improvement Costs

Island improvement costs are reported to be 20% to 50% above mainland prices due to extra transportation costs for materials and lost time for labor due to boat access. The following are conceptual costs for the low-level infrastructure and improvement program described above as per 1998;

• On site sewage disposal - 9,125 gallons @ \$20/gal	= \$182,500
• Sewer line renovation/new - 5,000 LF @ \$40/LF	= \$200,000
• Water line renovation/new - 5,000 LF @ \$50/LF	= \$250,000
• Wells and pumps - 2 @ 15,000 Each	= \$30,000
• Elevated Water Tank (new or rehab)	= \$120,000
• Dynamic Water Pump	= \$50,000
• Diesel Electric Power Plant	= \$85,000

• Telecommunications (Cell Phone & VHF)	n/c
• Boat Moorings - 50 @ \$2,000 (needs Hull arrangement	= \$100,000
• Playfields and miscellaneous (allow)	= \$100,000
• Additional site clearing (allow)	= <u>\$200,000</u>
• SUBTOTAL	= \$1,317,500
• Engineering and Contingencies @ 25%	= <u>\$329,375</u>
• GRAND TOTAL	= \$1,646,875
• SAY (ROUNDED)	= \$1,650,000

These costs are utilized as the basis for the expense side of the Development Model for the beachhead phase.

The expansion program opportunities identified for the permanent recreational development will consist of the reuse of selected existing buildings or the construction of new buildings. These uses have been described as follows:

- Restaurant(s) and a small ancillary retail,
- One or more bed and breakfasts (up to 40 rooms total)
- Retreat/Conference Center (200+/- ppd and 5,000 s.f. - including overnight),
- Executive Fishing/Sports Club (tied to landside hotel development),
- Adjunct facility for the New England Aquarium,
- Quartermaster Building for non-profit marine R&D/Environmental Education (2 to 3 acres),
- Other hospitality uses (3 to 6 acres with 40 to 80 units),
- Officers Row restoration,
- Duplex renovation for staff.

This program will require infrastructure service from the mainland. The Town of Hull, as per its Town Manager, has expressed an interest in providing underwater, sewer and electrical service connections to Peddock's Island. The Town of Hull has its own electric utility company. Sewer service is by municipal plant east of Telegraph Hill, and water is provided to the Town by the Massachusetts American Water Company. Costs for these service connections by Hull are pending.

ECONOMIC AND FINANCIAL MODEL

The CRE's conceptual plan for restoration, development, and operation of Peddock's Island (PI) as a multiple-use recreational, research, and commercial resource has been roughly modeled to test its early capital requirements and operating potential. We have specifically considered:

1. Current Value

This is the estimated value of PI as it existed prior to the start of the proposed development program assuming it could be developed to its highest and best use.

2. Development Schedule

Restoration and development is proposed in different phases extending of a ten-year period.

3. Development Costs

Costs of restoration and development by phase and sector will be estimated. Development costs will include direct and indirect costs of individual facilities and their pro-rata share of sector and project-wide infrastructure and overhead. At present, our focus is on “Beachhead” and “Expansion”.

4. Operating and Revenues and Expenses

Revenues from potential operating sources including fees, rentals, leases, and merchandise sales will be estimated, together with direct operating expenses of individual facilities, and an allocation of sector and project-wide services. In this section, we have roughly estimated the operating potential of development during the first three years of the project.

5. Capital Requirements and Sources

The model will estimate total capital required for restoration and development.

6. Master Cash Flow Analysis

Ultimately all capital requirements, operating revenues and expenses should be consolidated into a master cash flow analysis for the 10-year period contemplated for the full development of PI, then projected for five years beyond completion for a total analysis period of 15 years. In the present exercise, we have focused on the first three years of the project. Subsequent projections will need considerably more effort, and are beyond the scope of this current project.

These broad assumptions have been made:

1. No land will be sold, title will remain with MDC. Up to 25% of the Island’s total land area may be leased for private development. The balance will remain as open space available for public use.
2. Economic and financial input is estimated at market rates, costs and terms including user fees, lease and rental rates, project overhead, and costs of capital.
3. Non-market features necessitated by governmental policy, preference or necessity that may not represent highest and best use will be accounted for as an off-setting subsidy.
4. Operating deficits are assumed to be financed on a line-of-credit basis at market rates.

5. There will be no taxes on land, land improvements, structures or personal property owned by MDC or other governmental entity.

DEVELOPMENT PHASES

Three major phases are proposed.

Phase	Identification	Period Yrs)	Features
1	Beachhead	3	Concept plan refined, funding confirmed, project management team engaged, consultants hired to plan, promote and finance project. Pier activated. Visitors center developed and opened. Other Phase I activities and projects completed.
2	Expansion	4	Remaining buildings targeted for rehabilitation in the Fort Andrews sector will be completed. Infrastructure will be expanded to serve other mater-planned sectors. Opportunity sites will be readied for final development. Phase I and Phase II operations will be expanded, marketing activities will be accelerated.
3	Realization	3	Opportunity sites will be leased and developed and the ten-year program completed.

ESTIMATED VALUE OF PEDDOCK'S ISLAND

"As Is"

November 1, 1998

Category	Description/Analysis	Amount	Value Reference
Land	187 acres at an average value of \$30,000 per acre (Only part to be improved)	\$5,610,000	Estimated value of comparable, privately-held island properties.
Pier	Timber pier and floating docks	\$2,000,000	Reported Replacement Cost
Structures	Category 1. 5 structures designated for Phase I rehabilitation: 15,489 sf @25.	\$388,000	RCLD
	Category 2. 14 structures to be mothballed for future use, 135,223 sf @ 10.	1,352,000	RCLD
	Category 3. 7 structures to be demolished, 67,532 sf @ 10.	(675,000)	
		1,065,000	Estimated Cost of Demolition and Removal
Infrastructure	Roads, pathways, trails, cleared open spaces, existing utilities	100,000	RCLD
Miscellaneous	Maps, surveys, studies, other documentation, and other assets specifically dedicated to Peddock's by MDC.	25,000	Replacement Cost
	Total	\$8,800,000	

RDLD – Estimated Reproduction Cost Less Depreciation

Phase I Development Cost Summary

(Direct and indirect costs, exclusive of finance charges)

Category	Description	Amount	Timing
Planning	Master land planning for the 10-year program.	100,000	Year 1
	Phase I site planning, engineering, architectural and other professional fees and expenses	250,000 350,000	Allocated over 3 years.
Project Management	Three-person, full-time development team		
	Project Manager	100,000	
	Project Associate	40,000	
	Project Accountant	60,000	
	Burden @25%	50,000	
	Annual Cost x 3	250,000 750,000	Allocated over 3 years.
Site Preparation	Cleanup and clearing	100,000	Year 1
Infrastructure	On-site sanitary septic collection and disposal; domestic water supply, treatment and distribution; cellular and VHF communications; miscellaneous and contingencies.	1,100,000	Years 1 & 2
Development	• Rehabilitation of five existing structures for reuse as:		
	- Administrative office and visitors center		
	- Maintenance and fire control		
	- Residence		
	- Vehicle storage		
	- Meeting rooms – 15,489 sf @ 137.71 sf (avg)	2,133,000	
	• Playfields	100,000	
	• Boat moorings	100,000	
	• Campsites (75)	150,000	
		2,483,000	Years 1-3
Demolition	Seven (7) structures: demolition and disposal. 675,000 cf @ 1.00	675,000	Year 1
Protection	Fourteen structures mothballed 135.223 sf @ 1.90	266,000	Year 1

Summary	Total Direct Costs	5,714,000	Years 1-3
	Indirect Costs:	571,000	Years 1-3
	Administrative overhead, legal, and accounting. Transportation. Leased and purchased equipment. Leased space. Insurance. At 10% of direct costs.		
	Contingencies:	343,000	Years 1-3
	6% of direct costs		
	Total Phase I Development Costs	\$6,628,000	Years 1-3

General Assumptions

For the three-year, Phase I period:

- Available facilities are expected to operate during a 150-day season extending roughly from May 16 through October 12 each year.
- The comfortable daily visitor capacity of the Island is estimated eventually to be 2000. In years 2 and 3 the estimated daily visitor capacity is estimated at 800.
- Utilization of facilities is expected to be at a seasonal average of 40% in year 2 increasing to 50% in year 3, eventually stabilizing at 65% in year 5.
- No revenues are anticipated in year 1 due to construction and renovation activities.
- Use fees and rates will be based on market rates for generally comparable facilities in the Boston area.
- Use fees and rates are expected to increase 3% annually after year 3.

Revenues Sources

In the first phase of development, these potential sources have been identified.

- Mooring fees: 50 moorings, \$20 daily fee
- Campsites: 75 sites, \$25 average daily rate
- Guide Services: Average daily income \$0.50 per visitor
- Meeting rooms: 2 meeting rooms, \$50 average daily rate for each
- Merchandise sales: Vending, general store, gift shop. \$6.00 per visitor
- Concessions and rental: Fast food, fishing equipment, small boats, etc., four concessions, each at \$25 per day.

A revenue summary for year 2 is shown in Table 9-1

Operating Expenses:

It is recommended that Island operations be contracted to a private sector-company, possibly the same company that provides project development services. These further assumptions have been made.

- A daily staff will be required to provide management, visitor services, and property maintenance.
- Cost of goods sold will be 40% of gross sales.
- Utility costs will be \$0.50 per visitor/day.
- Advertising and Promotion will be 6% of gross revenues.
- Administrative and General expenses will be 5% of gross revenues.
- Contract services will be used for electrical and mechanical repairs and grounds maintenance.
- There will be no property taxes.
- Property damage and comprehensive general liability insurance is estimated at \$10,000 per annum.

An expense summary for year 2 is shown on Table 9-2.

Table 9-1
Summary of Operating Revenues
Year 2

Category	Quantity	Rate	Season (Days)	Utilization	Revenue
Mooring Fees	50 moorings	20. day	150	.40	60,000
Campsites	75 sites	25. day	150	.40	112,500
Guide services	800 visitors	1. day	150	.40	48,000
Meeting rooms	2 rooms	50. day	150	.40	6,000
Merchandise sales	800visitors	6 .day	150	.40	288,000
Concessions/Leases	4	25. day	150	.40	6,000
Total Year 2					520,500

Table 9-2
Summary of Operating Expenses

Category	Explanation/Calculation	Expense
Cost of Goods Sold	40% of Merchandise Sales	115,200
Payroll & Burden	12 person x 100 day avg. x 150 days x 1.20 burden	
Utilities	800 visitors x \$.50 x 150 days x 40% utilization	24,000
Advertising & Promotion	\$520,500 x 6%	31,200
Administrative & General	\$520,500 x 5%	26,000
Contract Services	\$3,000/month x 6	18,000
Telephone, Fax, I-Net	\$300/month x 6	1,800
Rental Equipment	\$1,000/month x 6	6,000
Insurance	Estimated at	10,000
Reserve for Repairs	Estimated at	20,000
Misc. & Other	\$520,500 x 3%	15,600

Management Fee	\$520,500 x 5%	26,000
Total Year 2		509,800

Peddock's Island
Phase I: Year 2 Operating Summary

Revenues:		
Fees and services		\$520,500
Expenses:		
Exclusive Capital charges		\$509,800
Net Operating Income		\$10,700

Cash Flow Analysis

Development and operating activities have been consolidated and summarized in Table 9-3.

Summary and Conclusions

The purpose of this analysis is to show in rough form the rudimentary process suggested for identification and evaluation of the costs, financial requirements and operating potential of Peddock's Island.

As a model is refined and extended it will pick up subsequent phases of development and expanded operations. In the absence of more detailed physical plans and market studies, it seems inappropriate to continue beyond the present level of analysis.

Our conclusion is that operating revenues can meet operating expenses, but there is no additional revenue from entrepreneurial profit or amortization of improvements. Thus, all investment made in the beachhead phase and at least part of the expansion phase must come from public or institutional sources, not from profit motivated private sector.

FUNDING AND IMPLEMENTING
PEDDOCK'S TEN-YEAR PLAN
1999-2009

The ten-year program needs to be expansive and yet responsive to the natural and man-made resources of the island. The plan and the various elements of the development will make the island a place to stop, to visit and, for some, to stay and enjoy and learn. Financial viability is dependent upon matching a variety of capital sources from the public and private sectors with the risks and returns available in the venture. To provide eligibility for a variety of funding arrangements and flexibility in implementing the plan, the developer/agent is likely to be a non-governmental organization (NGO). Enterprise, funding and management will be a combination of private, public and non-profit sectors.

The Metropolitan District Commission (MDC) has been a diligent steward with limited resources and provides a headstart and a model with Elm Bank/Horticulture Society for the Peddock's plan. MDC is critical in both the funding and implementation of the Peddock's Island development program. The continuity of MDC's stewardship capital and operating funding will be helpful during the initial phase in the form of beach and campsite improvements and security and maintenance staffing. Selected activities might well continue to be managed by MDC with its regional role as in the stewardship of historic and recreational resources in the greater Boston Metropolitan area.

NGOs can operate in the private and public sector with seemingly greater ease and flexibility than governmental units like the MDC. The beachhead and expansion phases might be characterized as the seeding phase with highest risk investments. The budget which is comprised of several components of infrastructure and preliminary stabilization and setup costs, might be too large and risky for one funding source or the MDC capital budget. However, when divided into five or six logical parts, such as visitors' center, water and sewer, roads and paths, historic Fort Andrews stabilization and demolition, campsites and beaches, and harborfront facilities, the so-called "ask" is in the \$1 million range and the opportunity for buy-in and sponsorship in the next phase is possible. MDC's Elm Bank model through lease and/or license to an NGO would provide an agent/developer, and additional state sources and various federal and municipal (Hull, Hingham, Weymouth, Quincy, and Boston) funding sources could be tapped without governmental restriction or regulation or jurisdictional barriers. These are outlined below.

The next phase will possibly attract private sector capital funding, a substantial portion in the range of \$8 to \$10 million will be required from grants, low-cost or forgiving capital because of the limited track record from the venture. This phase will include the major infrastructure for the buildout of the island and the initial

components of a potential retreat and the lab. Major stabilization and restoration of all Fort Andrews buildings to be preserved will occur in the second phase. These first two phases will be linked and separated only by the lead-time required to plan and fund the second phase which will be the major capital requirement of the overall plan.

Within four to five years the island will indeed be open for business and the character and limit of the plan will be clearly established. Subsequent phases for the retreat and the lab should be funded from the private sector. Initial improvements financed by governmental or institutional sources might be sold or held for cash generation to maintain the NGO agency. User fees, concession and license, and transportation fees based on traffic will marginally offset operating expenses during the initial three years. Increasing income from these sources resulting from increased traffic and percentages will be augmented by the rental income from ground leases and leaseholds from the traditional real estate sources.

We have summarized possible financial sources critical to the different phases of development. It is important to create a "package" from these sources in order to move ahead with this project.

The Federal Government

Source: **National Park Service funding for Harbor Islands**
Amounts: Uncertain.
Timing: Uncertain.
Note: The Federal government will match \$1 for every three \$3 raised, whether state, local or private. Specific funding has not been appropriated yet for projects. NPS is internally funding management plan and staff costs. Funding legislation will be necessary. A Peddock's plan for funding over several years should be agreed upon and initiated in the Legislative process.

Source: **ISTEA-2**
Amounts: Estimate by EOTC officials is for the Commonwealth to receive \$12 million to \$20 million with 65% or \$7.8 million to \$13 million available for bike and pedestrian paths yearly.
Timing: Apply in March/April 1998.
Note: Program has only a six-month authorization. It is expected to continue, but there are many variables. Need to be in Transportation Improvement Plan (TIP). Funds are used to reimburse costs and a 10% match required. Program also funds a wide variety of historic preservation projects and other non bike/pedestrian related projects.

Source: **National Recreational Trails Act Recreational Trails Program**
Amounts: \$1,000 to \$30,000 grants on a matching basis. \$200,000

available to Massachusetts for recreational trails.

Timing: July receipt of applications, October 1998 awards.

Note: Need 50% match but can be in kind. Contact Peter Brandenburg at the Department of Environmental Management at 727-3180 x 655. Good for Vietnam Memorial or smaller trail component.

Source: **EPA Sustainable Development Grants**

Amounts: \$5 million available each year

Timing: Yearly.

Note Good for innovative septic, alternative energy, and sustainable building adaptations.

Source: **EPA Environmental Education Programs** Joe Supple, 565-3404.

Amounts: Under \$10,000

Timing: Yearly.

Note Good for environmental education efforts—suited for Moon and Long Island.

Note limited Land and Water Conservation Program funding has been available. Program may be reauthorized and would be a terrific funding source

Commonwealth of Massachusetts Funding

Source: **Capital Appropriation Lots Back to Beaches**

Amounts: Over \$30 million authorized for this program.

Timing: Subject to state capital allocations.

Note Unallocated funds could be used for projects affiliated with MDC.

Source: **Division of Conservation Services Self Help and Urban Self Help Programs**

Amounts: Up to \$500,000 for matching reimbursement grants for projects with conservation and recreation purposes.

Timing: Yearly.

Note Competitive. Non profit agent with master lease of land may be eligible.

Source: **Department of Environmental Management Historic Landscapes Program.**

Amounts: Average grant of approximately \$25,000.

Timing Yearly.

Source: **The Seaport Bond Bill**
Amounts: Varies but many big projects authorized. \$300 million potentially available.
Timing If eligible, application can be made at any time.
Note: Contains some broad language. Moorings, piers, dredging and other sub components may be fundable under this program.

Source: **The Massachusetts Historical Commission**
Amounts: Varies, but \$10 million a year in overall funding.
Timing: Yearly.
Note: This is a very good program for the Lighthouse, perimeter walk and other noted historical features. Needs a non-profit partner to receive funds from this for state-owned land.

In addition to the direct funding sources described above, this trail can also benefit from forming partnerships with potential users and advocacy groups as was done so successfully with the Neponset River Greenways Program. A brief discussion of the more major interest groups follows:

The Town of Hull

Hull has expressed an interest in helping support and possibly fund bringing electricity, public water and sewerage, and mooring facilities to Peddock's.

Alternative Funding Sources

In addition to the programs mentioned above, financial and other forms of support may be obtained from the following sources:

Non Profit, Foundation and Governmental Sources

The Peddock's Island project has very good funding potential for limited natural, cultural and historic resource funding to be used for smaller trail components or interpretive materials.

Heinz Foundation

Sweet Water Trust grants for habitat restoration - Up to \$10,000 dollars. Contact Nancy Smith 617-482-5998

Greenway Grants - Administered by the Department of Environmental Management for the Commonwealth. Grants are made up to \$5,000 with a 50% required match that can be in kind. Yearly applications. Contact Jennifer Howard at (617) 727-3160.

Fields Pond Foundation - Brian Rehrig 617-899-9990.

National Fish and Wildlife Foundation. Lucy Wallace, 508-443-0498.

The Massachusetts Historic Commission - Endangered Projects funds. Potential funds for lighthouse, stone walls and renovation of other significant properties.

Trust for Public Land and *Boston Natural Areas Fund*. Strong supporters of Neponset River Greenway and other allied projects. May lend some financial support and technical expertise.

Potential Partners

Corporate: Harbor Front Hotels, Fleet/BankBoston, Spaulding and Slye, Fidelity, Boat operators, Hotels etc.

Non Profit: *The Island Alliance, The Aquarium. The Audubon Society. The Trust for Public Land, The Nature Conservancy, and other Harbor Island advocacy groups*

Alternative energy companies
Clivus Multrum

The Peddock's Island Project will need to incorporate tourists, Harbor Island advocacy and other environmental groups in order to make it a project with the all important regional benefits. These groups can provide programming, adopt a trail or park efforts, marketing and political support.

Linkage with Mitigation Programs

A potential source of commitments and funding for Peddock's may come from environmental mitigation programs. Already there are mitigation commitments from the EOTC, and more may follow. Developers that are seeking approval of Chapter 91, particularly those in the Boston Seaport District, might offer to meet goals of public access through specific commitments to these projects. The *Massachusetts Environmental Policy Act (MEPA)* requirements may also be met through a similar targeting of off-site mitigation benefits to these pedestrian and bicycle routes. The key is to make it known that Peddock's Island is a Federal, State and local priority, and thus a potential locus for developer or other sponsor initiated mitigation.

Corporate sponsorship - Receiving corporate funds in exchange for advertising through T shirts, tickets, signs, events, vending machines, etc.

User fees. Fees camping, special programs and other services that are sometimes free in parks will need to be increased or quite simply, more public funds will be necessary to make the venture feasible.

1.	Visitors center with food kiosks and sundries	2 phases	10,000 sf
2.	Harbor and mooring dockhouse	2 phases	4,000 sf
3.	Fort complex restoration with interpretive center	4 phases	4,000 sf
4.	Campsites for 100	2 phases	
5.	120 bed hut system	3 phases	18,000 sf
6.	Residential complex for island team 20 apartments	3 phases	20,000 sf
7.	Sports shop for fishing, kayaking, small boat sailing and marine accessories	2 phases	5,000 sf
8.	Restaurant(s)	2 phases	5,000 sf
9.	150 room retreat	3 phases	75,000 sf
10.	30,000 lab, study center, monitoring site	3 phases	30,000 sf
			175,000

1.	Visitors Ctr.	2 phases	10,000 sf	#31-6,300sf, #39-3,434sf	7,734
2.	Dockhouse	2 phases	4,000 sf	#8	2,700
3.	Fort center	4 phases	4,000 sf	#26-10,400	10,400
4.	Campsites	2 phases			
5.	Hut system	3 phases	18,000 sf	#30-10,350 sf;#27&28-5,120sf	15,740
6.	20 apartment	3 phases	20,000 sf	#14,15,16,34,35	13,126
7.	Sports shop	2 phases	5,000 sf	#4-4160sf	4,160
8.	Restaurant(s)	2 phases	8,000 sf	#25-grade floor;#22-5550sf	8,000
9.	Retreat	3 phases	45,000 sf	#36-45,000sf plus	75,000
10.	Lab center	3 phases	30,000 sf	#25-upper floors;#10&11&21	40,000
					175,000

It is to be recognized however, that the moderate intensity permanent development will be limited to the already developed, but abandoned, Fort Andrews or East Head sector of the island and the beach area. The Middle Hill, salt marsh and West Head sectors of the island will remain forever as low key passive recreational and environmental education opportunities, with walking trails and interpretive signage and markers.