

Hampton Roads PDC



Introduction

The Hampton Roads Planning District is located in the southeastern corner of the Commonwealth of Virginia at the mouth of the Chesapeake Bay. The Hampton Roads Planning District Commission includes seventeen member localities, including ten cities (Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg), six counties (Gloucester¹, Isle of Wight, James City, Southampton, Surry, and York), and one town (Smithfield). The region's development and commerce are directly influenced by its relationship to the water, taking its name from the sheltered anchorage that lies between the Cities of Hampton and Norfolk. In addition to the Chesapeake Bay, the region includes significant stretches of two major tributaries, the James River and York River, in addition to several other significant waterways, including the Elizabeth, Nansemond,

¹ Gloucester County was included in the inventories for both HRPDC and MPPDC and is covered in the Middle Peninsula PDC chapter.

and North Landing Rivers. In addition, the Atlantic Intracoastal Waterway passes through four cities in South Hampton Roads between the Albemarle-Pamlico Sound and the Chesapeake Bay. This passage includes two man-made canals, the Dismal Swamp Canal and the Albemarle and Chesapeake Canal, both located in the City of Chesapeake. The Dismal Swamp Canal provides a connection between the Pasquotank River and the Southern Branch of the Elizabeth River, while the Albemarle and Chesapeake Canal connects the North Landing River with the Elizabeth River.

The region's coastal areas and waterfronts are home to a diverse range of uses, ranging from areas conserved for natural resources and recreation to heavily industrialized waterfronts used for shipping, ship building and repair, and related uses. Other activities include recreational boating, kayaking, paddle boarding, and surfing, commercial fishing, and aquaculture. Hampton Roads is also home to the Port of Virginia and several coastal military installations, some of which operate major ship repair and berthing facilities.

The Hampton Roads region has economic and cultural interests in supporting and maintaining working waterfronts. As a region in many ways defined by its waterfront, the Hampton Roads region is dominated by major industrial working waterfronts and water-related industries. In particular, major naval facilities and port facilities are both significant regional employers and landowners. From a cultural and historical perspective, many of the region's communities began as working waterfronts based on fishing and trade. Those roots continue to influence the region's economy and culture. Protecting and promoting these assets, large and small, while continuing the region's development and intensification, is an officially adopted policy for several of the region's cities and counties. At the same time, improving public access to waterfronts for recreation is a major concern, one that is becoming an increasingly more important component of local land use and development plans.

History of Working Waterfronts in the Region

The Hampton Roads region has a long history of working waterfronts. In many ways, the region was settled and exists as it does today due to its location at meeting of the Chesapeake Bay and Atlantic Ocean and its natural harbor. While traditional working waterfront activities such as oystering and fishing were important parts of Hampton Roads communities' early economies, the most significant working waterfronts in the region were the early ports, which in several cases later became the sites for the region's major industrial and shipping facilities. Many of the region's colonial-era towns and cities, including Norfolk, Portsmouth, Smithfield, and Yorktown, were founded as ports to ship goods back to Europe or to support shipping and trade. Others, such as the waterfronts in downtown Newport News and along the Elizabeth River in Chesapeake, developed in the late 19th and 20th centuries to support the shipping of coal and other industrial materials or military ship-building needs. In addition to these industrial waterfronts, other communities, such as Poquoson and Hampton, developed as hubs for waterman fishing and shellfishing in the Atlantic Ocean, Chesapeake Bay, and tidal rivers.

Chesapeake

The area now included in the City of Chesapeake was originally settled in the early 1600s as part of what became Norfolk County. In 1963, Norfolk County and the City of South Norfolk merged to form the City of Chesapeake. In the 1800s the area was the location of two significant infrastructure projects related to working waterfronts – the construction of the Great Dismal Swamp Canal, which started in 1793 and finished in 1805, and the construction of the Albemarle and Chesapeake Canal, which was completed in 1858.² Both projects provided sheltered waterways for shipping between the Albemarle Sound and Chesapeake Bay. The beginning of the 20th century saw the development of the Elizabeth River’s Southern Branch as industrial waterfront.³ Historically, the city was also home to some commercial seafood businesses, but today, working waterfronts in Chesapeake are almost uniformly industrial in nature and scale.

Hampton

The City of Hampton was formed by the merger of Elizabeth City County and the Town of Hampton in 1952. Working waterfronts have played an important role in the city’s economy and culture since its original settlement in the 1600s. Like several other communities in Hampton Roads, Hampton served as an important shipping site in the 17th and 18th centuries. The city has also historically been home to a significant commercial fishing industry, particularly with shellfish and blue crabs.⁴

Isle of Wight County

Several communities in Isle of Wight County were historically home to working watermen engaged in shipping, fishing, and shellfishing. Rushmere, originally named Ferguson’s Wharf, is located on the James River and was home to fishermen and oystermen. The village was the site of a wharf used to transport lumber. Rescue, a village located on Jones Creek, was the harbor for a similar group of workers. Battery Park, located on the Pagan River close by to Rescue, was home to a shipping wharf for tobacco and a thriving oystering community.

Newport News

Newport News has a long history as both a center for the commercial seafood industry and the development of heavy waterfront industry in Hampton Roads. The Menchville area off of Deep Creek has long been the home of watermen. At the other end of the city, Newport News Shipbuilding and the city’s shipping terminals have been part of the city’s economic base for over a century. Newport News Shipbuilding, located on the James River, was originally founded in 1886 as the Chesapeake Dry Dock and Construction Co.

Norfolk

² <http://www.cityofchesapeake.net/Visitors/history.htm>

³ Forward Chesapeake 2026 Comprehensive Plan

⁴ Hampton Community Plan

Norfolk has been home to a large number of working waterfronts since its earliest days. The town of Norfolk was originally established in the late 17th century as a port for shipping tobacco. As Norfolk's population grew, large-scale shipping took over as the main waterfront industry. In 1917, the facility now known as Naval Station Norfolk was established at Sewell's Point; the base is now the largest naval base in the world. Norfolk International Terminals was constructed in 1966; the port facility was later absorbed into the Port of Virginia.

Poquoson

Poquoson's working waterfront legacy started in the 1630s, when the area was home to several large farms and the wharves used to ship their products. In the early 19th century the city's economy shifted from export agriculture to seafood, which has remained an important part of the city's culture and economy ever since. Amory's Wharf, now a historic site on the Back River, was a center for the seafood industry in the late 19th and early 20th centuries.⁵

Portsmouth

Portsmouth was founded as a port town in 1752 through an act of the Virginia General Assembly.⁶ The city's working waterfronts heritage is mostly tied to heavy industry. In 1767, the Gosport Shipyard was built on the Elizabeth River. In 1862, this facility was renamed the Norfolk Naval Shipyard, a name it retains to the present day.⁷

Smithfield

Smithfield was first settled in 1634 and incorporated as a town in 1752.⁸ The town developed as a port for shipping products such as peanuts and ham. The town's status as a working port lessened in the early 20th century following a fire and a general decline in water-based transportation.⁹

Suffolk

Suffolk's history of working waterfronts dates back to the town of Suffolk's founding in 1742 on the site of a settlement named Constant's Wharf. Constant's Wharf was originally settled as the home, wharf, and tobacco warehouses by John Constant, an English settler, in the early 18th century.¹⁰ The settlement played an important role in local and regional trade.¹¹

⁵ http://articles.dailypress.com/1994-11-26/news/9411260027_1_historical-status-wharf-landing-pier

⁶ <http://www.portsmouthva.gov/history/>

⁷ <http://www.navsea.navy.mil/Home/Shipyards/Norfolk/AboutUs/History.aspx>

⁸ <http://www.smithfieldva.gov/content/index/view/id/32>

⁹ Smithfield Comprehensive Plan

¹⁰ <http://www.suffolk-fun.com/tour-and-explore/history/>

¹¹ http://pilotonline.com/news/local/history/what-s-in-a-name-constant-s-wharf-in-suffolk/article_9123eedd-3190-52cc-b5a5-3cfba5922864.html

Virginia Beach

The city of Virginia Beach occupies the area originally known as Princess Anne County, which was created from Norfolk County in 1691. Kempes' Landing, later known as Kempsville, was established as a small port at the headwaters of the Elizabeth River's Eastern Branch and was the site of several industries related to shipbuilding and repair, including the production of pitch, tar, and turpentine.¹² The Lynnhaven River was historically a major site for oystering, but the industry disappeared due to a combination of over-harvesting, disease, poor water quality from development. Recently parts of the river were reopened to shellfish harvesting.

York

York County has a long history of being a home to working watermen that continues to the present. Yorktown was a major port for agricultural products in the 18th century, but declined in importance during and after the Revolutionary War. In the 20th century, the county became home to several military facilities on the York River which are still active.

Current Status of Working Waterfronts in the Region

In Hampton Roads, Virginia, working waterfronts are areas or structures on, over, or adjacent to navigable bodies of water that provide access to the water and are used for water-dependent commercial, industrial, or government activities, including commercial fishing, recreational fishing, tourism, aquaculture, boat and ship building, boat and ship repair, boat and ship services, seafood processing, seafood sales, transportation, shipping, marine construction, and military activities.

Hampton Roads working waterfronts include a variety of activities, ranging from independent watermen engaged in fishing or shellfishing to large industrial ports and shipping facilities. Working waterfronts are similarly used by a wide range of businesses, from self-employed watermen bringing daily catches directly to market to large international conglomerates with huge container and bulk vessels. Most working waterfronts in Hampton Roads are privately owned; the Seafood Industrial Park in Newport News is an exception. The diversity of working waterfronts in Hampton Roads continues to provide a wealth of economic and cultural benefits to those who work in waterfront industries and to the region as a whole. A significant part of the region's overall economy is tied to the ports and naval facilities and to the associated businesses that support those facilities, such as shipbuilders and suppliers. At the smaller scale, the local commercial seafood industry provides a small but significant part of the economy for several communities. Locally caught seafood is found on many local restaurant menus, and area cultural and historical festivals, such as the Poquoson Seafood Festival highlight the importance of the seafood industry to the region's development, providing a sense of history and place.

Working waterfronts in Hampton Roads face a number of threats and challenges. Two of the greatest threats to these working waterfronts are poor water quality and sea level rise. Poor water quality can damage or eliminate fisheries and oyster grounds. Increasing urban development and the use of

¹² Virginia Beach Comprehensive Plan Technical Document

fertilizers can contribute to nutrient, sediment, and bacterial impairments, which can actively harm aquatic species populations. Bacterial impairments can result in areas being placed off limits to commercial fishing and shellfishing. This can have the same economic impact as if the populations were lost. Poor water quality and its impacts on aquatic resources are common issues identified throughout Hampton Roads communities' comprehensive plans. Even in localities that do not have large commercial seafood industries, the negative impacts of development on water quality are considered an important issue to address.

Sea level rise and recurrent flooding are also threats to the area's working waterfronts. These businesses and facilities must be located on or near the water, which makes them inherently vulnerable to more frequent flooding. Sea level is expected to rise between two and seven feet in Hampton Roads by the end of the 21st century. Many working waterfronts would be at risk under the lowest sea level rise scenarios, but higher amounts could result in significant damage to some of the region's largest working waterfront facilities. Under the lowest scenario, twelve of the working waterfronts identified in the inventory would be vulnerable to sea level rise. At the highest level, nearly all would be vulnerable.

In addition to these environmental threats, the region's industrial and seafood working waterfronts face global and national-scale economic challenges. At the global scale, the region's shipping terminals are affected by issues such as the expansion of the Panama Canal, which will allow for significantly larger vessels. The Port of Virginia, through its Hampton Roads terminals, provides access to the mid-Atlantic and the Ohio River Valley for container traffic. At present, Hampton Roads is the only east coast port with congressional authorization to have a fifty-five (55) foot deep channel, which will accommodate the larger vessels. The port currently is dredged to fifty (50) feet. Although container traffic continues to drive a large portion of the port's business, coal remains a significant part. Demand for coal, whether up or down, has a significant impact on the port's overall bottom line.

At the national level, working waterfronts in Hampton Roads are significantly impacted by decisions made by the federal government. Work at federal shipyard facilities in Norfolk and Portsmouth drives the regional economy through direct employment. Federal contracts for shipbuilding, repair, and maintenance contribute to the local economies in several cities, including Newport News, Norfolk, and Portsmouth. When federal spending declines, employment at these facilities and businesses also declines, with rippling effects throughout the regional economy. Industry consolidation is also an issue in the industrial working waterfronts, with major international firms buying out local or regional firms.

In addition to environmental threats and economic challenges, working waterfronts in many Hampton Roads are also faced with the impacts of the region's transition from an agricultural economy and distributed development pattern to an industrial and service economy based on urban centers and suburban neighborhoods. As the region has grown in population, waterfronts have become less of a place for employment and more of an amenity to be enjoyed. Most Hampton Roads communities appear to have addressed working waterfronts through their zoning ordinances, which in many cases allow specific working waterfront uses. A more important issue for these communities is adequate provision of public access to waterways for recreation.

Working Waterfronts in Hampton Roads

The HRPDC Working Waterfronts Inventory completed in 2013 identified 165 working waterfront operations. These were classified into five (5) groups (Commercial, Industrial, Military, Recreational, and Seafood) and twenty-five (30) subgroups, as shown in Table 1 below.

Table 1: HRPDC Working Waterfront Inventory Classifications

Working Waterfront Groups	Working Waterfront Subgroups
Commercial	Boat Dealer Boat Repair Boat Supplies Dock Construction Marina Navigational Services Transportation
Industrial	Bulk Liquid Storage and Shipping Cargo Shipping/Handling Marine Construction Marine Dredging Marine Towing Petroleum Bulk Stations and Terminals Petroleum Terminal Power Generation Products and Services Ship Repair
Military	Military Ship Repair
Recreational	Boat Rental Charter Boats Cruises Fishing Pier
Seafood	Seafood Retail Seafood Wholesale Seafood Transportation Shellfishing

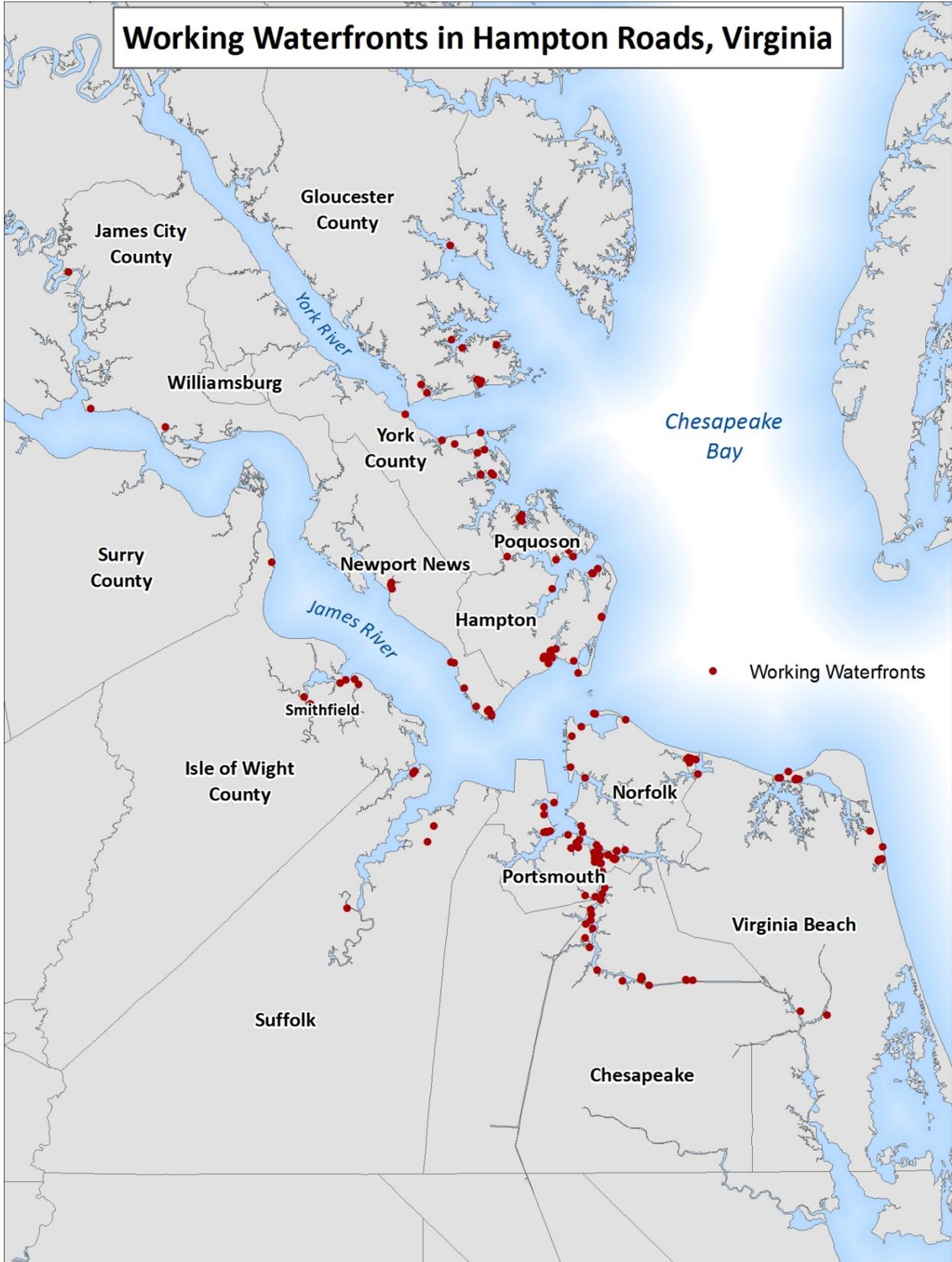
Working waterfronts were identified in twelve (12) HRPDC localities: Chesapeake, Gloucester County, Hampton, Isle of Wight County, James City County, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and York County. The distribution of working waterfronts in each locality is shown below in Table 3.

Table 2: Working Waterfronts in Hampton Roads Localities

Locality	Commercial	Industrial	Military	Recreational	Seafood	Total
Chesapeake	4	15				19
Gloucester County	6				5	11
Hampton	16				4	20
Isle of Wight County*	6				1	7
James City County	3					3
Newport News	4	2		2	8	16
Norfolk	16	16	1	2	1	36
Poquoson	3				5	8
Portsmouth	13	7	3			23
Suffolk	3			1	1	5
Virginia Beach	13	2		3	3	21
York	8	1			1	10
TOTAL	95	43	4	8	29	179

*Including the Town of Smithfield

Most communities with working waterfronts have only one or two types of operations. Norfolk is the only community with all five categories present; Newport News and Virginia Beach each have four types. The inventory reflects the importance of tourism and recreation businesses as working waterfronts in Hampton Roads, as well as the long-standing presence of seafood businesses, particularly on the Peninsula. In fact, only five (five) of the twenty-nine (29) identified seafood-related working waterfronts were not found on the Peninsula (including Gloucester County).



Chesapeake

Most of Chesapeake’s working waterfronts are industrial in nature and are located along the Southern Branch of the Elizabeth River, with additional businesses located along the Intracoastal Waterway. As stated in its Comprehensive Plan, Chesapeake currently has no commercial fisheries, since many of its waterways are condemned for both fishing and shellfishing. To minimize conflicts between the industrial waterfront and the city’s suburban neighborhoods and other commercial areas, the city has adopted a zoning ordinance that restricts most working waterfront-related activities to areas zone for industrial uses. The zoning ordinance identifies eight (8) working waterfront-related uses:

- 1) Animal and Marine Fats and Oils
- 2) Boat Dealers
- 3) Canned and Cured Fish and Seafood
- 4) Marinas
- 5) Petroleum Bulk Stations and Terminals for Hire
- 6) Petroleum Refining and Related Industries
- 7) Prepared Fresh and Frozen Fish and Seafood
- 8) Water Transportation

Each of these uses is allowed by right (P) or with a conditional use permit (C) in some or all of the city’s business and industrial districts, as shown in the table below.

Table 3: Working Waterfronts Uses Allowed in Chesapeake, Virginia

Use	B2	B5	MXD/U	M1	M2	M3
Animal and Marine Fats and Oils					C	C
Boat Dealers	C	C	C	C	P	P
Canned and Cured Fish and Seafood					C	C
Marinas	P	P	P	P	P	P
Petroleum Bulk Stations and Terminals for Hire					P	P
Petroleum Refining and Related Industries					C	C
Prepared Fresh and Frozen Fish and Seafood					C	C
Water Transportation					P	P

In recognition of the importance of the city’s industrial working waterfronts to the economy, Chesapeake has also adopted a zoning classification specifically for working waterfronts, the M-3 Waterfront Industrial District. According to the city’s zoning ordinance, uses in the M-3 district must be water-related and include a port or docking facility.

Hampton

Although shipping played a role in the city’s early economy, today working waterfronts in Hampton are either related to seafood or to servicing recreational boaters, though several industrial uses utilize the city’s waterways. Specific industries that rely on working waterfronts include commercial fishing, concrete, and petroleum. Working waterfront businesses are located on several of the city’s waterways,

Hampton Roads Working Waterfronts

including the Chesapeake Bay coast, the Hampton River, and the Back River. Although the city has not adopted an explicit working waterfronts zoning district, it has allowed several working waterfront activities as by-right uses in several zones. The ordinance identifies six (6) working waterfront-related uses:

- 1) Boat repair
- 2) Boat sales
- 3) Boat tour/charter boat docking facility
- 4) Boathouse, pier, dock, ramp; commercial (public or private)
- 5) Marina, including boat sales, rental, storage, and fuel
- 6) Pier, dock, seawall related to commercial or industrial water transport

Boathouses and marinas are allowed with a use permit in all of the city’s zoning districts. Each of the other uses is allowed by right (P) or by permit (UP) in one or more of the city’s commercial, industrial, and utility districts, as shown in the table below.

Table 4: Working Waterfronts Uses Allowed in Hampton, Virginia

Use	C-1	C-2	C-3	M-2	M-3	LFA-1	LFA-2	RT-1	BB-3	BB-4	BB-5	HRC-2	DT-1	DT-2
Boat Repair				P	P	P	P							P
Boat Sales	P	P	P	P		P	P	P	P	P	P	P	P	P
Boat Tour/Charter Boat Docking Facility														P
Pier, Dock, Seawall Related to Commercial or Industrial Water Transport				UP	UP									

Isle of Wight County

Isle of Wight has relatively few working waterfronts currently. Most of those are related to recreational boating or fishing and are located along or near the main stem of the James River. The County has not adopted a working waterfronts zoning designation. However, it has included four (4) working waterfronts related activities in its zoning ordinance:

- 1) Aquaculture
- 2) Marina (including Boat Repair Yards)
- 3) Boat Repair (included in Motor Vehicle Repair Service/Minor)
- 4) Boat Storage (included in Motor Vehicle/Outdoor Storage)

Hampton Roads Working Waterfronts

Each of these uses is allowed by right (P) or with a conditional use permit (C) in one or more of the county’s agricultural, residential, commercial, industrial, or planned development districts, as shown in the table below.

Table 5: Working Waterfronts Uses Allowed in Isle of Wight County, Virginia

Use	RA C	R R	V C	N C	S E	S R	U R	L C	G C	L I	G I	GI C	PD -R	PD - M H	PD - CP	PD - MX	PD -IP
Aquaculture	P		C														C
Marina	C	C	C	C	C	C	C	C	P				C		P	C	P
Boat Repair			C					C	P						C	C	P
Boat Storage									C	P	P	P		C	C	C	C

James City County

James City County has few working waterfronts, and all of the working waterfronts documented are related to recreational boating. Two of the three working waterfronts are located on or near the James River; the third is located on the Chickahominy River. The county has not adopted a working waterfronts zoning designation. However, the zoning ordinance currently includes several working waterfront uses that are allowed by right (P) or with a special use permit (S) in several of the county’s residential, commercial, and industrial zones. The ordinance identifies six (6) working waterfront uses:

- 1) Fish farming and aquaculture
- 2) Waterfront business activities
- 3) Yacht clubs; marinas/boat storage and service
- 4) Marina, boat dock or waterfront recreational facilities
- 5) Boat docks
- 6) Marine or waterfront businesses to include the receipt, storage, and transshipment of waterborne commerce or seafood receiving, packaging and distribution

Table 6: Working Waterfronts Uses Allowed in James City County, Virginia

Use	A-1	R-4	R-5	R-6	R-8	LB	B-1	M-1	M-2	MU	PL	EO
Fish farming and aquaculture	S				S					P		P
Waterfront business activities	S											
Yacht clubs; marinas/boat storage and service		P				S	P	P	P	P		S
Marina, boat dock or waterfront recreational facilities			P								S	
Boat docks				P								
Marine or waterfront businesses to include the receipt, storage, and transshipment of waterborne commerce or seafood receiving, packaging and distribution							P	P	P	P		S

In addition to its more common working waterfronts, James City County is also home to one end of the Jamestown-Scotland Ferry, which provides service on State Route 31 across the James River between James City County and Surry County.

Newport News

Newport News currently has a variety of working waterfront businesses, ranging from shipyards and massive shipping terminals to small and medium-sized seafood operations. These businesses are located along the James River and at its tributary inlets and creeks. The city has not adopted a working waterfront zoning district. However, the zoning ordinance currently has several working waterfront uses that are allowed by right (P) or with a conditional use permit (C) in several residential, commercial, and industrial zones in the city. The ordinance identifies eleven (11) working waterfront-related uses:

- 1) Boat Basin
- 2) Boat & Yacht Sales
- 3) Country/Yacht Club
- 4) Freight Terminal
- 5) Marina
- 6) Seafood Packing & Processing
- 7) Seafood Wholesale Distribution & Receiving
- 8) Seaport
- 9) Shipbuilding, Shipyard Manufacture or Repair
- 10) Small Boat Repair
- 11) Transit Terminal for Bus, Rail Boat, Ship, or Other Mass Transit

Hampton Roads Working Waterfronts

Table 7: Working Waterfronts Uses Allowed in Newport News, Virginia

Use	R1	R2	R3	R4	R5	R6	R7	R8	R9	P1	O1	O2	O3	C1	C2	C3	C4	C5	M1	M2
Boat Basin	C	C	C	C	C	C	C	C	P	P		P		P	P	P			P	P
Boat & Yacht Sales									C					C	C	P				
Country/Yacht Club	C	C	C	C	C	C	C	C	C	C		P		P		P	C			
Freight Terminal																C		C	P	P
Marina										C				C	C	P			P	P
Seafood Packing & Processing																				P
Seafood Wholesale Distribution & Receiving															C	P		P	P	P
Seaport																P			P	P
Shipbuilding, Shipyard Manufacture or Repair																				P
Small Boat Repair															C	P				
Transit Terminal for Bus, Rail Boat, Ship, or Other Mass Transit					C	C	C	C	C	C	C	C	C	C	C	P	C	P	P	P

Although the city has not adopted a working waterfronts zoning district, it has established the Newport News Seafood Industrial Park. The facility was initially established in the early 20th century as the Newport News Small Boat Harbor. In 1979, the City of Newport News created the Seafood Industrial Park and has continued to own and maintain it as a location for businesses related to and supporting the commercial seafood industry.

Norfolk

Norfolk currently has the greatest number and diversity of working waterfronts in the Hampton Roads region, ranging from seafood operations and recreational boating facilities to large shipping terminals and military facilities. These working waterfronts are found on every major waterway in the city, including the Elizabeth River, the James River, the Chesapeake Bay, and Little Creek. The city has adopted zoning designations specifically for working waterfronts and allows working waterfront uses in

many other zones throughout the city. The city's current zoning ordinance (which is currently undergoing a comprehensive revision) identifies eighteen (18) working waterfront uses:

- 1) Boat Building and Repair (Small Craft)
- 2) Boat Ramps
- 3) Boat Sales and Service
- 4) Boatels
- 5) Bulk Cargo Pier; Terminal
- 6) Cargo Pier, Terminal
- 7) Community Dock
- 8) Cruise Ship Pier, Terminal
- 9) Fishing Pier
- 10) Fishing; Commercial
- 11) Marina (with Boat Repair)
- 12) Marinas, excluding boat repairs
- 13) Military Installations
- 14) Personal Watercraft Rental
- 15) Seafood Processing; Seafood Market
- 16) Ship Building and Repair
- 17) Ship Supplies
- 18) Yacht Club

Community docks are allowed by right (P) and yacht clubs are allowed by special exception (S) in all of the city's residential districts. Other working waterfront uses are allowed by right or by special exception in some or all of the city's office, commercial, industrial, downtown, and special purpose districts, as shown in the table below.

Table 8: Working Waterfronts Uses Allowed in Norfolk, Virginia

Use	BC-1	BC-2	C-2	C-4	I-1	I-2	I-3	I-4	I-5	D-1	D-5	OSP	MI
Boat Building and Repair (Small Craft)								P					
Boat Ramps												P	
Boat Sales and Service			P	P	P			P					
Boatels			S					S					
Bulk Cargo Pier; Terminal									P				
Cargo Pier, Terminal									P				
Cruise Ship Pier, Terminal									P				
Fishing Pier			P										
Fishing; Commercial								P					
Marina (with Boat Repair)								P					
Marinas, excluding boat repairs			P					P		S	P		
Military Installations													P
Personal Watercraft Rental			S										
Seafood Processing; Seafood Market						P	P	P					
Ship Building and Repair									P				
Ship Supplies	P	P				P		P	P				
Yacht Club			P										

Norfolk has long recognized the importance and unique role of its industrial working waterfronts, and as a result the city has adopted two working waterfronts zoning designations. The I-4 designation is referred to as the Waterfront Industrial District, and is intended for “water-dependent activities requiring waterfront locations but not needing direct access to deep water channels.”¹³ The I-5 designation is referred to as the Deep Waterfront Industrial District, and is intended for “large scale maritime uses, such as shipping, shipbuilding and repair, bulk cargo transfer, and other uses requiring deep access.”¹⁴

Poquoson

Working waterfronts continue to play an important role in Poquoson’s economy and culture. The city is home to several working waterfront businesses related to both recreational boating and to the seafood industry. These working waterfronts are mostly located along the Back River and Bennett Creek, a tributary of the Poquoson River. Poquoson has not adopted a specific working waterfronts zoning district. However, the city has identified eight (8) working waterfronts related uses that are allowed in various districts. These uses are:

- 1) Boat sales or service

¹³ Norfolk Zoning Ordinance Article II Chapter 7, §7-4.1

¹⁴ Norfolk Zoning Ordinance Article II Chapter 7, §7-5.1

Hampton Roads Working Waterfronts

- 2) Commissary facilities for boats
- 3) Fueling stations for watercraft
- 4) Hull repair shops
- 5) Marina
- 6) Recreational marinas
- 7) Retail businesses which supply commodities such as boats, engines, and accessories
- 8) Small boat docks (with repair)

These uses are allowed by right (P) or with a conditional use permit (C) in five (5) of the city's zoning districts.

Table 9: Working Waterfronts Uses Allowed in Poquoson, Virginia

Use	C-1	POSCD	PUD	B-2	G-C
Boat sales or service				C	C
Commissary facilities for boats			P		
Fueling stations for watercraft			P		
Hull repair shops			C		
Marinas			P	C	C
Recreational marinas		P			
Retail businesses which supply commodities such as boats, engines, and accessories			P		
Small boat docks (with repair)	P				

Portsmouth

Portsmouth currently has a significant number of working waterfronts, including some of the region's largest industrial and shipping facilities. Much of Portsmouth's waterfront along the Elizabeth River is dominated by large working waterfront facilities. Most of the city's waterfront is zoned for either industrial uses or for Preservation/Government (which applies to the city's military and other federal facilities). The city has included several working waterfronts related uses in its zoning ordinance, but has not adopted a specific working waterfronts related zoning designation. The current zoning ordinance includes four (4) working waterfronts related uses:

- 1) Boat and marine rental and sales
- 2) Marina
- 3) Marina, pleasure boats only
- 4) Shipping container storage yard

These are allowed by right (P), with a use permit (U), or allowed by activity center regulations (A) in some or all of the city's zoning districts, as shown in the table below.

Table 10: Working Waterfronts Uses Allowed in Portsmouth, Virginia

Use	GR	UR	URH	NMU	GMU	MUH	IL	IN	NAC	CAC	RAC	HLB	WF
Boat and marine rental and sales				P	P	P	P	P		A	A	P	U
Marina		U	U	U	U	U	P	P			A	U	P
Marina, pleasure boats only	U	P	P	P	P	P	P	P	A	A	A	U	P
Shipping container storage yard							U	U			U		

Smithfield

As an incorporated town, Smithfield has adopted a separate zoning ordinance from Isle of Wight County. None of the working waterfronts from Isle of Wight County included in the Hampton Roads working waterfront inventory were located within the town limits. However, the town has included working waterfronts in its comprehensive plan and zoning ordinance. The zoning ordinance identifies X working waterfront related uses:

- 1) Boat docks, boat storage, and waterfront access facilities as an accessory use to a private single family dwelling
- 2) Boat docks, boat storage, and waterfront access facilities, as an accessory use to uses other than private single family residential dwellings
- 3) Commercial boat docks, fishing piers and marinas
- 4) Commercial fishing and shellfishing
- 5) Cultivation and harvesting of shellfish and worms for bait
- 6) Vehicle sales, including boats and watercraft
- 7) Waterfront retail business activities including boat docks and piers, yacht clubs, marinas and boat service facilities, storage and shipment of waterborne commerce, fish and shellfish receiving, seafood packing and shipping, and recreational activities
- 8) Waterfront retail businesses and activities associated with a shopping center use, including boat docks and piers, yacht clubs, marinas, boat service facilities, and recreational uses
- 9) Yacht clubs and marinas

These uses are allowed by right (P) or by special use permit (SUP) in eight (8) of the town’s zoning districts, as shown in the table below.

Table 11: Working Waterfronts Uses Allowed in Smithfield, Virginia

Use	DN-R	D (DMU)	HRC	PSC	I-1	C/I	I-2	EC
Boat docks, boat storage, and waterfront access facilities as an accessory use to a private single family dwelling	P							
Boat docks, boat storage, and waterfront access facilities, as an accessory use to uses other than private single family residential dwellings	SUP							
Commercial boat docks, fishing piers and marinas								SUP
Commercial fishing and shellfishing								P
Cultivation and harvesting of shellfish and worms for bait								P
Vehicle sales, including boats and watercraft			SUP		SUP			
Waterfront retail business activities including boat docks and piers, yacht clubs, marinas and boat service facilities, storage and shipment of waterborne commerce, fish and shellfish receiving, seafood packing and shipping, and recreational activities		SUP	SUP		SUP	SUP	SUP	
Waterfront retail businesses and activities associated with a shopping center use, including boat docks and piers, yacht clubs, marinas, boat service facilities, and recreational uses				SUP				
Yacht clubs and marinas							SUP	

Suffolk

Suffolk does not currently have many working waterfronts. Those businesses that are located in the city are both located off the Nansemond River. The city does not have a dedicated working waterfronts zoning district, but the current zoning ordinance includes three (3) working waterfronts related use:

- 1) Aquaculture
- 2) Marinas
- 3) Concentrated aquatic animal production facility

These uses are allowed by right (P) or by conditional use permit (C) in fifteen (15) of the city’s zoning districts, as shown in the table below.

Table 12: Working Waterfronts Uses Allowed in Suffolk, Virginia

Use	C	A	RR	RE	RL	RLM	RM	RC	RU	B-1	B-2	CBD	O-1	M-1	M-2
Aquaculture	P	P	C	C										C	C
Marinas	C	C	C	C	C	C	C	C	C	C	P	P	P	C	C
Concentrated aquatic animal production facility		P													

Surry County

Surry County does not currently have any working waterfronts. The county’s comprehensive plan calls for improvements to water access facilities for recreational boating and fishing. In addition, Surry County is home on one end of the Virginia Department of Transportation Jamestown-Scotland Ferry. The ferry operates 24 hours a day year round. The county’s zoning ordinance identifies three working waterfront related uses:

- 1) Marinas (including yacht or boat clubs)
- 2) Boat storage (included in motor vehicle outdoor storage)
- 3) Boat repair (included in motor vehicle repair (minor))

These uses are allowed by right (P) or by conditional use permit (C) in eight of the county’s zoning districts.

Table 13: Working Waterfronts Uses Allowed in Surry County, Virginia

Use	A-R	RVC	R-1	R-2	B-1	B-2	P-D	M-1
Marinas	C	C	C	C	P	P	P	
Boat storage						P		P
Boat repair	C	C				P		

Virginia Beach

Virginia Beach has the second highest number of working waterfront businesses identified in the Hampton Roads working waterfronts inventory. Most of these businesses are commercial in nature, but the city also has several working waterfronts that are engaged in the industrial, recreational, and seafood related pursuits. Most of these businesses are located on the Lynnhaven River off the Chesapeake Bay or on Rudee Inlet. A small number of businesses are also located on the North Landing River. The city has not adopted a specific working waterfronts zoning designation, but has included several working waterfronts related land uses in its zoning ordinance. The current ordinance identifies fourteen (14) uses:

- 1) Aquacultural operations
- 2) Boat sales

Williamsburg

Williamsburg does not currently have any working waterfront businesses. However, boat repair and servicing is allowed in the City’s B-2 zoning districts.

York

York County currently has a number of working waterfronts related to both the commercial seafood industry and recreational uses. For the most part these businesses are located along the York River and Poquoson River in areas such as Dandy, Seaford, and Dare. The majority of the businesses identified in the inventory are marinas; however, commercial fishing and aquaculture remain a significant part of the County’s economy. The County has adopted a zoning ordinance that identifies where working waterfront businesses are allowed to operate. The ordinance identifies eight (8) working waterfront uses:

- 1) Bait, Tackle/Marine Supplies Including Incidental Grocery Sales
- 2) Boat Sales, Service, Rental, and Fuel Dispensing
- 3) Fish Canning, Curing, Grinding, Smoking
- 4) Fish, Seafood Store
- 5) Marina, Dock, Boating Facility (Commercial)
- 6) Marina, Dock, Boating Facility (Private/Club)
- 7) Marine Railway, Boat Building and Repair
- 8) Seafood Receiving, Packing, Storage

These uses are allowed either by right (P) or by a special use permit (S), as detailed in the table below.

Table 15: Working Waterfronts Uses Allowed in York County, Virginia

Use	RC	RR	R20	R13	R7	RMF	GB	WCI	EO	IL	IG
Bait, Tackle/Marine Supplies Including Incidental Grocery Sales							P	P	P	S	S
Boat Sales, Service, Rental, and Fuel Dispensing							P	P		S	
Fish Canning, Curing, Grinding, Smoking								S			S
Fish, Seafood Store							P	P	P		
Marina, Dock, Boating Facility (Commercial)								P		P	P
Marina, Dock, Boating Facility (Private/Club)	S	S	S	S	S	S		P		P	P
Marine Railway, Boat Building and Repair								P		P	P
Seafood Receiving, Packing, Storage								P		S	P

As with some other communities in Hampton Roads, York County has adopted a special zoning district for specifically for working waterfronts. The Water-Oriented Commercial/Industrial District was established “to provide opportunities for various types of activities oriented toward and requiring access to the water.”¹⁵

Working Waterfronts Project Background

In addition to this current project, the Hampton Roads Planning District Commission received funding through the Virginia Coastal Zone Management Program and the Virginia Institute of Marine Science to contribute to the effort to develop a Virginia Working Waterfronts Master Plan. Total funding for this work amounted to \$11,000 from 2011 to 2013.¹⁶ This funding was used to develop an inventory of working waterfronts in Hampton Roads.

In addition CZM funds, the Hampton Roads region has also been the recipient of grants from the Virginia Port Authority’s Aid to Local Ports program. Between FY11 and FY16, Hampton Roads communities were awarded nearly \$2.5 million. Projects funded in Hampton Roads include:

- \$175,000 for a new mooring dolphin at the Half Moone Cruise and Celebration Center at Nauticus in the City of Norfolk in FY11
- \$325,000 for the rehabilitation of the east fender system of the mainline bridge in the City of Chesapeake in FY12
- \$233,750 for a new mooring dolphin at the Half Moone Cruise and Celebration Center at Nauticus in the City of Norfolk in FY12
- \$200,000 for the addition of maintenance free floating docks to the Elizabeth River frontage project in the City of Norfolk in FY14
- \$250,000 for a dredging project at the wharf of Front Street near the NOAA marine operations center in the City of Norfolk in FY14
- \$90,000 for dock replacement at the Great Bridge Battlefield and Waterways Center in the City of Chesapeake in FY15
- \$200,000 for maintenance-free concrete floating docks at Nauticus in the City of Norfolk in FY15
- \$56,250 for dock replacement at Elizabeth River Park in the City of Chesapeake in FY16
- \$638,292 for the replacement of the west bulkhead at the Seafood Industrial Park in the City of Newport News in FY16
- \$112,500 for breakwaters at Messick Point in the City of Poquoson in FY16
- \$187,500 for a pier in City Park in the City of Portsmouth in FY16
- \$10,000 for a dredging project at Tyler’s Beach in Isle of Wight County in FY16

¹⁵ Sec. 24.1-334

¹⁶ This work was funded under CZM FY11 Task 92 and FY12 Task 92.

Case Study: The Newport News Seafood Industrial Park

The Newport News Seafood Industrial Park is an example of how public funding can be used to support, maintain, and grow working waterfront industries. The 39-acre facility is located on Newport News Creek, federally-maintained navigable waterway off Hampton Roads, on the southeastern tip of Newport News adjacent to the northern terminus of the Monitor-Merrimac Memorial Bridge Tunnel and the Hampton Roads Sanitation District's Boat Harbor Treatment Plant. It was originally built in the early 20th century as the Newport News Small Boat Harbor. In 1979, the City of Newport News, recognizing the need for a seafood-specific facility, established the Seafood Industrial Park and made several improvements to the facility to turn into a premier seafood harbor. Since its establishment the Seafood Industrial Park has received over \$2.5 million in federal assistance and over \$7.5 million in state assistance.¹⁷ Specific improvements made over the years include:

- Phase I improvements to the Seafood Industrial Park bulkhead with \$1.5 million in federal grant funds and \$4.2 million in additional state funding (1980)
- Phase II improvements to the bulkhead with \$1 million in federal grant funds and \$2.7 million in state funding (1982)
- Extension of vessel mooring capacity via a mooring pier (1992)
- Dredging of Newport News Creek outer harbor channel to 18 feet by the U.S. Army Corps of Engineers (1996)
- Refurbishing of industrial moorings with a Virginia Port Authority grant of over \$600,000 (2015)

The Seafood Industrial Park is now home to over a dozen working waterfronts businesses, including seafood processing and sales, boat building and repair, machine shops, marine towing, and marine construction. Major employers in the Seafood Industrial Park include Davis Boat Works, Casey's Seafood, and Chesapeake Bay Packing.

The Seafood Industrial Park is a cooperative endeavor between the city and the businesses that rely on the facility. While the city owns the land and leases it to businesses, the tenants own the facilities they build. Improvements to the harbor have been financed by city funds and grants. The U.S. Army Corps of Engineers has also dredged the harbor's channel to help maintain navigability. The area is zoned M-2 (Heavy Industrial) to allow tenants to conduct most working waterfront uses by right. Operation of the Seafood Industrial Park is regulated by ordinance in the city code, specifically Chapter 11 Article III. The Seafood Industrial Park is managed by a city staff harbor master. Demand for mooring space exceeds capacity, and all the land at the Seafood Industrial Park is leased. The facility has also been a revenue generator for the city, contributing over \$481,000 per year in rent alone, with another \$3.8 million collected in mooring fees since 1989.¹⁸

¹⁷ <https://www.nngov.com/667/Seafood-Industrial-Park>

¹⁸ <https://www.nngov.com/667/Seafood-Industrial-Park>

The Future of Working Waterfronts in the Region

For most Hampton Roads communities, working waterfronts have entered into a steady economic state. All of the communities included in the Hampton Roads inventory have adopted zoning ordinances that specifically allow for working waterfronts uses. Several communities have also adopted districts specifically for working waterfronts uses or have established publicly supported facilities for working waterfronts businesses. With a few exceptions, the industries that use working waterfronts are not growing, and in several cases, economic downturns and industry consolidation have reduced the number of active working waterfronts. The challenge they face is how to retain existing businesses and industries while promoting waterfronts as amenities for urban communities and tourists. To address this challenge, the region's communities have already identified several policies and goals related to working waterfronts as part of their comprehensive plans. These policies include:

- Improve and encourage public waterfront access for recreation, fishing, and boating through new facilities (such as boat launches and docks and pedestrian walkways) and redevelopment.
- Develop new waterfront areas and redevelop underutilized industrial or commercial waterfronts with a mix of uses to create water-oriented districts.
- Encourage recreational use of the water by residents and tourists to support water-based businesses, such as eco-tourism companies and marinas.
- Improve and protect water quality to increase both recreational (swimming and visiting beaches) and commercial use (fishing and oystering) of the water.
- Support the dredging of the region's channels and waterways to improve access to the region's port terminals and access for recreational boats
- Protect existing active working waterfronts
- Encourage additional working waterfront business development in active working waterfront areas

In several localities, these policies are already being pursued through focuses planning and infrastructure improvement efforts.

Appendix A - NOAA Coastal County Maritime Jobs Snapshots

The National Oceanic and Atmospheric Administration produces “County Snapshots” that summarize various trends and statistics related to coastal management at the county level. The Maritime Jobs Snapshots summarize the impact of marine jobs on a county’s economy in terms of employment, wages, and goods and services. These snaps show the distribution of maritime jobs within a county by sector, in comparison with the state and nation, and over time. The sectors included in the Snapshots are Living Resources, Marine Construction, Marine Transportation, Offshore Mineral Extraction, Ship and Boat Building, and Tourism and Recreation. In addition, some jobs are included in the total but marked as “Suppressed;” these are employers where revealing the industry or number of employees would violate business confidentiality. There are several potential issues with using the Maritime Jobs Snapshots. First, the economic dataset that the snapshots are based on is the Quarterly Census of Employment and Wages (QCEW), which is produced by the Bureau of Labor Statistics. The QCEW does not include self-employed workers, which would apply to many watermen. Second, as mentioned above, the BLS cannot publish employment data for particular sectors since it would violate business confidentiality, such as if there is only one employer in a given sector. This limits the overall usefulness and accuracy of the figures. Third, the Tourism and Recreation sector is very broad. In addition to industries such as marinas, boat dealers, and water tours, it also includes hotels and lodging, sporting goods, and campsites.

Maritime Jobs Snapshots are available for fourteen (14) Hampton Roads counties and independent cities: Chesapeake, Gloucester County, Hampton, Isle of Wight County, James City County, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Surry County, Virginia Beach, Williamsburg, and York County. According to the Snapshots, total employment in maritime jobs ranges from 0 jobs in Surry County and Williamsburg to over 22,000 jobs in Virginia Beach. A summary of jobs and shares by sector for cities and counties in Hampton Roads is included below in Table 1. Individual snapshots are also included.

Table 16: Maritime Jobs in Hampton Roads, VA

Locality	Total Maritime Jobs	Living Resources	Marine Construction	Marine Transportation	Offshore Mineral Extraction	Ship and Boat Building	Tourism and Recreation	Suppressed
Chesapeake	2,829	N/A	16.4%	48.8%	N/A	N/A	N/A	34.8%
Gloucester County	902	N/A	N/A	N/A	N/A	N/A	100.0%	0.0%
Hampton	5,584	1.8%	N/A	N/A	N/A	N/A	98.2%	0.0%
Isle of Wight County	686	N/A	1.5%	N/A	N/A	N/A	88.0%	10.5%
James City County	3,590	N/A	N/A	N/A	N/A	N/A	83.0%	17.0%
Newport News	8,124	0.2%	N/A	12.6%	N/A	4.6%	82.6%	0.0%
Norfolk	15,763	0.1%	0.4%	4.7%	N/A	23.6%	55.7%	15.5%
Poquoson	207	N/A	N/A	N/A	N/A	N/A	100.0%	0.0%
Portsmouth	13,700	N/A	3.1%	0.5%	N/A	71.0%	17.9%	7.5%
Suffolk	3,792	N/A	N/A	24.5%	N/A	N/A	70.4%	5.1%
Surry County	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100.0%
Virginia Beach	22,026	0.3%	0.3%	0.6%	N/A	N/A	97.9%	0.9%
Williamsburg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100.0%
York County	3,515	N/A	N/A	N/A	N/A	N/A	100.0%	0.0%

Source: NOAA Coastal County Maritime Jobs Snapshots (coast.noaa.gov/snapshots/)