

Redevelopment as a Nutrient Reduction Strategy



Virginia Coastal Zone
MANAGEMENT PROGRAM



Prepared by
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Redevelopment as a Nutrient Reduction Strategy

Prepared for the
Hampton Roads Planning District Commission

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Prepared by

CH2M HILL

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Report Documentation

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Redevelopment as a Nutrient Reduction Strategy

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ABSTRACT:

Local governments are implementing strategies to achieve Chesapeake Bay Total Maximum Daily Load (TMDL) requirements. Current redevelopment activities related to stormwater quality control and future redevelopment planning were evaluated and recommendations made to help localities in using future redevelopment activities to meet the Chesapeake Bay TMDL nutrient reduction requirements.

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Work to support the development of Virginia's Phase II WIP is included in the Hampton Roads Planning District Commission Unified Planning Work Program for Fiscal Year 2012, approved by the HRPDC at its Executive Committee meeting of June 16, 2011. This specific project is included in the HRPDC 2011 CZM competitive grant proposal package. HRPDC authorized the submittal of the grant proposal and subsequent acceptance of grant offer at its Executive Committee meeting of September 15, 2011.

Executive Summary

Localities in the Chesapeake Bay watershed are facing the challenge of cost effectively meeting the requirements of the Chesapeake Bay Total Maximum Daily Load (TMDL). The Hampton Roads Planning District Commission (HRPDC) received a grant in 2011 from the Virginia Department of Environmental Quality (DEQ) Coastal Zone Management Program to examine redevelopment as a local government strategy to meet the nutrient reduction goals of the Chesapeake Bay TMDL. This study provides information about current redevelopment and its relationship to stormwater management. The objectives of the grant are to define redevelopment, identify lands targeted for future redevelopment, examine the maximum potential and extent of redevelopment in the next 15 years, estimate the nutrient removal for redevelopment based on the revised Virginia Stormwater Regulations, evaluate the cost effectiveness of nutrient removal achieved through redevelopment activities, and summarize the advantages and disadvantages of including redevelopment as a strategy to achieve nutrient reductions as required by the Chesapeake Bay TMDL.

Under the previous Virginia Stormwater Management regulations and the Chesapeake Bay Preservation Act, redevelopment projects with existing site imperviousness greater than the average land cover condition and located within the Chesapeake Bay Preservation Area of a locality were required to reduce phosphorus loads by 10 percent. The new Virginia Stormwater Management Regulations will require all localities to have a stormwater quality requirement for all site development.

Under the new regulations, redevelopment projects that have no net increase in impervious cover from the predevelopment condition shall reduce total phosphorus loads by 20 percent below the predevelopment total phosphorous load if the site is greater than 1 acre and 10 percent if the site is less than one acre. If a redevelopment project increases impervious area on a prior developed site, then the total phosphorous load from the additional impervious area must meet the new development standard of 0.41 pounds per acre per year. According to the regulations, the predevelopment load is defined by the conditions that exist when the development plans are submitted to the locality.

There are several advantages and disadvantages in using redevelopment activities to help meet the Chesapeake Bay TMDL requirements.

Advantages

1. Nutrient removal from redevelopment activities can be counted towards the nutrient reduction requirement for the Chesapeake Bay TMDL while the nutrient removal from new development activities will typically not provide a reduction in the existing nutrient load.
2. Private developers typically pay for stormwater management on redevelopment sites while localities pay for BMP retrofit projects on publicly-owned lands.
3. Some localities already provide incentives to attract businesses to existing developed areas which may make it easier to redevelop existing developed areas that currently do not have stormwater management controls. Localities will need to track these activities in order to incorporate them into their Chesapeake Bay TMDL compliance plans.

Disadvantages

1. Future redevelopment is difficult to predict and can complicate a strategy that must be implemented on a regulated timeframe.
2. Incorporating redevelopment into a local government's Chesapeake Bay TMDL strategy will require coordination between economic development, planning, and stormwater to track and project acres of redevelopment.
3. Siting and construction of stormwater management facilities on redevelopment sites can be more difficult and expensive than facilities on new development sites.

Information from Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Virginia Beach, and Williamsburg was collected to provide data about current and future redevelopment activities. Information was provided by Planning Department and Public Works Department staff from the selected localities. Information was also gathered from published documents and from the local government websites. Based on this information, the study findings include:

- Redevelopment is not consistently defined by local governments.
- Redevelopment is not typically tracked for reporting.
- Plans for strategic growth areas do not typically include stormwater management designs for water quality.

Water quality treatment from redevelopment activities should be one of the strategies that localities use to help meet their Chesapeake Bay TMDL nutrient reduction goals; however, the amount of nutrient reduction from redevelopment activities will vary widely depending on the current build out of the locality and the economic climate for development. Several recommendations to help localities plan for using redevelopment activities to meet the TMDL requirements are:

1. Develop a definition of redevelopment for stormwater management site plan design review that is consistent with Virginia's Stormwater Management Regulations.
2. Use redevelopment planning as a catalyst to provide water quality treatment in existing developed areas that don't currently have water quality controls.
3. Develop a process for tracking nutrient removal due to redevelopment activities so progress towards the Chesapeake Bay TMDL requirements can be calculated.

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Acronyms and Abbreviations

BMP	Best Management Practice
CBPA	Chesapeake Bay Preservation Act
DCR	Virginia Department of Conservation and Recreation
DEQ	Virginia Department of Environmental Quality
GIS	Geographic Information System
HRPDC	Hampton Roads Planning District Commission
PARS	Permit Administration and Review System
TMDL	Total Maximum Daily Load
WIP	Watershed Implementation Plan

Localities in the Chesapeake Bay watershed are facing the challenge of cost effectively meeting the requirements of the Chesapeake Bay Total Maximum Daily Load (TMDL). The Hampton Roads Planning District Commission (HRPDC) received a grant in 2011 from the Virginia Department of Environmental Quality (DEQ) Coastal Zone Management Program to examine the role that redevelopment may have in helping to meet the nutrient reduction goals of the Chesapeake Bay TMDL. This report describes the results of this evaluation.

1. Objectives

The objectives of the grant are to define redevelopment, identify lands targeted for future redevelopment, examine the maximum potential and extent of redevelopment in the next 15 years, estimate the nutrient removal for redevelopment based on the revised Virginia Stormwater Regulations, evaluate the cost effectiveness of nutrient removal achieved through redevelopment activities, and summarize the advantages and disadvantages of including redevelopment as a strategy to achieve nutrient reductions as required by the Chesapeake Bay TMDL.

2. Background

The Chesapeake Bay TMDL for nitrogen, phosphorous, and sediment was established by the U.S. Environmental Protection Agency in 2010 as a requirement for states in the Chesapeake Bay watershed. The states required individual localities to develop Phase II Watershed Implementation Plans (WIPs) to describe the strategies that they will use to reduce the pollutant loads to meet the Chesapeake Bay TMDL. One of the strategies to reduce nutrients in runoff from urban areas involves constructing structural stormwater best management practices (BMPs) in existing developed areas that currently have no stormwater management controls. This study provides information about current redevelopment and its relationship to stormwater management.

Under the previous Virginia Stormwater Management regulations and the Chesapeake Bay Preservation Act, a redevelopment project with existing site imperviousness greater than the average land cover condition and located within the Chesapeake Bay Preservation Area of a locality was required to reduce phosphorus loads by 10 percent. The new Virginia Stormwater Management Regulations will require all localities to have a stormwater quality requirement for all site development.

Under the new regulations, redevelopment projects that have no net increase in impervious cover from the predevelopment condition shall reduce total phosphorus loads by 20 percent below the predevelopment total phosphorous load if the site is greater than 1 acre and 10 percent if the site is less than one acre. If a redevelopment project increases impervious area on a prior developed site, then the total phosphorous load from the additional impervious area must meet the new development standard of 0.41 pounds per acre per year. According to the regulations, the predevelopment load is defined by the conditions that exist when the development plans are submitted to the locality.

3. Reasons for Using Redevelopment to Meet Nutrient Reduction Goals

There are advantages and disadvantages of using stormwater management required by redevelopment activities as a strategy to meet the nutrient removal requirements for the Chesapeake Bay TMDL. Most municipalities will have some type of redevelopment in the future and the new Virginia Stormwater Regulations require a 20 percent reduction of phosphorous from the existing conditions for development areas greater than one acre.

Older developed urban areas typically do not have existing stormwater management controls so the total amount of phosphorous removed from redevelopment sites with no existing BMPs can be counted towards the Chesapeake Bay TMDL requirements. Stormwater quality treatment nutrient reductions from new development will not count towards the Chesapeake Bay TMDL requirements because there will be no increased removal of the existing nutrient load. For the Phase II WIPs, some Hampton Roads localities have proposed retrofitting existing developed publicly-owned land with BMPs to help meet the nutrient load reduction. The advantage of retrofitting publicly-owned land is that the locality has control over the implementation of the project; however, the locality will be responsible for paying for the project. Retrofitting existing development with BMPs can be very costly even

if the cost of land is not a factor. In redevelopment, the cost for providing stormwater BMPs is typically the responsibility of private developers so the locality gets the benefit of the 20 percent nutrient reduction without paying for the BMPs unless the locality is providing assistance or incentives for the redevelopment project.

The localities that are mostly built out will have more redevelopment than new development. Incentives for redevelopment include Enterprise Zones, HUBZones, and various other programs. These incentives are described in more detail in Section 4 of this report. A few localities have funded the design and construction of stormwater management facilities and infrastructure for large new development and redevelopment areas in order to provide an incentive for private development in these areas and to implement a regional stormwater management approach.

In the Virginia Stormwater Regulations, water quality requirements for redevelopment areas are less stringent than the water quality requirements for new development areas. In a comparison between new development and redevelopment nutrient removal requirements, a developer will typically have to remove less phosphorous at a redevelopment site than at a new development site. However, it is harder to retrofit stormwater management for existing areas than design stormwater management for new development areas because of limited existing open area and potential conflicts with existing utilities. If a large site is planned for redevelopment, especially as part of a locality redevelopment project, then it may be easier to create the open space needed to construct large BMPs.

The costs for constructing a stormwater management facility for a redevelopment area will typically be greater than the cost for the same size of stormwater management facility at a new development site. BMPs for urban redevelopment areas with limited open space include small bioretention facilities, permeable pavement, green roofs, underground infiltration facilities, or hydrodynamic structures. Larger redevelopment areas with more open space may have the area for retention ponds, extended dry detention ponds, vegetated channels, or larger bioretention areas. Table 3-1 provides a description of some typical BMP costs for redevelopment versus new development sites. The costs were obtained from the *Maryland Phase II Watershed Implementation Plan*, Appendix C. Most of the BMPs listed for redevelopment have higher initial and post construction costs than the BMPs listed for new development.

TABLE 3-1

Comparison of Planning Level BMP Costs for Redevelopment vs. New Development

Stormwater Best Management Practice	Total Initial Costs per Impervious Acre Treated ¹	Total Post Construction Costs per Impervious Acre Treated ²	Total Costs over 20 Years	Average Annual Costs over 20 Years
Redevelopment Typical BMPs				
Bioretention (Retrofit – Highly Urban)	\$186,750	\$1,531	\$217,370	\$10,869
Dry Extended Detention Ponds (Retrofit)	\$72,500	\$1,231	\$97,120	\$4,856
Filtering Practices (Below ground with sand)	\$56,000	\$1,631	\$88,620	\$4,431
Hydrodynamic Structures	\$42,000	\$3,531	\$112,620	\$5,631
Permeable Pavement (With sand)	\$335,412	\$3,060	\$396,600	\$19,830
Urban Tree Planting	\$183,000	\$1,210	\$207,200	\$10,360
Wet Ponds and Wetlands (Retrofit)	\$66,000	\$763	\$81,250	\$4,063
New Development Typical BMPs				
Bioretention (New – Suburban)	\$49,880	\$1,531	\$80,495	\$4,025
Dry Extended Detention Ponds (New)	\$44,000	\$1,231	\$68,620	\$3,431
Urban Forest Buffers	\$33,000	\$1,210	\$57,207	\$2,860
Vegetated Open Channels	\$26,000	\$610	\$38,207	\$1,910
Wet Ponds and Wetlands (New)	\$26,100	\$763	\$41,370	\$2,068

(Source: *Maryland Phase II Watershed Implementation Plan*)

¹Includes the cost of site discovery, surveying, design, planning, permitting, capital, labor, material, and overhead costs. For BMPs that require land, the opportunity cost is assumed to be \$50,000 per acre.

²Includes the combined annual operating, implementation, and maintenance costs.

However, the information in Table 3-1 only tells part of the story on the cost of stormwater quality treatment for redevelopment versus new development. If for example, a 4 acre site that consists of 2 acres of impervious cover and 2 acres of managed turf is redeveloped with no change in land cover then a 20 percent reduction of phosphorus load would be required. Using the runoff reduction spreadsheet for redevelopment, the pre-development phosphorous load would be 5.34 lb/yr with the impervious area contributing 4.34 lb/yr and the managed turf area contributing 1.00 lb/yr. Since the land cover condition is the same for pre- and post-development conditions, the post-development phosphorous load reduction required is 1.07 lb/yr. If the 4 acre example site was used for new development with the same post-development land cover, the phosphorous load reduction requirement to achieve 0.41 lb/acre/yr would be 3.70 lb/yr which is 69 percent of the total 5.34 lb/yr post-development phosphorous load.

The area that would need to be treated will vary with the BMP removal efficiency. For the 4 acre redevelopment site example, a BMP that removes 20 percent of the site phosphorus load would have to treat the entire 4 acre area while a BMP that removes a greater percentage would treat a smaller area to achieve the same removal goal. This relationship can be expressed as:

$$\text{Reduction Requirement (\%)} \times \text{Land Cover Area (ac)} = \text{Removal Efficiency (\%)} \times \text{Area Treated (ac)}$$

where Land Cover Area is the impervious area and possibly the managed turf area for the example site.

This can also be expressed as:

$$\text{Area Treated (ac)} = \text{Reduction Requirement (\%)} / \text{Removal Efficiency (\%)} \times \text{Land Cover Area (ac)}$$

For the purposes of this discussion, it was assumed that all of the impervious area at the example site would be treated before extending treatment to the managed turf area. If all of the load reduction can be achieved by treating some or all of the impervious area, then the managed turf will go untreated. If the entire impervious area was treated and the removal goal was not achieved, then the managed turf load would be reduced to the amount necessary to achieve the remainder of the goal.

Table 3-2 shows the phosphorus removal efficiencies for eight BMPs based on the data provided in the Virginia BMP Clearinghouse. The Impervious Area Treated was calculated based on the second equation above. If the resulting area was greater than 2 acres, then the 2 acres was entered in the Impervious Area Treated and the remaining phosphorus removal was calculated. The Managed Turf Area Treated was then calculated in the same manner. Again if the Managed Turf Area Treated was greater than 2 acres, then 2 acres was entered into the area treated and the Remaining Phosphorus Reduction Requirement was calculated. The Remaining Phosphorous Reduction Requirement value indicates that the load reduction requirement could not be achieved by the particular on-site BMP and the blue shaded BMPs in Table 3-2 are the ones that can meet the phosphorous removal requirements on-site with the post-development land cover conditions as described in the example.

A Remaining Phosphorous Reduction value means that that the developer will need to use a different BMP to achieve the reduction goal on-site or use a combination of BMPs in series to achieve a greater overall phosphorous removal efficiency. The developer could also purchase nutrient removal credits to achieve the additional reduction off-site or the post-development land cover condition would have to include a greater percentage of managed turf or change managed turf to forest/open space land cover.

The cost to treat on-site was calculated based on the area treated and the cost per impervious acre in Table 3-1. Managed turf areas generate about 25 percent of the treatment volume for a 1 inch storm and treatment cost per acre was adjusted accordingly. The on-site treatment cost in Table 3-2 are only for the BMP constructed on-site and if there is a remaining phosphorous reduction requirement, there will be additional costs to achieve the phosphorous reduction requirement if the example site post-development land cover conditions remain as described.

TABLE 3-2

Comparison of BMP Costs to Attain Removal Goal for Redevelopment vs. New Development

Stormwater BMP	Phosphorous Removal Efficiency (%)	Impervious Area Treated (ac)	Managed Turf Area Treated (ac)	Remaining Phosphorous Reduction Requirement (lb/yr) ¹	On-Site Treatment Cost
Redevelopment with Pre- and Post-Development Land Cover of 2 acres of Impervious and 2 acres of Managed Turf, 20% Phosphorous Reduction Required					
Bioretention 1	55%	0.89	0.00	0.00	\$166,208
Bioretention 2	90%	0.55	0.00	0.00	\$102,713
Dry Extended Detention Pond 1	15%	2.00	2.00	0.27	\$181,250
Dry Extended Detention Pond 2	31%	1.59	0.00	0.00	\$115,275
Filtering Practice 1	60%	0.82	0.00	0.00	\$45,920
Filtering Practice 2	65%	0.76	0.00	0.00	\$42,560
Wet Pond 1 (Coastal)	45%	1.09	0.00	0.00	\$71,940
Wet Pond 2 (Coastal)	65%	0.76	0.00	0.00	\$50,160
New Development with Post-Development Land Cover of 2 acres of Impervious and 2 acres of Managed Turf, 69% Phosphorous Reduction Required					
Bioretention 1	55%	2.00	2.00	0.76	\$124,700
Bioretention 2	90%	1.89	0.00	0.00	\$94,273
Dry Extended Detention Pond 1	15%	2.00	2.00	2.90	\$110,000
Dry Extended Detention Pond 2	31%	2.00	2.00	2.04	\$110,000
Filtering Practice 1	60%	2.00	2.00	0.50	\$140,000
Filtering Practice 2	65%	2.00	2.00	0.23	\$140,000
Wet Pond 1 (Coastal)	45%	2.00	2.00	1.30	\$65,250
Wet Pond 2 (Coastal)	65%	2.00	2.00	0.23	\$65,250

¹If there is a remaining load reduction requirement, it means the selected on-site stormwater BMP could not reduce the required amount of phosphorous so it should not be used in this example or off-site nutrient removal will be required.

Here is a summary of advantages and disadvantages for using redevelopment activities to help meet the Chesapeake Bay TMDL requirements:

Advantages

1. Nutrient removal from redevelopment activities can be counted towards the nutrient reduction requirement for the Chesapeake Bay TMDL while the nutrient removal from new development activities will typically not provide a reduction in the existing nutrient load.
2. Private developers typically pay for the redevelopment site stormwater management required by the state regulations while localities pay for BMP retrofit projects on publicly-owned lands.
3. Some localities already provide incentives to attract businesses to existing developed areas which may make it easier to redevelop existing developed areas that currently do not have stormwater management controls. Localities will need to track these activities in order to incorporate them into their Chesapeake Bay TMDL compliance plans.

Disadvantages

1. Future redevelopment is difficult to predict and can complicate a strategy that must be implemented on a regulated timeframe.

2. Incorporating redevelopment into a local government's Chesapeake Bay TMDL strategy will require coordination between economic development, planning, and stormwater to track and project acres of redevelopment.
3. Siting and construction of stormwater management facilities on redevelopment sites can be more difficult and expensive than for new development sites.

4. Locality Research

Information from Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Virginia Beach, and Williamsburg was collected to provide data about current and future redevelopment activities related to stormwater management. Representatives from the Planning Departments were typically targeted as the initial contact at the locality and in most cases the questions were answered by both Planning Department and Public Works Department staff. Information was also gathered from documents and from local government websites.

4.1 Definition

Localities were asked how they currently define redevelopment and how localities apply the stormwater quality requirements for redevelopment compared to new development. Most localities define redevelopment as "The process of developing land which is, or has been, previously developed." If there was existing impervious area on a site, then future development on that site will be considered redevelopment. Many localities acquire land, clear the land to avoid blight, and develop the site years later. Local policies differ on how long these sites can remain undeveloped before they are treated as new development instead of redevelopment.

For example, one locality allows new construction to apply the redevelopment criteria if the applicant can estimate past land cover based on historical aerial photographs regardless of how long the site has been cleared of all impervious area. In contrast, another Hampton Roads locality requires construction to follow the new development criteria if the site has been demolished down to the dirt (removal of slabs) at the time the new site plan is submitted. Since the redevelopment nutrient removal requirements are less stringent than new development requirements, these policies have significant impacts on the cost of construction.

4.2 Historic Redevelopment Rates and Tracking

Localities were also asked how they track redevelopment activities. Historic redevelopment information could be used to analyze past redevelopment rates and estimate future nutrient reductions. Locality planning departments document all projects that go through the site plan review process including rezoning, conditional use permits, land disturbance permitting, and subdivision or site plan review; however, new development and redevelopment are not categorized separately.

Localities' stormwater calculation reviews differentiate between new development and redevelopment with regards to meeting the Chesapeake Bay Preservation Act (CBPA). If an existing development site has impervious areas or previously had impervious area, it is considered redevelopment. Neither planning nor stormwater departments could easily provide an estimate of acres of redevelopment per year. The number of acres redeveloped is documented in the individual files for site plan review; but for most localities, it would take a lot of time for staff to review those files and summarize the data.

4.3 Projecting Future Redevelopment Rates

Ideally, localities could estimate nutrient reductions associated with future redevelopment and include those reductions in their TMDL implementation strategy. However, the rate of redevelopment is difficult to predict. One method of estimating future redevelopment is to:

1. Quantify the area already targeted for redevelopment by planning and economic development departments.
2. Estimate how much of the targeted area will be developed before the TMDL deadline or MS4 permit cycle (5 years).
3. Calculate the associated nutrient reductions based on existing land cover and the new stormwater regulations.

Several types of documents and programs identify areas that localities have targeted for redevelopment such as comprehensive plans, HUBZones, and Enterprise Zones. The following sections provide more detail about these resources.

Comprehensive Plans and Strategic Growth Areas: Localities identify areas of future redevelopment in their comprehensive plan and/or in a smaller planning area component documents. For example, transit-oriented development is predicted along the current light rail line in Norfolk and areas with possible future expansion of light rail in Southside Hampton Roads. All localities expect more redevelopment in older developed areas to occur in the future. Most localities have not estimated the quantity of redevelopment that will occur between now and 2025 but have identified growth areas that will likely have redevelopment in the future. In some localities, redevelopment planning for smaller planning areas includes changes to zoning, transportation and other infrastructure improvement planning such as stormwater management. Generally, locality plans for smaller planning areas do not calculate the potential nutrient removal due to redevelopment. Some of the plans have calculated the amount of existing impervious area and included possible locations for stormwater BMPs.

HUBZones: The HUBZone program is a federal program administered by the U.S. Small Business Administration. Historically underutilized business zones or HUBZones are designated geographic areas that provide federal contracting preferences to qualified businesses located in and hiring employees from these areas.

Virginia Enterprise Zone program: The Virginia Enterprise Zone program is a partnership between state and local governments. Enterprise Zones are designated geographic areas where state and local grants, local tax abatements and refunds for qualifying companies or property owners create new full-time jobs and/or new taxable investment above specific thresholds. The locality Enterprise Zone incentives may consist of local utility tax refunds, abatement of business license fees, expansion or relocation financial incentives, property tax reductions, technical assistance, and/or training. The program includes the Real Property Investment Grant that funds rehabilitation, expansion, or new construction of commercial, industrial, or mixed-use buildings.

Additional State and Local programs: Other state programs include the Community Development Block Grant (CDBG) and Industrial Revitalization Funds (IRF). CDBG funded activities include building façade improvements, redevelopment of key structures, development of upper-story housing, and economic restructuring activities to help ensure sustainability of downtown business districts. The IRF program funds redevelopment of vacant and deteriorated industrial and commercial properties. Other locality programs may include low-interest loans and other financing programs designed to attract new businesses and encourage the expansion of existing businesses. Additional information on the federal, state, and locality redevelopment incentive programs is provided in Appendix A.

5. Findings

The information gathered from local governments shows a wide range of policies and plans related to redevelopment and stormwater management. Some of the findings include:

- Redevelopment is not consistently defined by local governments.
- Redevelopment is not typically tracked for reporting.
- Planning for strategic growth areas for redevelopment does not typically include stormwater management designs for water quality.

The implementation of water quality requirements varies between localities due to differences in how redevelopment is defined by local governments. Localities have varying time limits on when previous site development can be counted as existing development for a site that has been cleared. If a developer can use a redevelopment classification for an existing developed site that has been cleared, the required nutrient reductions will be less onerous than if the site is classified as new development.

A locality may want to take credit for a change from an existing developed impervious area to a turf managed area if the site will be cleared for a long period of time because they could get a substantial nutrient reduction

from the land cover change. However, the site will need to be classified as new development when it is eventually developed.

For the site plan review process, development sites are tracked by localities but the amount of redevelopment area and the nutrient removal from stormwater management from redevelopment activities are not specifically tracked. In the future, it will be important to account for nutrient reduction from redevelopment activities and report those reductions as progress towards meeting the Chesapeake Bay TMDL requirements.

Land use plans that include redevelopment usually do not include stormwater management facilities or a strategy on how to achieve water quality compliance with the new stormwater regulations and Chesapeake Bay TMDL requirements. However, some localities have identified the possible locations of regional stormwater management facilities in smaller area planning documents. Even quantifying the amount of existing impervious area in future redevelopment areas will help localities estimate the potential amount of nutrient reduction.

6. Summary and Recommendations

Water quality treatment due to redevelopment activities should be one of the strategies localities use to meet their Chesapeake Bay TMDL nutrient reduction goals; however, the amount of nutrient reduction will vary widely depending on the current build out of the locality and the economic climate for development. Several recommendations to help localities plan for nutrient reductions tied to redevelopment are as follows:

1. Develop a definition of redevelopment for stormwater management site plan design review that is consistent with Virginia's Stormwater Management Regulations.
2. Use redevelopment planning as a catalyst to help provide water quality treatment in existing developed areas that don't currently have water quality controls.
3. Develop a process for calculating and/or tracking the nutrient removal due to redevelopment activities so that anticipated or actual progress towards the Chesapeake Bay TMDL requirement can be more easily evaluated for the future planning.

6.1 Define Redevelopment

Localities have differing criteria for determining if development on a previously developed site constitutes redevelopment especially if a development site has been cleared of existing development. The state stormwater management regulations define predevelopment site conditions as existing at the time site plans are submitted for redevelopment. Localities should develop a definition of redevelopment that is consistent with the Virginia Stormwater Management Regulations and take credit for the reduction in the existing nutrient load from BMPs constructed to meet the water quality requirements for redevelopment sites. Localities should document existing site conditions for future redevelopment areas so there is a record of the land cover conditions that can be used in the future when calculating the nutrient removal due to redevelopment activities.

If a locality allows an existing development site that has been cleared to be planted with grass, the site can be counted as a land cover change from impervious area to managed turf to provide a reduction of nutrients to help meet the Chesapeake Bay TMDL. However, when the land is developed, the developer will need to meet the state stormwater regulation requirement for new development which will require greater nutrient reductions than for redevelopment. If the existing development site classification of redevelopment is kept, the locality will still get a benefit with the 20 percent nutrient removal but it will be less than if the site was classified as new development and planted with grass.

6.2 Promote Redevelopment

Comprehensive plans for Hampton Roads localities all include a component of redevelopment and some urban localities classify most future development as redevelopment. Planning for stormwater management in future redevelopment areas will help localities to meet their Chesapeake Bay TMDL load reductions. Some locality master planning documents identify strategies for water quality treatment using green site design or low impact development techniques to help reduce the amount of runoff. Local governments also build regional stormwater

management facilities to capture the runoff from large drainage areas like commercial districts and industrial parks. If localities were planning to use BMP retrofits on publicly-owned land to meet their Chesapeake Bay TMDL requirement, they should compare the cost of paying for the retrofit projects to the cost of providing financial assistance for private redevelopment activities to identify the most cost effective strategy.

A locality may want to create a list of water quality control projects in redevelopment areas for developers to construct if they can't comply with water quality requirements on-site. For example, a developer might pay for permeable paving at an existing parking lot in a redevelopment area and count the nutrient reduction from the permeable pavement as off-site stormwater management credits for his new development. A locality could also provide water quality treatment for future, large redevelopment projects. For example, localities could design and construct BMPs before these sites are built out and either treat the BMPs as an economic incentive or recoup the stormwater costs by incorporating them into leases or the sale of property.

The federal, state, and local incentive programs such as HUBZones and Enterprise Zones that provide funds and other assistance can be used to promote redevelopment. Localities should consider the potential cost savings of using redevelopment activities to help meet the Chesapeake Bay TMDL requirements when evaluating the funding offered through these incentive programs.

6.3 Calculate and Track Nutrient Reduction from Redevelopment Activities

At a minimum, localities should start collecting data on redevelopment projects. The data could be used to document progress towards meeting the local TMDL targets and show compliance with MS4 permits. The type of redevelopment information that should be tracked includes:

- Address of redevelopment site
- GPS coordinates of site
- Parcel identification number
- Year of installation
- 12 digit watershed in which it is located
- Total drainage area treated
- Amount of impervious area
- Amount of phosphorous, nitrogen, and sediment reduction, lbs
- List of BMPs used at the site

If localities want to use redevelopment as an implementation strategy in their MS4 permits, they will need to identify the number of acres to be redeveloped in their Action Plans for the 5 year permit. The rate of redevelopment and associated nutrient reductions would be a metric tracked in the local annual MS4 reports. Since redevelopment is unpredictable, localities might propose an alternate strategy (i.e. streetsweeping or structural BMP) that would be implemented if redevelopment rates are below the original estimate. The alternate strategy could be implemented 3 or 4 years into the permit, if needed.

An example calculation was developed to quantify the nutrient reductions for future redevelopment in Portsmouth. The Enterprise Zones in Portsmouth were used as the area for potential redevelopment in this calculation. The Enterprise Zone locations are shown in Figure 6-1. The data was obtained from the Virginia Economic Development Partnership Geographic Information System (GIS) Department website. The Enterprise Zones cover 1,156 acres or 5 percent of the City's total area.

Portsmouth has recently updated the existing land cover data in their GIS. Information from the GIS was used to determine the land cover composition in the City's Enterprise Zones. The land cover consists of four types: impervious, soil, vegetation (includes both managed turf and natural) and water. The GIS data was also used to determine the area treated by existing BMPs in the Enterprise Zones. Table 6-1 summarizes the land cover areas for total Portsmouth Enterprise Zone area and those areas that are treated and not treated by existing BMPs.

TABLE 6-1
Portsmouth Existing Land Cover in Enterprise Zone Areas

Land Cover	Total Area (ac)	Area Treated (ac)	Area Not Treated (ac)
Impervious	698.52	99.00	599.52
Soil	32.00	19.46	12.54
Vegetation	419.97	82.40	337.58
Water	5.19	4.54	0.65
Total	1155.67	205.39	950.28

For purposes of this calculation, it was assumed that any future redevelopment would occur in the untreated area of the Enterprise Zones because the areas already treated by existing BMPs have more recent development. The land cover data was entered into the Virginia DCR runoff reduction method spreadsheet for redevelopment with the following assumptions:

1. Class C soils for the entire area
2. The soils land cover was treated as managed turf.
3. The forest / open space land cover constitutes 14 acres of the vegetation land cover in the Enterprise Zones. The remainder of the vegetation land cover is managed turf.
4. The 0.65 acres of water was not included in the calculation.
5. It was assumed that the redevelopment impervious and managed turf percentages would be consistent with the current land cover percentages. A larger impervious value needs to be treated as two calculations. One calculation would address the redevelopment reduction component. That is, the area equal to the existing impervious and managed turf areas. The other calculation would address the new development component which is that amount of area that exceeds existing conditions. If that two step approach is used, then the redevelopment component is the same as if the values were constant from existing conditions to redevelopment.

The result of the example calculation was a predevelopment annual load of 1,470 lb of phosphorus. A 20 percent reduction would be 294 lb/yr. The entire untreated area in the Enterprise Zones represents 4.4 percent of the total City area. Over a 15-year period, redevelopment of the untreated Enterprise Zone area would result in a redevelopment rate of 63 acres per year (0.29 percent of total area/year). This value could be used to represent the high end of the range of redevelopment in the City. In its Phase II WIP planning, Portsmouth estimated a redevelopment rate of 40 acres per year (0.19 percent of total area/ year). For planning purposes, Portsmouth can anticipate phosphorous reductions between 193 lbs and 294 lbs over a 15-year period due to redevelopment activities.

Using the same loading methodology for the entire City, Portsmouth has a current annual phosphorus load of 33,290 lb. This amount is based on the land cover areas and BMP service areas that were provided in the City's Phase II WIP but does not exclude state and federal properties. The redevelopment load reduction discussed above would remove between 0.6 percent to 0.9 percent of the City's annual phosphorus load.

The Virginia Phase II WIP states that phosphorus loads in urban stormwater should be reduced by 16 percent for impervious surfaces and 9 percent for managed turf. Based on Portsmouth's land cover, this amount would be the equivalent of a 14 percent reduction to Portsmouth's annual load. The redevelopment strategy would meet 4.3 percent of the City's total reduction obligation at the low end and 6.4 percent on the high end. If the redevelopment was funded by private developers or grants, the strategy would allow Portsmouth to save an estimated \$38 million to \$127 million on the construction of public property BMP retrofits. The amount saved would depend on the types of BMPs used for the retrofits.

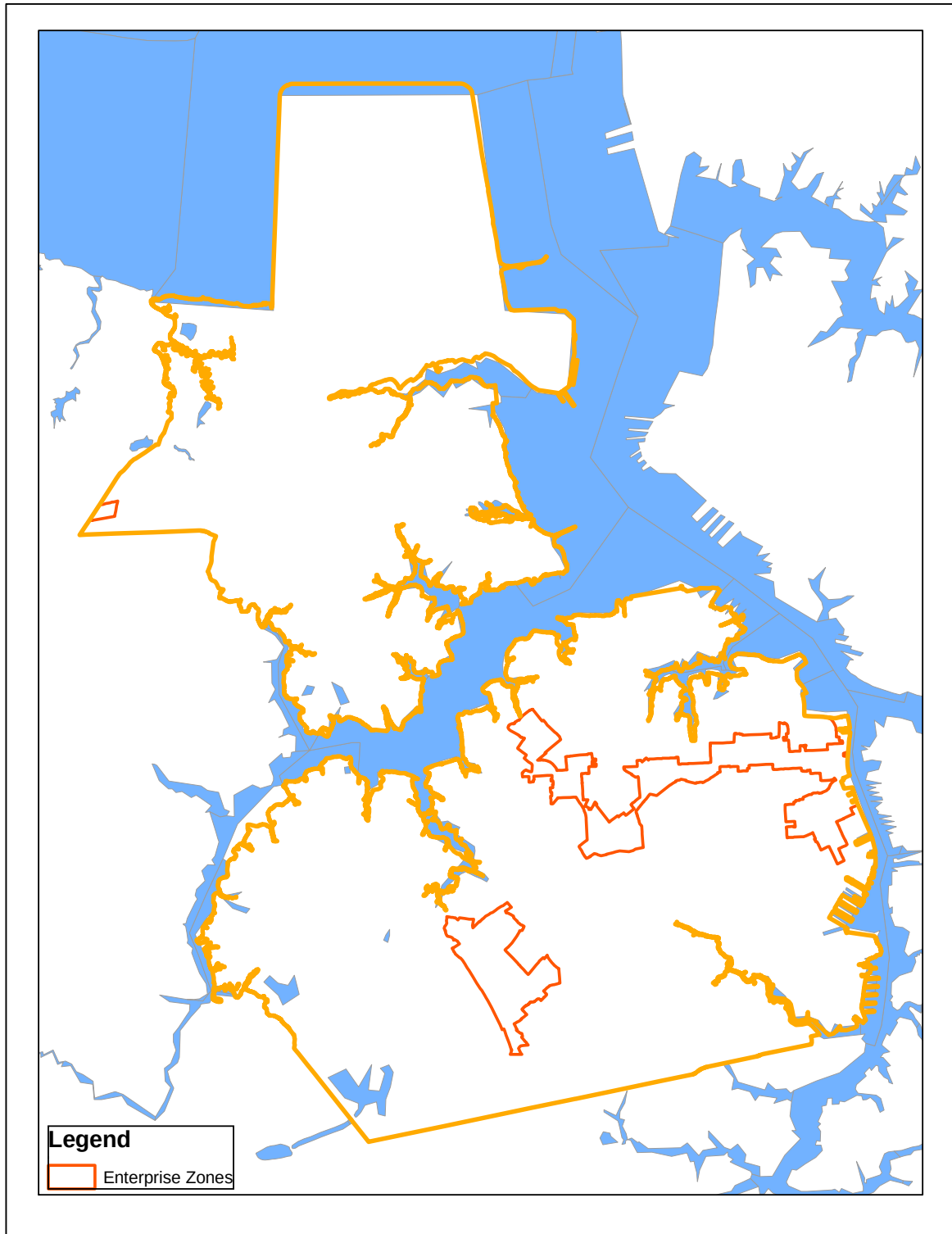


FIGURE 6-1
Portsmouth Enterprise Zone Locations

7. References

- Hampton Roads Planning District Commission. *Chesapeake Bay Phase II Watershed Implementation Plan, Hampton Roads Regional Planning Framework, Scenario, and Strategies*. January 2012.
- King, Dennis and Patrick Hagan. 2011. *Costs of Stormwater Management Practices in Maryland Counties*. University of Maryland Center for Environmental Science.
- Norfolk Department of Public Works. *Summary of the City Norfolk Response to the Chesapeake Bay TMDL*. 1 Feb 2012
- Portsmouth Department of Public Works. *Portsmouth Chesapeake Bay TMDL Phase II Watershed Implementation Plan*. 1 Feb 2012
- Schueler, T. and C. Lane. *Recommendations of the Expert Panel to Define Removal Rates for New State Stormwater Performance Standards*. 15 July 2012.
- Virginia Beach Economic Development Website. 20 July 2012.
- Virginia Department of Conservation and Recreation. *Commonwealth of Virginia Chesapeake Bay TMDL Phase II Watershed Implementation Plan*. 30 Mar 2012.
- Virginia Department of Conservation and Recreation. *Runoff Reduction Method*. Virginia Department of Conservation and Recreation, 29 Mar 2011.
- Virginia Soil and Water Conservation Board Stormwater Regulations, 4VAC50-60, 2011.



Appendix A

Incentive Programs for Redevelopment

Incentive Programs for Redevelopment

The following pages include materials from locality websites that describe some of the incentive programs for redevelopment. Not all of the available incentive program information from area localities has been included and more information can be found by contacting the localities directly.

Loans

Newport News Urban Development Action Grant Loan Program (NNUDAG)

Supports businesses making taxable investments within the City and providing job opportunities for low and moderate-income persons. The minimum loan amount is \$10,000 and the amount of funds is tied to the number of jobs created. There is a 2:1 (200%) private funds match for NNUDAG funds and no more than 20% of the NNUDAG loan may be used for inventory and working capital.

Newport News Micro-Loan Program (NNML)

Designed to provide loan opportunities for the establishment, stabilization or expansion of small micro-enterprises with lack of access to capital. Loan amounts range from \$2,000 to \$25,000 with a maximum term of five (5) years. Interest rates are fixed for the term of the loan. The loan program has flexible payment terms and a 10% equity requirement.

Newport News Capital Fund (NNCF)

Designed to provide loan opportunities from \$5,000 to \$250,000 for local businesses without sufficient financing from private lenders. Loans are targeted to businesses that create jobs that help to mitigate effects of defense cutbacks in Newport News. Requires a 1:1 (100%) match with private funds and no more than 25% of a loan can be used for working capital.

Peninsula Revolving Loan Fund (PRLF)

Fixed-asset, direct loan program to businesses that will create new employment opportunities. Loan amounts can range from \$20,000 to \$200,000. Requires a 2:1 (200%) private funds match and no more than 40% of the loan can be used for working capital.

Façade Improvement Grant (FIG) Program

The objective is to restore, sustain, and improve commercial properties located within the City of Newport News. Provides matching grant funds, up to a maximum of \$30,000, to assist with eligible façade improvements on properties city-wide that are used for commercial, industrial, office or mixed-use purposes. May assist in financing the cost of eligible façade improvements such as: awning installation, exterior lighting, hardscape improvements, signage and more.

E-Commerce Business Assistance Grant Program

The Economic Development Authority of the City of Newport News, Virginia (EDA) has agreed to help Newport News Small, Women- and Minority-owned private businesses grow revenues and jobs through e-Commerce, and has set aside a business assistance grant fund for that purpose. Funding is for eligible e-Commerce services benefiting Small, Women- and Minority-owned, for-profit businesses licensed and located in Newport News. Funds are awarded on a per-case basis and must be provided by a registered licensed e-Commerce service provider.



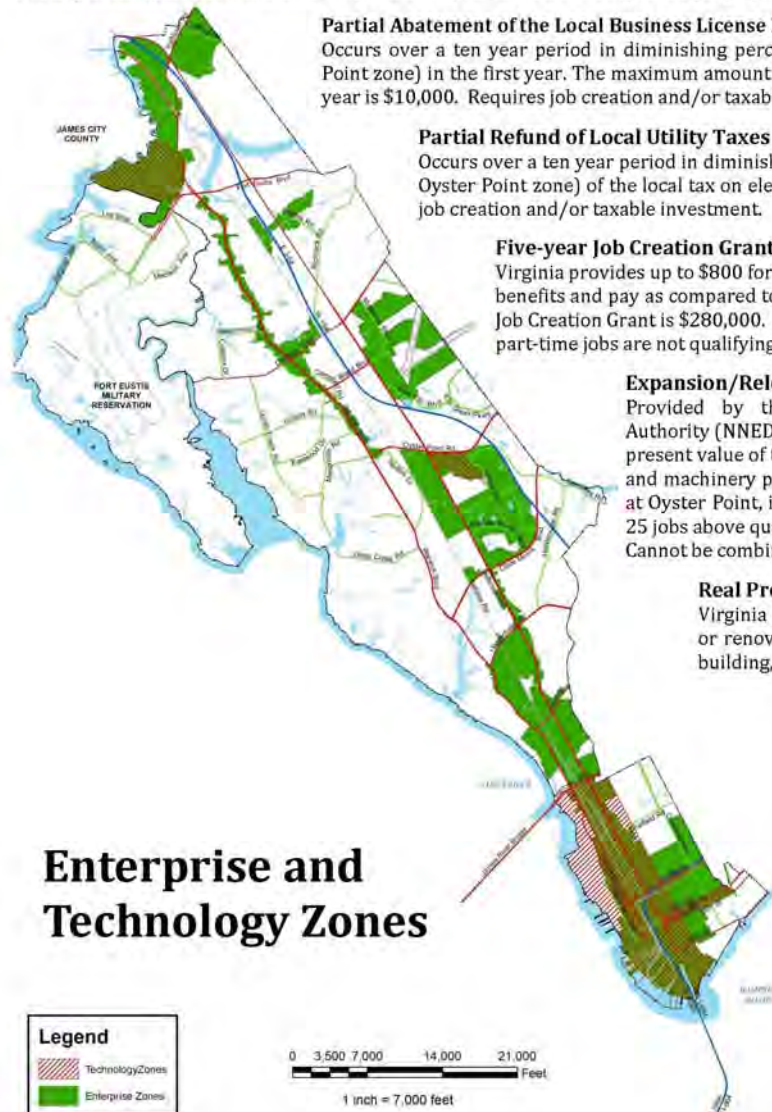
INCENTIVES FOR NEW AND EXISTING BUSINESSES

City of Newport News
Department of Development
2400 Washington Avenue, 3rd Floor
Newport News, VA 23607
(757) 926-8428

www.nngov.com/development
www.newportnewsva.com

April 2012

VIRGINIA ENTERPRISE ZONES provide state and local grants and local tax abatements and refunds for qualifying new and existing companies and property owners that create new full-time jobs and/or new taxable investment above specific thresholds. The City of Newport News has three Virginia Enterprise Zones covering seven geographic areas. State and local incentives can include:



Partial Abatement of the Local Business License Fee

Occurs over a ten year period in diminishing percentages beginning with 100% (80% in Oyster Point zone) in the first year. The maximum amount of the license fee that can be abated in any one year is \$10,000. Requires job creation and/or taxable investment.

Partial Refund of Local Utility Taxes

Occurs over a ten year period in diminishing percentages beginning with 100% (80% in Oyster Point zone) of the local tax on electric and natural gas in the first year. Requires job creation and/or taxable investment.

Five-year Job Creation Grant

Virginia provides up to \$800 for each qualifying job, depending on health benefits and pay as compared to federal minimum wage. The maximum annual Job Creation Grant is \$280,000. Retail, restaurant, personal service and part-time jobs are not qualifying.

Expansion/Relocation Cost Reduction Incentive

Provided by the Newport News Economic Development Authority (NNEDA) to target industries. Incentive is equal to the present value of three years of property taxes on new real estate and machinery paid to the City of Newport News. In City Center at Oyster Point, it is delivered as free garage parking. Requires 25 jobs above qualifying wage and \$2.5 million investment. Cannot be combined with other local Enterprise Zone incentives.

Real Property Investment Grant

Virginia provides up to \$200,000 for new construction or renovation of a commercial, industrial or mixed-use building, depending on cost of qualifying improvements.

Enterprise and Technology Zones

HUBZones

Provides federal contracting preferences to qualified businesses located in and hiring employees from historically underutilized business zones. Seven census tracts in Newport News have been designated as HUBZones in Newport News' downtown and southeast areas.

Commercial Rehabilitation Property Tax Abatement

Provides for a five year reduction of the post-rehabilitation assessment of a qualifying property by fifty percent of the eligible rehabilitation costs. The building must be 20 years old (15 if within an Enterprise Zone) or older and used for non-residential purposes. Rehabilitation must expand the building by no more than fifty percent. Applicable building permits must be issued and reflect eligible rehabilitation costs. The qualifying investment must equal at least 20% of the building's value.

VIRGINIA TECHNOLOGY ZONES encourage the development of commercial and industrial businesses engaged in technological research, design and manufacturing. Local incentives, upon approval by City Council, can include:

Energy and Defense Infrastructure Grant

For manufacturing in support of non-carbon based energy production or defense weapons systems currently not being produced in Newport News. Provided by the NNEDA, incentive is equal to .5% of taxable investment annually for four years. Requires 100 jobs above prevailing wage and a \$25 million taxable investment. Businesses are eligible for either a Technology Zone Grant or a Local Enterprise Zone Grant.

Business License Fee Abatement

Provides 50% abatement to businesses in the following service sectors: energy development, modeling and simulation, photonics, nanotechnology, aerospace industries, R&D. Provides abatement over ten years. Requires 25 jobs at \$70,000+ annual salary, indexed to inflation. Businesses are eligible for either a Technology Zone or Enterprise Zone business license fee abatements for the same activity.

city of norfolk enterprise zone



NORFOLK

DEPARTMENT OF DEVELOPMENT

Contact Information

(757) 664-4338 • 500 East Main Street, Suite 1500 • Norfolk, VA 23510
www.norfolkdevelopment.com

state incentives

Qualification for the listed incentives is based on the calendar year and administered annually.
All applicants (businesses and real properties) must be located within an enterprise zone.

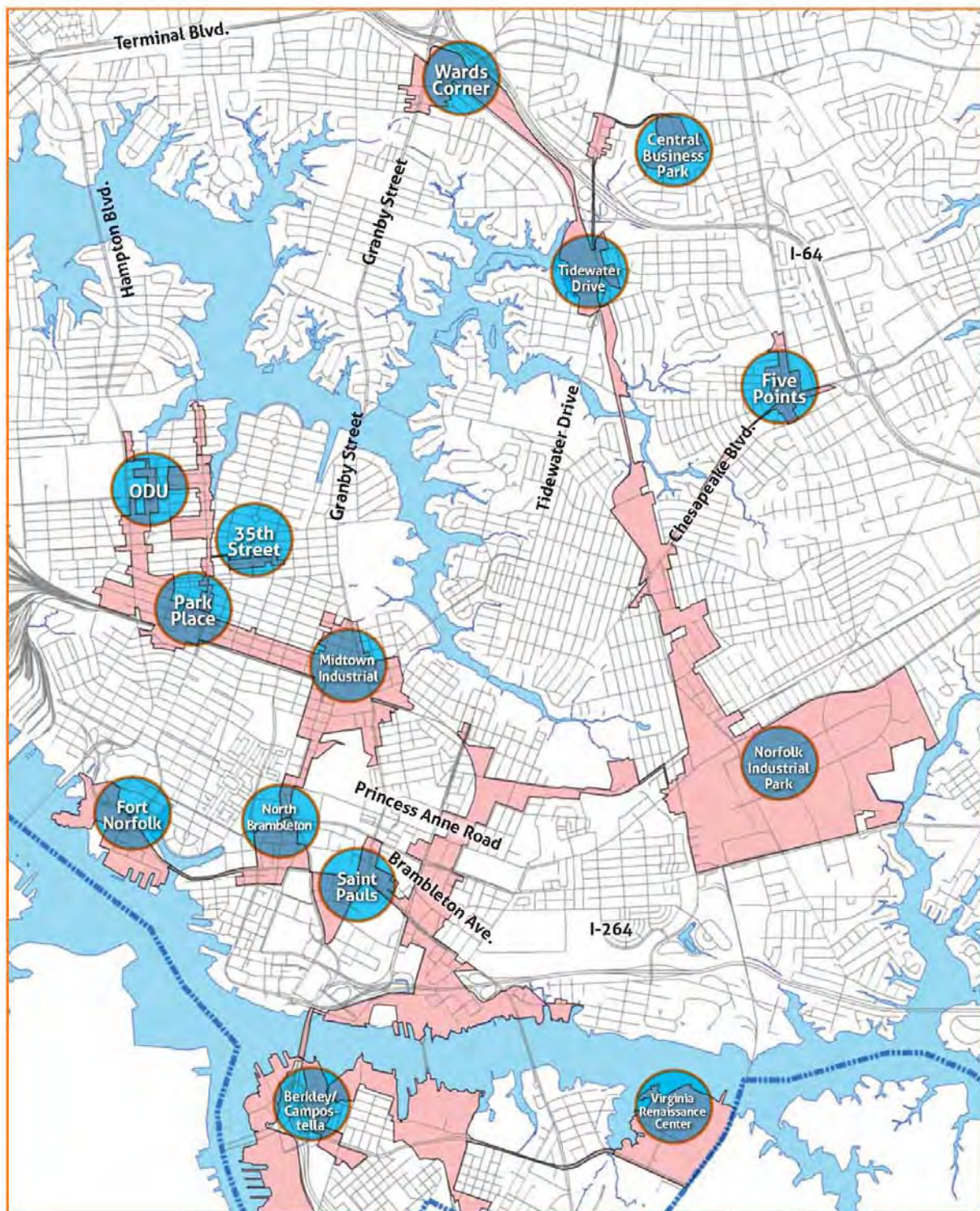
Tax Credit	Real Property Investment Grant	Job Creation Grants
benefits	- Up to \$100,000 per Grant building or facility for qualifying real property investments of less than \$5 million. - Up to \$200,000 per building or facility for qualifying real property investments of \$5 million or more.	- Up to \$500/year per net new permanent, full-time position earning at least 175% of the Federal minimum wage with health benefits. - Up to \$800/year per net new permanent full-time position earning at least 200% of federal minimum wage with health benefits.
eligibility requirement	- Commercial, industrial, or mixed-use buildings or facilities. - For rehabilitation and expansion, at least \$100,000 incurred in qualified real property investments. - For new construction, at least \$500,000 incurred in qualified real property investments.	- Creation of at least four net new permanent full-time positions. - Net new permanent full-time positions created over the four-job threshold that meet wage and health benefit requirements are eligible. - Excludes retail, personal service, or food and beverage positions.
application forms	Required application forms: - EZ-RPIG - Final Certificate of Occupancy/approved Final Building Inspection/or Third Party Inspection Report - Mixed-use building form (if applicable) - Tenant form (if applicable) - Multiple owner form (if applicable). - W-9 - CPA Attestation Report	Required application forms: - EZ-JCG - JCG Worksheet - W-9 - CPA Attestation Report
grant term	- Capped per building or facility at a maximum of \$200,000 within a five- consecutive year term. - Grants awarded may be subject to pro-ration should requests exceed grant funds allocated.	Available for a five- consecutive year term for net new permanent full-time positions above the four-job threshold which meet the wage and health benefit requirement.
obtain more information	http://www.dhcd.virginia.gov/EZones/default.htm www.norfolkdevelopment.com	http://www.dhcd.virginia.gov/EZones/default.htm www.norfolkdevelopment.com

Effective July 1, 2010, in areas with an unemployment rate that is one and one-half times or more the state average, the business firm will receive \$500 per year for up to five years for each grant eligible position that during such year is paid at least 150 percent of the federal minimum wage and that is provided with health benefits.

local incentives

Qualification for the listed incentives is based on the calendar year and administered annually.
All applicants (businesses and real properties) must be located within an enterprise zone.

Incentive	Description	Qualification Criteria	Value
tax specialist	Businesses currently located in EZ or seeking to locate in EZ will have the ability to consult with a Tax Specialist.	Business must be located within EZ or be moving to EZ.	
commercial/ industrial real estate relief	This incentive will offer taxpayers an opportunity to improve commercial/ industrial structures and not pay full taxes on those improvements for 14 years.	The commercial structure must be located in the EZ and at least 20 years old. Improvements to the structure must increase the property's assessed value by 40%.	Varies per structure.
business license tax relief	Businesses will receive a reduction of their business license tax for a five-year consecutive period.	Business must be located within EZ and make a \$100,000 taxable investment within the EZ.	1st year=50% 2nd year=40% 3rd year=30% 4th year=20% 5th year=10%
building permit fee relief	A one time 50% reduction on building, electrical, mechanical, and plumbing permits.	Existing EZ businesses must make a \$100,000 taxable investment within the Enterprise Zone. New EZ businesses must make a \$500,000 taxable investment within the Enterprise Zone.	A one time 50% reduction for qualifying permits.
local utility tax relief	This incentive will provide businesses with a reduction of their utility tax for a five-year consecutive period.	Existing EZ businesses must make a \$100,000 taxable investment within the Enterprise Zone. New EZ businesses must make a \$500,000 taxable investment within the Enterprise Zone.	1st year=50% 2nd year=40% 3rd year=30% 4th year=20% 5th year=10%
free formal training	Free formal training will be provided to Enterprise Zone businesses on various topics.	Business must be located within EZ or be moving to EZ.	
business district marketing assistance	EZ business districts will have individual collateral marketing sheets that will include statistical business data.	Business must be located within EZ or be moving to EZ.	
norfolk redevelopment and housing authority technical assistance	Technical assistance will be provided by the Norfolk Redevelopment and Housing Authority to businesses that are located in the EZ and/or assistance to businesses that would like to purchase NRHA commercially zoned property in the EZ.	Business must be located within EZ or be moving to EZ.	
norfolk redevelopment and housing authority meeting space	The Norfolk Redevelopment Housing Authority will provide meeting space for EZ businesses at no cost.	Business must be located within EZ or be moving to EZ.	



▲ Norfolk's New Enterprise Zone Map

To see if your property is in Norfolk's Enterprise Zone, go to www.norfolknavigator.com and click on the Enterprise checkbox in the map area. Then zoom in to your area.

Enterprise Zone Program

Portsmouth's new Virginia Enterprise Zone was designated in 2010 and offers state and local incentives to qualifying businesses locating and expanding within the Zone. Targeted areas include the MAST Center, PortCentre Commerce Park, Downtown, Midtown and the Victory Village area.

STATE INCENTIVES

Real Property Investment Grant

- Cash grants equal up to 20% of the amount of qualified investment in excess of the threshold
- The qualifying investment threshold for new construction equals \$500,000; the rehabilitation threshold is \$100,000
- The maximum benefit per building or facility within any five-year period is \$100,000 for projects less than \$5 million and \$200,000 for projects of \$5 million or more
- Mixed-use projects must have at least 30% of floor area in commercial, industrial or office use in order to qualify
- Grants are payable to the owner and/or tenant incurring costs
- The application deadline is April 1 of year following completion of the work

Job Creation Grant

- Cash grants equal up to \$800 per year for five years for new positions earning 200% of the federal minimum wage and offering health benefits; up to \$500 for those earning 175-199% of the federal minimum wage and offering health benefits
- The first four positions created are not eligible for grants. Grants are paid on a maximum of 350 positions per year.
- Retail, food and beverage, and personal service firms are not eligible
- Firms may qualify for additional five-year periods with further job creation
- The application deadline is April 1

For more information contact the Virginia Department of Housing and Community Development at (804) 371-7121 or visit www.dhcd.virginia.gov

LOCAL INCENTIVES

Business Personal Property Investment Grant

- Cash grants equal 50% of the net increase in business personal property taxes and are paid over five years
- Grants are paid semi-annually after a performance agreement is signed with the Portsmouth EDA and after all taxes are paid to the City
- A qualifying firm must create at least 10 new jobs and invest at least \$500,000 in new business personal property
- The firm must be a target industry: technology, modeling & simulation, maritime/logistics office, corporate/professional office or healthcare
- The firm must have a current business license and authorize the Commissioner of the Revenue to release pertinent tax data

Historic Rehabilitation Tax Credits

Portsmouth has six historic districts containing homes and buildings with an exciting variety of potential uses. In that we cherish our heritage, we encourage your interest in preservation and historic rehabilitation and will assist you in any manner we can beyond the Federal and State tax credit programs briefly explained here.

Through the Federal and State Rehabilitation Tax Credit programs, property owners receive incentive for private investment in the preservation of historic buildings. Buildings that are individually listed in the National Register of Historic Places and the Virginia Landmarks Register, or are certified as contributing to a historic district that is listed on these registers, are eligible for the tax credits.

For the Federal Program

- The cost of the rehabilitation must exceed the owner's basis in the building, or \$5,000, whichever is greater
- The credit is 20% of the eligible rehabilitation expenses
- The credit applies to income producing properties only

For the State Program

- Income-producing properties: The cost of the rehabilitation must be at least 50% of the assessed value of the year preceding the rehabilitation
- Owner-occupied properties: For rehabilitations completed after January 1, 2001, the cost of the rehabilitation must be at least 25% of the assessed value of the building in the year preceding the rehabilitation
- The credit is 25% of the eligible rehabilitation expenses

For more information, contact the Virginia Department of Historic Resources Tidewater Regional Preservation Office at (757) 886-2818 or visit www.dhr.virginia.gov.

Foreign Trade Zone Program

The Foreign Trade Zone (FTZ) is a federal designation that allows businesses located within the zone to defer, reduce or eliminate the payment of U.S. customs duties on imported goods held within the zone. Customs duties are paid only when and if merchandise is transferred into U.S. Customs territory. No Customs duties are paid on merchandise exported from a FTZ. Duties are not paid on broken or wasted product. Businesses are allowed to store goods within the Zone indefinitely. With special authorization from the FTZ Board, companies are also allowed to manufacture products within the zone and pay duties on either the foreign parts used or the finished product, whatever rate is most advantageous. Merchandise may also be moved into the Zone for inspection, testing and repair.

While the Zone is physically located within the United States, businesses and activities for the purposes of tariff laws and Customs entry procedures, are treated as being outside the Customs territory of the United States. The zone is author-

of the revenue to release pertinent tax data

- The firm must apply within 12 months of meeting all qualifications; jobs and investment targets must be met within 12 months of each other

Machinery and Tool Investment Grant

- Cash grants equal 50% of net increase in machinery and tool taxes and are paid over five years
- Grants are paid semi-annually after a performance agreement is signed with the Portsmouth EDA and after all taxes are paid to the City
- Must create at least 25 new jobs & invest at least \$2,500,000 in new machinery
- Jobs must pay at least 175% of the federal minimum wage
- Must authorize the Commissioner of the Revenue to release pertinent tax data
- The firm must apply within 12 months of meeting all qualifications; jobs and investment targets must be met within 12 months of each other

Development Fee Rebate

- Rebates 90% of fees for rezoning, use permit, and subdivision applications and site plan reviews and 50% of building plan review and building permit fees (excluding state levy) to a qualifying developments.
- Rebates are received after Certificate of Occupancy.
- Qualifying developments are new construction or improvements to an existing structure totaling \$50,000 or more that results in a net increase in the property's real estate assessment as determined by the City Assessor.
- Applications consist of two parts; Part 1 must be submitted to the local Enterprise Zone administrator within 10 days of obtaining required permits; and Part 2 must be submitted to the administrator within 120 days of Certificate of Occupancy.

Commercial Façade Loan Program

- \$5,000 to \$50,000 loans from the Portsmouth Redevelopment & Housing Authority for commercial and mixed-use building façade renovations
- Terms are 2% below prime for 10 years
- Limited to contiguous zone area from Downtown waterfront to Midtown

Corridor Streetscape Improvement Incentive

- Acceleration of planned streetscape improvements affecting commercial or mixed-use developments of at least \$25 million (subject to availability of adequate capital funding)

Mixed-Use Development Incentive

- If needed to facilitate a mixed-use development of at least \$25 million, an appropriately scaled public contribution can be negotiated with the developer

For more information contact Portsmouth Economic Development Department at (757) 393-8804 or visit www.portsmoutheda.com

as being outside the Customs territory of the United States. The zone is authorized by the U.S. Foreign Trade Zone Board and operates under the supervision of the U.S. Customs Service and the Virginia Port Authority as Grantee of FTZ No. 20. PortCentre Commerce Park and the Portsmouth Marine Terminal are designated as Foreign Trade Zones.

For more information, contact the U.S. Foreign Trade Zone Board at (202) 482-2862 or visit www.customs.gov.

HUBZone Program

The HUBZone Program is a "placebased" federal contracting program for small businesses. The program is administered by the U.S. Small Business Administration and provides both Federal prime contract and subcontract benefits.

Types of Contracts

A competitive HUBZone contract can be awarded if the contracting officer has a reasonable expectation that at least two qualified HUBZone firms will submit offers and that the contract can be awarded at a fair market price.

A sole-source contract can be awarded if the contracting officer does not have a reasonable expectation that two or more qualified HUBZone small businesses will submit offers, determines that the qualified HUBZone small business is responsible, and determines that the contract can be awarded at a fair market price. The government estimate cannot exceed \$5 million for manufacturing requirements or \$3 million for all other requirements. A full and open competition contract can be awarded with a price evaluation preference. The offer of the HUBZone small business must not be more than 10% higher than the offer of the non-HUBZone/non-small business.

Other Programs

Small businesses located in the HUBZone can qualify for higher government guaranties on surety bonds for construction and service contract bids. The SBA will increase its guaranty on surety bonds to these companies from 80% to 90% making it easier for them to compete for government and private sector contracts.

Eligibility

Only companies certified by the SBA are eligible to participate in the HUBZone program. To qualify, a small business must meet all of the following requirements:

- The company's principal office must be in a HUBZone
- At least 51% of the company is owned and controlled by U.S. Citizens
- At least 35% of the company's employees must be HUBZone residents

8(a) firms located in a HUBZone will be able to receive contracting opportunities under both programs.

For more information, contact the Small Business Administration Virginia District Office at (804) 771-2400 or visit www.sba.gov/hubzone.

