

Fairfield Township

Cumberland County, New Jersey

2010 Build-Out Analysis



July 2010

**Endorsed by the Fairfield Township Environmental Commission, and
Adopted by the Fairfield Township Land Use Board
as an Amendment to the Master Plan on August 3, 2010
in accordance with Resolution 10-005.**

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The original of this document was signed and
sealed in accordance with NJAC 13:41-1.3.b



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I. Introduction to Build-Out Analysis

The Build-Out Analysis is a tool that allows the residents of Fairfield Township to consider what the Township will look like if it is built to the capacity permitted by the current zoning while also taking known environmental and other regulatory constraints into consideration. The Build-Out Analysis calculates how much development could occur in the Township given the existing zoning and regulatory constraints. The reason for conducting the build-out analysis is to provide a basis for evaluating whether the current zoning regulations will serve to achieve the land use outcomes desired by the Township, and to assess whether changes are needed to advance the Township's goals and objectives related to land development. Armed with this information the Township will be better positioned to identify specific changes needed in the Master Plan and zoning regulations, and to ensure that local policies are consistent with the desired end results. The build out analysis has limitations, in that it can not anticipate the timing of potential development or whether the zoning capacity is consistent with the natural carrying capacity of the land.¹ Yet it is useful, because the build-out will provide the foundations for and information in support of local land use planning. The build-out analysis may be coupled with other land use and capacity based information to assist the Township in formulating informed land use policies.

Fairfield Township has for many years been working to balance its interests in preserving and enhancing its existing centers of development (including Fairton and Gouldtown), preserving farmland and the agricultural industry, accommodating appropriate growth and encouraging investment, prioritizing and facilitating preservation and conservation of environmentally valuable and recreationally desirable open spaces, and promoting good design. Sometimes after comparing a build-out analysis with their vision for the future, municipalities find that their zoning codes do not actually advance their overall land use objectives in the most effective way. The ultimate "build-out" of the Township will impact many interconnected systems including community life, the economy, transportation and utility infrastructure, and the environment. The focus on enforcing existing land use regulations can obscure the path to implementing a municipality's true vision. The Build-Out Analysis has been prepared to help the Township to find out whether such divergences exist in Fairfield.

II. Overview

In 2009 the Fairfield Township Land Use Board adopted a Master Plan Reexamination Report. In addition to meeting the requirements of New Jersey Municipal Land Use Law (N.J.S.A. 40:55D-89), the Township intended for the Master Plan Reexamination Report to lay the foundations for future planning that would set out a vision for the Township and provide direction to guide the Township in reaching its goals and objectives over time.

The Township decided at the outset of the Master Planning process that realizing a vision over the long-term would require short-range and long-range planning efforts, to ensure balanced and sustainable land use that meets the needs of the citizens of the Township and preserves Fairfield's unique character in southern New Jersey. It was understood that the land use

¹ From a land use planning standpoint, carrying capacity is an assessment of the capacity of the environment and infrastructure systems to sustain existing and projected population and development. The assumption is that growth should be sustainable, so that over-development does not negatively impact existing stable communities or destroy ecological communities. Incorporating capacity analysis will allow the Township to ensure that a balance is maintained between natural and build systems.

planning effort would be based on core principles, but that it would also be responsive to opportunities and evolving conditions. In order to set forth a land use planning strategy that will endeavor to retain the small town character, provide opportunities for a vibrant economy, support the continued viability of agriculture, protect natural resources, and guide design to create a balanced and attractive town where the built environment and the natural environment coexist in harmony, the Township must have an accurate understanding of the current conditions.

The purpose of the Build-Out Analysis is to provide a snapshot of current land use conditions and project how the Township may change based on existing land use patterns and land use regulations. The Build-Out Analysis anticipates how the Township may develop in the future based on current regulations and known constraints.

Once the Township has an accurate picture of “where we are”, then it will be possible to determine “where we want to go” in more quantifiable terms. One of the goals of the Build-Out Analysis is to provide a common understanding among residents, public officials, land owners, and other stakeholders, and to inform the Township’s future land use planning and policy making.

The inputs for the build-out analysis comprise information gathered from various sources, including:

- Fairfield’s Environmental Resources Inventory
- Geographic Information Systems layers from Cumberland County, the New Jersey Department of Environmental Protection (NJDEP), and the US Geological Survey :
 - Parcels
 - Wetlands
 - Streams and lakes
 - Known Contaminated Sites
 - Preserved Farmland
 - Preserved Open Space
 - Aquifer Recharge
 - Ground Water Recharge
 - Land Use/Land Cover
 - Landscape Project Data
 - Natural Heritage Priority Sites
- Fairfield Township’s Zoning Map and Zoning Code
- Existing Developed Areas
- Existing Development Approvals
- Wastewater Planning Maps

Before proceeding with the analysis, some background on the Township will provide a backdrop.

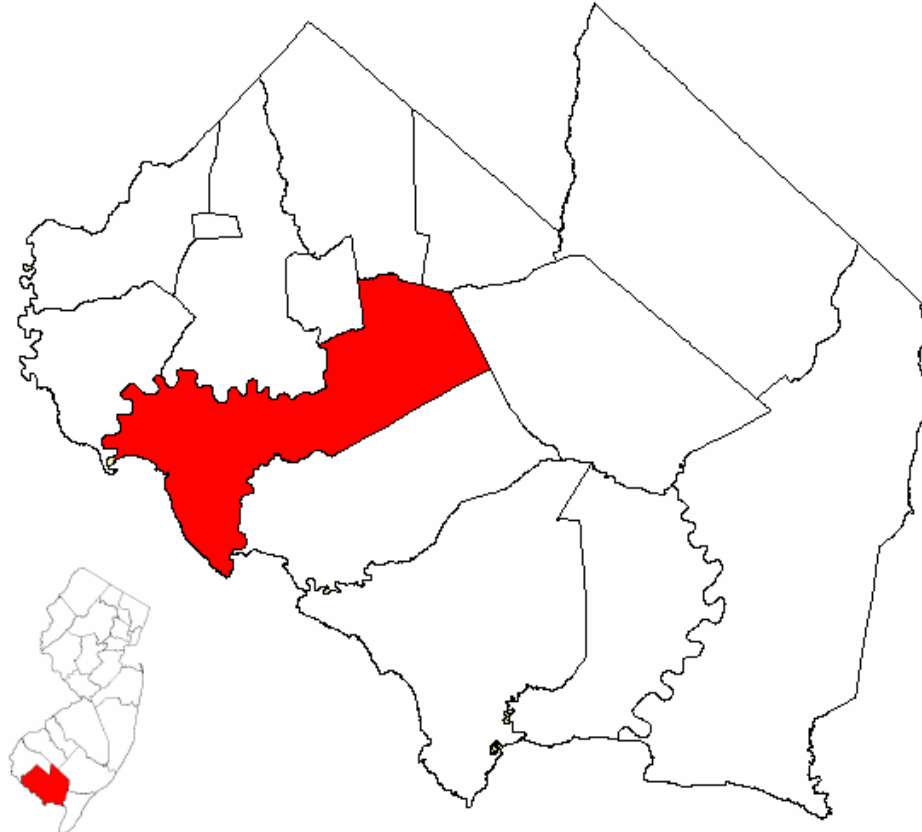
III. Location, Population, and Influential Factors

A. Location

Fairfield Township consists of 43.8 square miles and shares a boundary with both Bridgeton City and Millville City, but also shares boundaries with the more rural municipalities of Hopewell, Greenwich, Lawrence, Deerfield and Upper Deerfield. Fairfield Township is part of the Delaware Bay Shore region and has frontage on the Delaware Bay. **MAP 1** is an aerial photograph of the Township and shows the locations of the surrounding municipalities.

Fairfield Township is located in southern Cumberland County, and is strongly influenced by its location on the Delaware Bay. The Cohansey River serves as the northwestern border of the Township and the Delaware Bay serves as the southwestern border. The Township is located approximately 42 miles southeast of Philadelphia and 48 miles west of Atlantic City. Of the 28,032 acres that make up Fairfield Township, approximately 10,000 acres (35%) are tidal marshland and water. The northeastern half of the Township consists primarily of woodlands and agricultural land uses, while the southwestern half of the Township consists of primarily estuarine wetlands and tidal flats with some areas of woodlands. This western area is under the jurisdiction of the New Jersey Coastal Area Facility Review Act (CAFRA -N.J.S.A. 13:19). **MAP 4** shows the CAFRA area of the Township.

CAFRA was enacted to protect coastal waters and the land adjacent to them. The coastal areas are important to New Jersey's quality of life and economy; providing recreational, residential and business opportunities. Coastal land also provides crucial habitat for wildlife, such as migrating birds, commercially valuable fish and shellfish, and sporting and recreational species. CAFRA is intended to ensure that a balance is maintained between human activities and the fragile ecosystem. The regulations aim to prevent pollution, destruction of vital wildlife habitat, unacceptable increases in rainwater runoff, and destruction of the natural beauty that attracts visitors. The law divides the CAFRA area into zones, and regulates different types of development in each zone. The CAFRA zones in Fairfield are "Rural" and "Environmentally Sensitive". The purpose of the Coastal Rural Planning Area is to enhance the rural character and agricultural viability of the area, and the intent is to maintain development patterns that support, rather than conflict, with the rural landscape. The purpose of the Coastal Environmentally Sensitive Planning Area is to protect environmentally sensitive features by guiding development to centers and maintaining low intensity development patterns. In this area the intent is to discourage the development of public infrastructure facilities outside of existing centers. Fairton has been considered as a possible coastal village within the CAFRA regulated area, based on the existing concentrated development pattern. The focus of both the Coastal Rural Planning Area and the Coastal Environmentally Sensitive Planning area is on ensuring that development does not exceed the capacity of natural and built systems.



Location of Fairfield in Cumberland County and in New Jersey

Development in Fairfield Township has historically been concentrated in two areas – Fairton and Gouldtown. The Fairton village area developed independently along the Cohansey River and is located within the CAFRA regulated area, while Gouldtown’s development has been more heavily influenced by Bridgeton City, which is the cultural, social, and economic hub of western Cumberland County, and is outside the CAFRA regulated area. Bridgeton City has the potential to influence the future development of Fairfield, both positively and negatively, so an understanding of the relationship between the City and the Township, and a cooperative approach to land use planning with the City is essential.

B. Planning Areas

The vast majority of Fairfield Township is located within Planning Areas 4 (Rural) and 5 (Environmentally Sensitive) on the New Jersey State Plan Policy Map, which reflects the Township’s essentially rural nature. **MAP 3** shows the State Planning Areas within Fairfield as well as the previously proposed center boundaries.² The State Plan section below elaborates on the State Planning Areas and the purpose and intent of the planning areas found in Fairfield. The Build-out analysis results are broken down by zoning district and by State Planning Areas so that the potentially developable land area maybe considered in view of the Township’s current zoning and the State Planning Area designations.

² The Center boundaries were proposed by the Township in 2004, but the designation process was not completed.

Fairton is acknowledged by the 2001 New Jersey State Plan to function as a “village center”, and is shown as a proposed village center within Planning Area 4 on the State Plan Policy Map as adopted by the State Planning Commission³. Fairton is also within the CAFRA regulated area, and would therefore require NJ Department of Environmental Protection approval as well as Office of Smart Growth approval to be designated as a Center. The Gouldtown area is within Planning Areas 1 and 2 on the State Plan Policy Map, and the Township has in the recent past expressed interest in pursuing a center designation for that area as well as for Fairton, but there has been some uncertainty about the benefits of center designation. There was once a proposal for a Bridgeton Regional Center, which would have included a portion of Fairfield proximate to the Bridgeton City limits, but the proposal was abandoned when Bridgeton opted to request the regional center designation only for the area within its municipal borders. The Township may pursue the Center designations independent of Bridgeton, but will need to coordinate with regional partners to ensure adequate infrastructure capacity and complementary development.

Center-based development is the State Plan’s strategy to encourage and accommodate growth in centralized areas, in order to minimize sprawl and to encourage a less land-consumptive development pattern. Center-based development has been shown to have less environmental impacts than sprawling development patterns, to foster a sense of place and connection to community, and to provide more efficient infrastructure and service delivery. The meaning and purpose of “center” designation is further discussed further in Section VI E below.

Centers within the CAFRA regulated area (as Fairton would be) require approval (endorsement) from both the Office of Smart Growth and the NJ Department of Environmental Protection (NJDEP). For a CAFRA center the NJDEP must be able to make a finding that the center is consistent with the purposes of the Coastal Area Facility Review Act and the Coastal Zone Management Rules. The NJDEP review must make the determination that the center designation would not result in unacceptable harm to the coastal ecosystem or the resources of the built or natural environment. In requesting endorsement of a Center designation for Fairton, the Township would need to address natural resource protection and coastal management by demonstrating that local plans and ordinances are or will be consistent with the goals of the Coastal Zone Management Program (N.J.A.C.7:7E). Information about wastewater management would also need to be provided to ensure ample capacity in the designated center and also to ensure that infrastructure would not be extended beyond the center.

C. Population

At the time of the 2000 Census, the Township’s population was 6,283 people within 1,751 occupied housing units (out of a total 1,915 housing units). According to the New Jersey Department of Labor and Workforce Development (based on 2000 U.S. Census data and the number of certificates of occupancy, less any demolition permits, multiplied by the average number of persons per unit) the 2008 population estimate is 6,742 people, an increase of 459 people or 7.3% since 2000. It must be noted that a Federal Correctional Institution is located in Fairfield. The US Census counts inmates in the location of their incarceration, so the adult male population in Fairfield is inflated by the presence of the correctional facility. As of February

³ The State Plan showed the proposed “center” since the compact village development pattern is characteristic of a “center” – an area with residential and non-residential uses in close proximity to one another, sharing a common identity. The “center” designation requires the Township to engage in the Plan Endorsement process with the Office of Smart Growth and the State Planning Commission.

2010, the inmate population was 1,523.⁴ For land use planning purposes, taking the prison into consideration, it may be estimated that Fairfield's population in non-prison housing units is approximately 5,219. According to information published by the South Jersey Transportation Planning Organization there were an estimated 802 jobs in Fairfield in 2004.

According to the US Census Bureau, the Township's population has grown steadily since 1930, with the exception of the decade between 1980 and 1990 as shown in the table below (although residential building permit data suggests that growth did occur in the 1980s). It is expected that the Township will continue to grow at a moderate pace, with the South Jersey Transportation Planning Organization estimating the Township will reach 7,441 people by 2020. The Council on Affordable Housing (COAH) projected a more modest increase in growth (83 households or 230 people by 2018).⁵ A recent analysis conducted by the Center for Urban Policy Research at Rutgers University projects that the population growth in Fairfield will range from 105 to 366 people by 2018. At the time of the 2000 Census, the average household in Fairfield consisted of 2.78 people. Of the 1,751 occupied housing units, 84.2% were owner occupied and 15.8% were renter occupied. In Cumberland County overall 67.9% of households are owner occupied and 32.1% are renter occupied.

Fairfield Township Population 1930-2007									
Year	1930	1940	1950	1960	1970	1980	1990	2000	2008*
Population	1,848	1,977	2,932	3,916	4,990	5,693	5,699	6,283	6,742

*July 2008 Estimate from the New Jersey Department of Labor and Workforce Development

Residential property serves as the largest component of the Township's tax base, at 84.22%. Of the remaining tax base, vacant land accounts for 5.69%, farm qualified homesteads account for 4.79%, farms account for 1.87%, and commercial properties account for 8.21%. There is a significant amount of preserved open space land in Fairfield, owned by the State of New Jersey and other non-profit groups. Fairfield receives a payment in lieu of taxes (PILOT) at a rate of \$5.00 per acre since approximately 35.5% of the Township's land area is tax exempt open space.⁶ In 2009 the total PILOT was \$57,736.85.

Since New Jersey municipalities are heavily reliant on the local property tax levy to fund municipal services and public education, tax ratable considerations inevitably come in to play in considering future land use scenarios. The costs associated with education, public facilities, and service delivery (solid waste collection, snow plowing, road improvements, etc) will vary depending on the types of uses in the Township and the development patterns.

⁴ This includes 1,413 at the Federal Correctional Institution and 110 at the adjacent minimum security camp.

⁵ Appendix F of COAH's Round Three rules (NJAC 5:97) included municipal household and employment projections. COAH's rules and methodology have been challenged on many fronts. This information is provided for reference only.

⁶ As authorized by the Garden State Preservation Trust Act of 1999, when less than 20% of a municipality's land area is tax exempt open space, the payment is \$2.00 per acre, when the open space accounts for 20% to 40% of the land area, the payment is \$5.00 per acre, when the open space accounts for 40% to 60% of the land area, the payment is \$10.00 per acre, and when the open space accounts for more than 60% of the land area, the payment is \$20.00 per acre. The future of this PILOT program is uncertain.

IV. Build-Out Analysis Methodology

The methodology utilized for the Fairfield Township Build-Out Analysis is outlined below.

- A. Identify the Number and location of existing residential units in the Township.
- B. Identify the number and location of developed non-residential properties in the Township.
- C. Identify the number and location of Farm Assessed properties and farm houses.
- D. Prepare and gather Geographic Information Systems (GIS) mapping information:
 - a. Aerial Photo
 - b. Parcel data
 - c. Preserved open space and recreation lands
 - d. Preserved farms
 - e. NJDEP unofficial wetlands
 - f. Streams and lakes
 - g. Category-1 Waterway buffers
 - h. Fairfield Township Zoning
 - i. State Planning Areas
 - j. Approved but not yet constructed development
 - k. Natural Heritage Priority Sites database
 - l. Land Use/Land Cover data
 - m. NJ DEP Landscape Project
- E. Using GIS select all properties classified as vacant (property class 1), farmland (property class 3A and 3B), and all residential (property class 2) that may be considered “under developed” because it can be further subdivided based on current zoning for future development.
- F. Eliminate lands identified as publicly owned recreation, municipal open space, County and State Parks, State forest areas, State Wildlife Management Areas, and preserved farm land; as these areas are not available for future development.
- G. Eliminate lands owned by public entities or public utilities designated for preservation, recreation or public use.
- H. Eliminate lands owned by a Homeowners Association and dedicated for open space or for stormwater management as part of a development approval.
- I. Determine the locations of approved but not yet constructed developments, noting the number of units approved for residential development or the square footage approved for commercial development. Eliminate these lots. The approved, but not yet constructed developments are shown in Appendix A.

- J. Subtract wetlands areas and required stream buffers (wetland buffers are not subtracted at this stage since the wetlands have not been field verified and are estimates).
- K. Once all of the above are subtracted, determine the potentially developable land within each existing zoning district.
- L. For each existing residential lot that is “underdeveloped” with one residential unit on a large lot, subtract the minimum lot size area for the zone. This estimates how much land would be retained for the existing house if the lot were to be further subdivided in the future.
- M. Estimate the potential Build-Out based on existing zoning classifications (Sept 2002). Assume that 25% of the potentially developable land area will be needed for infrastructure, roads, stormwater management, etc.
- N. Determine the potentially developable land in each planning area, aggregated by residential and non-residential zoning classifications.

MAP 5 illustrates areas that are undevelopable because they are already developed, publicly owned and designated for open space or recreation, public utilities or other institutions designated for public use, and preserved farms.

V. Zoning Overview

MAP 2 shows the existing zoning districts in Fairfield Township. The following is a summary of the uses and parameters for the existing zoning districts. The build-out results should be considered in conjunction with the existing zoning to gain an understanding of the potential type and scale of development that may occur under existing conditions.

A. Residential Districts

There are currently four residential zoning districts in Fairfield. The Agricultural district is intended to encourage the retention of agriculture and to maintain the rural character of the area. The other residential districts are centered on and around the Gouldtown and Fairton areas and acknowledge existing residential development patterns. The 2002 Master Plan indicated that minimum lot sizes would be maintained to protect groundwater resources (ensure ample space for on-site septic systems to function). None of the existing residential districts have a specified density requirement, rather the minimum lot sizes are relied upon to manage density.⁷

1. A Agricultural –Total Acreage: 10,824 acres

a. Permitted Uses:

- Agriculture
- Municipal, County, State owned offices, assembly buildings and parks
- Golf Courses
- Single Family Detached Dwellings
- Local, county or state education facilities
- Accessory Structures commonly incidental to the above uses.

b. Requirements

- Minimum lots size for farms, government buildings and single family detached dwellings on new public roads is 5 acres
- Minimum lot size for single family dwellings on existing public roads is 2.5 acres
- Lot and yard dimensions:

	Single Family On new public street	Single family On existing public street
Minimum lot size	5 acre	2.5 acre
Lot width	400 feet	250 feet
Lot frontage	400 feet	400 feet
Lot depth	500 feet	300 feet
Front yard	75 feet	50 feet
Side and Rear Yard	30 feet	25 feet
Maximum building coverage	5%	10%
Maximum lot coverage	10%	20%
Maximum Building Height	35 feet	35 feet

⁷From a land use planning standpoint, “Density” is defined as the number of dwelling units per unit of land. For example 2 units per acre.

2. R-1 Residential – Total Acreage: 1,257 acres

Permitted uses:

- Single family detached dwellings
- Agriculture (no animals)
- Municipal, County or State owned office buildings and parks
- Local school district owned educational facilities
- Churches
- Accessory Structures commonly incidental to the above uses

	Single Family
Minimum lot size	1.5 acre
Lot width	200 feet
Lot frontage	150 feet
Lot depth	300 feet
Front yard	50 feet
Side and Rear Yard	25 feet
Maximum building coverage	15%
Maximum lot coverage	20%
Maximum Building Height	35 feet

3. R-2 Residential – Total Acreage: 1,445 acres

Permitted Uses:

- Single family detached dwellings
- Agriculture (no animals)
- Municipal Buildings and Parks
- Churches
- Accessory uses commonly incidental to the above uses

	Single Family
Minimum lot size	1 acre
Lot width	150 feet
Lot frontage	100 feet
Lot depth	200 feet
Front yard	40 feet
Side and Rear Yard	20 feet
Maximum building coverage	15%
Maximum lot coverage	20%
Maximum Building Height	35

4. R-3 Residential – Total Acreage: 312 acres

Permitted uses:

- Single family detached dwellings
- Municipal Buildings and Parks
- Churches

- Accessory Uses commonly incidental to the above uses

	Single Family
Minimum lot size	35,000 sq ft
Lot width	100 feet
Lot frontage	50 feet
Lot depth	200 feet
Front yard	40 feet
Side and Rear Yard	25 feet
Maximum building coverage	40%
Maximum lot coverage	50%
Maximum Building Height	35 feet

B. Non-Residential

There are four non-residential districts, one of which is the FP Floodplain district, which is not generally developable for any traditional residential or non-residential use, rather it is best left in a natural state. Another of the districts is S State-owned land, which consists of 3,033 acres.

1. M Marine Resort – Total Acreage: 104 acres

Permitted Uses:

- Marinas
- Boat buildings and Repair yards
- Boat sales and service
- Marine supply store
- Bait and tackle shops
- Municipal buildings and parks

2. FP Flood Plain – Total Acreage: 9,449 acres

Buildings are not permitted in the flood plain zone. Permitted Uses:

- Pasture, grazing, agriculture
- Game farm fish hatchery
- Hunting and fishing reserves
- Wildlife sanctuary, woodland preserve or arboretum
- Open space and yard areas required for structures in other zoning districts

3. PBI Planned Business-Light Industry – Total Acreage: 348 acres

Permitted uses:

- Retail businesses and service establishments
- Minor appliance and office machine repair
- Professional offices and clinics
- Insurance and financial institutions
- Commercial recreation and restaurant
- Motor vehicle inspection
- Used and new car sales
- Motels

- Restaurants
- Drive in restaurants
- Bowling, ice and roller rinks
- Health clubs
- Golf driving range, mini-golf
- Car wash
- Indoor theater
- Home improvement stores
- Funeral homes
- Residential businesses

PBI District Zoning Standards	
Minimum lot size	Range 1 acre to 2.5 acre depending on use
Lot width	100 to 150 depend on use
Lot frontage	100 feet
Lot depth	200 feet
Front yard	50 feet
Side and Rear Yard	25 feet
Maximum building coverage	30%
Maximum lot coverage	60%
Maximum Building Height	35 feet

4. I Industrial – Total Acreage: 284 acres

Permitted uses:

- All uses permitted in the PBI zone
- Glass and ceramic manufacturing
- Wood and paper products
- Concrete and plastic manufacturing
- Rope and yarn manufacturing
- Concrete mixing, concrete products
- Lumber, wood and new building materials
- Fuel, coal, oil storage yards and distribution facilities
- Manufacture and fabrication of machinery and metal products
- Public utility maintenance and storage yards
- Farms

Minimum lot size	5 acres
Lot width	250
Lot frontage	200
Lot depth	300
Front yard	75
Side and Rear Yard	40
Maximum building coverage	40%
Maximum lot coverage	65%
Maximum Building Height	45 feet

VI. State Planning Areas

One of the main purposes of the State Plan, as directed by the State Planning Act, is to seek an appropriate balance of land uses in the State of New Jersey. The balance envisioned by the State Plan weighs economic growth and development and the conservation and protection of the State's natural and cultural resources. The State Plan also tries to ensure that the costs and benefits of future growth are fairly distributed so that all New Jersey residents share equitably in the State's anticipated prosperity. The State Planning Act mandates that the State Plan must encourage development, redevelopment and economic growth in locations that are well situated with respect to present or anticipated public services or facilities, reduce sprawl, and discourage development where it may impair or destroy natural resources or environmental qualities.

Fairfield Township has a stake in the State Plan, and intends that this Build-out Analysis will be utilized as a reference by State planners. Ideally the State-wide land use policy map would be supported by all levels of government, as well as residents and business owners, so that the many diverse stakeholders throughout the State would share a point of reference and would make decisions about the allocation of resources using the same general guiding land use principles. Yet, making the connection between the State-wide land use policies and local land use policies and decisions is easier said than done. The State Plan was last adopted in 2001, and a draft of the updated State Plan was released in 2009. There are processes set up within the State Planning Rules that are intended to provide adequate opportunities for public input into the State Plan. For example, the cross-acceptance process is intended to ensure local participation in the review and revision of the State Plan every three years. The cross-acceptance process began in 2004 and has been delayed for several years. Despite the inefficiencies and bureaucratic process, the State Plan remains a valuable tool in considering local land use policies. There is no doubt that well coordinated planning will result in a more efficient, effective and sustainable outcome, which will benefit all New Jersey residents.

Cohesive planning for preservation, development, and infrastructure among State, regional and local decision makers would serve to coordinate priorities so that resources are used effectively - resulting in more desirable, livable communities over time. No matter how small a decision may seem, or how divergent two land use issues may appear at first glance - in matters relating to land use, the economy, and natural systems - everything is connected to everything else. The State Plan is intended to be a tool that will allow the State to function more efficiently and effectively, reinforcing goals and objectives and avoiding unintended consequences.

The State Plan Policy Map (SPPM) illustrates the locations of five different planning areas and two sub-areas in the State, ranging from Metropolitan to Suburban to Rural and Environmentally Sensitive. The Planning Areas in Fairfield Township are shown on MAP 3. The State Plan recognizes that each of the Planning Areas requires a different planning approach. As noted in Section III B above, center-based development is the State Plan's strategy to encourage and accommodate growth in centralized areas, in order to minimize sprawl and a less land-consumptive development pattern. Centers may be designed at various scales depending on the local context, but all centers are premised on the idea that compact planned development in designated areas will minimize development impacts on the environment, will encourage communities of character and will be more efficient overall. Containment of the sprawling suburban development that has characterized typical development patterns in New Jersey since the 1950s requires a concerted focused land planning strategy. Centers are defined in the State Plan in order to identify the scale, location and design communities and their natural

landscapes. Centers may be located within any Planning Area as long as the designation is logical and adequately considers local history, environment, infrastructure and other relevant factors; and as long as a viable coordinated plan for the center can be established.

Planning Areas are large masses of land that share a common set of conditions, such as population density, infrastructure systems, relative degrees of development, and natural systems. The Planning Areas classify land areas and connect them to the fundamental policy objectives set forth in the State Plan, and are delineated geographically on the State Plan Policy Map. Each of the Planning Areas is intended to meet different objectives, and each Planning Area is intended to ensure an appropriate balance between development and conservation of natural resources on a State-wide level. Municipalities must also be concerned about finding an appropriate balance at the local level. Infrastructure capacities and natural systems have been utilized in identifying and delineating the Planning Area classifications (as well as the Centers and Environs). Further explanation of the planning areas, intent, goals and objectives are found in the State Plan itself.

The four Planning Areas found in Fairfield are described below (and shown on MAP 3)

A. The Metropolitan Planning Area (PA-1)

This Planning Area includes a variety of municipalities that range from large Urban Centers to 19th century towns shaped by commuter rail and post-war suburbs. The Communities in this Planning Area have strong ties to major metropolitan centers. The PA-1 areas have many things in common: mature settlement patterns; infrastructure systems that are approaching their reasonable life expectancy; an aging housing stock in need of rehabilitation; recognition that redevelopment will be the predominant form of growth; and a growing realization of the need to regionalize services and systems. In Fairfield, planning Area 1 is close to the border with Bridgeton.

In the Metropolitan Planning Area, the State Plan's intent is to do the following:

- Provide for much of the State's future development and redevelopment
- Revitalize Cities and Towns
- Take advantage of increased densities and compact building design
- Encourage distinctive, attractive neighborhoods with a strong sense of place
- Provide for mixed-use concentrations of residential and commercial activity
- Create a wide range of residential housing opportunities and choices with income mix
- Provide for a variety of multi-modal transportation alternatives
- Prioritize clean-up and redevelopment of brownfields and greyfields sites
- Create cultural centers of state-wide significance
- Re-design any existing areas of low-density sprawl

B. Suburban Planning Area (PA-2)

The Suburban Planning Area is located adjacent to the Metropolitan Planning Area, but can be distinguished by a lack of high intensity Centers, by the availability of developable land, and by a more dispersed and fragmented pattern of predominantly low-density development. Suburban Planning Areas are served by regional infrastructure. These areas have typically been designated for growth in municipal master plans. Current development patterns outside of Centers in the suburban planning area are almost entirely dependent on the automobile for transportation. Scattered subdivisions and employment centers offer few if any focal points for

community interaction that may have been provided in older urban or suburban communities by traditional main streets or a town square. The effect of local planning efforts has been to isolate land uses from each other, using zoning requirements such as large setbacks or extensive buffers, the location of stormwater detention facilities and unnecessarily wide roads to create physical barriers between land uses and different activities. Current trends continue to extend sprawl throughout this Planning Area, focusing primarily on the same single-use or limited use development in response to developer and market demand that generally conform to local government zoning requirements.

In the Suburban Planning Area, the State Plan's intention is to do the following:

- Provide for much of the State's future development
- Promote growth in center-based developments by increasing densities and employing attractive community design to encourage more compact forms of development
- Protect the character of existing stable communities
- Revitalize existing cities and towns
- Promote increased coordination and integration of transportation planning and land-use decision-making
- Encourage multi-modal transportation alternatives to the automobile
- Protect natural resources
- Re-design and retrofit existing areas of sprawl
- Reverse the current trend toward additional sprawl

C. The Rural Planning Area (PA-4) including the Rural/Environmentally Sensitive Planning Area (PA-4B)

The rural planning area comprises much of New Jersey's countryside, where large masses of cultivated or open land surround rural Regional Centers, Towns, Villages and Hamlets. Relatively isolated residential, commercial and industrial sites are clearly distinguishable from typical suburban development in this Planning Area. The open lands of this Rural Planning Area include most of New Jersey's prime farmland, which has the greatest potential for sustaining continued agricultural production in the future along with forested and woodland tracts. These areas along with the Environmentally Sensitive Planning Area – Planning Area 5, serve as the "greensward" for the larger region and are not currently, nor are they expected to be urban or suburban in nature in the future. This classification also includes a sub-Planning Area the Environmentally Sensitive/Rural Planning Area. The State Plan Intent for this sub-Planning Area is to support continued agricultural development on lands with environmentally sensitive features.

In the Rural Planning Area, the State Plan's intention is to do the following:

- Maintain the environs as large contiguous tracts of farmland and open space
- Promote a viable agricultural industry and compatible off-the-farm economic opportunities for farmers
- Revitalize existing rural centers Accommodate future growth and development in existing centers and center-based new development
- Protect the character of existing, stable communities
- Confine programmed sewers and public water services to centers
- Impose impervious cover restrictions and require restoration, maintenance and enhancement of the working landscape.

D. Environmentally Sensitive Planning Area (PA-5)

The Environmentally Sensitive Planning Area contains large contiguous land areas with valuable eco-systems, geological features and wildlife habitats particularly in the Delaware Bay and other estuary areas, the Highlands Region and the Coastal Area. New Jersey's future environmental integrity and a substantial portion of its economy depend on the protection of these irreplaceable resources. Environmentally Sensitive Planning Areas are characterized by watersheds of pristine waters, trout streams and drinking water supply reservoirs; aquifer recharge areas for potable water supplies; habitats for endangered and threatened plant and animal species, coastal and freshwater wetlands; prime forested areas; scenic vistas and other significant topographical, geological or ecological features, particularly coastal barrier spits and islands. These resources are critically important not only for the local residents of these areas, but for all New Jersey residents and tourists who may travel great distances to visit these sites. Existing Centers within the Environmentally Sensitive Planning Area have been, and often remain, the focus of residential and commercial growth and public facilities and services for their region, as well as supporting the travel, tourism and recreational industries. These Centers generally are linked to each other by rural roads and separated from other developments by open spaces or linked to the mainland by state highways crossing coastal wetlands and waterways.

In the Environmentally Sensitive Planning Area, The State Plan's intention is to do the following:

- Protect environmental resources through the protection of large contiguous tracts of open space
- Accommodate growth in existing cities and towns and new Center-based developments
- Revitalize existing cities and towns
- Protect the character of existing stable communities
- Confine water supply and sewer systems to existing cities and towns and new Center based developments
- Impose impervious cover restrictions and require restoration, maintenance and enhancement of the natural landscape.

E. Centers

The Planning Areas each have a purpose, yet conditions "on the ground" are not always entirely consistent with the State Plan descriptions of the area. Some areas, such as Fairton in Fairfield Township have the characteristics of a "Center" within the rural planning area, but the Center designation is not reflected on the State Plan Policy Map. In 2002 the Township's Master Plan Reexamination recommended the designation of Gouldtown and Fairton as Centers, and a Plan Endorsement Petition was submitted to the State Planning Commission in 2004. The Center designations have not been acted on and the petition has been abandoned, but the concept is still of interest to many in the Township. The 2009 Master Plan Reexamination recommended that the potential Center configurations be revisited and that the designation of Centers may be a valuable tool in guiding future land use in the Township, while maintaining balance between the natural and built environments, and encouraging sustainability. The Township has also participated in the regional planning effort known as the Western/Southern Cumberland Regional Strategic Plan lead by the Cumberland Development Corporation. This regional

planning effort ties the interests of the twelve participating municipalities together with a shared vision for the region.⁸

The results of the Build-Out Analysis provide the Township with more information to utilize in considering the best course for future land use planning. In considering whether to pursue Center designations for Fairton and/or Gouldtown, the Build-Out Analysis Project Team gathered the following information about the Office of Smart Growth's center-based planning initiatives. Additionally the Office of Smart Growth maintains a Plan Endorsement Benefits Chart, which is included as Appendix B.

Potential Benefits of Center-based Planning:

- Create a diversity of housing options within the fabric of the community
- Enhance the walkability of a community (pedestrian friendliness)
- Reduce reliance on motor vehicles for all trips
- Provide the opportunity for planned development and implementation of design standards
- Enhance quality of life and sense of community
- Create a development pattern consistent with the historic hamlets, villages and towns of Cumberland County, limiting sprawl
- Reduce sprawl since lots developed in a more compact pattern and land outside designated Centers is developed at very low density
- Potential to permanently preserve land outside Centers (if done using Transfer of Development Rights or noncontiguous clustering)
- If using Transfer of Development Rights (TDR) for the centers, additional planning monies may be available; and land preservation occurs through private market transactions rather than expenditure of public dollars
- If State Planning Commission recognizes as designated Center, receives higher priority for various state funding programs and eligible for certain state agency regulatory programs
- If State Planning Commission recognizes as designated Center, becomes location where state agency permit-streamlining provisions apply for municipal and other locally desired projects

Potential Challenges:

- Planning for wastewater treatment, alternatives to septic systems is needed (sewer service area or community septic systems)
- Difficult to implement incrementally because infrastructure investments are needed to make the center work.
- The planning and implementation costs money
- The TDR concept is sensible, but has proven practically difficult based on current rules, the rules need to be modified at the State level to make TDR a more viable option.
- If State Planning Commission recognizes as designated Center, becomes location where permit-streamlining provisions for development in Smart Growth areas apply, including projects that may not be desirable locally.

⁸ The Western/Southern Cumberland Regional Strategic Plan has been on-going for more than five (5) years, and is nearing completion at the time of this Build-Out Analysis.

VII. Developable Land Summary

The following table summarizes the build out analysis, beginning with the Township's total acreage and subtracting constrained and undevelopable lands.

Fairfield Build-Out Summary		
	Subtract	Total Acres Remaining
Fairfield Total Acreage		27,890 acres
Roadways and Waterways	-1,589.89	26,300.11
Municipal Recreation and Open Space	- 429.88	25,870.23
Fairfield Township Board of Education	- 31.99	25,838.24
Cumberland County Rec and Open Space	- 7.05	25,831.19
State Recreation and Open Space <ul style="list-style-type: none"> • Wildlife Management Areas • Forest Area 	- 5,268.04	20,563.15
Federally Owned Properties	-218.27	20,344.88
Preserved Farms	-1,376.48	18,968.4
Public Utilities or other public use	-27.35	18,941.05
Non-profit preservation (NJ Natural Lands Trust, The Nature Conservancy, Wildlife Preserves Inc.)	-2,815.62	16,125.43
Exelon PSE&G(NJDEP controlled), Eagles Manor(deed restricted), and other deed restricted/preserved lands	- 1,414.06	14,711.37
Homeowners Associations	- 38.29	14,673.08
Developed Residential Lands	- 1,153.72	13,519.36
Developed Commercial Lands	- 439.5	13,079.86
Developed Church/Non Profit	-43.95	13,035.91
Lands with development approvals	- 351.37	12,684.54
Wetlands	- 4,435.62 acres outside of otherwise un-developable or preserved properties (10,662 total wetland)	8,248.92
Total Remaining Potentially Developable Land	TOTAL= 8,248.92 potentially developable acres	

VIII. Build-Out Analysis Results

A. Residential

To determine the potential residential development based on the existing zoning, the total potentially developable acreage in the zone is multiplied by a factor of .75 to estimate and account for the space that is typically needed for infrastructure, roads, stormwater management, etc. The density or minimum lot size for the zone is utilized to estimate the maximum number of lots that could be developed under existing zoning.

Fairfield Township Residential Zoning Capacity Based on Existing Zoning (not including developments already approved)		
Zone	Developable Acres	Potential Residential Units
A	5298.59	993 (25% at 2.5 u/acre and 75% at 5 u/acre)
R-1	982.37	491
R-2	697.34	523
R-3	85.69	80
TOTAL	6,994.88	2,087

If 2,087 additional residential units were constructed, the additional population would be approximately 5,801 people (using the average household size of 2.78 people per household at the time of the 2000 Census). If all of the residential units were assumed to be average sized (3 bedroom) single family homes, when built-out the additional homes could add approximately 1,210 school-aged children in any given year⁹. Added to the current population, the population at full build-out would be approximately 12,543 people (of which approximately 1,500 are incarcerated).

It is useful to consider the overall development potential and the potential population impacts, but for residential development it is also important to consider what the development pattern would look like, and whether the development pattern would be conducive to and consistent with the Township's other goals and objectives. Also critical for future planning is the potential demand for services that would result from the more than 2,000 additional housing units at full build-out. The timing of development would impact the ability of the Township to accommodate and absorb the additional service demands. The provision of water and wastewater service is also an important consideration. Whether development may connect to the public water distribution system and whether development may connect to the public sewer system will alter the cost of development and the environmental impacts of development. The availability of public water and sewer services may also alter the pace and location of development.

For the purposes of this analysis we have calculated the potential water demand and wastewater generation in accordance with N.J.A.C.7:9A-7.4.¹⁰ The added population would result in a total increase of water and wastewater demand of 730,450 gpd over the existing approximate demand of 670,250 gpd (based on the existing 1,915 housing units).

⁹ Calculated using information in "Who Lives in New Jersey Housing? A Quick Guide to New Jersey Residential Demographic Multipliers", published by the Center for Urban Policy Research Edward J. Bloustein School of Planning and Public Policy, Rutgers, The State University of New Jersey

¹⁰ N.J.A.C. 7:9A-7.4 NJDEP 350 gpd for residential housing units

The table in Section C below shows a more extensive breakdown of the potentially developable land by State Planning Area. The largest area of potentially developable land is within the Agriculture Residential zone (A), with 5,298.59 acres. The majority of that land is within the Rural Planning Area (PA-4).

B. Non-residential

To determine the potential non-residential development based on the existing zoning, the total developable acreage in the zone is multiplied by a factor of .75 to estimate and account for the space that is typically needed for infrastructure, roads, stormwater management, etc. The average permitted density or minimum lot size, multiplied by the average maximum building coverage for the zone is utilized to estimate the maximum number of square feet of non-residential space that could be developed under the existing zoning.

Fairfield Township Non-Residential Zoning Capacity Based on Existing Zoning (not including developments already approved)		
Zone	Developable Acres	Potential Square Feet Non-residential
M	8.5	124,962 sq ft (.75 x.45)
PBI	201.06	2,298,334 sq ft(.75x.35)
I	103.66	1,346,004 sq ft (x.75x.40)
TOTAL	313.22	3,769,300 square feet

In considering the non-residential build-out results it is worth noting that along the section of Route 49 (East Commerce Street) designated as Planned Business and Light Industry (PBI), the district extends 200 feet from the right of way. This depth creates many lots that are split by the zone line, and could present practical difficulties for site planning.

For reference, the following are typical sizes for different types of non-residential development:

Type of Non-Residential Use	Typical Square Footage
Big Box” retail such as Target or Wal-Mart	+/-120,000 square feet
Pharmacy such as CVS or Walgreens	+/- 14,000 square feet
Professional offices for doctors, etc	6,000 + square feet
Neighborhood retail shopping center	+/- 20,000 square feet
Daycare	+/- 11,000 square feet
Bank	+/- 4,500 square feet
Restaurant Fast Food Dining	+/-2,500 square feet +/- 6,000 Square feet

C. Zoning by State Planning Area

Fairfield Township Vacant Land by Zone and Planning Area																		
ZONE **	PA-1 Metropolitan			PA-2 Suburban			PA-4 Rural			PA-4B Rural Environmentally Sensitive			PA-5 & Park Environmentally Sensitive Park			Total	Wet	Dev
	Total	Wet	Dev.	Total	Wet	Dev.	Total	Wet	Dev.	Total	Wet	Dev.	Total	Wet	Dev.			
A	5.40	.63	4.77	374.08	32.47	341.61	4204.09	493.5	3710.59	971.56	16.02	955.54	370.03	83.95	286.05	5925.16	626.57	5298.59
R-1	.2	0	.2	549.82	1.41	548.41	405.04	3	402.5	28.33	0	28.33	4.61	1.22	3.39	988	5.63	982.37
R-2	60.15	3.45	56.7	184.73	19.23	165.5	417.27	12.12	405.15	43.58	.37	43.21	27.27	.49	26.78	733	35.66	697.34
R-3	14.0	0	14	2.50	0	2.50	70.59	5.84	64.75	0	0	0	4.44	0	4.44	91.53	5.84	85.69
S	0	0	0	0	0	0	4.76	.29	4.47	.63	.16	.47	80.97	66.18	14.79	86.36	66.63	19.73
M	0	0	0	0	0	0	0	0	0	0	0	0	60.83	52.33	8.5	60.83	52.33	8.5
FP	0	0	0	0	0	0	608.36	253.57	354.79	7.79	.88	6.91	3815.22	3325.91	489.1	4431.37	3580.36	851.01
PBI	55.03	1.1	53.93	66.08	0	66.08	90.02	8.97	81.05	0	0	0	0	0	0	211.13	10.07	201.06
I	3.1	0.45	2.65	41.62	19.53	22.09	112.47	32.55	79.92	0	0	0	0	0	0	157.19	52.53	103.66
Total	137.88	5.63	132.25	1218.83	72.64	1146.19	5913.05	809.84	5102.76	1051.89	17.43	1034.46	4255.99	3504.97	747.02	12,684.54	4435.62	8248.92

**** Zoning Classifications:**

- A Agricultural/Residential
- R-1 Residential
- R-2 Residential
- R-3 Residential
- S State Owned Land
- M Marine
- FP Flood Plain
- PBI Planned Business and Industry
- I Industrial

IX. Observations and Recommendations

The Build-Out Analysis has provided information that has stimulated ideas, concerns, and discussion about current the current economic, environmental, regulatory, and social conditions in and around the Township and has resulted in a list of observations, issues, and recommendations for further consideration.

- 1. Agriculture Residential Zone.** The greatest amount of potentially developable residentially zoned land is within the Agriculture Residential (A) zone, with 5,298.59 acres. Of that acreage, the majority is within Planning Area 4, the rural planning area (3,710.59 acres) and a significant portion of the area (1,537 acres) is within Planning Area 4B, the rural environmentally sensitive planning area. The Township's Agricultural Residential base zoning is already relatively low density, but if developed to capacity, the new development would further fragment the landscape and result in a sprawling development pattern.
- 2. Potential for Sprawl.** It has been the Township's intent to define areas in the vicinity of the developed areas of Gouldtown and Fairton where more concentrated planned development could be encouraged and contained, consistent with the carrying capacity of the land and infrastructure. The build-out analysis reveals that there are some inconsistencies between the existing zoning, the previously proposed center boundaries, and the state planning areas. Though the Agriculture residential zoning district permits residential development at a relatively low density on lots of 2.5 and 5 acres, if built to zoning capacity, the result would be sprawling development. The Agricultural zoning district also covers some woodland areas that have not historically been in agricultural use, so the designation may be misleading. The forested lands within the Agricultural zoning district are shown on MAP 11. The purpose of agricultural zoning is to maintain a critical mass of farmland, to encourage the retention of farm families and agricultural business and to discourage fragmentation of the land. The forested areas may also be worthy of low density development, in order to provide groundwater and aquifer recharge areas, provide wildlife habitat, and to preserve the forest cover, which assists in mitigating carbon dioxide in the atmosphere. Perhaps a second low density residential district should be created, or the importance of woodlands should be incorporated into the purposes of the A zone.
- 3. Balanced Growth and Centers.** This Build-Out Analysis has provided the first steps in the reconsideration of the previously proposed center boundaries for Fairton and Gouldtown. Since at least 1976, the Township's Master Plan has encouraged development near the two core areas of Fairton and Gouldtown, and the current zoning does reflect this, with the R-1, R-2 and R-3 zoning in and around the Fairton and Gouldtown areas. The Master Plan has also encouraged the retention of active farmland, the preservation of buffer zones along streams and rivers, and the protection of woodland areas for aquifer recharge. Together these policies steer development toward the areas of existing development, but without a definitive means for implementation, the policies are not always effective. At the same time the Township has encouraged economic growth in order to broaden the tax base and serve the community with retail, service and wholesale businesses. In this way the Township has sought to ensure that community facilities and services may be provided at reasonable costs to the residents while maintaining sound financial status. Without a clear shared understanding of these issues, the desire to both conserve and grow can seem to conflict.

The concept of center based development is compelling in that it promises to provide opportunities for well designed growth and redevelopment, while preserving the surrounding lands in a more natural and rural state. Center based development would provide more compact development within the “centers” which presents opportunities for efficiencies in construction, operational costs and service delivery, and also promotes a sense of place and community; while retaining the small town rural character and protecting farmland and valuable woodlands.

The prospects for center-based planning must be considered with regard to environmental constraints, providing enough area for concentrated future growth potential, mixed uses, and potential infrastructure improvements. The identification of centers would provide central areas where well designed, compact growth would be accommodated and contained and the areas outside the Centers would be protected from the intrusion of the growth that occurs within the Centers. In 2004 the NJ Office of Smart Growth staff members acknowledged that the designation of the Fairton and Gouldtown Centers along with the State’s programmatic, technical and financial assistance, and prioritization would be a key to the Township’s revitalization efforts. The center designations are particularly important in planning for sewer service areas, and the Township’s planning documents should be clear about whether the Township desires to maintain the Gouldtown and Fairton sewer service areas. It must be acknowledged that the installation of sewer system and water distribution system infrastructure would require a critical mass of development in the centers to make the investment financially feasible. If the infrastructure investment is not financially viable then alternative such as community systems may be an option. Additional research is needed to assess the viability of and support for different options.

The designation of centers would provide the central principles around which other planning priorities may be organized. The Center designations may also serve as a catalyst to focus efforts on enhancing the streetscape, preserving historic character, and improving pedestrian and bicycle circulation facilities within the centers. In order for the center designations to be meaningful, the centers will need room to grow, and a plan for water and sewer infrastructure should be considered in cooperation with the County Planning Department and the CCUA.

As an alternative to the formal designation of Centers, the Township may wish to use the results of the Build-Out Analysis and the accompanying environmental data to provide capacity-based zoning that would be reflective of the center-based concepts, providing more concentrated development near existing areas of development and outside of environmentally sensitive areas and agricultural development areas; and very low density development in the environs. Maps 10, 12 and 13 begin to paint this picture.

4. **Publicly owned lands.** The project team has pointed out that not all publicly owned land is preserved. The Township and the Board of Education may wish to sell some of their land holdings, when the specific properties have been acquired through tax sales or for purposes other than developing community facilities or for preservation. The lands that have been identified that may be sold have been included as potentially developable. However, decisions about the sale of public property should consider not only the short term economic benefits, but also the long term environmental and community benefits of retaining the property. One example is two properties owned by the Township and the Board of Education that are surrounded on three sides by the Buckshutem Wildlife Management Area (Block 12, Lot 27.02 is 62.69 acres owned by

the BOE and Block 12, Lot 29 is 6.8 acres owned by the Township). These properties are part of the Bluebird Branch Natural Heritage Priority Site, which includes wetland habitat for a globally rare plant species and lands that drain toward the wetland habitat. Preservation of these properties would be beneficial to the integrity of the area.

5. **Golf Course.** For the analysis the Cohanzick Country Club and Golf Course was assumed to be “developed”. It was not therefore included in the “potentially developable” land calculations. In this economy some golf courses are struggling, while others are doing fine. The susceptibility of the golf course to change should be considered so that future land use planning may consider the golf course area. Currently it is within the A (Agriculture) and FP (flood plain) zoning districts. Some members of the Build Out project team suggested that this area be considered “developable” for the build-out analysis since the land is currently within the A Agricultural zone and could be developed with a different use if the owner decided to. The golf course is 155 acres, of which approximately 40 acres are wetlands according to the NJDEP’s unofficial wetlands layer. If developed according to the current zoning, approximately 25 houses could be constructed on the site, adding approximately 70 additional residents.
6. **Wastewater Service Areas.** There is currently some uncertainty about the potential for the extension of wastewater facilities to serve Fairton and a larger portion of Gouldtown. Correspondence about wastewater planning was sent to the CUA by the NJDEP on February 5, 2010. The availability of public water and sewer would help to ensure that more concentrated and compact development in these areas would not have detrimental environmental impacts. However, the extension of these services would require a substantial investment, either by a public entity or a private developer. In order to create economies of scale to justify such an investment, a large development project would likely be required. The build-out analysis and the subsequent recommendations will assist the Township in taking a position on the need for and appropriate service area for water and sewer service in the future.
7. **Foreclosures.** According to the 2000 US Census, of the 5,161 residents aged sixteen and over in 2000 (this includes the prison population), 2,288 were in the labor force. 5.5% of the labor force in Fairfield was reported as unemployed in 2000. The 2000 Census reported that New Jersey’s unemployment rate was 3.7%. In June 2010 New Jersey’s unemployment rate had reached 9.6%. Though municipal level unemployment figures are not currently available, the unemployment rate in Fairfield Township has surely increased, as the recession has impacted people across industries, in all geographic areas, and across the economic spectrum. The economic downturn has slowed development activity and has also resulted in many home foreclosures. The project team has indicated that focus should be on filling existing homes before constructing new ones.
8. **Split-Lot Zoning.** There are a number of lots that are split by a zone boundary (referred to as “split lot zoning”). When the zoning boundaries are not coincident with parcel lines, uncertainty remains about the most appropriate use for the property. The split-lot zoning situation also creates hurdles to be overcome by property owners. Future zoning revisions should seek to eliminate this problem, particularly within the PBI zone along Bridgeton-Millville Pike (Route 49) and along Bridgeton-Fairton Road (CR 609).
9. **Zoning Consistency.** There are some areas, particularly in the western portion of the Township where the zoning designations (A, S, FP) need to be reviewed so that they are

more consistent with current ownership and the realities on the ground. To the extent possible the overall zoning plan should communicate the existing conditions (with regard to state owned land and environmentally sensitive areas) and the Township's desired land use.

10. **Publicly Owned Land.** Adding a zoning category for "Publicly Owned Land" to replace the "State Owned Land" category will provide a designation that may be used to illustrate the general locations of facilities and open spaces owned by the State, the Township, and non-profit organizations. This will more clearly communicate existing land use and the potential for development to those reviewing the zoning map.

X. Planning For the Future

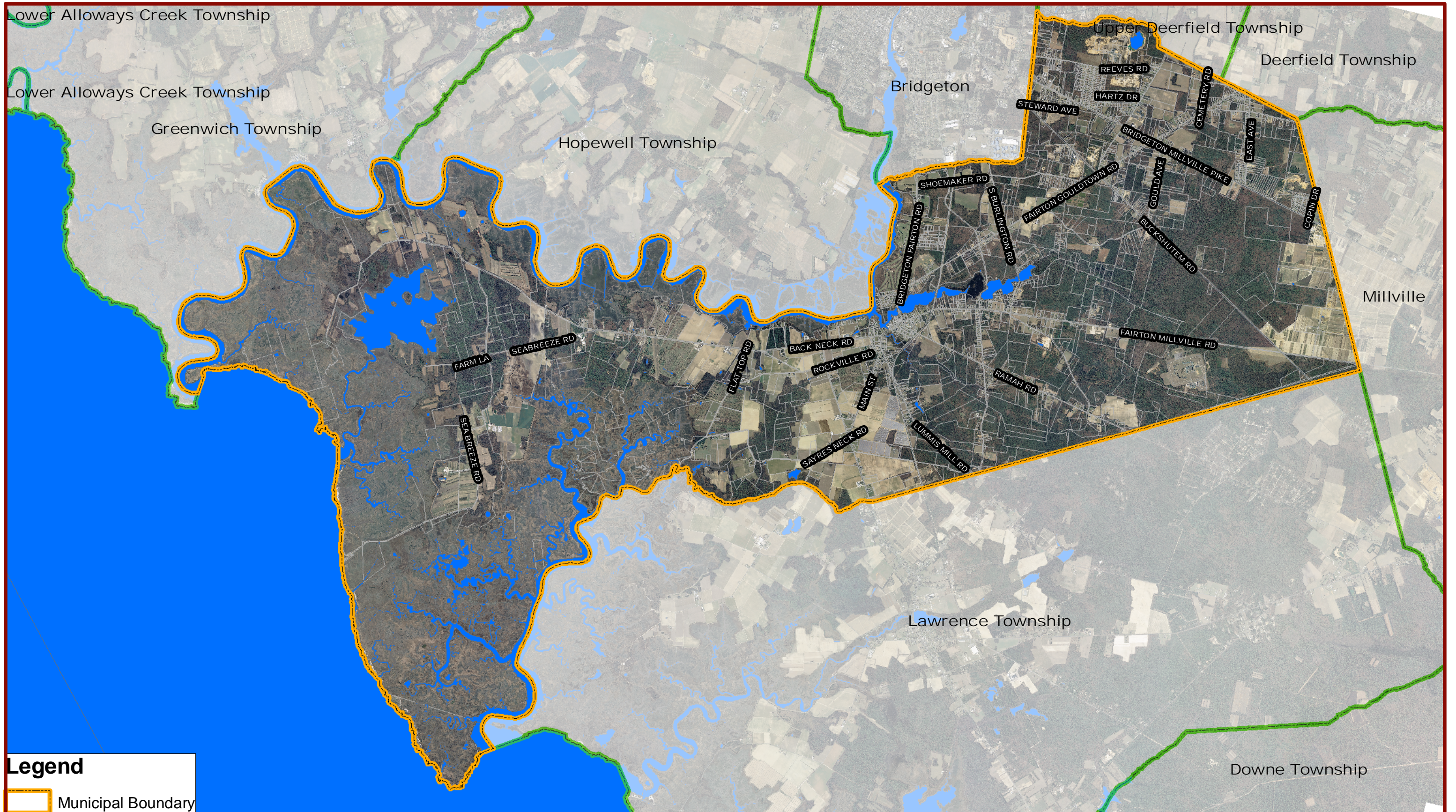
This Build-Out Analysis resulted from a collaborative effort that has brought together information from various sources and input from residents, professional planners, and Township officials. The Build-Out Analysis and especially the maps may assist the Township in updating land use related goals and objectives and in guiding land use decisions into the future. Land use dynamics are continually changing and are inextricably connected to economic, environmental and social dynamics. As new information becomes available and as new land use scenarios present themselves (such as renewable energy facility proposals), the land use plan must adjust. The Build out Analysis provides the foundations upon which the Township may build its policies and positions. As such it is recommended that the Build Out Analysis be adopted as an element of the Master Plan.

A Master Plan is intended to guide the use of lands within the Township in a manner that protects public health and safety, promotes the general welfare, and advances the Township's goals and objectives. Land use policy is integral to many local issues, and the Master Plan provides the backbone for many land use strategies and decision-making. It serves to communicate the Township's goals and objectives, and the analysis, rationale and recommendations in the Master Plan can support the Township's policy decisions. The Master Plan may also unify interests and ideas that often seem to compete with one another. Using the Build-Out Analysis results as a tool, the Master Plan may be better structured to promote the Township's goals, objectives and planning principles and to guide development in accordance with the Township's vision.

Appendix A

Developments Approved, Not yet Constructed

Resolution	Block / Lot	Acres	Location	Zoning/ Planning Area	Square Feet/ No. units	Description
06-21	12/34&40.02	26.21	Fairton Millville Road	A / PA4 & PA4B	2 residential units	
07-06	19 / 1	8.28	33 Reeves Road	R-2 / PA1	5 residential lots	
07-08	22/ 1 & 4	0.28	Sunset Lane	R-3 & A / PA1	2 residential lots	
07-09	52/ 44	67.59	103 Seabreeze Road	FP & A /PA-5	3 residential lots	
07-11	54/ 2 & 3	26.15	60 Lanning Wharf Road	FP & A /PA-5	2 residential lots	
07-12	14/ 23	1.73	Gould Avenue	R-2 & A/ PA4B	2 residential lots	
07-13	47/ 1, 2, & 2.01	65.18	Husted Bateman Road	FP & A/ PA4	2 residential lots	
07-18	16/1.01	0.71	1187 Bridgeton Millville Pike	PBI & R-2 / PA2	1 residential lot	
07-20	16/ 10 & 11	4.2	Gould Avenue	PBI & R-2/ PA2	1 residential unit	
07-24	17/ 13	5.59	29 Piercetown Road	A / PA2	3 residential lots	
08-02	25/ 3	19.94	86 Shoemaker Lane	I / PA 4	?sq ft	Industrial Building
08-04	10/ 2 & 2.01	27.64	Fairton Millville Road	A / PA4	2 residential lots	
08-05	34/ 31.01 & 31.02	21.65	Fairton Millville Road	A / PA4 &PA4B	1 residential lot	
08-13	35/ 13.01	7.5	330 Ramah Road	R-2 & A/ PA4	1 residential lot	
08-14	19.03/ 31	3.02	1007 East Commerce Street	R-2/ PA1	1 residential lot	
08-15	19/ 45	4.92	847 East Commerce Street	PBI/ PA1	19,500 sq ft	Renovation of old bowling alley
08-16	47/ 2.01 & 6	46.35	Husted Bateman Road	A, FP, & M / PA4 & PA5	1 residential lot	
09-01	30/ 30.01	5.68	368 Fairton Gouldtown Rd	A/ PA4 & PA4B	1 residential lot	
09-02	27.05/ 1	22.96	40 Back Neck Road	A & FP/ PA4 & PA5	1 residential lot	
09-05	43/ 44	9.87	170 Lumms Mill Road	I / PA 4	2 residential lots	non conforming residential use
09-06	12/ 25.03	7.1	Gould Avenue	A / PA4B	1 residential lot	



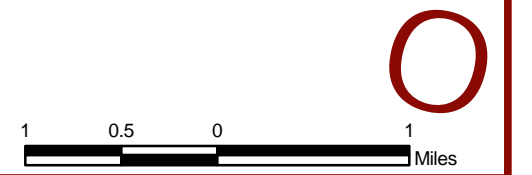
Legend
 Municipal Boundary

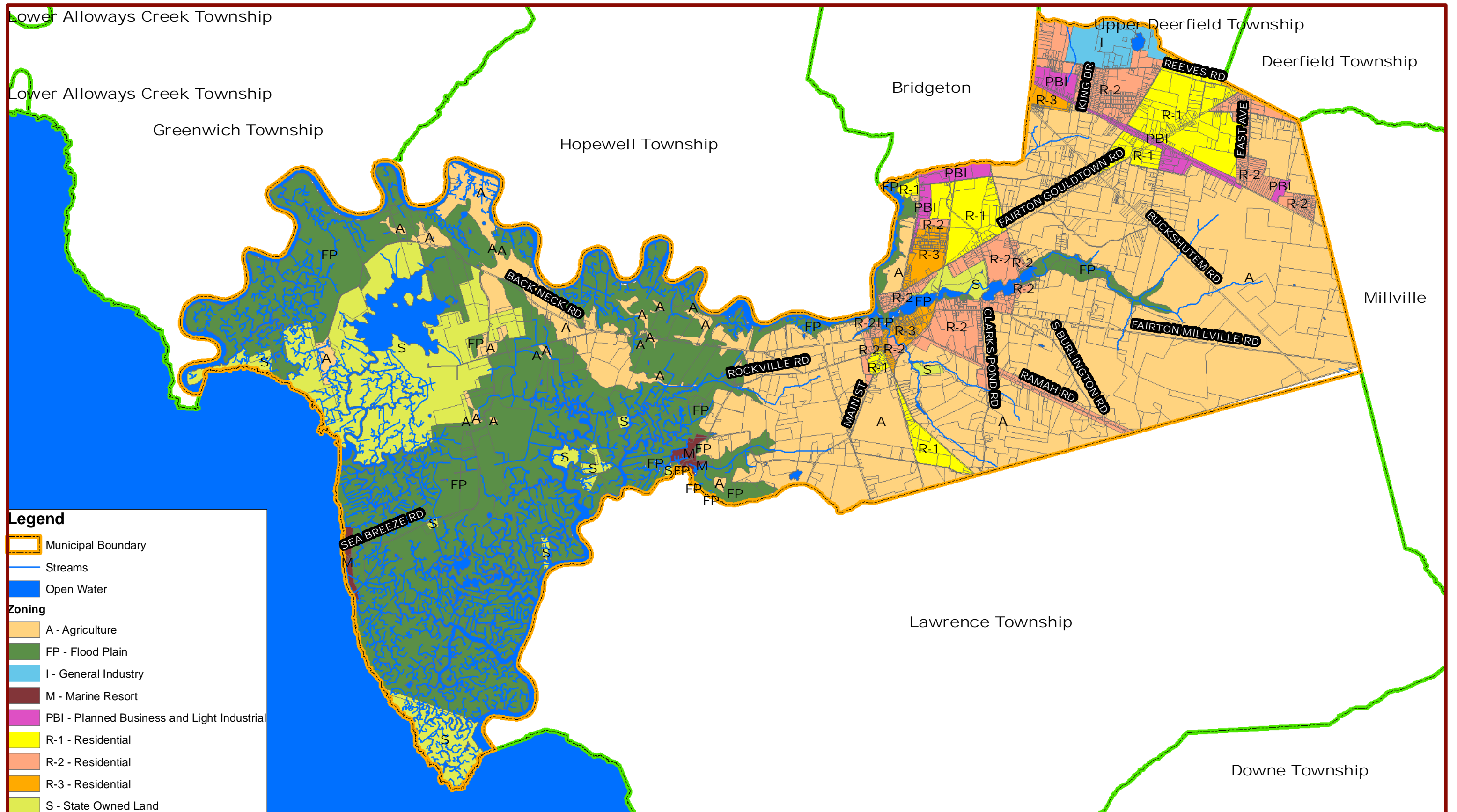
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Aerial Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
2007 NJ Digital Orthoimagery	
Scale: 1" = 1 mile	
Date: March 5, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP #6054	

Fairfield Township
 2007 Aerial Map
 Map 1





Legend

- Municipal Boundary
- Streams
- Open Water

Zoning

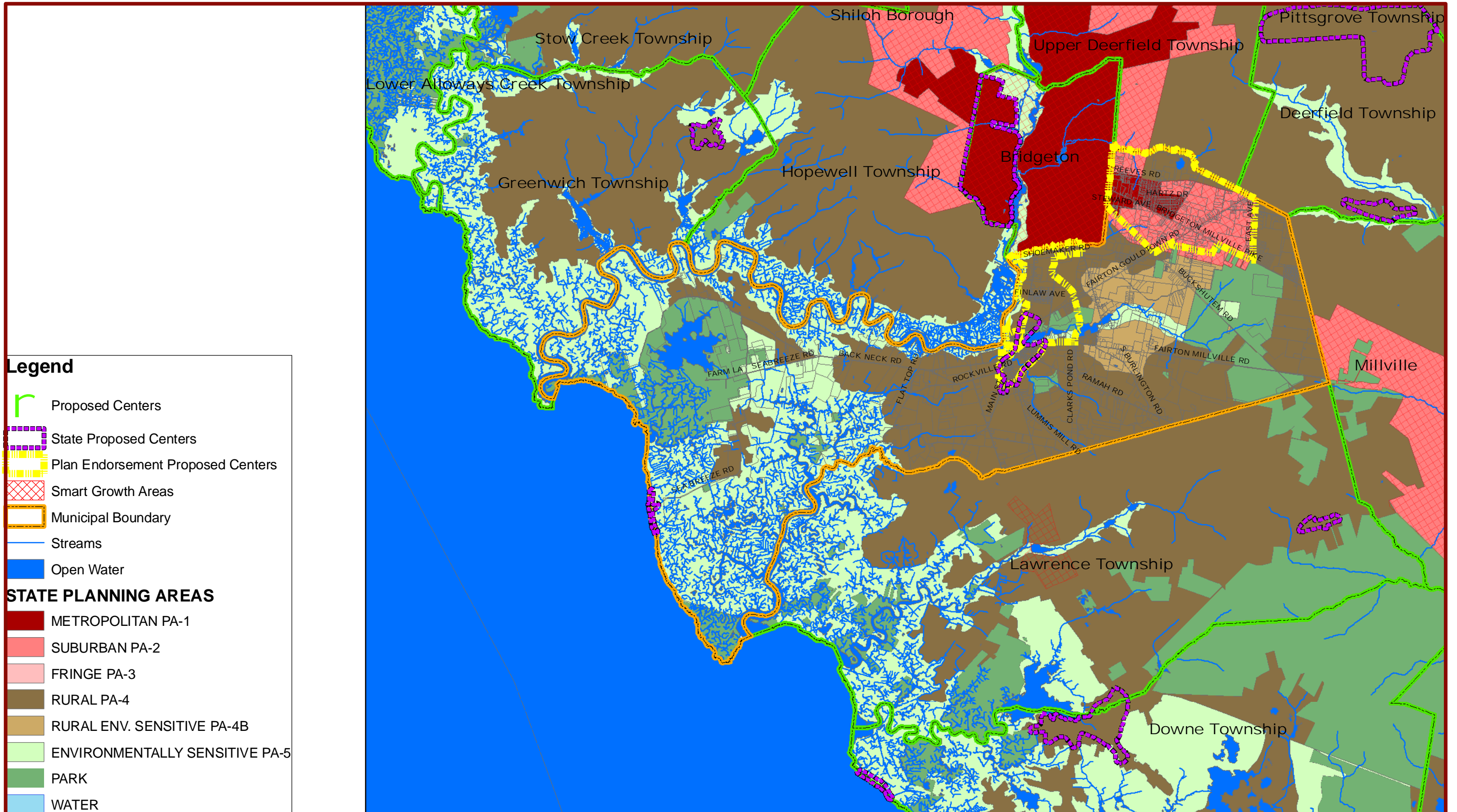
- A - Agriculture
- FP - Flood Plain
- I - General Industry
- M - Marine Resort
- PBI - Planned Business and Light Industrial
- R-1 - Residential
- R-2 - Residential
- R-3 - Residential
- S - State Owned Land

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Zoning Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
Scale: 1" = 1 mile	
Date: March 5, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP #6054	

Fairfield Township
 Existing Zoning Map
 Map 2



Legend

- Proposed Centers
- State Proposed Centers
- Plan Endorsement Proposed Centers
- Smart Growth Areas
- Municipal Boundary
- Streams
- Open Water

STATE PLANNING AREAS

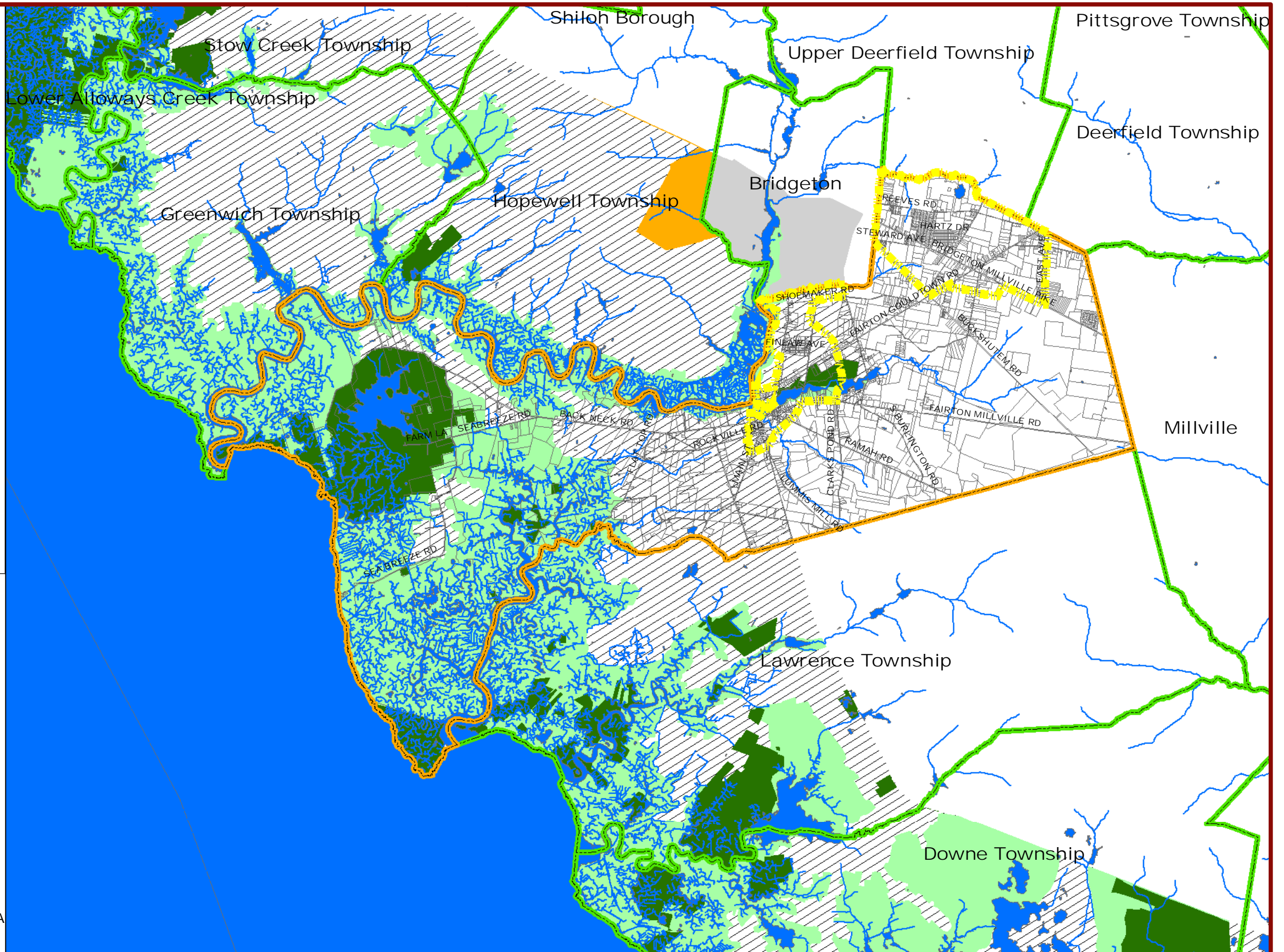
- METROPOLITAN PA-1
- SUBURBAN PA-2
- FRINGE PA-3
- RURAL PA-4
- RURAL ENV. SENSITIVE PA-4B
- ENVIRONMENTALLY SENSITIVE PA-5
- PARK
- WATER

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State Plan Policy Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
Scale: 1"= 1.5 mile	
Date: March 5, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP #6054	

Fairfield Township
 State Plan Policy Map with
 Previously Proposed Center Boundaries
 Map 3



Legend

- Proposed Centers
- Plan Endorsement Proposed Centers
- Municipal Boundary
- Streams
- Open Water

Coastal Planning Areas

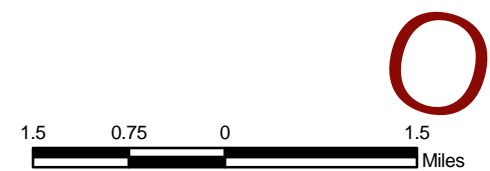
- COAST_PA**
- COASTAL METROPOLITAN PLANNING AREA
 - COASTAL SUBURBAN PLANNING AREA
 - COASTAL FRINGE PLANNING AREA
 - COASTAL RURAL PLANNING AREA
 - COASTAL ENVIRONMENTALLY SENSITIVE PLANNING AREA
 - COASTAL PARK

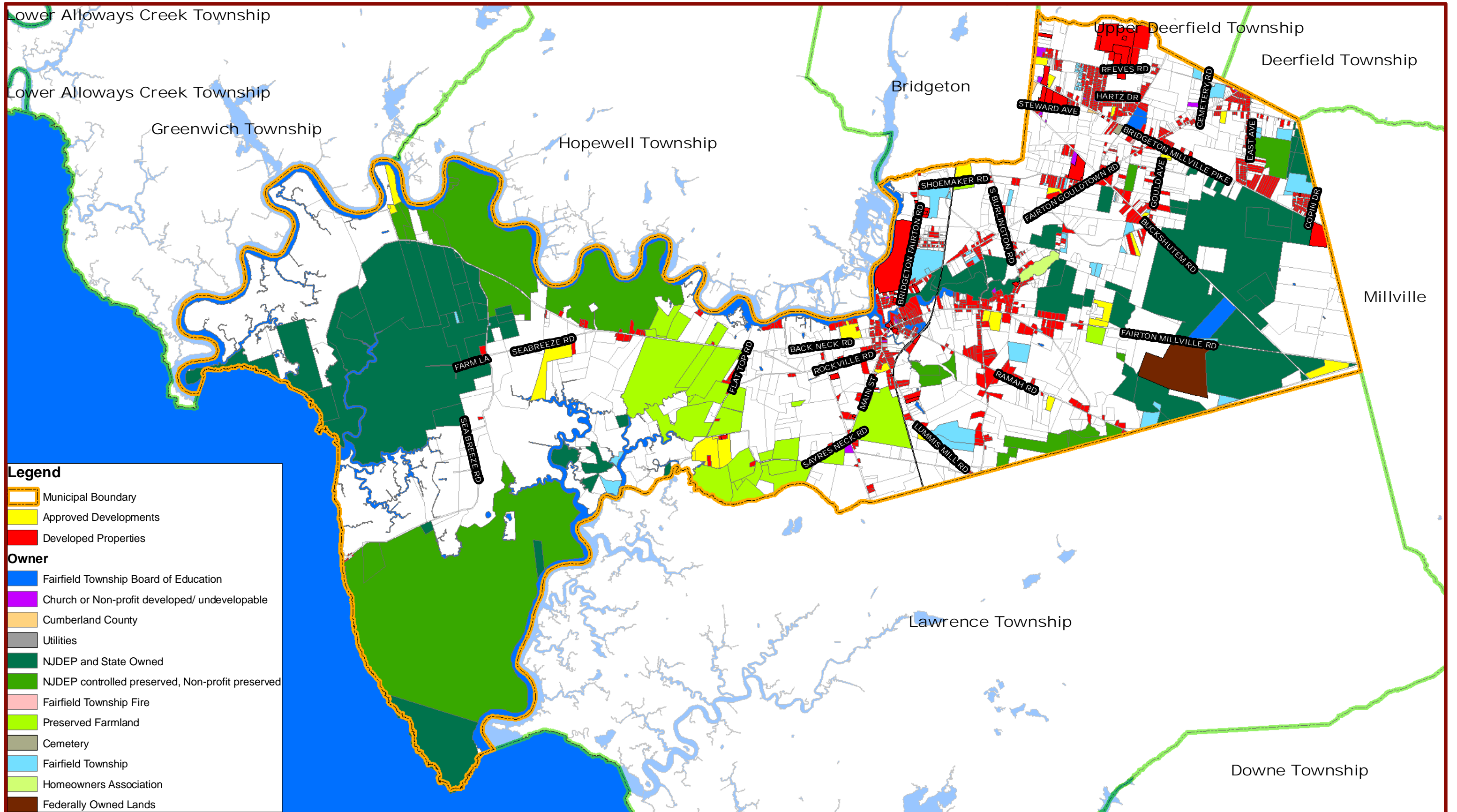
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CAFRA Map Sources:	
Parcel Data: Cumberland County Planning Department	
Scale: 1"= 1.5 mile	
Date: March 5, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP #6054	

Fairfield Township
 CAFRA Area and CAFRA Planning Areas Map
 Map 4





Legend

- Municipal Boundary
- Approved Developments
- Developed Properties

Owner

- Fairfield Township Board of Education
- Church or Non-profit developed/ undevelopable
- Cumberland County
- Utilities
- NJDEP and State Owned
- NJDEP controlled preserved, Non-profit preserved
- Fairfield Township Fire
- Preserved Farmland
- Cemetery
- Fairfield Township
- Homeowners Association
- Federally Owned Lands

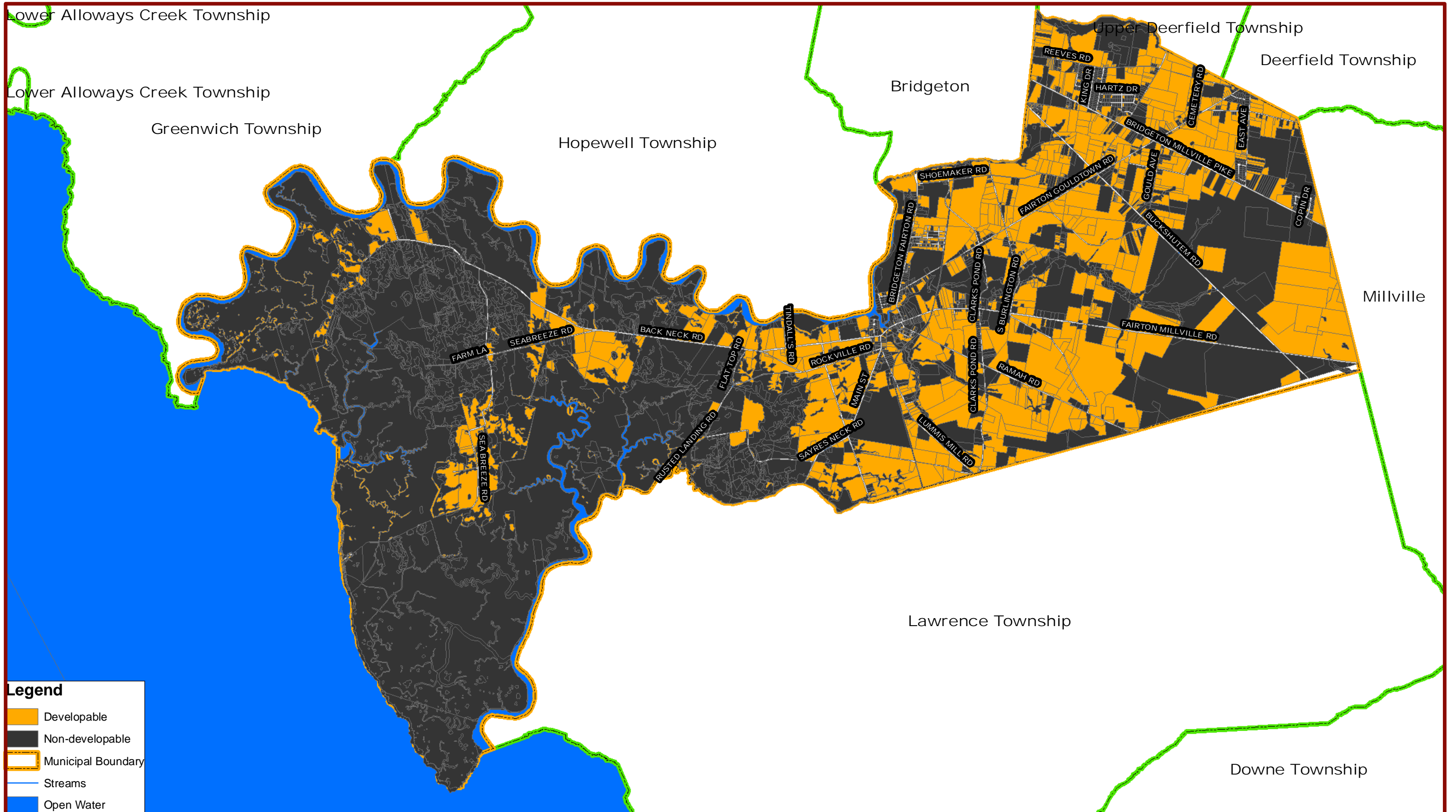
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Preserved and Developed Properties Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
Scale: 1" = 1 mile	
Date: April 30, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP AICP #6054	

Fairfield Township
 Preserved and Developed Properties
 Map 5

1 0.5 0 1
 Miles



Legend



- Developable
- Non-developable
- Municipal Boundary
- Streams
- Open Water

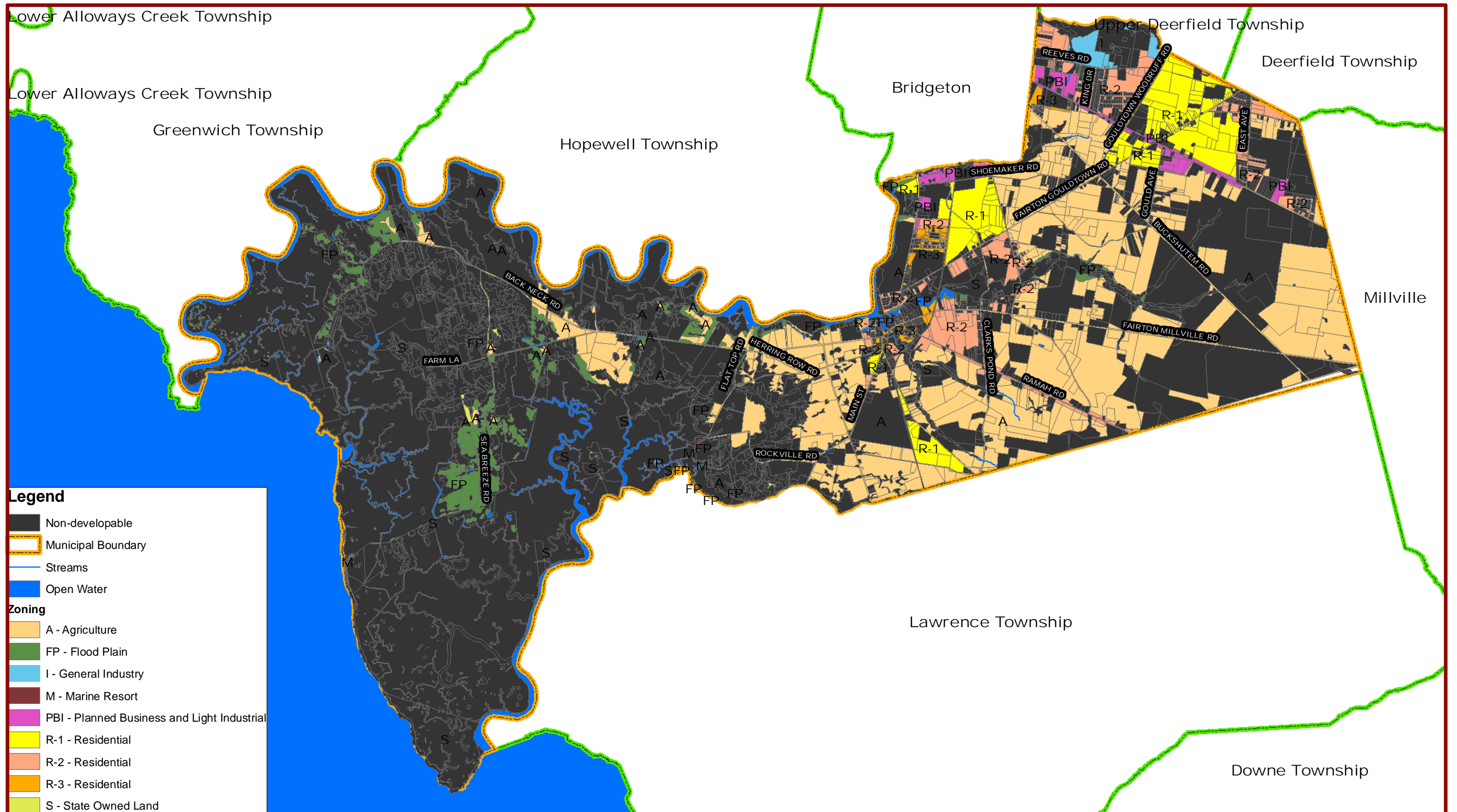
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Non-developable vs Developable Areas Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
Scale: 1" = 1 mile	
Date: April 30, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP AICP #6054	

Fairfield Township
 Non-developable vs Developable Areas Map
 Map 6



Legend

- Non-developable
- Municipal Boundary
- Streams
- Open Water

Zoning


- A - Agriculture
- FP - Flood Plain
- I - General Industry
- M - Marine Resort
- PBI - Planned Business and Light Industrial
- R-1 - Residential
- R-2 - Residential
- R-3 - Residential
- S - State Owned Land

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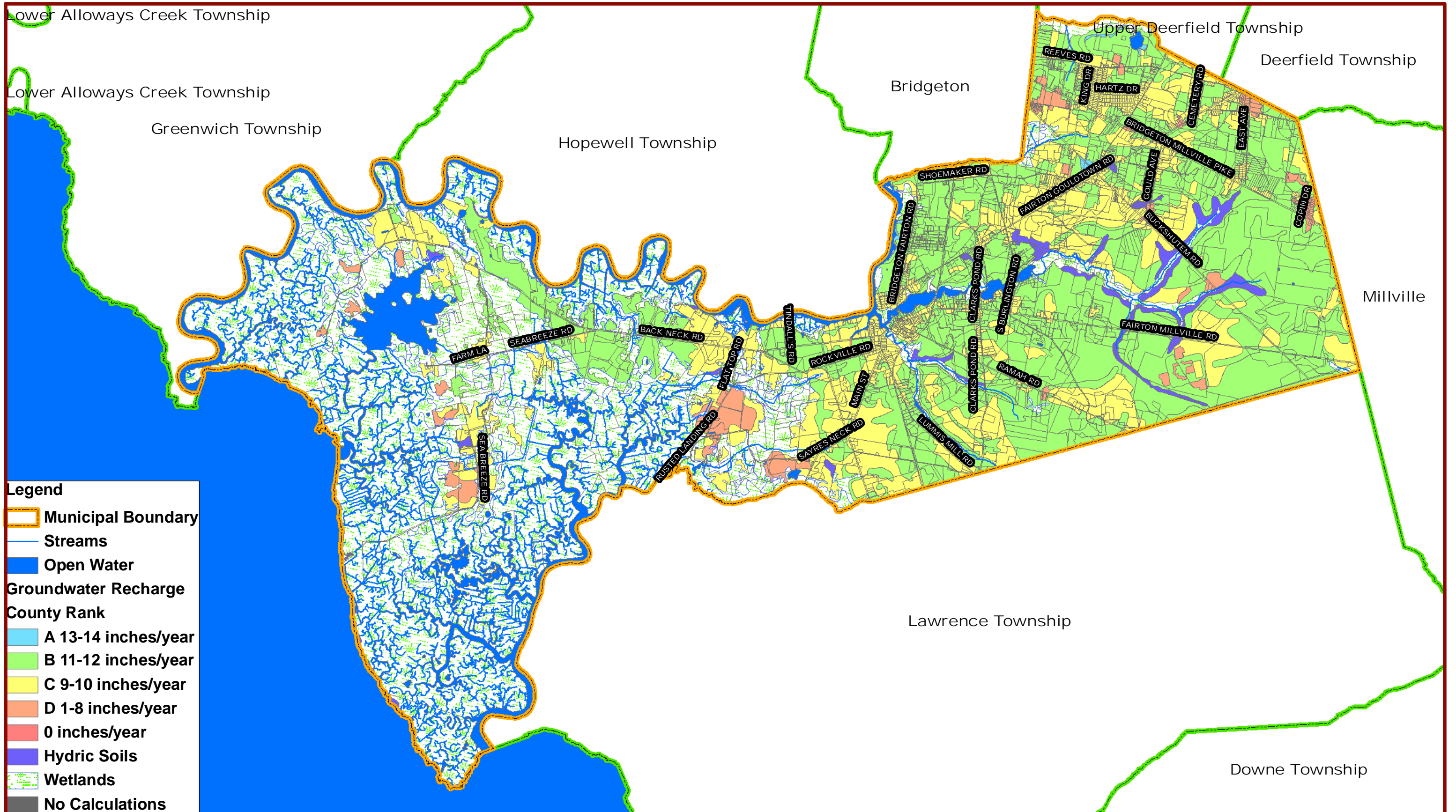
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Build-out Zoning Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
NJDEP GIS	
Scale: 1" = 1 mile	
Date: March 5, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP #6054	

Fairfield Township
 Build-out Zoning Map
 Map 7



1 0.5 0 1
 Miles



Legend

- Municipal Boundary
- Streams
- Open Water
- Groundwater Recharge County Rank**
- A 13-14 inches/year
- B 11-12 inches/year
- C 9-10 inches/year
- D 1-8 inches/year
- 0 inches/year
- Hydric Soils
- Wetlands
- No Calculations

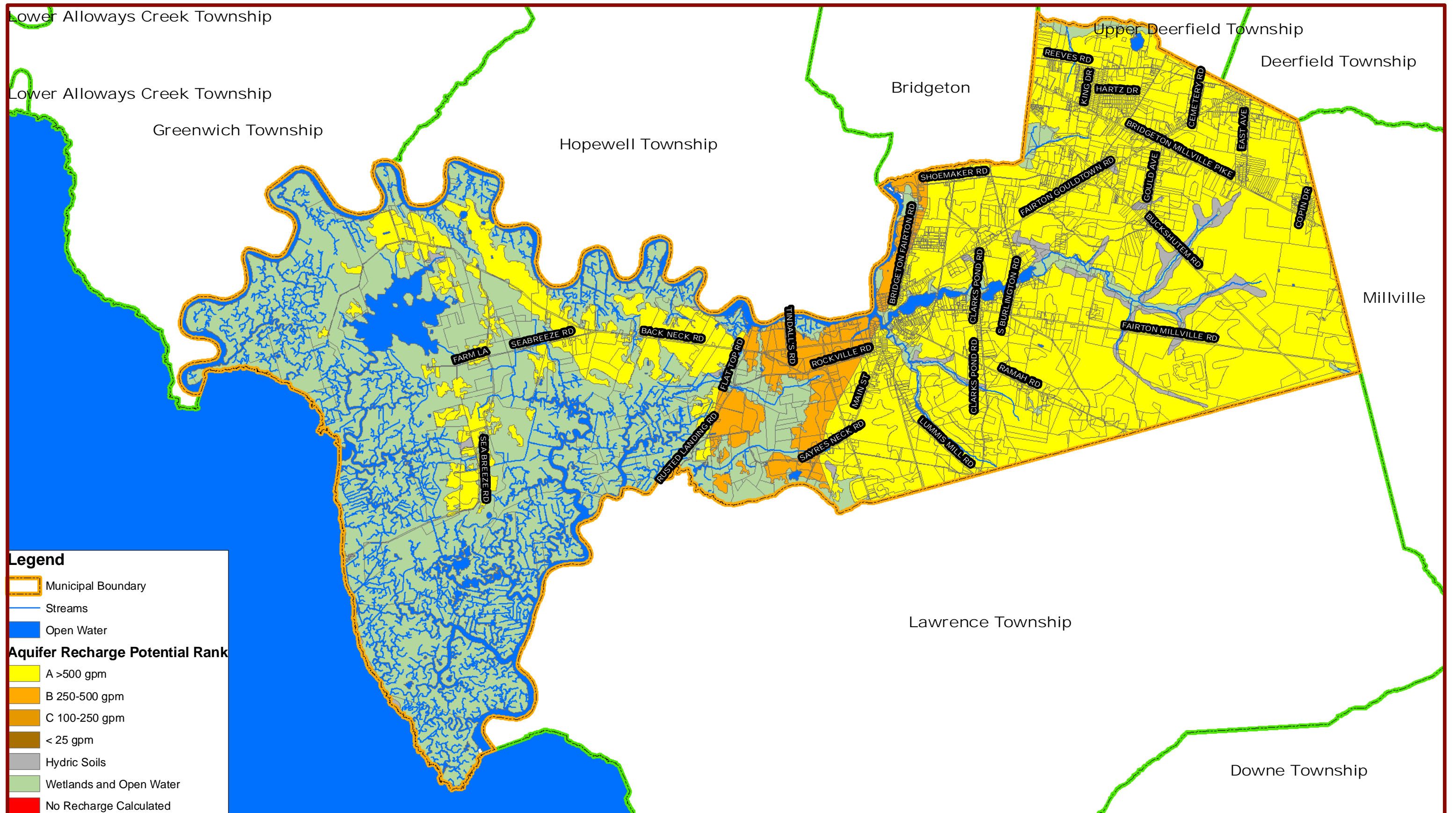
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Groundwater Recharge Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
NIDEP & USGS	
Scale: 1" = 1 mile	
Date: April 28, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP AICP #6054	

Fairfield Township
 Goundwater Recharge Map
 Map 8





Legend

- Municipal Boundary
- Streams
- Open Water

Aquifer Recharge Potential Rank

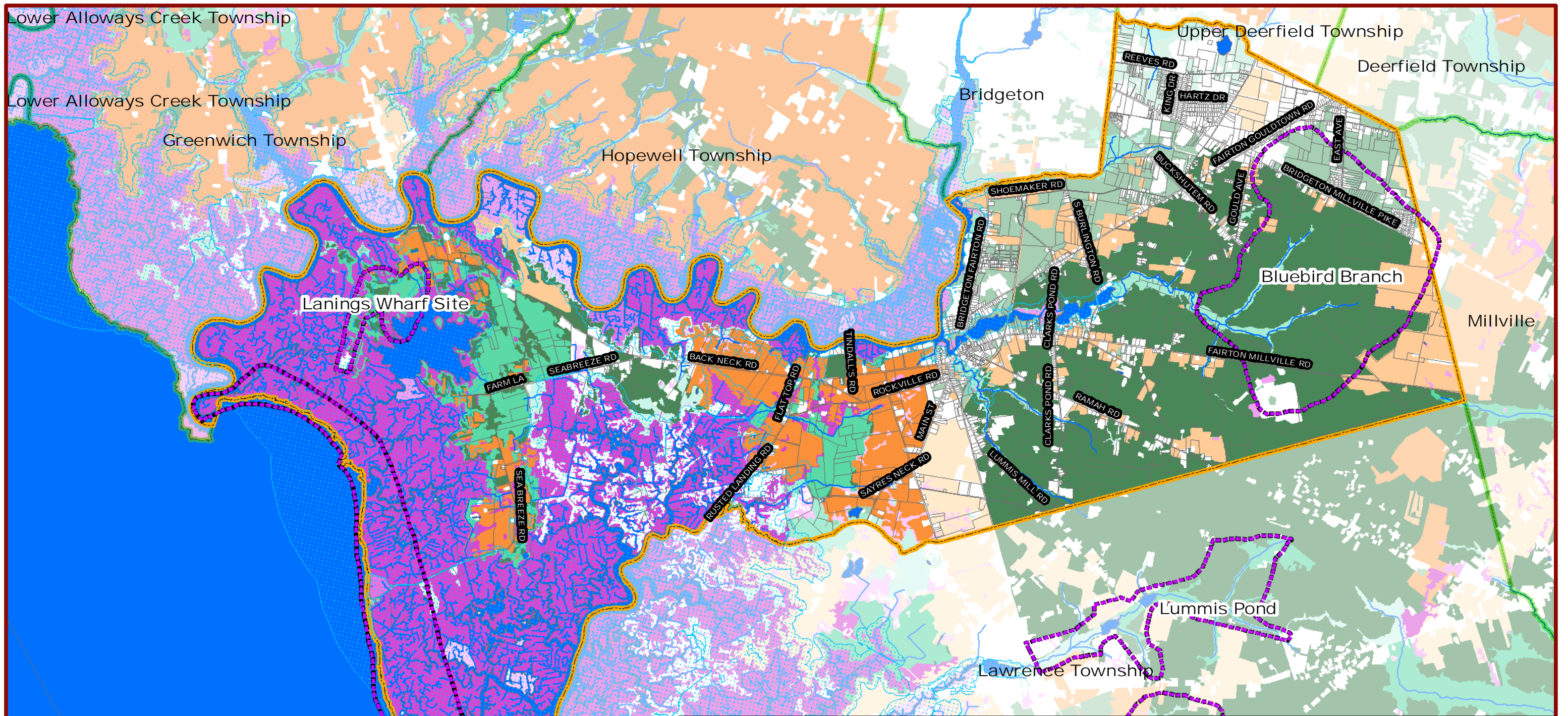
- A >500 gpm
- B 250-500 gpm
- C 100-250 gpm
- < 25 gpm
- Hydric Soils
- Wetlands and Open Water
- No Recharge Calculated

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Aquifer Recharge Potential Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
NJGS NJDEP	
Scale: 1" = 1 mile	
Date: May 7, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP AICP #6054	

Fairfield Township
 Aquifer Recharge Potential Map
 Map 9



Legend

Natural Heritage Priority Sites	Municipal Boundary	Streams	Open Water	Bald Eagle foraging_V2_1	Woodturtle_V2_1	Urban peregrine_V2_1	Emergent Wetlands	Forested Wetlands	Forest	Grassland	Beach
							RANK	RANK	RANK	RANK	RANK
							Suitable Habitat (1)	Suitable (1)	Suitable (1)	Suitable (1)	Suitable Habitat (1)
							Priority Species (2)	Priority Species (2)	Priority Species (2)	Priority Species (2)	Priority Species (2)
							State Threatened (3)	State Threatened (3)	State Threatened (3)	State Threatened (3)	State Threatened (3)
							State Endangered (4)	State Endangered (4)	State Endangered (4)	State Endangered (4)	State Endangered (4)
							Federal T and E (5)	Federal T and E (5)	Federal T and E (5)	Federal T and E (5)	Federal T and E (5)

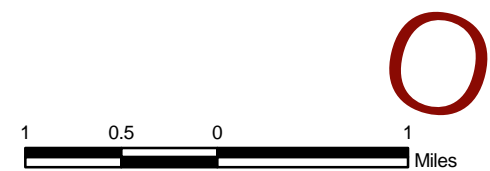
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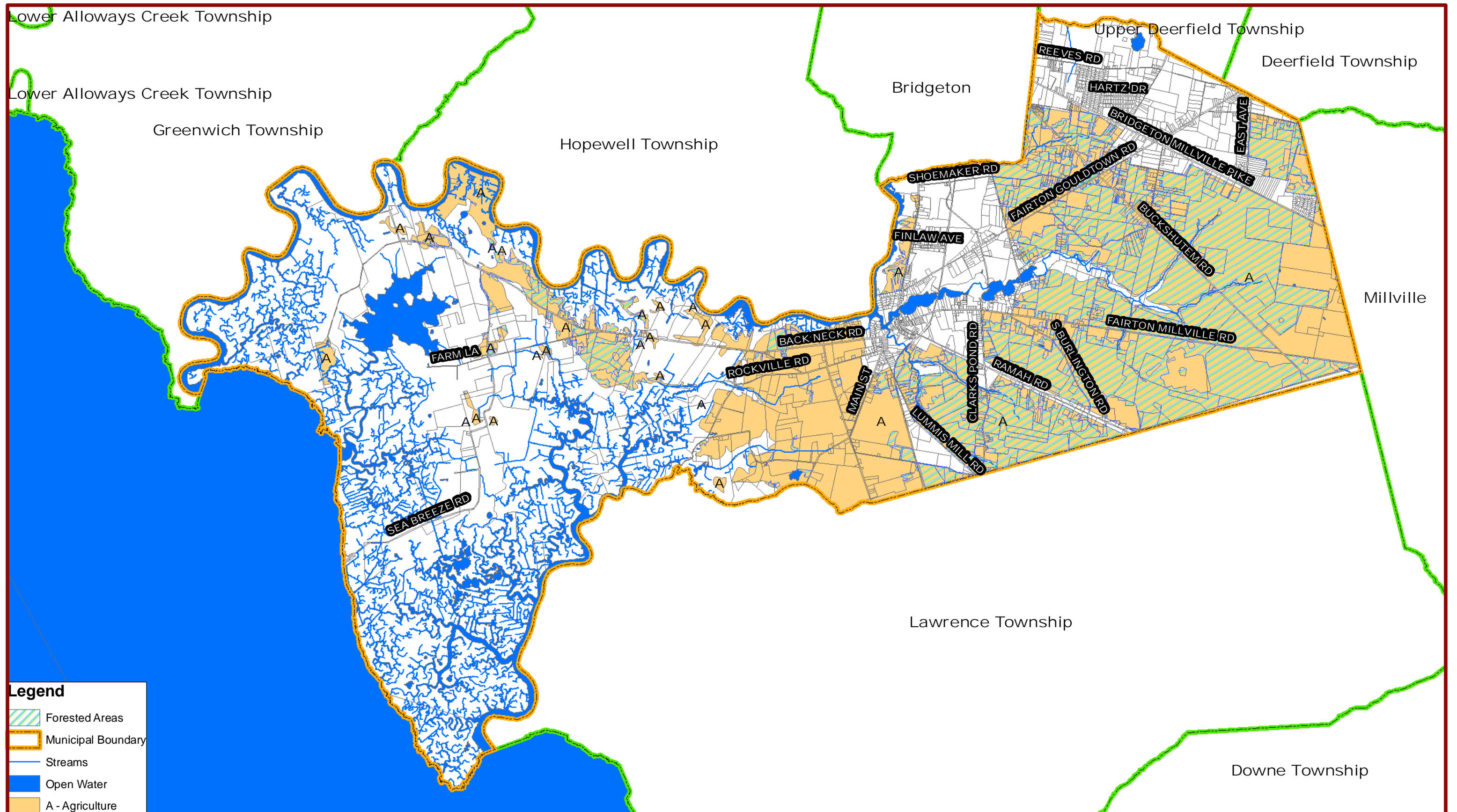
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Landscape Project 2.1 Map
 Sources:

Parcel Data: Cumberland County Planning Department
NJDEP GIS
Scale: 1" = 1 mile
Date: March 5, 2010
Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP #6054

Fairfield Township
 Landscape Project 2.1 Map
 Map 10





Legend

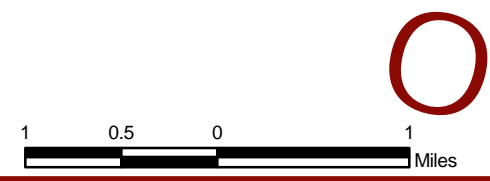
- Forested Areas
- Municipal Boundary
- Streams
- Open Water
- A - Agriculture

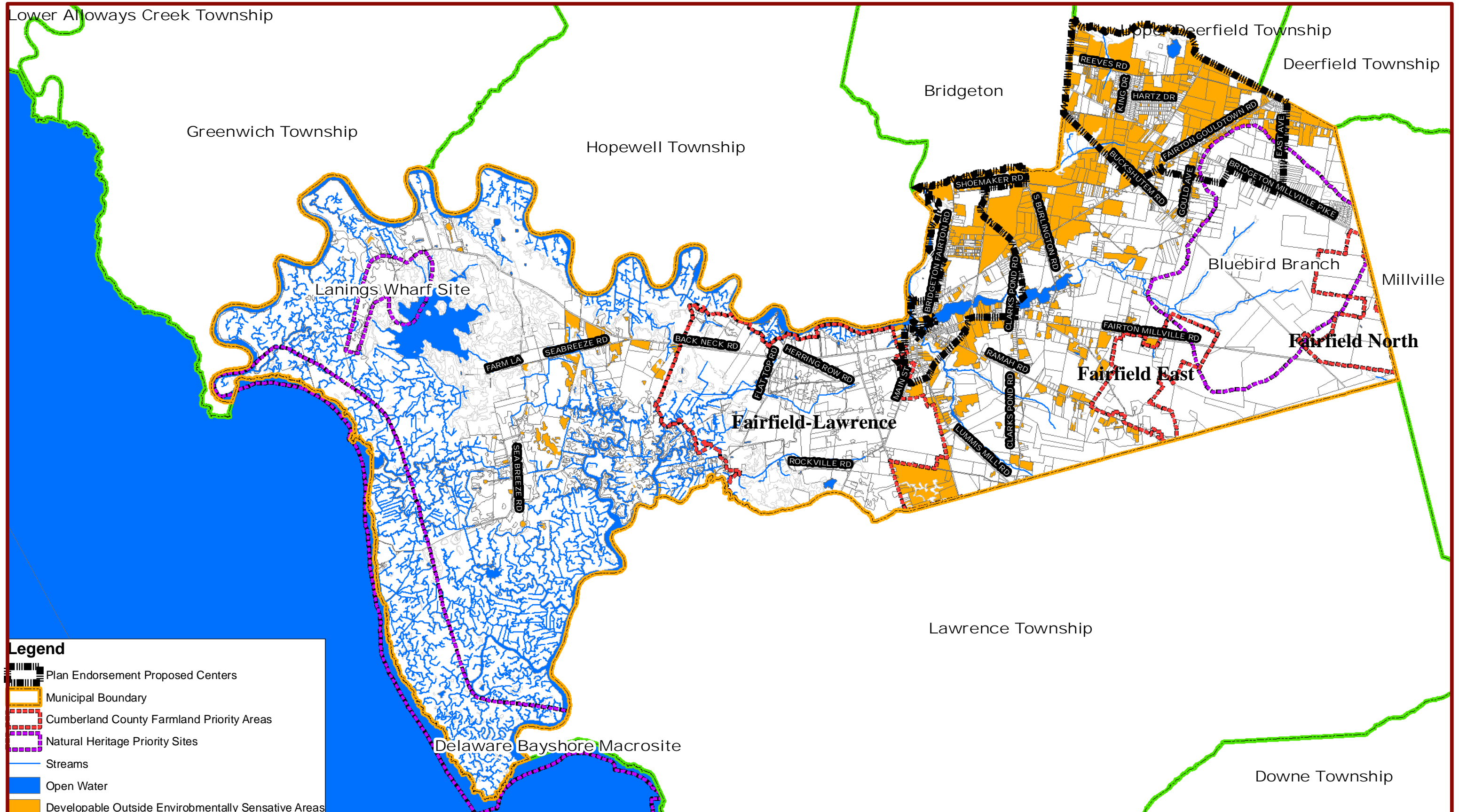
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Agriculturally Zoned Forested Areas Map	
Sources:	
Parcel Data: Cumberland County Planning Department	
2007 NJ Digital Orthoimagery	
Scale: 1" = 1 mile	
Date: April 19, 2010	Proj: FT2010
Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP AICP #6054	

Fairfield Township
 Agriculturally Zoned Forested Areas Map
 Map 11





Legend

- Plan Endorsement Proposed Centers
- Municipal Boundary
- Cumberland County Farmland Priority Areas
- Natural Heritage Priority Sites
- Streams
- Open Water
- Developable Outside Environmentally Sensitive Areas

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Developable Properties Outside Environmentally Sensitive and Ag Priority Areas Map

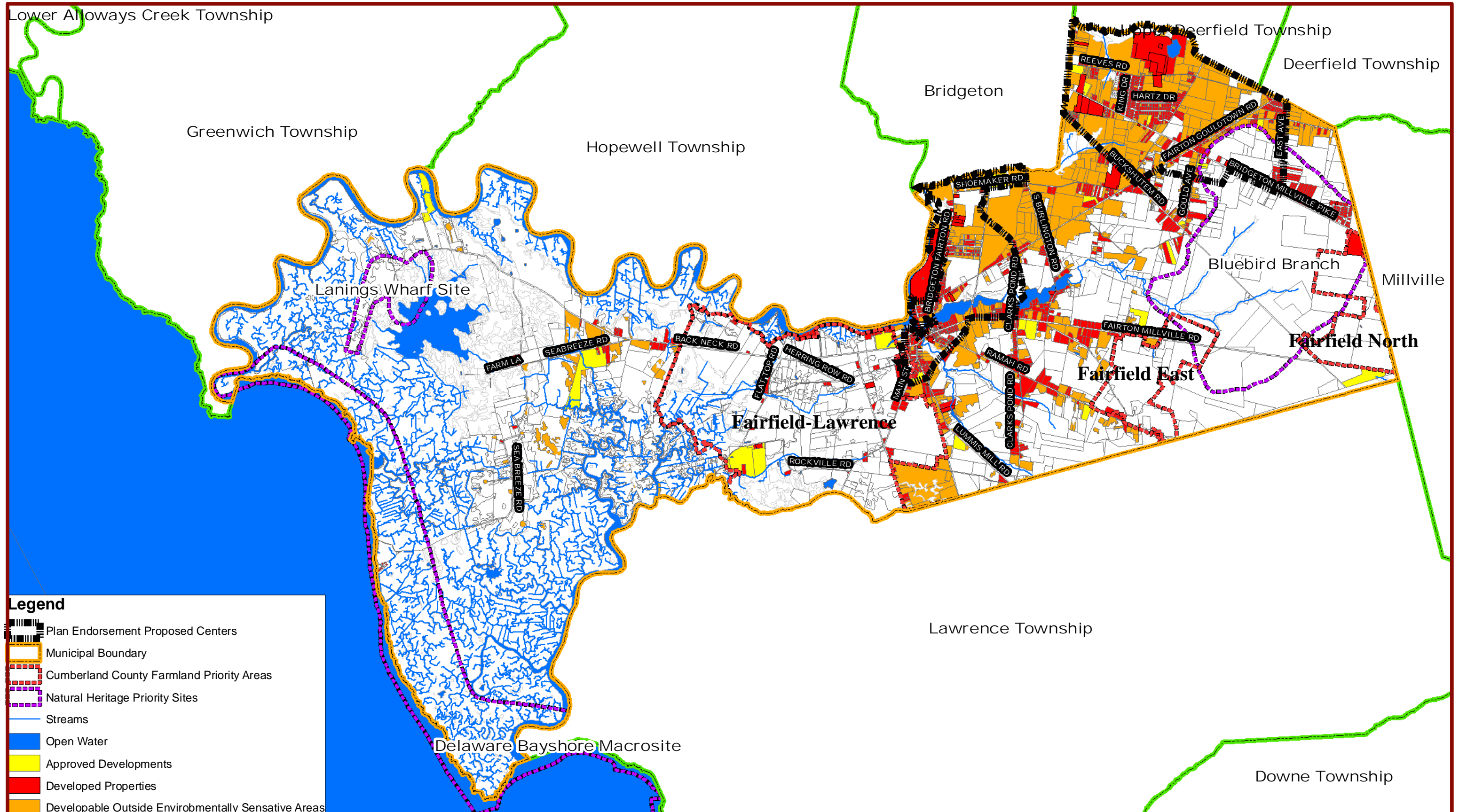
Parcel Data: Cumberland County Planning Department
 DVRPC data

Scale: 1" = 1 mile
 Date: May 7, 2010
 Proj: FT2010
 Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP AICP #6054

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Fairfield Township
 Developable Properties Outside
 Environmentally Sensitive Areas and Ag Priority Areas Map
 Map 12

1 0.5 0 1 Miles



Legend

- Plan Endorsement Proposed Centers
- Municipal Boundary
- Cumberland County Farmland Priority Areas
- Natural Heritage Priority Sites
- Streams
- Open Water
- Approved Developments
- Developed Properties
- Developable Outside Environmentally Sensitive Areas

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Developed and Developable Properties Outside Environmentally Sensitive and Ag Priority Areas Map
 Parcel Data: Cumberland County Planning Department
 DVRPC data
 Scale: 1" = 1 mile
 Date: May 7, 2010
 Proj: FT2010
 Prepared By: Leah Furey PP AICP #5851 Ryan Conklin PP AICP #6054

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Fairfield Township
 Developable and Developed Properties Outside Environmentally Sensitive Areas and Ag Priority Areas Map
 Map 13

1 0.5 0 1 Miles