

GA-17-15

GRANT BRIEFING DOCUMENT

rev. 2/13/13

From:

Name: JP "Flip" Walters Dept: Rec & Parks Phone: 410-263-7958

This is a request to

- review, approve, and/or sign a grant agreement/award
other

Grant title: Boating Infrastructure Grant FY15- FY17

Grantor: US Dept. of the Interior thru MD DNR Amount: \$ 100,000

Attestation:

- Match is not required.
Match is required. Match will be met in the form of \$20,274.50 State Waterway Improvement Grant/\$20,274.50 FY15 CIP Budget

I attest that this asset has been approved/appropriated in

Department Director signature Dept Date

Table with columns: Routing, Initials, Date (In, Out), Comments. Rows include: originating Dept Director, Grants Coordinator, Finance Director, City Attorney, City Manager, Mayor, City Clerk, Finance Committee, Finance Dept.

Return to Originating Department

**GRANT BRIEFING DOCUMENT**

rev. 2/13/13

*From:*  
 Name: J. P. "Flip" Walters Dept: Rec-Parks-Harborstr Phone: 410-263-7973

*This is a request to*

review, approve, and/or sign a grant agreement/award

other Requesting Authorization to Apply for a Grant

*Grant title:* Boating Infrastructure Grant - Tier I (Three Year Period of Performance)

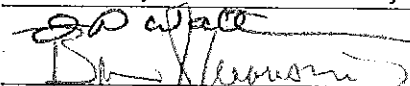
*Grantor:* US Dept. of Interior thru Md Dept of Natural Resources Amount: \$ 100,000.00

**Attestation:**

Match is *not* required. NO CITY MATCH REQUIRED

Match is required. Match will be met in the form of <sup>1</sup> 75% Federal Funding from DOI  
25% Contribution from non-CityAgency (Md. Dept. of Natural Resources)

I attest that this asset has been approved/appropriated in <sup>2</sup> As a fall-back alternative and  
in case of any MDNR shortfall we may use partial 66640-524010 funds in FY15 & FY16 & FY17

	<u>Harbormaster</u>	<u>23 Sept, 2013</u>
Department Director signature	Dept	Date

Routing	Initials	Date		Comments
		In	Out	
<input checked="" type="checkbox"/> originating Dept Director	<u>RJW</u>		<u>9/3es</u>	
<input checked="" type="checkbox"/> Grants Coordinator	<u>VGB</u>		<u>10/1/13</u>	
<input type="checkbox"/> Finance Director				
<input type="checkbox"/> City Attorney				
<input type="checkbox"/> City Manager				
<input type="checkbox"/> Mayor				
<input type="checkbox"/> City Clerk				
<input type="checkbox"/> Finance Committee				
<input type="checkbox"/> Finance Dept				

*Return to Originating Department*



Grant Title Boating Infrastructure Grant- Tier I - FY15 - FY17 (This Replaces the Form submitted on 23 Sept, 2013)

Grant Award (\$) \$120,247.50 Originating Department(s): Rec & Parks Dept- Harbormaster Div- Dock Fund

Dept Contact (Name/Phone): J. P. "Flip" Walters, Harbormaster (410-263-7973)

Expenditure Account	Revenue Source				Total per Expend. Type	Comments
	Federal	State	Local (Matching)	Other		
Salaries					0.00	
Benefits					0.00	
Overtime					0.00	
Supplies					0.00	
Telephone					0.00	
Electricity					0.00	
Fuel and Oil					0.00	
Training & Education					0.00	
R & M - Equipment					0.00	
Special Programs					0.00	
Contract Services					0.00	
Capital Outlay	\$100,000.00	\$20,274.50	\$20,274.50		\$140,549.00	66240-580000-845XX
other (fill-in)					0.00	
other (fill-in)					0.00	
other (fill-in)					0.00	
other (fill-in)					0.00	
other (fill-in)					0.00	
other (fill-in)					0.00	
<b>Total</b>	<b>\$100,000.00</b>	<b>\$20,274.50</b>	<b>\$20,274.50</b>	<b>\$0.00</b>	<b>\$140,549.00</b>	

TOTAL EXPENDITURES\*: \$140,549.00

\* May be different from Grant Award \$ if there is a match requirement.

Match is not required.

\_\_\_\_\_  
Department Director Signature/Date

Dock Fund- Harbormaster Div- Rec & Parks  
Department

Match is required. Match will be met in the form of <sup>(1)</sup> \$20,274.50 See Attached Grant Budget (From Page 10 of Grant Agreement)

I attest that this asset has been approved/appropriated in <sup>(2)</sup> FY15 C.I.P. Budget \$40,000.00 Allocated (See Attachment CIP Spreadsheet)

  
Department Director Signature/Date 17 OCT 14  
**ACTING**

Recreation and Parks Dept. - Dock Fund  
Department

**COMMENTS:**

The Federal and State Funds will cover 75% and 12.5% respectively, up to their respective ceilings shown above.

This project will likely result in improved mooring revenues thru accomodating larger boats, reduced maintenance costs by replacing moorings currently in need of thousands of dollars of maintenance work with brand new moorings; will result in greatly reduced hazard liability risk to the City (see BOAT-US) Underwriters letter in the attachment) and will reduce environmental impact in our Harbor thru reduced bottom scouring.

(1) Examples (include dollar amounts if applicable): Cash match, equipment loan, staff salaries, volunteer time, contribution from non-City agency.

(2) Examples: FY \_\_\_ operating budget, a memorandum of understanding, City Council resolution/ordinance.

**GRANT Briefing Document, continued**

*Provide a short narrative. Include:*

-program description	- purpose of funds	- due dates
-grant period	-amount of request or award	
-special features, e.g., environmental impact implications, notarization required		

Over the last two years we have been converting older moorings in Spa Creek to newer safer heavy duty Helix Moorings to accommodate larger boats and earn greater revenue in the dock fund. (See Attachment).

The newer moorings drastically reduce our reduce risk and liability - The insurance industry has recognized the superior safety by granting a 15% premium reduction for owner using Helix Mooring Systems. We as a self insuring government can take great comfort that we are reducing our risk when we utilize a product for which Insurance Companies after test and evaluation reduce premiums for customers using that product.

The newer moorings drastically reduce the adverse environmental impact of local boat moorings by reducing the volume and depth of bottom scouring by mooring chains dragging thru the sand and mud, disrupting bottom growth, oysters, and other residents of the harbor bottoms.

The newer moorings accommodate larger boat than could be safely accommodated on the older moorings. Consequently we are now able to collect fees from boats we previously had to turn away.

This is a triple Win-Win-Win for the City. Reduced risk / liability, reduced environmental impact, greater revenue capacity, paid in part by Federal Funds, and in part by State Funds.

Finally, private citizens are required to utilize Helix mooring systems in Annapolis Waters (City Code Section 15.20.110 and Action of Annapolis Board of Port Wardens on 27 Feb., 2007). By continuing to implement this program we are bringing the City into compliance with it's own Code and Regulations imposed upon the public.

We can not yet guarantee 100% grant funding. However, heretofore over twenty years these projects have been 100% funded by blended Federal and State Funding. We reasonably believe that we will be able to continue this pattern. The Federal Funds will remain available for three years, and cover seventy five percent (75%) of the project cost, up to a Federal Funds ceiling of \$100,000.

As a fall-back position, in the event of nonavailability of State matching funds we can stretch the project out over three fiscal years using a maximum of \$11,000 each year from routinely appropriated maintenance and repair funds (Account 66640-524010).

Application deadline 10/4/13.  
 Notice of award March 2014.

APW  
 23 Feb 13

<sup>1</sup> Examples: cash match, equipment loan, staff salaries, volunteer time, contribution from non-City agency.

<sup>2</sup> Examples: FY\_\_ Operating Budget, a memorandum of understanding, City Council resolution/ordinance.



# BOAT/U.S.

Boat Owners Association of The United States

Marine Insurance  
Washington National Headquarters  
880 South Pickett Street, Alexandria, VA 22304

Boat Insurance: 1-800-263-2883  
Claims: 1-800-937-1937  
Fax: 703-461-2940

March 3, 1997

David Merrill  
Helix Mooring Systems Inc  
P.O. Box 723  
Belfast, Maine 04915

Dear Mr. Merrill:

This is to confirm our recent phone conversation regarding the discount the BOAT/U.S. Marine Insurance program provides boat owners who use the Helix mooring system.

When a boat owner applies for a BOAT/U.S. marine insurance quotation and states that the boat is moored on the helix system he will receive a 15% discount on the quotation.

Please let me know if you have any other questions or if we can be of further service.

Sincerely yours,

E. Ann Hutchins  
Vice President & Manager  
Marine Insurance Underwriting

EAH/va

## Minimized chain drag radii help protect the harbor ecosystem

Short scoping is allowed because of superior holding capacity.

Long scoping of the chain is required for conventional anchors and mushrooms.

Conventional mooring systems can damage the delicate ocean floor ecosystem. The large sweep associated with long chains on traditional systems can scour the bottom, wiping out precious habitat.

The new Chance mooring system helps alleviate this problem. It utilizes the superior and predictable holding capacity of Chance helical anchors.

**Outstanding Capital Projects - Expected Funding Requirements over next 12 months**

ORG OBJ PROJECT	Project	Bond Funded?	Priority Score	Available Budget (Col E)	Required Funding (Col F)	Available To Transfer (Col E - Col F)	Status
<b>Projects fully funded with bond proceeds</b>							
30400 583000 10001	Landfill Gas Mitigation - Consent Order	Yes	100	-\$904	\$211,576	-\$212,480	N&E Study on-going, add funding reqd for ACM
30400 583000 40002	Dam Repair - Consent Order	Yes	100	\$776,764	\$776,764	\$0	Complete design, then award construction
62340 583000 71003	Water Distribution Rehab	Yes	75	\$3,525,016	\$1,150,000	\$2,375,016	Waterline replacement - \$1,000,000 Asset Mgmt Study - \$150,000
30400 583000 20004	Maintenance Facility	Yes	74	\$493,653	\$4,678,000	-\$4,184,347	D/B award - Design + Construction fund requirements
61340 583000 72006	Sewer Rehab and Improvements	Yes	74	\$3,314,534	\$1,940,000	\$1,374,534	Gentry Court - \$400,000 Hilltop Lane - \$130,000 Smith Avenue Force Main - \$1,050,000 2nd St. Wetwell - \$210,000 Asset Mgmt Study - \$150,000
61340 583000 72002	Sewer Pump Station Rehab	Yes	73	\$1,886,991	\$671,763	\$1,015,228	Bywater Pump Station - \$630,250 (low bidder) + PM
30400 583000 50008	Truxton Park Pool Imps	Yes	71	\$93,340	\$93,340	\$0	Planning
New	Johnson Harbormaster Bldg Rehab	Yes	62	\$0	\$240,000	-\$240,000	New project submission
30400 583000 40006	Roadway Imps - Summer 2014/15 work	Yes	62	\$164,053	\$0	\$164,053	On-going (funds encumbered for 2014/2015 resurfacing)
30400 583000 40007	Sidewalk Imps - Summer 2014/15 work	Yes	62	\$404,250	\$404,250	\$0	Work on-going, all funds to be encumbered
64340 582000 73002	Buildings (Off-Street Parking)	Yes	62	\$75,970	\$75,970	\$0	Hillman Garage structural inspections/repairs
30400 583000 40008	Fire Station Paving	Yes	55	\$426,212	\$426,212	\$0	Work to start in late June/early July
New	Truxton Park Skatepark	Yes	46	\$0	\$26,000	-\$26,000	New project submission
New	IT Payroll Time & Attendance	Yes	43	\$0	\$276,132	-\$276,132	New project submission
30400 583000 40004	Greenfield St. Imps	Yes	N/A	\$0	\$13,500	-\$13,500	Final payment pending
30400 585000 50001	IT System Implementation	Yes	N/A	\$443,439	\$0	\$443,439	MUNIS implementation
67340 583000 75001	Market House Renovations	Yes	N/A	\$294,041	\$75,000	\$219,041	AC mods and new exterior furniture
			<b>Total</b>	<b>\$11,897,959</b>	<b>\$11,257,507</b>	<b>\$639,853</b>	
<b>Projects partially funded with bond proceeds</b>							
30400 583000 20005	City Hall - HVAC Replacement	Partial	62	\$798,170	\$750,000	\$48,170	Project design is ongoing - State bond bill funds
66340 583000 74050	Bulkhead Replacement	Partial	54	\$1,499,855	\$7,500,000	-\$6,000,145	\$1.5M Federal Grant
30400 583000 20002	Maynard Burgess	Partial	N/A	\$273,499	\$273,499	\$0	Construction Award - bldg weatherization (\$100K grant)
30400 583000 20005	City Hall - Generator Installation	Partial	N/A	\$150,000	\$150,000	\$0	Construction contract award (Emergency Mgmt grant)
30400 583000 20009	Stanton Center Improvements	Partial	N/A	\$13,502	\$13,502	\$0	Punchlist work and change orders (CDBG funds)
New	Pumpout Boat	Partial	70	\$75,000	\$100,000	-\$25,000	Federal Grant for \$75,000
New	Moorings	Partial	63	\$100,000	\$140,549	-\$40,549	Federal Grant for \$100,000
New	Police Dept Indoor Range	Partial	N/A	\$250,000	\$500,000	-\$250,000	New - Unfunded (State bond bill will provide \$250,000)
New	Roadway Imps - Main Street	Partial	N/A	\$1,206,000	\$2,170,000	-\$964,000	New - Main Street repair (\$1.2M from State)
	<b>Transfer from other projects with available funds</b>			<b>\$3,058,742</b>		<b>\$3,058,742</b>	Amount = \$639,853 + \$2,418,890
	<b>Sub-total</b>			<b>\$7,424,769</b>		<b>-\$4,172,762</b>	
	<b>Use of BAN funds until FY17 bond issuance</b>			<b>\$4,172,762</b>		<b>\$4,172,762</b>	
	<b>Total</b>			<b>\$11,597,550</b>	<b>\$11,597,550</b>	<b>\$0</b>	

## ADDENDUM A: SCOPE OF WORK

### Maryland BIG Project – Annapolis Mooring Improvement

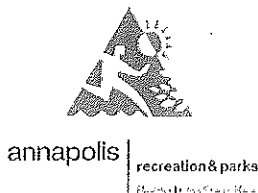
The purpose of this project is to upgrade twenty eight (28) mushroom moorings to Helix moorings capable of accommodating non-trailerable recreational transient vessels up to fifty five feet in length. With a useful life of 20 years, this project will provide improved non-trailerable transient recreational vessel access to the historical and cultural opportunities that make Annapolis a world-class boating destination.

The work will be bid and preformed under contract. On-site supervision of the project will be done by the Harbormaster and a qualified engineer(s) of the City's Department of Public Works and/or by a qualified engineer(s) under contract. The work site will be inspected periodically during the course of the construction and after the project is completed. Following construction of the project, the moorings will be managed and maintained by the City of Annapolis.

#### Project Cost Summary

<u>Quantity</u>	<u>Description</u>	<u>Cost</u>
28	Triple 16" SS175 series anchors with 7' termination included	\$ 39,200.00
56	Helix SS175 series 7' anchor extensions	\$ 19,600.00
1000'	½" galvanized mooring chain	\$ 7,000.00
28	Shackle 1-1/8" Crosby Safety – Galvanized	\$ 653.80
84	Shackle 5/8" Crosby Safety – Galvanized	\$ 6,955.20
28	Mooring Pendant 5/8" by 8'	\$ 1,540.00
1	Freight	\$ 4,500.00
1	Site Surveyor – Set up proper positioning	\$ 1,500.00
28	Labor – Install New Helix Moorings	\$ 25,900.00
28	Labor – Remove, power wash and recycle mushroom moorings	\$ 21,700.00
1	Design, permit drawings, and Applications	\$ <u>12,000.00</u>
Total Project Cost		\$140,549.00
Federal BIG funding (not to exceed 75%, maximum \$100,000.00)		\$100,000.00
25% match provided by 50/50 State/Local funds		\$ <u>40,549.00</u>
-State Waterway Improvement Funds		\$20,274.50
-City Mooring Maintenance Funds		\$ 20,274.50

The work site will be inspected by the Department periodically during the course of the construction and after the project is completed. All plans and specifications shall be stamped by a Maryland Registered Engineer.



Captain J. P. "Flip" Walters, Harbormaster

Annapolis Recreation and Parks  
Harbormaster's Office  
One Dock Street  
Annapolis, MD 21401  
Main: 410.263.7973  
Fax: 410.295.9018

[www.annapolis.gov/harbormaster](http://www.annapolis.gov/harbormaster)

[harbormaster@annapolis.gov](mailto:harbormaster@annapolis.gov)

Boating Infrastructure Grant Program  
FY14 Tier I Project Submission

***Upgrade Moorings in the Annapolis Main Mooring Field  
(Severn River-Spa Creek) Tier I BIG***  
City of Annapolis, Anne Arundel County, Maryland

***Background:***

The City of Annapolis is sometimes called "America's Sailing Capitol." Annapolis is the premier boating destination in Maryland, and indeed on the entire Chesapeake Bay. The Annapolis Harbormaster conducts 18,000 customer transactions each year. During the 15 months ending 30 September, 2013 we have hosted 8,925 individual overnight boater visits on our public moorings (Moorings only, this does not include boaters visiting Annapolis City Dock)..

Annapolis is the State Capitol of Maryland, the Anne Arundel County Seat and home of the United States Naval Academy. With a moderate climate, Recreational boating in Annapolis goes on year round, including intercollegiate sailing and local yacht club frostbiting programs for the hearty serious sailors throughout the winter.

Harbor depths in general tend to be 8 to 10 feet upstream from the Spa Creek Draw Bridge and 12 to 18 feet outside the draw bridge. (*See Chart Excerpt in Appendix*). Based on Maryland Department of Natural Resources Statistics, there are nearly twice as many boats registered in Anne Arundel County as in Baltimore City and Baltimore County Combined. With only seven percent of the County Population and two percent of the county area, Annapolis is home to nearly one quarter of these boats (*See MDR Statics in Appendix*).

There is a Chesapeake Bay cultural activity, almost a 'boaters rite of passage' to spend a weekend on a mooring in Annapolis; take a water taxi to shop and dine in Annapolis on Saturday... Perhaps have a barbecue on the boat for dinner one night; then on Sunday morning take a water taxi ashore to attend church and go to one of the famous local Sunday Brunches, perhaps at Carole's Creek Café, the Fleet Reserve, or the Marriott Waterfront.

***NEED:***

We currently have 76 public moorings in City Waters. Thirty six of our public moorings (31 in Spa Creek above the Draw Bridge and 5 in Back Creek) were originally installed with Helix moorings. However, the 40 older moorings in the Main Mooring Field were originally installed with three hundred pound mushroom anchors and fifty foot mooring chains.

Over the last two years, with wonderful and greatly appreciate assistance from the great folks at the Boating Services Section of the Maryland Department of Natural Resources and the Waterways Improvement Fund we have managed to convert twelve of these forty moorings to Helix Anchors. (On these twelve moorings only) we are able to accommodate boats of up to fifty five feet in length. The twenty eight remaining older moorings, still on mushroom anchors, are limited to a maximum boat size of forty five feet in length.



## FY14 – BIG Tier I Application - Annapolis Mooring Field Upgrade

Surprisingly there are many more boats over forty five feet in length looking for moorings in Annapolis than we can currently accommodate. Each Friday night and Saturday night there are numerous boater conflicts trying to obtain use of one of these twelve higher capacity moorings. And there are frequent boater disappointments for those who find they spent just a little too long enjoying their boat on the waterways; and everyone else has beat them to the limited space available. As previously mentioned, we have hosted 8,925 individual overnight boater visits on our moorings during the immediate past 15 months. We do not maintain statistics on how many we turn away, but we do know (except in winter) there are several each weekend evening.

### ***OBJECTIVE:***

It is the intention of the City of Annapolis, thru the Harbormaster Division to upgrade the remaining twenty eight mushroom moorings to Helix moorings capable of accommodating boats up to fifty five feet in length.

### ***RESULTS and BENEFITS:***

This project will give us the capability to accommodate many more of the larger non-trailerable recreational boats (up to fifty five feet in length) than is our current capacity. The Helix anchors will be drilled 18 to 28 feet into the mud in the same spot as designated for the previous mushroom anchor it will replace. Because the Helix anchors require dramatically less scope of chain (the length of the anchor chain relative to the depth of water) as required for mushrooms we can accommodate larger boats within exactly the same mooring field geometry.

The shorter chains will reduce bottom scouring by the chain dredging its way thru the harbor bottom as the boats swing around the moorings with changes in winds and tide. The smaller bottom scouring results in reduced disturbance of the plants, oysters and other aquatic life on the bottom of the bay waters.

Helix moorings are demonstrably more safe and kinder to the environment than their technologic predecessors. Marine Underwriters have conducted substantial testing of the Helix mooring systems and the results are quite conclusive. Boat US offers a fifteen percent reduction in the insurance premium for boats utilizing Helix moorings. The proof of enhanced safety is provided by the Underwriters themselves. When an insurance carrier will assume the same risk in exchange for fifteen percent less money in payment of insurance premiums the non-engineers among us can readily accept that the safety benefits are substantial<sup>1</sup>. (See Boat US letter and Helix Test Data in Appendix).

The benefits to the boating public are: First: Greater Safety for the boat, the boaters and the nearby property owners including other boaters tied up in the nearby vicinity. Second: Greater accommodation of larger boats (that currently we have to turn away).

The Helix anchors will have a life expectancy of well over twenty years. With ordinary maintenance it is probable that these moorings will serve the boating public up to fifty years.

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<sup>1</sup> Currently we have one of our moorings (M37) permanently removed from service to the boating public because our mushroom mooring anchor seems to have a wanderlust. We have had a diver trench it into the bottom with a jet pump twice. As soon as a boat of any size attaches however, it seems to drag its way slowly toward the Spa Creek Drawbridge with the flood tide and out to sea on the ebb... endangering the unknowing boater both on Mooring 37 and those on moorings adjacent. This "wanderlust" is *nearly* impossible with a Helix Mooring.

**FY14 – BIG Tier I Application - Annapolis Mooring Field Upgrade**

The City of Annapolis and MDNR Boating Services have a long history of consultation and working together to approve the procurement procedures and installation of our waterways improvements which we treasure and will continue through and beyond this project.

USDOI- Fish and Wildlife Funding signs and Maryland Waterways Improvement Fund signs are already displayed on several completed projects in the immediate vicinity. These will be continued. It is impractical to display similar signs on the individual moorings, however we will add the logos with a “Thank You” acknowledgement to our “Welcome To Annapolis” bulletin that is offered to every boater upon first greeting after arrival in City Waters.

***LOCATION:***

The project is located in at the confluence of Spa Creek into the Severn River in Historic Annapolis Maryland, Capitol of the State of Maryland, Home of the United States Naval Academy and Anne Arundel County seat of government. The approximate center of the Main Mooring Field is located at 38° 58.547’ North Latitude, 076° 28.958’ West Longitude.

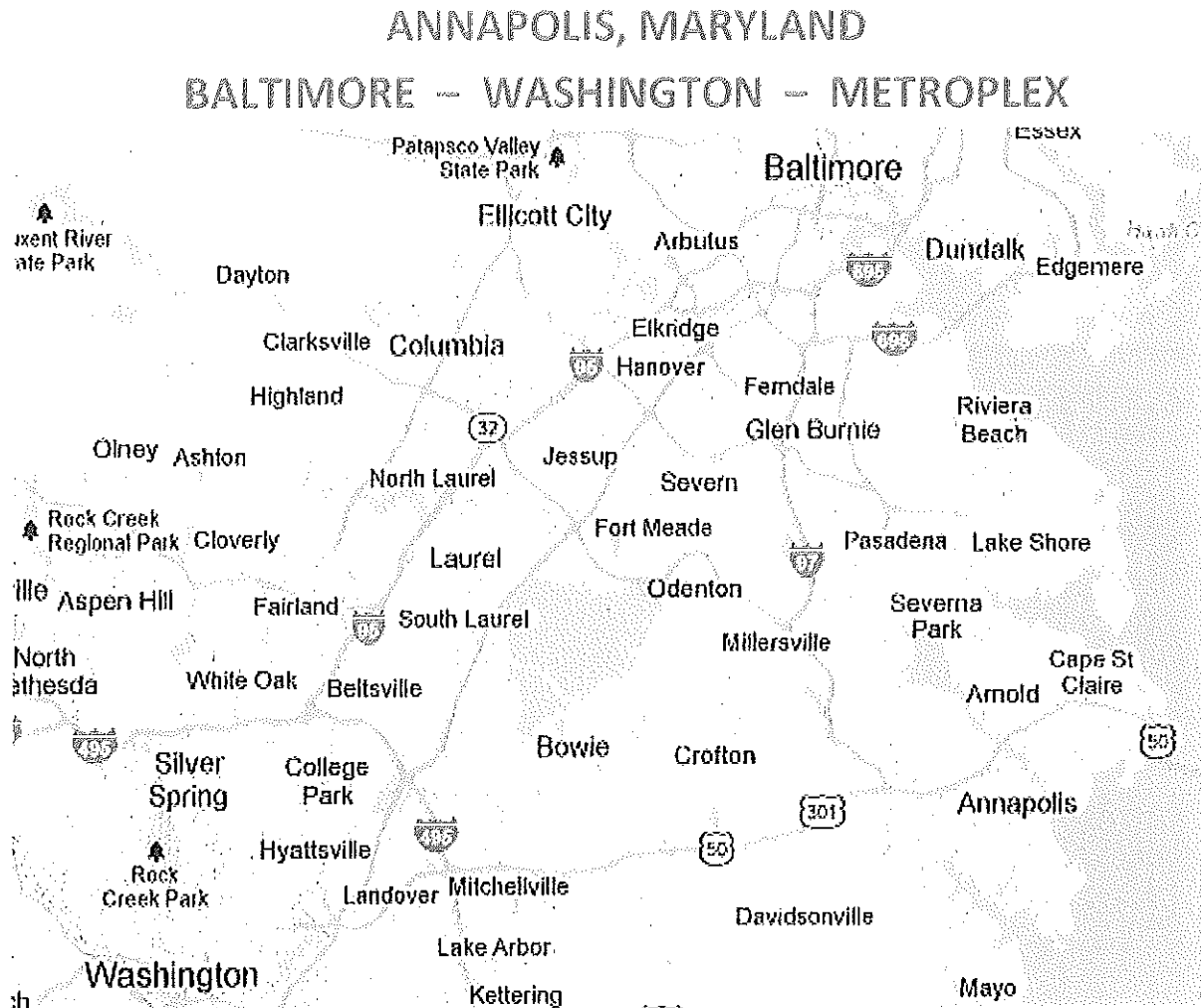
***TIME FRAME and COST ESTIMATE:***

The cost estimate for the entire project is \$140,549. The requested Boating Infrastructure (Tier I) Grant of \$100,000 represents 71.15% of the total; cost. The \$40,549 matching funds will be provided either thru use of State Waterways Improvement Fund Grant(s), City Mooring Maintenance Funds or a combination of both. This project is expected to be completed within two years of Grant Award.

Item	Description:	Unit:	Quantity:	Unit Cost	Extended:
1	Triple 16" SS 175 series anchor with 7' termination included	Ea.	28	\$1,400.00	\$39,200.00
2	Helix ss175 series 7' anchor extension	Ea.	56	\$350.00	\$19,600.00
3	1000 feet 1/2" galvanized mooring chain	Ft.	1000	\$7.00	\$7,000.00
4	Shackle 1-1/8" Crosby Safety - Galvanized	Ea.	28	\$23.35	\$653.80
5	Shackle 5/8" Crosby Safety - Galvanized	Ea.	84	\$82.80	\$6,955.20
6	Mooring Pendant 5/8" by 8'	Ea.	28	\$55.00	\$1,540.00
7	Freight	Lot	1	\$4,500.00	\$4,500.00
8	Site Surveyor- Set Up proper positioning	Job	1	\$1,500.00	\$1,500.00
9	Labor- Install New Helix Moorings	Ea.	28	\$925.00	\$25,900.00
10	Labor- Remove, power wash and recycle mushroom moorings	Ea.	28	\$775.00	\$21,700.00
11	Design, Permit drawings, and Applications	Lot	1	\$12,000.00	\$12,000.00
<b>Project Total Cost</b>					<b>\$140,549.00</b>

***KEY PERSONNEL:***

Mark O'Malley	Director of Boating Services, MDNR	410-260-8462
Carla Fleming,	Director of Boating Implementation	410-260-8447
Li Lan Carson,	Federal project leader, MDNR	410-260-8452
Don O'Neil,	Agency Grants Specialist, MDNR	410-260-8435
Virginia Burke,	Assistant City Manager, City of Annapolis	410-263-7997
Brian Woodward,	Director of Recreation & parks, City of Annapolis	410-263-7958
Brian Snyder,	Chief procurement Officer, City of Annapolis	410-263-7944
J.P. "Flip" Walters	Harbormaster, City of Annapolis	410-263-7973



## Baltimore–Washington Metropolitan Area

Redacted From Wikipedia, the free encyclopedia

The **Baltimore-Washington Metropolitan Area** is a combined statistical area consisting of the overlapping labor market region of the cities of Baltimore, Maryland and Washington, D.C. It is the most educated, highest-income, and fourth largest Combined Statistical Area in the United States, with a population of nine million people.

Based on Maryland Department of Natural Resources Statistics, there are nearly twice as many boats registered in Anne Arundel County as in Baltimore City and Baltimore County Combined.

With only seven percent of the County Population and two percent of the county area, Annapolis is home to nearly one quarter of these boats. *(See MDR Statics on Last Page of This Section)*

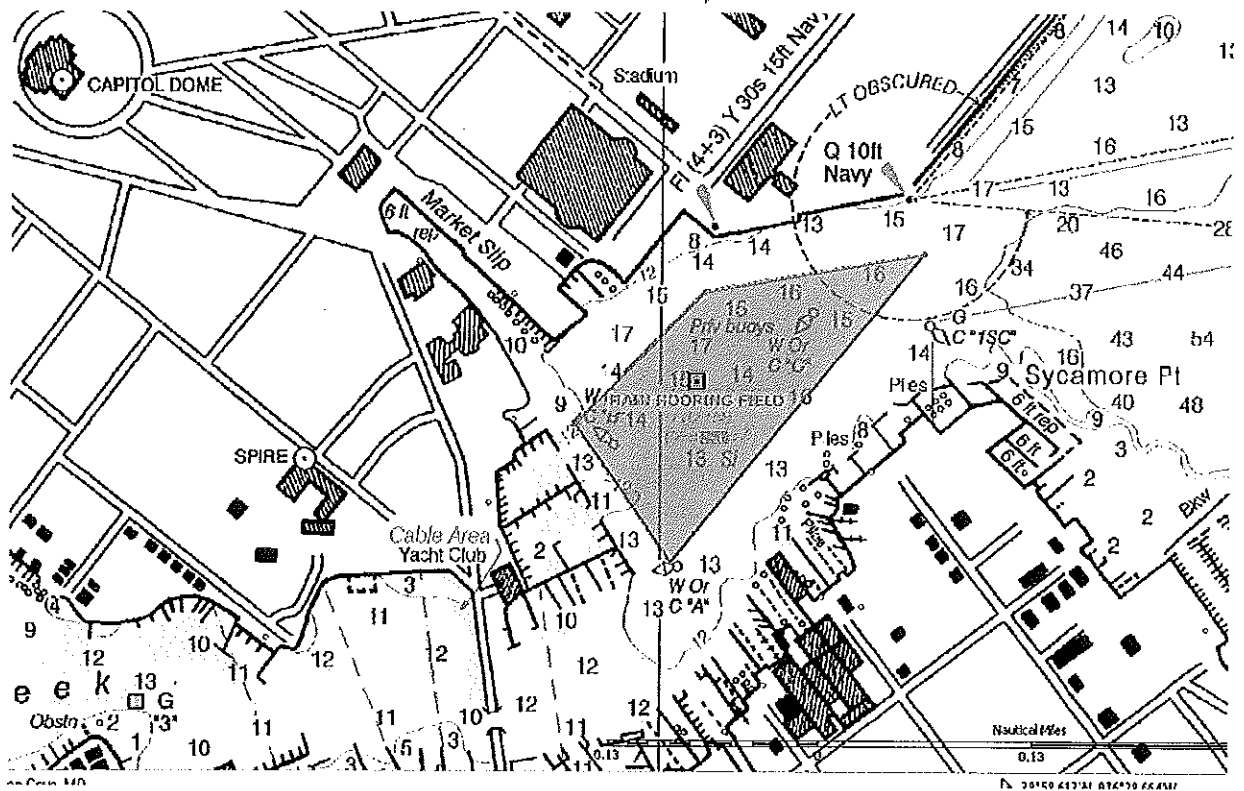
### Main Mooring Field – Annapolis, Maryland



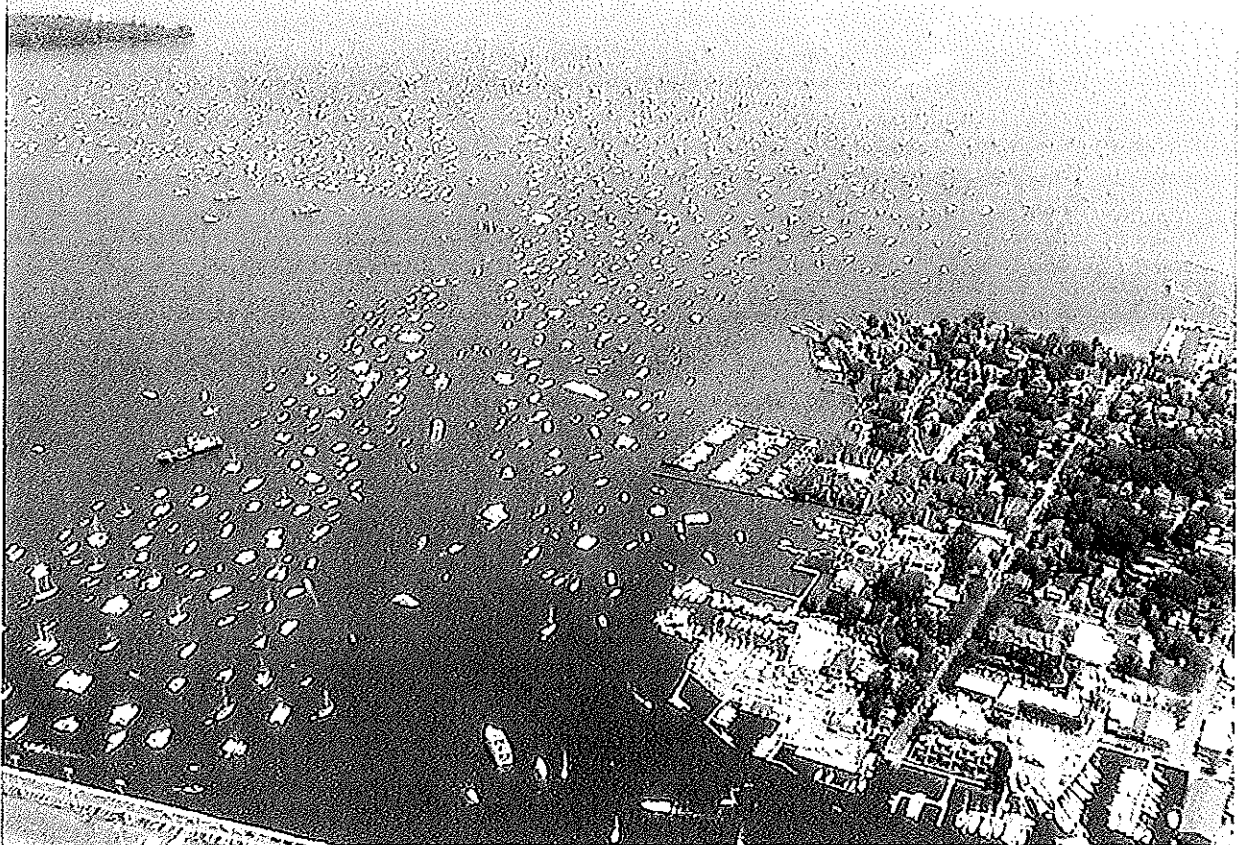
Viewed From the Roof of The Waterfront Marriott Hotel

### EXCERPT OF NOAA NAVIGATION CHART # 12283 “ANNAPOLIS HARBOR” Showing The Location of the “MAIN MOORING FIELD”

And Water Depths



ANNUAL BLUE ANGELS AIR SHOW – ANNAPOLIS  
US NAVAL ACADEMY GRADUATION WEEK  
MEMORIAL DAY HOLIDAY



An annual calendar of boating attractions and events every year (like the US Navy Blue Angels Air Show Pictured Here) make Annapolis the most visited recreational boating port in the Chesapeake Bay Region.



US Naval Academy Graduation and the Blue Angels Air Show start the boating season every Spring and lead us into the Memorial Day Holiday.

(USCG Pictures and Estimate - Approximately 5,000 Boats at Anchor over 2 day event)

Maryland Department of Natural Resources Statistics as of 11 Oct., 2011

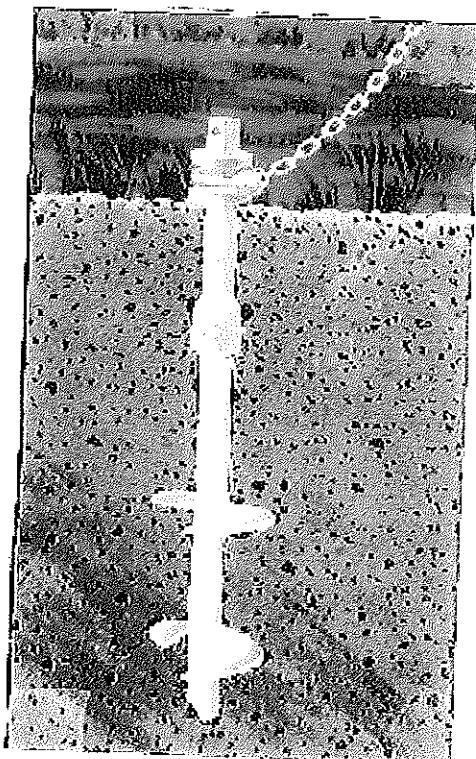
Not Trailered Boats	% Total MD Non-Trailered Boats	Trailered Boats	% Total MD Trailered Boats	Owner's Mailing Address	Total Boats	% Total MD Boats
22,809	25.44%	13,539	16.61%	Anne Arundel	36,348	21.24%
604	0.67%	1,632	2.00%	Allegany	2,236	1.31%
10,092	11.25%	10,624	13.04%	Baltimore	20,716	12.10%
2,008	2.24%	1,764	2.16%	Baltimore City	3,772	2.20%
3,771	4.21%	3,826	4.69%	Calvert	7,597	4.44%
3,841	4.28%	2,244	2.75%	Cecil	6,085	3.56%
2,552	2.85%	3,170	3.89%	Charles	5,722	3.34%
1,980	2.21%	2,901	3.56%	Carroll	4,881	2.85%
1,323	1.48%	991	1.22%	Caroline	2,314	1.35%
1,769	1.97%	1,407	1.73%	Dorchester	3,176	1.86%
1,843	2.06%	4,555	5.59%	Frederick	6,398	3.74%
1,190	1.33%	907	1.11%	Garrett	2,097	1.23%
4,980	5.55%	4,404	5.40%	Harford	9,384	5.48%
2,220	2.48%	2,474	3.04%	Howard	4,694	2.74%
2,042	2.28%	825	1.01%	Kent	2,867	1.67%
5,808	6.48%	4,692	5.76%	Montgomery	10,500	6.13%
3,358	3.74%	2,987	3.67%	Prince George's	6,345	3.71%
4,615	5.15%	1,988	2.44%	Queen Anne's	6,603	3.86%
4,107	4.58%	4,581	5.62%	St. Mary's	8,688	5.08%
666	0.74%	1,251	1.54%	Somerset	1,917	1.12%
4,040	4.51%	1,488	1.83%	Talbot	5,528	3.23%
821	0.92%	3,547	4.35%	Washington	4,368	2.55%
1,060	1.18%	2,732	3.35%	Wicomico	3,792	2.22%
2,174	2.42%	2,963	3.64%	Worcester	5,137	3.00%
89,673		81,492			171,165	
492		1,021		Unknown	1,513	
18,602	18% total	6,656	8% total	Out of State	25,258	13% total
<u>108,767</u>		<u>89,169</u>			<u>197,936</u>	

>>> "Carrick, Sharon M" <SCarrick@dnr.state.md.us> 12:20 10/18/2011 >>>

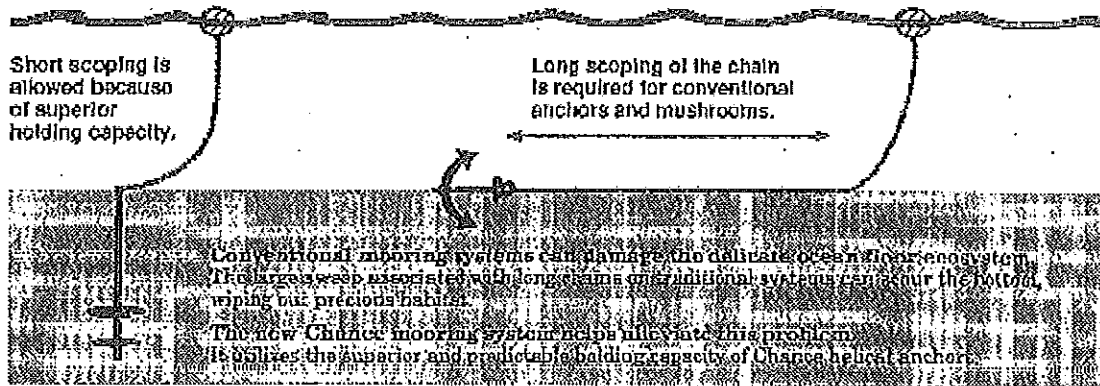
Zip	Total	Documented	Registered
21401	4,233	397	3,836
21402	42	1	41
21403	3,436	418	3,018
21404	64	6	58
21405	184	15	169
21409	862	61	801
21412	3	0	3

8,824 total boats

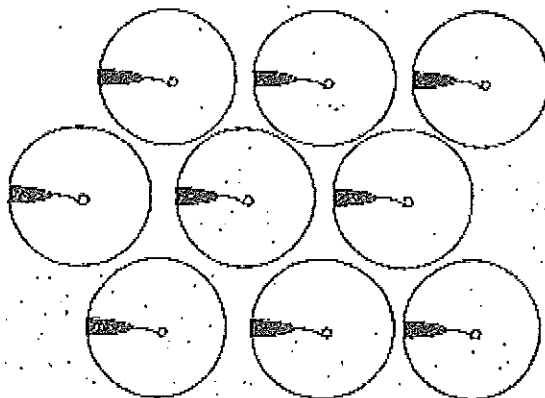
Moorlag Type	Bottom Condition	Breakout Force
350-lb. Mushroom	5 ft. deep in mud	2,000 lb.
500-lb. Mushroom	in sand bottom	1,700 lb.
3,000-lb. concrete USCG block	set in mud	2,100 lb.
6,000 lb. cement block	on sand bottom	3,200 lb.
8/10 Helix	soft clay mud	20,800+ lb.



## Minimized chain drag radii help protect the harbor ecosystem



## Shorter scoping allows more boats



Shorter scoping with the Chance system reduces mooring space required between boats. The large sweep associated with long chains on traditional systems can scour the bottom, wiping out precious habitat.

The new Chance mooring system helps alleviate this problem. It utilizes the superior and predictable holding capacity of Chance helical anchors.

- Install from the surface.
- Minimal sea floor disturbance.
- Retrieve and reuse anchors as harbor needs change.





Grant Title Boating Infrastructure Grant - Tier I - FY15, FY16 & FY17

Grant Award (\$) \$100,000.00

Originating Department(s): Recreation and Parks Department - Dock Fund

Dept Contact (Name/Phone): J. P. "Flip" Walters, Harbormaster

Expenditure Account	Revenue Source				Total per Expend. Type	Comments
	Federal	State	Local (Matching)	Other		
Salaries					\$0.00	
Benefits					\$0.00	
Overtime					\$0.00	
Supplies					\$0.00	
Telephone					\$0.00	
Electricity					\$0.00	
Fuel and Oil					\$0.00	
Training & Education					\$0.00	
R & M - Equipment					\$0.00	
Special Programs					\$0.00	
Contract Services					\$0.00	
Capital Outlay	\$100,000.00				\$100,000.00	66240-580000-845XX
other (fill-in)					\$0.00	
other (fill-in)					\$0.00	
other (fill-in)					\$0.00	
other (fill-in)					\$0.00	
other (fill-in)					\$0.00	
other (fill-in)					\$0.00	
<b>Total</b>	<b>\$100,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$100,000.00</b>	

SEE NEW FORM DATED 17 OCT 14

TOTAL EXPENDITURES\*: \$100,000.00

\* May be different from Grant Award \$ if there is a match requirement.

Match is not required.

[Signature] 9/24/2013  
Department Director Signature/Date

[Signature] 23 Sep 13  
Recreation & Parks Department - Dock Fund

Match is required. Match will be met in the form of <sup>(1)</sup> Contribution from non-City Agency - Md. Dept of Natural Resources

I attest that this asset has been approved/appropriated in <sup>(2)</sup> See Below

Department Director Signature/Date

[Signature] 23 Sep 13  
Recreation & Parks Department - Dock Fund

**COMMENTS:**

As a fall-back alternative and in case of any MDNR shortfall we may use partial 6664-524010 funds in FY15, FY16 & FY17. We can not yet guarantee 100% grant funding. However, heretofore, over twenty years these projects have been 100% funded by blended Federal and State funding. The Federal funds will remain available for three years, and cover 75% of the project cost, up to a federal funds ceiling of \$100,000.

(1) Examples (include dollar amounts if applicable): Cash match, equipment loan, staff salaries, volunteer time, contribution from non-City agency.  
(2) Examples: FY \_\_\_ operating budget, a memorandum of understanding, City Council resolution/ordinance.