

CRAMER HILL WATERFRONT PARK MASTER PLAN

Cooper's Ferry Development Association, Inc. • Cramer Hill Community Development Corp.
WRT—Planning, Urban Design, and Landscape Architecture
Dresdner Robin—Environmental and Engineering

The Cramer Hill Waterfront Park Plan was completed with contributions from the individuals, organizations, and public sector entities listed below.

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Eva Vlamis, Camden Greenways Inc.

Rails to Trails Conservancy

All who volunteered their time and opinions to complete surveys, attend interviews, focus groups and public meetings.

In Memory of S. Thomas Holmes III, who envisioned the Cramer Hill Waterfront years ago.

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Executive Summary

This waterfront park master plan represents a long-range community-driven vision for the redevelopment of Cramer Hill's waterfront. This vision is built upon the community's desire for a waterfront that is accessible to residents and visitors alike, incorporates a range of new recreational opportunities, and balances mixed-use development with the preservation and enhancement of an incredibly unique back channel environment. This renewed riverfront will offer recreation and respite, attract and support small businesses and sustain a vital ecosystem with a variety of plant and animal species. Over half of all waterfront land considered in this plan will be dedicated to open space and will be intrinsically connected to the reinvigorated "village" of Cramer Hill. Cramer Hill residents will be able to take pride in and stewardship of an exceptional waterfront park.

Currently, there is no public access to any part of the Cramer Hill waterfront. The stunning views across the still back channel waters, over the trees of Petty's Island and the mighty Delaware to the skyline of Philadelphia are hidden by landfill, industrial uses and fences. But this plan marks a growing realization of the untapped potential of the Cramer Hill waterfront. Petty's Island has just been deeded to the Natural Lands Trust of the State of New Jersey, as a conservation easement dedicated in perpetuity—making way for extensive environmental remediation and investment in visitor amenities. While the timeline for those changes spans two decades, the time for investing in Cramer Hill is now, so that the most positive, supportive relationship between mainland and island enhancements can be realized.



Right:
View of proposed Cramer Hill Waterfront
Park and mixed-use development from
North Camden.

This plan, the Cramer Hill Waterfront Plan, presents the Cramer Hill neighborhood's vision for its waterfront and a strategy for achieving that vision. Cooper's Ferry Development Association (CFDA), the private non-profit corporation charged with creating and implementing a comprehensive revitalization plan for the central Camden waterfront, has, along with key partners, coordinated the planning process for the Cramer Hill waterfront. Those partners include the Cramer Hill Community Development Corporation (CHCDC), the NJ Department of Environmental Protection, City of Camden, Camden County Parks Department, Camden Greenways Inc., Salvation Army, New Jersey Conservation Foundation, and neighborhood stakeholders.

The Cramer Hill Waterfront Plan was funded through a grant by the William Penn Foundation. With these funds, CFDA engaged the interdisciplinary planning and design firm, Wallace Roberts & Todd (WRT) along with Dresdner Robin, who provided engineering expertise as part of the core consulting team. S.T. Hudson Engineers provided analysis of edge conditions and existing wetlands. This waterfront plan was developed in a coordinated effort with the creation of a neighborhood plan that was spearheaded by CHCDC and its consultants Interface Studio and Lamar Wilson Associates. These two plans are complementary and fit together as one seamless vision for the community.





Left to right:

Manny Delgado of the Cramer Hill Community Development Corporation describes the process to create a resident driven blueprint for change.

The Camden Promise Charter School band welcomes the historic occasion.

This team collaborated with the project stakeholders and community extensively to develop a plan that reflects the aspirations of residents, enhances and leverages the site's assets and brings the highest level of sustained support. The plan's elements provide residents and stakeholders with the tools necessary to achieving their vision for the waterfront. Plan elements include analysis of existing conditions, opportunities and constraints, waterfront development principles and strategies, project precedents and conceptual illustrations, a land use and development framework, an access and circulation framework, conceptual park programming, design guidelines, an implementation phasing strategy and cost estimates.

Throughout the planning process, the residents of Cramer Hill have offered their commitment to enhancing the neighborhood, their diverse ideas and enthusiastic engagement. Community input on park programming was assessed and verified through surveys and community meetings. Through the civic engagement process, residents also developed six plan principles to guide development and evaluation of the plan. Those principles are:

- Create a public waterfront amenity that is physically and visually accessible.
- Design spaces and recreation amenities geared towards a wide range of users.
- Provide safe gathering spaces.
- Highlight Cramer Hill's natural assets through resource preservation and environmental education.
- Honor the neighborhood's rich cultural heritage and diversity.
- Plan for local investment and employment opportunities.

Left to right:

Students at St Anthony of Padua School express their views for the future of their community.

Local politicians and agencies show their support for a plan that represents the community's vision.

Thomas Corcoran and Jenny Greenberg of CFDA describe the waterfront master plan.

Student Artwork and Community driven plans for the revitalization of the Cramer Hill Neighborhood and Waterfront are on display at the May 11th Unveiling.





The Cramer Hill Waterfront Park will be a contiguous waterfront park system that extends along the length of the Cooper River and Delaware River Back Channel in Cramer Hill and encompasses five unique sub-character areas. These areas are:

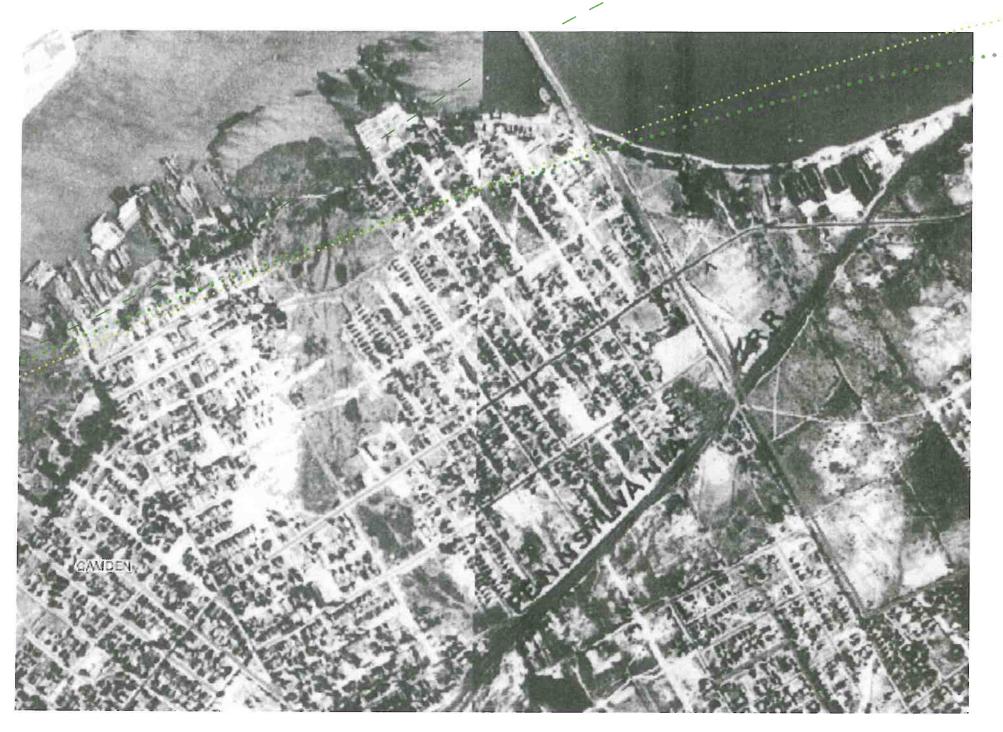
- The Cooper River Greenway
- Community Park at State and Harrison
- The 27th Street Waterfront Park
- Cove Park Catalyst Project
- Back Channel Park

The Cramer Hill waterfront has the potential to become a transformative economic, environmental and recreational asset for community residents, as well as a truly unique regional waterfront destination. Strategic investments that capitalize upon the waterfront's locational advantages could bring sustained investment and enhancements for years to come.









A Brief History of Early Cramer Hill

Cramer Hill is one of Camden's oldest neighborhoods, established in the 1880s as Stockton Township. The "Hill" in Cramer Hill has been said to refer to the rise in elevation north and west of 27th and Federal Streets. The attraction of open space and recreation was a great influencing factor in the development of the area we now know as Cramer Hill. In 1886, Samuel H. and Emmor D. French opened the Stockton Rifle Range and Stockton Park as a pleasure resort at the current location of Federal Street and Westfield Avenues. The nearly 90-acre park complex was frequented by urban middle-class vacationers who travelled from Philadelphia and Camden City via stage coaches and the West Jersey Ferry to enjoy this rural amusement park. The park included facilities for tennis, cricket, a band pavilion and boating on an artificial lake.

The park introduced urban dwellers to rural Stockton Township. Following on the early success of Stockton Park as a recreational destination which drew thousands of visitors, John Wright and his business partner Alfred Cramer purchased a large tract of land near Stockton Park for development. Wright's development, Wrightsville, on the east side of Cooper's Creek, proved so successful that Alfred

Cramer went on to form his own company. Cramer surveyed over 3,000 building lots to organize Cramer Hill, Pavonia, North Cramer Hill and a number of other housing developments consisting of brick row houses, single family houses and shops. Cramer offered easy credit terms to mechanics, tradesman and skilled workers from Philadelphia's urban neighborhoods to his new suburban settlement. In 1888 the Pennsylvania Railroad's Pavonia Car Works, Shop and Freight Yard at 27th and Howell opened, encouraging greater settlement of skilled workers. In May of 1889, a ferry service at the foot of 27th Street to Otis Street in Philadelphia was started to bring residents of Cramer Hill to work in the industrial establishments of the Kensington District of Philadelphia. In 1894 Stockton Township annexed Pavonia, Cramer Hill, Dudley, Wrightsville, and Rosedale.

By 1895 the township located primarily between Federal Street and the Delaware River had grown in size to 8,600 people but was largely residential with few recorded manufacturers. A number of services were present at the time including two post offices, a ship building firm, one jail with 3 cells, ten police officers and one police chief. Later as the township grew, business and industry grew to include a chemical fertilizer plant, textile mills, soap making factory, and a very successful brick and terra cotta kiln. Commercial activity along the Delaware River included the Noecker, Rickenbach and Ake Shipyard located at the foot of 27th Street, as well as a number of businesses and factories located along the rail line and on River Avenue. By the end of the 19th century, Cramer Hill had developed the physical economic and sociopolitical infrastructure to function as an independent urban village. In 1899 the state joined Stockton Township to the City of Camden as the eleventh and Twelfth Wards of East Camden. Although no longer an independent township, Cramer Hill continued to have the characteristics of an urban village.

Throughout the 19th century, Cramer Hill continued to grow, matched by increased prosperity in Camden. Shipbuilding was the dominant industry in Cramer Hill before and during World War I. Following the end of naval procurement orders, small shipyards in Cramer Hill survived on barge construction and small boat repair. Following World War I, Camden suffered economically. Never fully recovering, by the close of the 20th century Camden was one of the nation's poorest cities and in desperate need of redevelopment. The economic downturns that impacted Camden also had an impact on Cramer Hill in creating significant loss of jobs, population decline. increasing vacancy and diminished community services. As a result, what was once a vibrant waterfront village became a neighborhood separated from its waterfront by large tracks of vacant and underutilized land that has served as the City's dumping ground.

Over the years, Cramer Hill has stabilized and is now home to a diverse population that includes a large number of Hispanic families and recent immigrants as well as those who have called Cramer Hill home for generations. Cramer Hill's current residents still reflect the early racial diversity that existed in the area, with its early population of minority inhabitants and German descendents.

In 2006, a \$1.2 billion development project was proposed by Cherokee Investment Partners for Cramer Hill. The City of Camden adopted a redevelopment plan that would have enabled it to designate Cherokee as the master developer for Cramer Hill. The redevelopment plan proposed construction of 5,000 new homes, over 5000 square feet of retail space, marinas, an 18- hole public golf course, a new bridge over the Cooper River, and was projected to create over 1,600 jobs. However, the redevelopment plan also called for the relocation of roughly 1,200 households raising fear of gentrification.

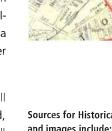
The idea was to spearhead redevelopment on a scale that would kick Camden's overall redevelopment into higher gear.

After sitting on hold for many years, in 2006, Supreme Court Judge Michael J. Kassel threw out the 2003 redevelopment plan on a procedural issue. The redevelopment planning process was restarted soon after when the City's Department of Development and Planning engaged a firm to complete a new study by 2008.

In January 2004, Joan Kroc donated \$1.5 billion to the Salvation Army to build and partially fund Kroc centers across the country to serve communities in the most need. After passing a rigorous, competitive application process, Camden, in the area of Cramer Hill, was chosen in 2004 as one of eight nationwide cities to receive funding for a Ray and Joan Kroc Corps Community Center. \$54 million was awarded for the project, \$27 million towards construction and another \$27 million designated for operations and programming. The Salvation Army is running a capital campaign to raise \$13 million, the balance needed for the center's construction and endowment. The new establishment will include a family enrichment center with affordable family services and programs, a learning and technology center with computer training and multi-purpose classrooms, a visual and performing arts theater, aquatic center, recreation center and town plaza.

In addition to the Kroc Center, investment along River Avenue, infill housing constructed by CHCDC and the coordinated Neighborhood, Waterfront and Human Capital Plans demonstrate that Cramer Hill today is poised for significant positive changes and a new Cramer Hill Redevelopment Plan.





Sources for Historical Background and images include:

Coopers Ferry Development Association, Interface Studio, Camden Historical Society. www.dvrbs.com/Camden/CamdenNJ-CramerHill.htm, Camden County NJ by Jeffery M. Dorwart, and Cramer Hill Tomorrow

Joseph McMasters buy 16 acres of McKeen's land. They laid out a townplat with 240 building lots.

(1874) The first house and store is built in Cramer Hill.

(1874) Alfred

Cramer and

(1888) The Pennsylvania Railroad's Pavonia Car Works, Shop and Freight Yard at 27th and Howell open.

(1886) Samuel H. and Emmor D. French open the 90-acre Stockton Rifle Range and Stockton Park as a pleasure resort at the current location of Federal Street and Westfield Avenues.

(1889) A ferry service is started from the foot of present day 27th street to Otis street in Philadelphia, transporting residents from Cramer Hill to industrial establishments in the Kensington District of Philadelphia.

(1895) Stockton Township Population reaches 8,600.



(1930) Cramer Hill.

(1894) Stockton Township annexed Pavonia, Cramer Hill, Dudley, Wrightsville, and Rosedale.

(1834) The Camden-Amboy rail line opens up connecting Southern New Jersey to New York.

......1875......1900......1900.......1925.......

(1876) Joseph Cramer, the brother of Alfred, opened a general

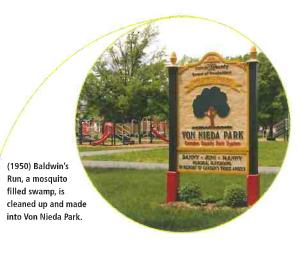
store.



(1899) The state joined

Stockton Township to the City of Camden as the Eleventh and Twelveth Wards of East Camden (1902) City Water Works Reservoir fell and caused severe water damage.







(2002) New Jersey assumes control of Camden's day-to-day operations under the Camden Municipal Rehabilitation and Recovery Act.



(2006) Camden is chosen to receive one of eight Kroc Corp Community Centers.

1950.



(2002) Cramer Hill Tomorrow, a neighborhood development plan is adopted by Camden Planning Board.

2000

(2004) Cherokee Investment Partners plan for extensive redevelopment is presented to the public leading to public opposition

Cramer Hill Waterfront Park Master Plan Background

In 2001, the Cramer Hill Neighborhood Advisory Council (NAC), a coalition of residents, businesses, churches and organizations active in the Cramer Hill neighborhood, generated a participatory neighborhood plan called Cramer Hill Tomorrow. The plan set forth a broad concept for the redevelopment of the two hundred acres of vacant and under utilized waterfront land along the Delaware River Back Channel and the Cooper River with a linear waterfront park and residential and mixed-use development. The plan called for creating riverfront access for the community, which had been completely cut off from the waterfront for decades.

To help further this plan, the NAC invited Cooper's Ferry Development Association (CFDA) to provide technical assistance on the creation and implementation of a more detailed waterfront master plan. CFDA became involved, sharing the expertise it developed over a 20-year period on the downtown Camden Waterfront. With funding from Fleet Bank, CFDA helped the NAC to transform itself into a 501(c)3 non-profit organization called Cramer Hill Community Development Corporation (CHCDC). CFDA implemented brownfield investigations on many of the waterfront sites and began to look at how to address one of Cramer Hill's biggest challenges, the remediation of the Harrison Avenue Landfill, an 85 acre former municipal landfill that had been inactive since the 1970s but had never been officially closed or capped.

In 2003, the City of Camden took the lead on an effort to redevelop Cramer Hill with the selection of OENJ Cherokee Investment Partners. a nationally-recognized brownfield developer that proposed a highly ambitious \$1.2 billion redevelopment project for Cramer Hill. The proposal entailed the development of an 18-hole golf course on the landfill and several thousand units of luxury waterfront housing. The City of Camden approved a Redevelopment Study and Plan that would have empowered it to take roughly 1,200 residential properties. The plan met multiple legal challenges, community opposition and public outcry. After several years of controversy, plan revisions, and court decisions and appeals, Cherokee withdrew its interest. The Cramer Hill community remained wary and distrustful of planning or development efforts and no work addressing the waterfront took place for several more years.

In 2007, the City and Camden Redevelopment Agency (CRA) determined that it was time to initiate a new redevelopment planning process in Cramer Hill, this time based on resident and stakeholder input, which would not designate any private occupied properties for acquisition through eminent domain. The CRA hired Urban Strategies, LLC, to prepare a Human Capital Plan that would complement the City's Redevelopment Plan by addressing the social needs of the neighborhood, including job training and employment.





Community meetings throughout the process were well attended and represented a broad cross-section of the neighborhood.

At the same time the CHCDC secured funding for a neighborhood plan from the Wachovia Regional Foundation and the NJ Neighborhood Revitalization Tax Credit Program. While the City's redevelopment plan would address big picture land use and zoning questions, CHCDC believed that there was also a critical need for a visually compelling, updated, community-driven plan to help quide and prioritize its work.

As CHCDC prepared to begin this work, CFDA saw an opportunity to coordinate a waterfront park planning process on a parallel track with the neighborhood plan. With support from the William Penn Foundation, CFDA would work with Wallace Roberts & Todd, LLC, along with Dresdner Robin, to develop a concept plan for a linear waterfront park that would extend along the length of the Cooper River and Delaware Back Channel in Cramer Hill. The objectives of the plan included maximizing waterfront access with the creation of a contiguous multi-use greenway trail, extending key neighborhood streets to the river, programming of passive and active recreational facilities and identifying areas for waterfront development. The CHCDC and CFDA have worked closely to re-engage residents, earning their trust and generating a unified plan that addresses the waterfront and core neighborhood with an exciting long-term vision for tomorrow, while also developing short-term projects that can make a difference in the neighborhood today.

CFDA and CHCDC have also coordinated with City/CRA and Urban Strategies throughout the process, participating in one another's community meetings and public outreach efforts.

Recognizing the host of environmental concerns that exist along the Cramer Hill waterfront, including a pair of nesting bald eagles, wetlands, and environmental contamination, and to ensure that the Cramer Hill Waterfront Park Master Plan was realistic and consistent with state and federal environmental regulations, CFDA, along with CHCDC and the City, also worked closely with the NJ Department of Environmental Protection (NJDEP). CFDA initiated conversations with the NJDEP at the outset of the process and secured commissionerlevel commitments to participating in the process in order to develop a plan for the waterfront that balances sensitive habitats with the need for environmental cleanup, public waterfront access and new development.

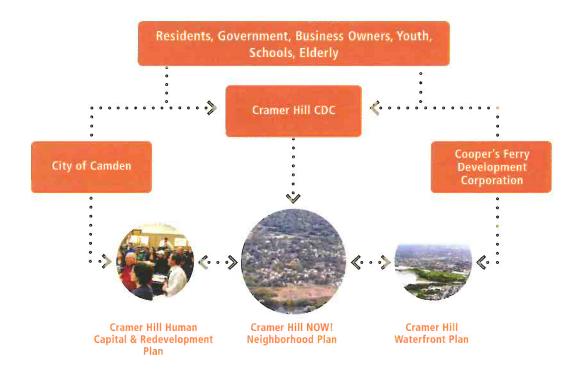
NJDEP was already engaged in Cramer Hill as a result of the ambitious \$35 million Salvation Army Kroc Community Center project slated for a 24-acre portion of the Harrison Avenue Landfill. NJDEP had become deeply involved on the remainder of the Harrison Avenue Landfill, with environmental investigations and the remediation of a "hot spot" of residual industrial waste near State and Harrison Streets. The familiarity that NJDEP had developed with the landfill site and the Cramer Hill waterfront allowed it to engage readily in a detailed level of discussion about the possibilities for the balance of the landfill and the waterfront.

The outcome of this complex process is a plan that reflects community needs and values, is consistent with City and State objectives and policy, and provides a compelling long-term vision complemented by short-term phased steps for implementation.

The Waterfront Planning Team

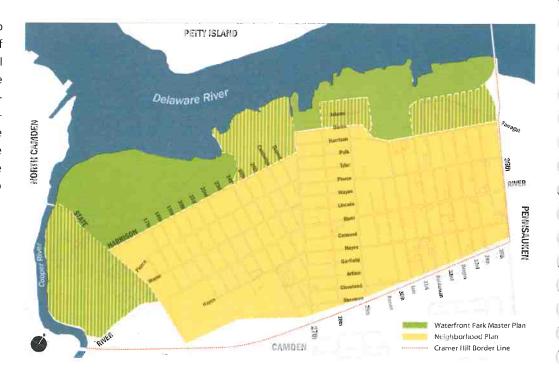
Through a Request for Qualifications and Proposals (RFQ/P) process, CFDA, along with a selection committee including CHCDC, Camden County Parks Department, and neighborhood residents, selected the team of Wallace Roberts & Todd (WRT) and Dresdner Robin to provide visioning, planning and environmental civil engineering services for the development of the waterfront park master plan. WRT's work with CFDA and Save Our Waterfront on the North Camden Waterfront Park plan served as instructive background for the Cramer Hill planning process.

Cramer Hill is unique among the Delaware's urban waterfronts because of its location along the back channel of the Delaware River and the lower reaches of the Cooper River. This location provides significant opportunities for ecological restoration, recreation and place-making. The design of a sensitive waterfront park master plan that pays attention to the neighborhood's needs while respecting and enhancing the existing ecological habitat has the potential to change the market value of the entire neighborhood and create a regionally significant open space amenity.



Three Parallel Planning Processes

In addition to the waterfront planning process there were two other concurrent planning process. CFDA, CHCDC, and the City of Camden worked together to ensure that the processes were well coordinated. All three of these efforts included an assessment of the existing conditions, both physical and human, and an outreach strategy that incorporated stakeholder interviews, workshops, community meetings and surveys. Many of the community meetings were conducted collaboratively to ensure participation and to maximize residents' investment in the process. A few events, as well as the surveys, were conducted independently in order to bring focus to specific waterfront, neighborhood and human capital priorities.



Defining the Plans

The Waterfront Park Master Plan

CFDA engaged WRT for planning and urban design and Dresdner Robin for engineering services to develop a waterfront park plan for the entire Cramer Hill waterfront. The planning effort sought to create a compelling vision that capitalizes upon the area's special backchannel environment, creates a pioneering environmental asset and identifies opportunities for future mixed use and residential development. These goals are envisioned to support a healthy, vibrant community that has full access and enjoyment of their remarkable waterfront assets.

Neighborhood Plan- Cramer Hill NOW!

CHCDC engaged Interface Studio to develop the Cramer Hill NOW Neighborhood Plan. The plan addressed quality of life, transportation, infrastructure, housing, commercial development, recreation, and open space. While the neighborhood plan focused on the core neighborhood, WRT and Interface Studio worked in sync to design key parcels where the neighborhood and waterfront intersected in order to create a comprehensive vision for the entire Cramer Hill community.

Human Capital Plan

In the fall of 2006, the City of Camden and its philanthropic partners solicited Urban Strategies to explore how Camden residents could best benefit from the extensive physical redevelopment processes planned for the city. The Human Capital Plan sought to elicit and support development of the individual knowledge, skills, and abilities needed to contribute to the community's growth. This plan was developed to complement the City's new Cramer Hill redevelopment plan.

All processes identified overlapping and complementary sets of goals.

Waterfront Park Master Plan Community Goals:

- Create a public waterfront amenity that is physically and visually accessible.
- Design spaces and recreation amenities geared towards a wide range of users.
- Provide safe gathering spaces.
- Highlight Cramer Hill's natural assets through resource preservation and environmental education.
- Honor the neighborhood's rich cultural heritage and diversity.
- Plan for local investment and employment opportunities.

Neighborhood Plan Guiding Principles:

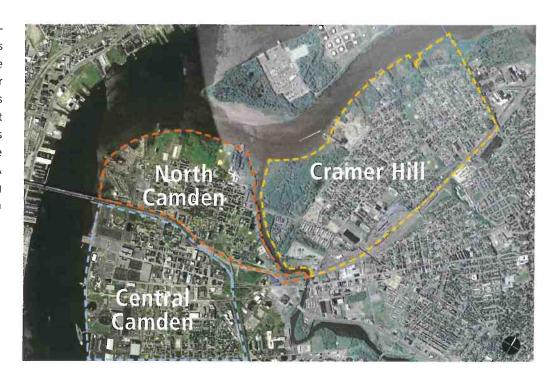
- Create a resident-driven blueprint for the community
- Create a social service network tailored to Cramer Hill
- Connect to the Waterfront
- Revitalize River Avenue
- Improve local parks and schools
- Create a mixed-income community
- Promote Cramer Hill as a cleaner and safer community for families

Human Capital Plan Priorities: (in order of importance placed by stakeholders)

- Implement a neighborhood safety clean-up to increase real and perceived safety and security.
- Increase availability of affordable housing
- Develop job training and job placement programs and educational opportunities for adults
- Provide funding for home improvement
- Reestablish nearby retail and professional services
- Increase cross-sector education and communications
- Increase police presence
- Partner with affordable child care providers
- Create youth programs
- Improve community centers, recreational facilities and parks

The Camden Waterfront

The City of Camden is primed to take advantage of its scenic location along the Central Delaware River. With significant investments in the Downtown Camden waterfront, the vision established in the North Camden Waterfront Park Plan and now the master plan for the Cramer Hill Waterfront, Camden has begun to establish itself as a waterfront city that capitalizes on its natural assets for significant economic and recreational development. Making great public places out of previously abandoned and underutilized brownfields is the driving impetus at the core of this transformation. WRT and CFDA have collaborated over the past twenty years to develop the guiding visions for all three waterfront areas. Primary programming for each reach includes:











North Camden



Cramer Hill

Central Camden

The Central Camden waterfront is envisioned as a mixed-use master planned development anchored with family entertainment venues as well as office buildings, housing, commercial, restaurants and a hotel/conference center. Current destinations in the Central Camden waterfront include, outdoor amphitheater for music and cultural events at Wiggins Park and Marina, a waterfront promenade, Camden's Children's Garden and Adventure Aquarium, Campbells Field, the Susquehanna Bank Center, Battleship New Jersey Museum, RiverLink Ferry, One Port Center, Ferry Terminal Office Building, and Victor Building.

North Camden

The North Camden waterfront proposes urban waterfront parks with family focused recreation, mixed-use development, significant tidal wetlands along with restored upland habitat and nature trails

Cramer Hill

The Cramer Hill waterfront is envisioned as passive and active recreation with substantial habitat areas integrated with mixed-use development.

Above Central Camden Image Sources:

Wiggins Park: "wxpn, all about the music." photo. manycats4me. available from Flickr: http://www.flickr.com/photos/manycats/30488708/

Campbell's Field: "Kris takes Campbell's Field by storm!" photo. crystalb. available from Flickr: http://www.flickr.com/photos/crystalb/3487903782/

The Cramer Hill Neighborhood

The Cramer Hill neighborhood incorporates the Cramer Hill/Pavonia and Beideman neighborhoods. Cramer Hill extends north to 36th Street and the border of Pennsauken, east to the Pavonia/ Conrail railroad lines, south to the lower reaches of the Cooper River, and west to the back channel of the Delaware River. Cramer Hill is a mediumto low-density neighborhood with a resident population of 10,035 in 2000 (Cramer Hill Neighborhood Plan). Vacancy is common within the neighborhood, with vacant lands comprising 35% of the neighborhood (Cramer Hill Neighborhood Plan). The number of vacant lots, dilapidated buildings and abandoned structures qualifies a significant portion of Cramer Hill as an area "in need of redevelopment". It is clear that significant investment and rehabilitation is needed to prevent further deterioration and disinvestment. The waterfront provides an opportunity for the needed level of investment.

The Study Area—The Cramer Hill Waterfront

The Study Area includes the entire waterfront bound by State Street at the Cooper River following the Back Channel northeast to 36th Street and extending inland to Harrison Avenue. The area is characterized by a number of developed and undeveloped parcels with a few parcels in commercial activity including a recycling business, waterway freight transportation, a private marina, and a number of brownfield properties including the former Camden City landfill which operated from 1952–1971. Overgrown vegetation dominates the majority of the undeveloped parcels while a number of locations offer magnificent views of the Back Channel creating a calm pastoral



setting. There are a number of eco habitats including tidally influenced and non tidal emergent wetlands, forested wetlands, upland field vegetation and upland urban forest. The state-listed protected bald eagle has been documented as nesting within the study area boundaries and NJDEP has identified critical habitat and foraging areas for the bald eagle along the waterfront.







Community Meetings: A series of meetings enabled stakeholders and community members to review the plan's progress and provide feedback.

The Community Engagement Process

In order to create an effective visioning process for what the Cramer Hill waterfront can become, a focused community engagement process was designed to reach out to groups within the community. Deliberate and focused efforts were made to engage the range of ethnic groups within the neighborhood, with specific emphasis placed on Latino residents, who account for 67% of Cramer Hill's residents, and youth, who make up 38% of the neighborhood residents (US Census). To encourage participation in the master planning process, outreach efforts included a series of evening community meetings held in schools and churches within the neighborhood, as well as focus groups at schools and churches. The meetings were advertised through fliers, mailings, and strategically placed billboards. All meetings included presentation materials that were presented with clear graphics and Spanish translations to maximize comprehension amongst all participants.

A survey was created to help residents prioritize waterfront recreational needs and was distributed at neighborhood meetings as well as at schools and churches. A total of 188 responses were received, the summary of which can be found on page 104. In addition to the survey, comments at the community meetings and breakout sessions were recorded and can be found on page 106.

The community engagement process also had the support of a Steering Committee, which represented several community civic institutions, schools and faith based organizations, as well as the City, County, and New Jersey Department of Environmental Protection. This Steering Committee served as a sounding board throughout the process and ensured that varying perspectives and community efforts throughout the neighborhood were represented in the waterfront planning process.

Waterfront Park and Neighborhood Plan Community Meeting Schedule

December 15, 2008

Sharp Elementary School

1st Park-Focused Community Meeting

- present site analysis
- distribute programming survey
- elicit goals

January 26, 2009

Vets Middle School

2nd Community Meeting (Park and Neighborhood Plan)

- · confirm goals, vision, and planning principles
- survey results

February 16, 2009

Christus Lutheran Church

3rd Community Meeting (Waterfront Park Master Plan)

present preliminary plan for comments

April 20, 2009

Christus Lutheran Church

4th Community Meeting (Waterfront Park Master Plan)

• present revised concept plan and illustrative for comments

May 11, 2009

Cramer Hill Community Center

(Von Neida Park) and Sharp School

Celebrations of Completed Waterfront and Cramer Hill Now

Neighborhood Plans

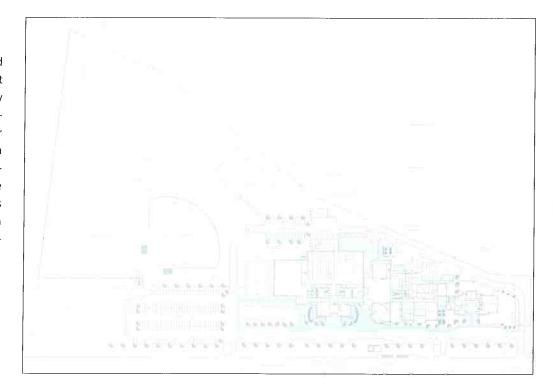
Good Things Are Coming to Cramer Hill!

The Salvation Army Ray & Joan Kroc Corps **Community Center**

The Salvation Army Camden Corps, with the assistance of Lockheed Martin and the Greater Camden Partnership, won a successful grant application for a new \$35 million dollar full-service community health and recreation facility located on Harrison Avenue on a 24acre portion of the former Harrison Avenue Landfill site. The center is currently in the design phase. The NJDEP approved remedial Action Workplan proposes to cover the entire site with a two-foot thick engineered cap (including the building and playing fields) and remove all solid waste from the Kroc Center building footprint. The center is slated to break ground in late 2009 with an estimated construction schedule of 24 months. Upon completion, the Kroc Center will provide an array of services geared towards families and youth.

The KROC Center will include:

- A Family Enrichment Center offering low-cost, high quality family enrichment programs including day care, after school programs, teen center, and senior citizens programs.
- A Learning and Technology Center including a library resource center, computer/technology access and training and multipurpose classrooms.
- Visual and Performing Arts Theater including public performances and exhibits.
- A Town Plaza that will serve as a community gathering space and reception area. Amenities will include a coffee shop and information booth.
- An Aquatic Center with an indoor pool.
- A Recreation Center offering a variety of fitness and programs and indoor and outdoor sports fields.







Above and left: Renderings and plan of the Salvation Army Ray & Joan Kroc Corps Community Center. Image Source: Kitchen & Associates

Waterfront Park Master Plan **Community Objectives:**

Through the community meetings, breakout sessions, and surveys, residents and plan partners worked together to develop six overarching plan objectives to guide the development of the Waterfront Park Master Plan.

CREATE A PUBLIC WATERFRONT THAT IS PHYSICALLY AND VISUALLY ACCESSIBLE.

Residents repeatedly expressed the importance of developing continuous public access to the waterfront and connecting the waterfront to the existing neighborhood fabric. Although Cramer Hill is a community bordered by rivers, few residents have had opportunities to get to the water's edge. The master plan proposes extending several neighborhood streets directly to the water in the most urban parts of the waterfront. In the areas of sensitive habitat, permanent and seasonal trails connect to outlooks and boardwalks to maximize access while protecting habitat.

DESIGN SPACES AND RECREATION AMENITIES FOR A WIDE RANGE OF USERS.

Within such a culturally diverse community with a large youth population, residents repeatedly voiced that new open space amenities should meet the needs of the neighborhood's diverse population, which has few other recreational outlets. In addition to design, programming will be key in creating safe, usable places that work for the most active as well as those who may have limited mobility.

PROVIDE SAFE GATHERING SPACES.

Throughout the community engagement process for both the Neighborhood and Waterfront Plans, safety has been one of the most consistent concerns of the community. The waterfront master plan and neighborhood plan evaluated a number of options for improving safety, including: design solutions such as park and street lighting; programming; neighborhood-watch/crime prevention programs such as community "Angel Watch" as well as increasing institutional support efforts, such as urban park rangers, more police presence and enforcement of curfew legislation.

HIGHLIGHT CRAMER HILL'S NATURAL ASSETS THROUGH RESOURCE PRESERVATION AND **ENVIRONMENTAL EDUCATION.**

Cramer Hill residents are proud of their village-like neighborhood with its natural waterfront. Residents would like to protect the habitat areas of this unique waterfront environment where bald eagles, deer and other species can thrive. The implementation of the many proposed wetlands and stormwater management strategies will restore and strengthen a much degraded habitat and provide additional habitat areas. This restored environment can serve as the resource base which can link neighborhood residents and visitors to a wide range of environmental educational opportunities.

HONOR THE NEIGHBORHOOD'S RICH CULTURAL HERITAGE AND DIVERSITY.

Cramer Hill residents are proud of the cultural diversity of their community and enthusiastically support expression of that diversity in the design and programming of their waterfront.

PLAN FOR LOCAL INVESTMENT AND **EMPLOYMENT OPPORTUNITIES.**

Cramer Hill residents expressed their urgent need for jobs and economic development and want to ensure that every phase of the waterfront planning process provides employment opportunities for the local population. The waterfront master plan can address this by creating opportunities for compatible mixed-use development adjacent to parks and open space which can contribute to local investment and sustain a mixed-income community to support retail and commercial services. The Human Capitol plan outlines education and training efforts needed to ensure that Cramer Hill's residents will have the skills necessary to work towards rebuilding their community.







Surveys, community meetings and breakout sessions, enabled residents and plan partners to develop objectives guiding the development of the Waterfront Park Master Plan.





Regional Context

Cramer Hill enjoys a location that is directly along the Back Channel of the Delaware River, behind Petty's Island. It is one mile from downtown Camden and three miles from downtown Philadelphia.



Opportunities and Constraints

The location of the Cramer Hill waterfront, along the Delaware River Back Channel, provides opportunities for a high degree of ecological enhancement. The waterfront's extensive wetlands and mudflats also contribute to a rich pallet of plant and animal species. While these valuable habitats provide numerous opportunities for enhancement, there are anticipated challenges to balancing human activity with preservation of these delicate ecosystems.

Opportunity: Petty's Island

Petty's Island, officially part of Pennsauken Township, is an uninhabited 392-acre island with a long history of industrial development. In January 2009, the New Jersey Natural Lands Trust, a conservation arm of the State of NJ, agreed to accept the donation of Petty's Island from Citgo as a conservation easement granted in perpetuity. The conservation easement will allow the island to be preserved for natural open space and serve as a future regional destination for natural and cultural recreation. In addition to providing spectacular views of the Philadelphia, Camden and Pennsauken waterfronts, the island has an important tidal flat ecosystem that has been home to bald eagles, herons and a range of marine habitat. The creation of a future state park system at Petty's Island can expand to embrace the shores of Cramer Hill, creating a unique habitat within the Central Delaware River basin that is accessible to the extensive population of the Philadelphia metropolitan region. The impact on conservation and recreation could be immense. Island enhancements could serve as a model for the restoration and renewal of a significantly degraded environment and create park system, tourism and other recreational jobs. The significant amenity the island will provide will most likely increase demand for housing and other uses along the Cramer Hill waterfront.





Opportunity: Underutilized Land

HARRISON AVENUE LANDFILL

This City owned parcel was used as an active landfill between 1950 and 1970 and was not properly closed. Since the site has remained inactive over a long period of time significant field scrub and second-growth wooded areas are present giving the area an appearance of a very natural landscape. This appearance is misleading as the dump site has not been remediated and active illegal dumping has been noted along the edge of State Street.



FARRAGUT SPORTMAN'S ASSOCIATION

Marina (Site leased from City of Camden). The Marina includes a 500' dock, a small landscaped area with a couple of benches and picnic tables, an unpaved area used for boat storage and an existing 2-story building with restrooms and other marina services.



RIVERFRONT RECYCLING

This facility conducts on site crushing and material grinding and recycling. The expanded operation of this industrial facility has intruded on public right-of-ways and created significant site erosion. This is not a water dependent operation and may not be the best use of Cramer Hill's most central waterfront site.



27th AND DUPONT

Apart for some random dumping and waste piles, this 14 acre site has remained undeveloped since tidal flats were filled between 1967 and 1970 to create land.



NEFF MACHINE

This 0.6 acre site was used as a machine shop and manufacturing facility from around 1915 to 1988. Operations ceased in 1988 when the 2 story building and operations were destroyed by fire. The site currently remains vacant.



UNDERWATER TECHNICS SITE

This 8 acres site was used for ship building and marine-related activities until circa 1995 when the property was vacated. It features a nicely wooded cove that offers views to the river and visibility from Buren and the adjacent neighborhood. The site's central location creates an ideal access point for waterfront park access.



EXPRESS MARINE

Express Marine is the only operating water dependent industry located on Cramer Hill's waterfront and provides tug and barge transport. The site includes storage space, a number of barges and tugs and associated machinery. The site is buffered by dense vegetation on three sides.



TRUCKER TOWING

Since the early 1900's parts of this site were occupied with a variety of domestic dwellings and other structures. Portions of the property closer to the Delaware River Back Channel were reportedly filled with hydraulically dredged materials between 1962 and 1972. The property is currently vacant and wooded with some waste piles.



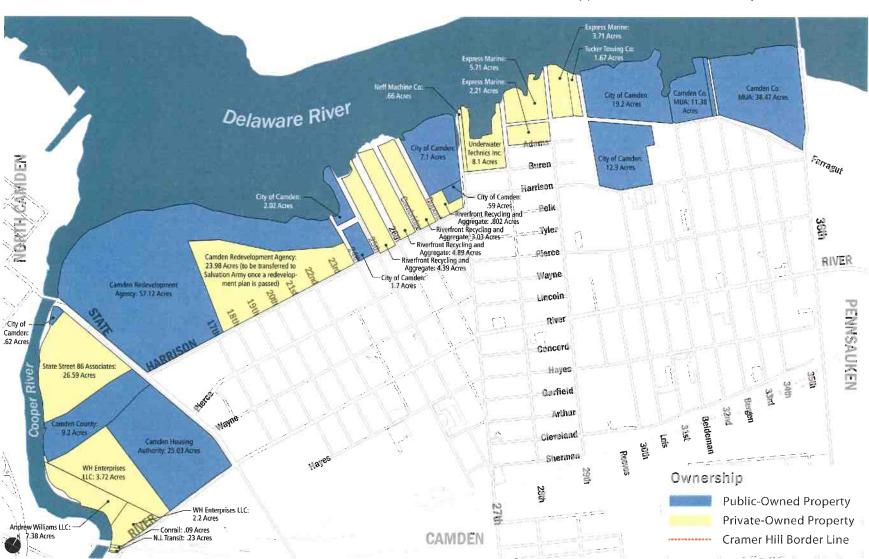
SJPC SITE (30th TO 32nd STREETS), CCMUA POND, AND CCMUA VACANT SITE (32nd TO 36th STREET)

The South Jersey Port Corporation (SJPC) Site comprises 7 lots for a total of 32.5 acres. These lots are owned by the City of Camden and are leased to the SJPC under a 40 year lease/service agreement dating back to 1992. The terms of the lease include the implementation of a wetlands mitigation project (two "ponds") and the use of these properties by the City of Camden provided that the use does not interfere with the mitigation improvements. Subsequently, approximately 4 acres were "constructed" as mitigation ponds. The pond and wooded areas have created valuable habitats for a number of bird species including the state-listed species, the Bald Eagle. Various waste piles and dumping areas are also present on the site. The site's location across Harrison Avenue from Von Neida Park can serve as a strong link between the neighborhood park and the waterfront. Further towards the northeastern end of the site are significant earthen mounds and significant areas of phragmites that may be an indication of the site's disturbance. With sensitive site planning additional wetland mitigation can expand the habitat areas and remediate the disturbed sites to create a valuable environmental education resource.



Opportunity: Ownership

Of the 200+-acre study area, 75%, or about 151 acres, is in public ownership. There are three active uses: Farragut Sportsmans Club, Riverfront Recycling, and Express Marine. The remainder is owned or leased by private landowners and is currently inactive.

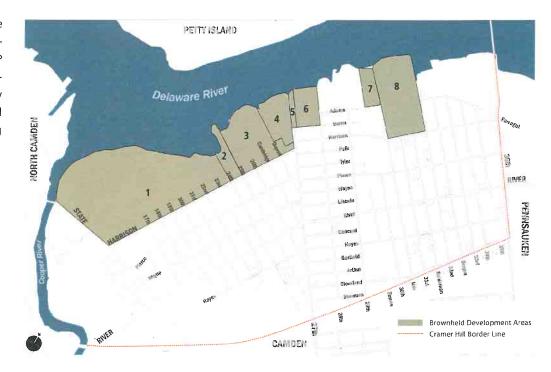


Opportunity: Brownfield Development Area

Cramer Hill has a number of properties along the waterfront that are currently underutilized. A total of eight properties (153 acres) comprise the Cramer Hill Brownfield Development Area (BDA). NJDEP uses this designation to help facilitate the investigation, remediation and reuse of these properties. They represent prime opportunity sites for new waterfront development and open space. A Brownfield Working Group which includes CHCDC and CFDA has been working towards the goal of redeveloping these sites.

- Harrison Avenue Landfill: A 85-acre landfill, currently inactive
- Farragut Sportsmens Club: A 6-acre site currently operating as a marina
- Delaware River Recycling: A 14-acre active facility
- Vacant Site 27th and Dupont: A 14-acre vacant site that is currently inactive (encroached on by adjacent recycling business)
- Underwater Technics: An 8-acre site that is currently inactive
- Neff Machine: A less than one-acre site that is currently inactive
- Tucker Towing: A 6-acre site that is currently inactive
- South Jersey Port Corp Wetlands Mitigation Pond: A 19-acre site that is currently inactive

The BDA designation signifies a cluster of contiguous brownfield sites with high potential for reuse. Preliminary environmental assessments on some of these properties, together with information from the NJDEP's publicly-accessible Geographic Information System's database, indicates varying levels of impacts to soil and in some cases groundwater. Future remediation will be required at these sites to allow public accessibility and usage.



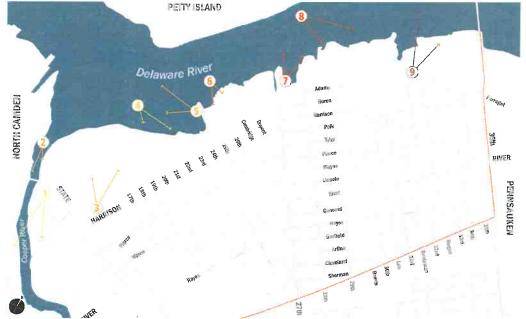
At the Harrison Avenue Landfill, the NJDEP has already conducted some soil remediation near the corner of East State Street and Harrison Avenue. Additional investigations and remedial design have been undertaken or are planned at the site as part of the final capping and closure of the landfill. Ultimately, this will provide a large area suitable for supporting open space and waterfront development opportunities.

Opportunity: Fantastic Views

The Cramer Hill Waterfront provides opportunities for views along the Delaware River, across to Petty's Island, and beyond to downtown Philadelphia.



















Opportunity: Calm Back Channel

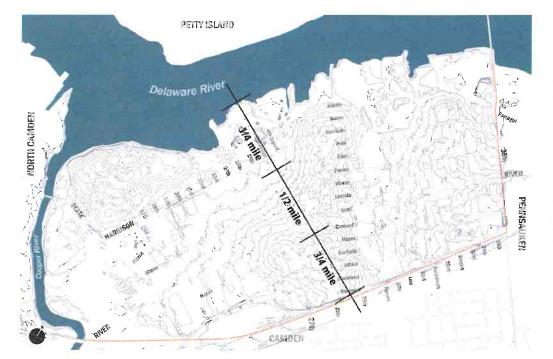
The Back Channel is protected from the main shipping channel of the Delaware River by Petty's Island. The shape of the Back Channel keeps the tidal currents at a lower velocity than the Delaware River main channel. Ship, barge and tug traffic do not utilize the back channel due to the limited depth of the water and the 36th Street bridge from Pennsauken to Petty Island. The shoreline's trees protect the back channel from winds making it ideal for canoeing and kayaking for much of the year.

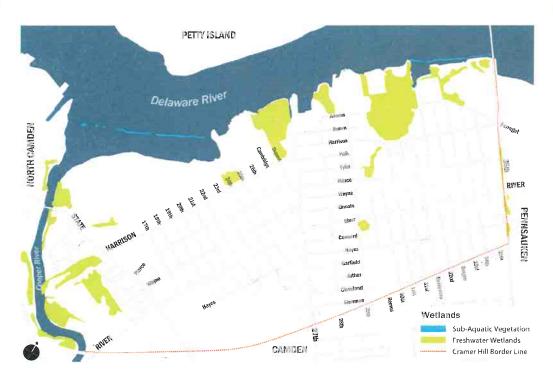
Opportunity: Small, Flat Areas for Community Use

The Cramer Hill Waterfront has relatively few areas with slopes over 10 degrees, except for a few areas along the landfill site and the Cooper River. The Harrison Avenue Landfill site provides over 13acres of relatively flat land on the corner closest to Harrison and State Street.

Opportunity: Potential Connections between Neighborhood, Amenities and Water's Edge-**Getting to the Water**

Although Cramer Hill is fortunate to have significant waterfront areas with potential for enhancement within walking distance of the entire neighborhood, access to the waterfront has been severely limited in recent decades. While there are numerous publicly-owned parcels of land, there are no current public parks or piers along Cramer Hill's 2.5 miles of waterfront. Farragut Marine, a 6-acre marina, offers magnificent views of the Back Channel, Petty's Island, Ben Franklin Bridge and Philadelphia skyline, but currently is a private facility.





Wetlands Source Data:

NJDEP Bureau of Geographic Information and Analysis 2002

The full extent of freshwater wetlands and tidally influenced will require additional delineation.

Opportunity: Wetlands Preservation, Enhancement and Creation

Freshwater wetlands provide a vital range of natural benefits:

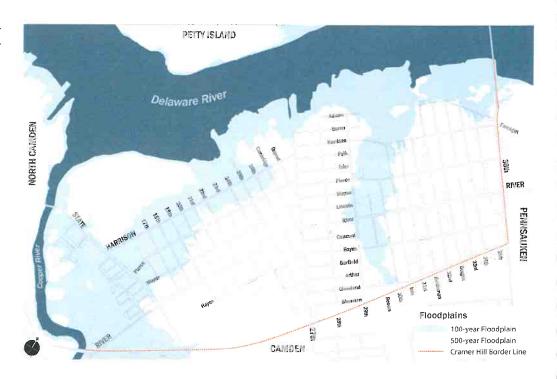
- Protect and store drinking water supplies through purification of surface and groundwater resources.
- Provide natural flood and stormwater damage, preventing loss of life and property through the absorption of runoff and flood crests.
- Serve as transitional zone between dry land and water courses, reducing soil erosion and creating essential breeding, nesting, spawning, and wintering habitats for a major portion of the State's fish and wildlife.
- Maintain a critical baseflow to surface waters through the gradual release of groundwater, particularly during periods of drought.

The Waterfront Park Master Plan proposes to not only protect existing freshwater wetlands—such as those near the State Street Bridge, at the 27th Street and Dupont Street property, and at the South Jersey Port Corporation Wetlands Mitigation site—but also to enhance and expand these wetland areas. New "constructed" wetlands are proposed within the Camden County Municipal Utilities Authority (CCMUA) parcel at the north end of the Park, following Farragut Avenue and 36th Street, and along the Cooper River stretch of the park. Other proposed wetlands are intended as stormwater wetlands, including those along the proposed bifurcated realignment of Harrison Avenue near Riverfront Recycling. These constructed stormwater wetlands remove pollutants from stormwater runoff through settling and vegetative uptake and filtering, and provide wildlife habitat . They also temporarily store runoff in relatively shallow pools that support conditions suitable for growth of wetlands plants. Finally, they can be utilized to reduce peak runoff rates when designed as multi-staged, multi-function facilities.

Constraint: Topography and Flood Zones

A majority of the waterfront park is located within the 100 and 500year floodplains of the Delaware River Back Channel and the Cooper River. The exceptions include the southerly corner of Centennial Village, a significant portion of the existing Harrison Avenue Landfill, portions of Harrison and Buren Avenues between North 27th and North 29th Streets, and Bergen Avenue, North 33rd and North 34th Streets, west of Harrison Avenue. There are also several small, isolated pockets of higher ground throughout the park. It should also be noted that a significant portion of these floodplains extend across Harrison Avenue (and other neighboring roadways) into Von Neida Park, which has the lowest ground elevation in the Cramer Hill area. Because of this low elevation, Von Neida Park is the first area to flood. It floods frequently—as often as once every three months.

The proposed waterfront park improvements do not exacerbate these existing flooding concerns and will ultimately be designed, to the extent possible, to reduce these problems. Anticipated solutions include landscape-based strategies, such as the creation of wetlands (e.g. bifurcated Harrison Avenue between 25th Street and Dupont Street), and "green streets" with bioswales and pervious surfaces to manage stormwater.



Flood Zone Source Data: FEMA 2008

Constraint: Bald Eagle Protection Zones

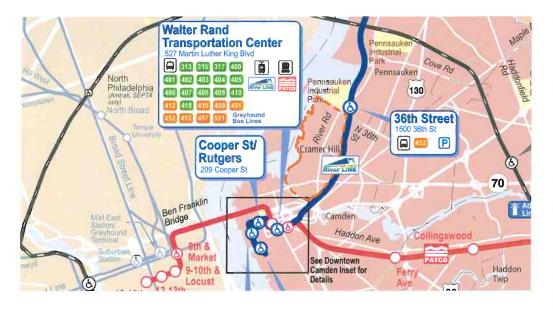
The Cramer Hill Waterfront Park, adjacent to the waters of the Cooper River and the Delaware River Back Channel, is a documented foraging and nesting area for the state-listed species, the Bald Eagle. As a general rule, the New Jersey Department of Environmental Protection (NJDEP) has designated an open water Bald Eagle foraging buffer of 300 feet from the mean high water line of the adjacent waterbody. The presence of the bald eagle also invokes a 150 or 300 foot buffer to existing freshwater wetlands in the area. Together with the open water buffer, these two buffer zones constitute the bald eagle foraging zone.

For the Cramer Hill Waterfront Park the NJDEP has further determined highly sensitive areas (e.g. around current or historical nesting sites and perching trees) and less sensitive areas (poor fishing or foraging habitat). The park plan has been adjusted to reflect these inputs and represents a balance of desired park features and access to waterbodies with protection of the bald eagle foraging and nesting areas.

Opportunity: Local and Regional Transportation Investments

Cramer Hill is bounded by the Delaware and Cooper Rivers and the Conrail rail yard. These same assets, which give Cramer Hill its village-like feel, also contribute to the separation of the residents from resources available in greater Camden and beyond. Through the neighborhood planning process, residents continually expressed their frustration over truck traffic, noise, poor street and sidewalk conditions and the hazards posed by speeding traffic. There are, however, opportunities to improve the street infrastructure and to redesign the public right-of-ways to encourage safe walking and biking while enhancing regional transportation access and improving the environment. Cramer Hill is fortunate to sit between the existing 36th Street River LINE Stop and a proposed stop at Federal Street. Also, the River, which once boasted significant ferry service between Camden and Philadelphia, can one day become a renewed transportation and sightseeing route.

The waterfront master plan addresses key recommendations from the Cramer Hill NOW! Neighborhood Plan that includes redesigning State Street and Harrison Avenue, restoring paper streets to provide public access to the waterfront and establishing multi-use recreational trail networks. These waterfront transportation improvements would complement the neighborhood plan's detailed improvements for walkability and sidewalk conditions, improved bus stops, reduced truck traffic and mitigated negative impacts caused by the rail line.



Opportunity: Interest and Support Among Agencies in Developing Parkland

The Cramer Hill waterfront enjoys unrivaled support from the numerous agencies and non-profit partners that are focused on creating a significant waterfront park system along Cramer Hill's frontage of the Delaware River Back Channel and Cooper River. Those partners include the Cramer Hill Community Development Corporation, Cooper's Ferry Development Association, the NJ Department of Environmental Protection, Camden Greenways Inc., Salvation Army, New Jersey Conservation Foundation, City of Camden, Camden County Parks Department and neighborhood stakeholders. By having all these groups involved in the process from the start, obstacles for implementation can be quickly negotiated and funding to make this plan a reality assembled.

The River LINE travels from Trenton to Camden, and many points in-between, connecting users to the NJ TRANSIT, AMTRAK, SEPTA and PATCO trains that provide public transportation to a number of major destinations, including Philadelphia, Atlantic City, Newark Liberty International Airport and New York.

Map Source: http://www.riverline.com/ geninfo_system.php

Constraint: Regulatory Limits

Development within the Cramer Hill Waterfront Park must comply with various regulatory policies, including those of the New Jersey Department of Environmental Protection (NJDEP) and the United States Army Corps of Engineers (USACOE). These regulatory policies are particularly stringent due to the existence of the waterfront (Cooper River and Delaware River Back Channel), wetlands, threatened and endangered species, and flood hazard areas. Other approvals will also be required from Camden City and Camden County. These policies and approvals, along with their applicability to the development along the Cramer Hill waterfront, are described in Appendix II.

Based on issues posed by the recommendations of this Cramer Hill Waterfront Park Master Plan, a number of key issues can be identified at this time:

- Waterfront Development: A significant portion of the overall park is within the 500 foot jurisdictional range.
- Wetlands: A current wetland delineation meeting both NJDEP and USACOE standards is required to determine jurisdictional limits for individual properties.

- Wetlands Buffers: The presence of the bald eagle foraging habitat on the site will likely trigger requirements for 150 foot setbacks.
- Tidelands: Tidelands, or riparian lands are all those lands now or formerly flowed by the mean high tide of a natural waterway.
 Tidelands are owned by the State of New Jersey which can sell its interests in the form of a grant or provide a short-term license or a long-term lease.
- Sanitary Sewer Service: The revised Water Quality Management Rules create potentially significant constraints to providing sewer service to the park parcels. This needs to be further evaluated with the Camden County Municipal Utilities Authority (CCMUA), which is required to submit a county-wide Wastewater Management Plan to NJDEP. Additionally, in the past, odors have reportedly been noted at the pump station located at Harrison and 27th Streets.



Wetlands Source Data:

NJDEP Bureau of Geographic Information and Analysis 2002 Flood Zone Source

Data: FEMA 2008





The Waterfront Vision

Create an Accessible Waterfront Park

This waterfront park master plan represents a long-range community-driven vision for the redevelopment of Cramer Hill's waterfront. This vision is built upon the community's desire for a waterfront that is accessible to all residents and visitors alike, incorporates a range of new recreational opportunities, and balances mixed-use development with the preservation and enhancement of an incredibly

unique back channel environment. This renewed riverfront will offer recreation and respite, attract and support small businesses, and sustain a vital ecosystem with a variety of plant and animal species. Over half of all waterfront land considered in this plan will be dedicated to open space and will be intrinsically connected to the reinvigorated "village" of Cramer Hill. Cramer Hill residents will be able to take pride in and stewardship of an exceptional waterfront park.



Cramer Hill Waterfront Park

The existing land conditions enable the development of a connected 1. The Cooper River Greenway waterfront park system that encompasses five unique sub-character 2. Community Park at State and Harrison areas. These areas are:

- 3. The 27th Street Waterfront
- 4. Cove Park Catalyst Project
- 5. Back Channel Park



Note: Proposed development along the waterfront created by Interface Studios in collaboration with WRT. Proposed development densities can be found in the Cramer Hill NOW! Neighborhood Plan.

The Cooper River Greenway

The banks of the Cooper River will be stabilized to support enhanced wetlands and transitional planting, ensuring that riparian habitat, open meadows and trails can provide passive recreational opportunities connected to other neighborhood amenities. The topography allows for key access points where trails can connect to docks, which will provide water access for small boats such as kayaks. The Cooper River trail system will be connected to North Camden via a pedestrian bridge at the old State Street Bridge and south to new neighborhood retail along River Avenue and a future River Line stop.

Remediation along the Cooper River will be designed and built in coordination with the redevelopment of Centennial and Ablett Villages, with mixed income housing as described in the Neighborhood Plan.

Note: Proposed development along the waterfront created by Interface Studios in collaboration with WRT. Proposed development densities can be found in the Cramer Hill NOW! Neighborhood Plan.







Top left:

Play areas within the waterfront park should be uniquely designed to use natural features to create unique and challenging playscapes that can provide sustainable play and add learning value.

Top right:

The Delaware River Back Channel and the Cooper River provide an exceptional environment for paddlecraft. Paddlecraft concessions and tours could support neighborhood use and regional tourism.

Bottom:

This rendering from WRT's plan for Liberty State Park illustrates the type of viewing facilities that could be employed to screen visitors from wildilfe.

Image source: Kids Together Park (Cary) picasaweb/Tami's Gallery



Note: Proposed development along the waterfront created by Interface Studios in collaboration with WRT. Proposed development densities can be found in the Cramer Hill NOW! Neighborhood Plan.

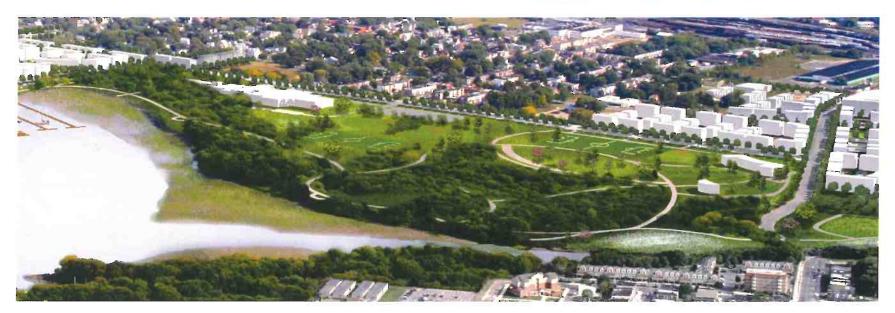
Community Park at State and Harrison

Located at the corner of State Street and Harrison Avenue, the former Harrison Avenue Landfill will be remediated and redesigned to create a safe and welcoming community park. Restored wetlands and upland habitat and acres of meadow will sustain a range of plant and animal species. This new community park will provide miles of trails as part of the Camden Greenway, picnic and open play lawns, highpoint viewing areas offering magnificent views of the river, North Camden, Petty's Island and points beyond. Well-lit and well-designed recreational courts and fields will present opportunities for recreation including basketball courts, baseball and soccer fields and playgrounds. An 18-hole miniature golf course will create income opportunities and provide local jobs managing the course and running related concessions. The course would also provide a family-friendly recreational amenity. A new library and community facility will provide access to much needed resources at a very accessible part of the neighborhood. Well-placed and locally designed and built artwork will be incorporated into the new Library/Community building and landscape. Interpretive features could engage the process of reclamation that has taken place at this once disturbed site. This new waterfront park will be connected via trails to the facilities of The Salvation Army Kroc Community Center which will offer complementary recreational, educational and cultural arts programs for the entire community.

From left to right, proposed waterfront features include: a public marina; the Camden Kroc Center and its athletic fields; overlooks and trails; public athletic fields and lawns; mini-golf course and concessions; and a new library/community center at the intersection of State Street and Harrison Ave. The proposed Camden Kroc Center is slated to begin construction in the very near future and remediation planning for the former Harrison Avenue Landfill has begun.

Creating a high level of community use and stewardship through the design and programming of this park area will be key.





Note: Proposed development along the waterfront created by Interface Studios in collaboration with WRT. Proposed development densities can be found in the Cramer Hill NOW! Neighborhood Plan.

The 27th Street Waterfront Park

This active waterfront will attract regional visitors while serving as the new front porch for neighborhood residents. A 3/4-mile promenade will accommodate strolling, market stalls and shaded benches while providing magnificent views to the Delaware River. The promenade will continue to the cove, connecting to opportunities for fishing. In the central lawn area a stage and earthwork amphitheater will host a range of community celebrations. At the western end of the boardwalk a new 200-berth marina will provide boating and river access at the former site of the historic Farragut Sportsmen's Club. This welldesigned park will support adjacent mixed-use development that can attract and retain a diverse mix of services and retail options, providing jobs and contributing to the local tax base. The Cramer Hill NOW! plan calls for dense residential development with mid rise buildings and ground floor retail adjacent to the park in this area. Supporting a vibrant mixed-use waterfront with ice-skating and other seasonal amenities will support year-round usage. A stormwater management channel will connect to the Harrison Avenue Greenway providing for stormwater management, improving water quality and helping to alleviate flooding.



Above:

A view looking towards the new 27th Street Waterfront Park and mixed-use development. The scale of the development is reduced as it meets the existing neighborhood and infill housing along Harrison Avenue.

Right:

Outdoor dining and cultural festivals enliven new waterfront public spaces.







Cove Park Catalyst Project

Among the key features of the Cramer Hill waterfront are the unique coves and inlets which are quite idyllic in character. A key catalyst project that could be implemented early in the process is to take advantage of the existing wooded cove between 27th and 28th streets to create an six acre waterfront park at the heart of the neighborhood, providing prime opportunities for picnicking fishing, trails, open lawns, and restored upland habitat. This new Cove Park's central location recalls Cramer Park, an early waterfront park that once sat at the heart of the Cramer Hill neighborhood.

The plan currently anticipates the continued presence of Express Marine within the waterfront site. Long-term possibilities for the property, if and when Express Marine, a significant, water-dependent neighbor, departs are dependent on the status of ecological and habitat constraints.





Left bottom: Boardwalks provide opportunities to experience wetlands while protecting sensitive ecosystems.

Note: Proposed development along the waterfront created by Interface Studios in collaboration with WRT. Proposed development densities can be found in the Cramer Hill NOW! Neighborhood Plan.

Existing Conditions





The proposed Cove Park can provide early public access to the water front.





Back Channel Park

One of the key assets of the waterfront is the wildlife inhabiting the neighborhood's open landscapes. The Waterfront Park Master Plan can take advantage of the earlier wetland mitigation projects at the South Jersey Port Corporation site to further enhance existing wetlands and create new wetland habitat and riparian forest. This portion of the waterfront is subject to a number of environmental constraints and features sensitive habitats that serve as foraging grounds for the bald eagles. Therefore, the waterfront from the head of Von Nieda Park extending to the 36th Street/Pennsauken border will be designed as a passive natural park system that can support a variety of eco habitats, including wetlands, riparian zones, and meadows. Following detailed site investigation, this zone will require comprehensive stormwater management design and engineering to maximize the opportunities of the wetland habitats and to relieve the flooding pressures at Von Nieda Park and other parts of the neighborhood. This restored riverfront habitat will create prime opportunities for environmental education and stewardship, and provide attractive views from adjacent infill development. Sensitive habitat will be protected through the use of low-impact seasonal trails and boardwalks. The Camden Greenway trail system will run through the site and connect the Cramer Hill neighborhood to the water as well as connecting trail users to Pennsauken, across to a future state park at Petty's Island, to other Camden neighborhoods, Merchantville, and surrounding suburbs.

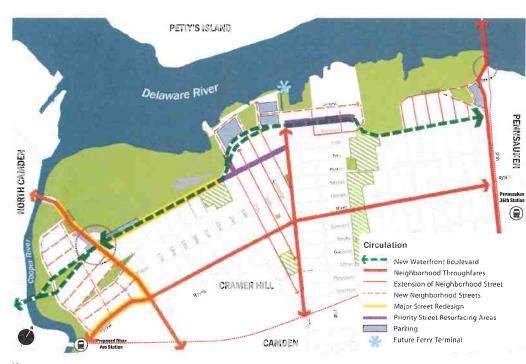
Note: Proposed development along the waterfront created by Interface Studios in collaboration with WRT. Proposed development densities can be found in the Cramer Hill NOW! Neighborhood Plan.

Existing Conditions





View looking at restored wetland and seasonal boardwalks. Trails connect to the waterfront and existing neighborhood.



Above:

Plan shows waterfront transportation improvements neighborhood wide transportation improvements are described in detail in the Transportation and Infrastructure section of the Cramer Hill Now! Neighborhood Plan.

Access and Circulation Framework

In order to increase access to the waterfront and facilitate new mixeduse development, a number of existing neighborhood roads will be extended to the waterfront. The extension of 25th, Cambridge, and Dupont Streets will connect the core of the neighborhood to the water. 27th Street will end in a pedestrian promenade that takes advantage of the existing inlet to create an environmental art piece that captures debris and cleans the water before it is released back into the river. A 30,540 sf plaza will serve as a multi-use space for winter ice skating and other events. The foot of 27th Street can also serve as a landing for future ferry service. Harrison Avenue will be rerouted to create a new waterfront boulevard and north south connection. This new boulevard will complement the Cramer Hill NOW! plan to strengthen River Road as the main commercial spine through the neighborhood, a priority identified through the neighborhood planning process. All streets will feature wide sidewalks, landscaping and lighting to facilitate better pedestrian connections. Bus stops will be located along the rerouted Harrison Avenue and connect to other regional transportation improvements.

The parking strategy for the waterfront park master plan is to provide on-street parking wherever feasible. New mixed-use development blocks will provide for the minimum number of spaces needed within the new development blocks. The goal of the master plan is to take advantage of the access to regional transportation that Cramer Hill enjoys. This allows an opportunity to limit the intrusive impact of parking on the landscape.

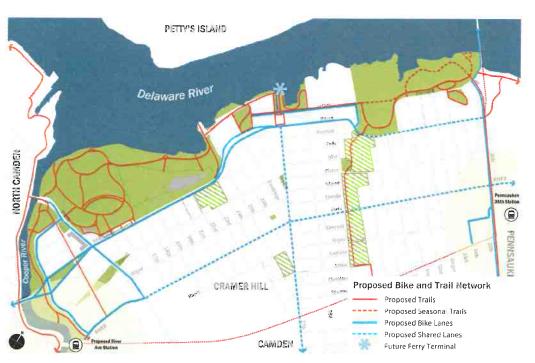


Green Parking has numerous advantages including reducing stormwater runoff and reducing the urban heat island effect. Less paving translates into lower development and maintenance costs while planting native vegetation in parking areas creates additional wildlife habitat as well as creating a more aesthetically pleasing environment.

This image is from WRT's work on Tacony/ Tacony-Frankford Creek.

Bike and Trail Network

Cramer Hill's waterfront park master plan proposes over 5.5 miles of multi-purpose trails connecting Cramer Hill to its waterfront and connecting the neighborhood to other local and regional assets. When completed, this interconnected network of trails will create boundless opportunities for recreation, transportation and economic growth. Cramer Hill trails will connect to North Camden multi-use trails, Merchantville bike trail, Cooper River bike trail.

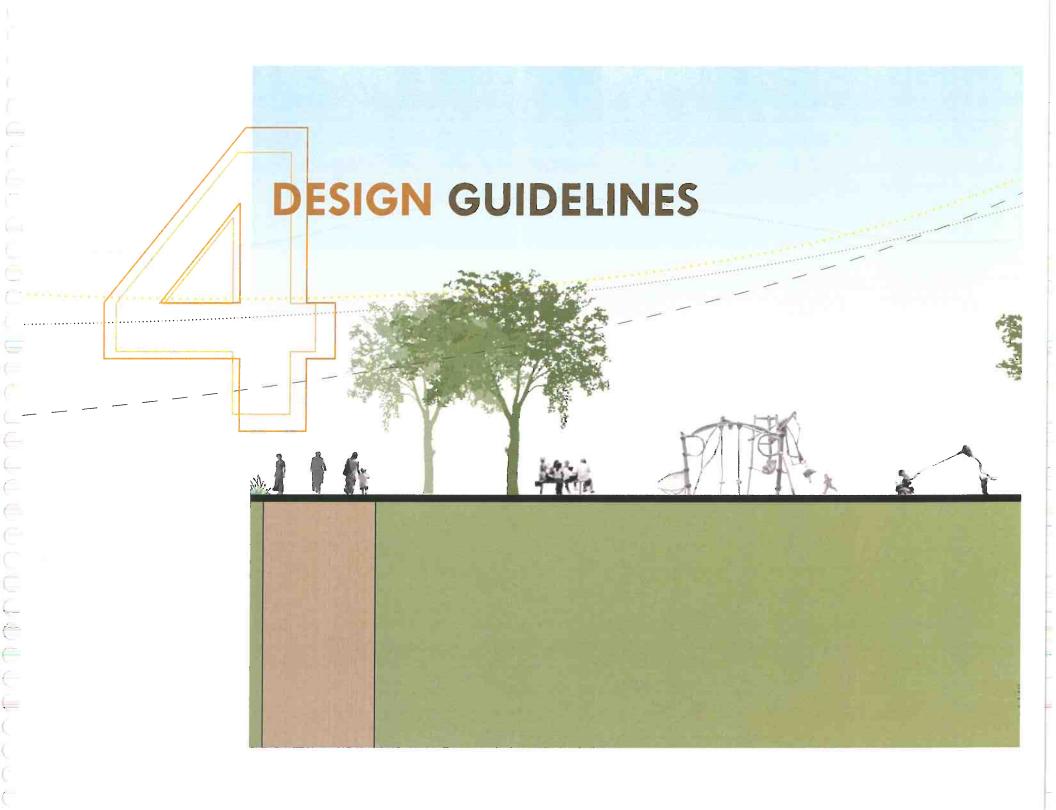


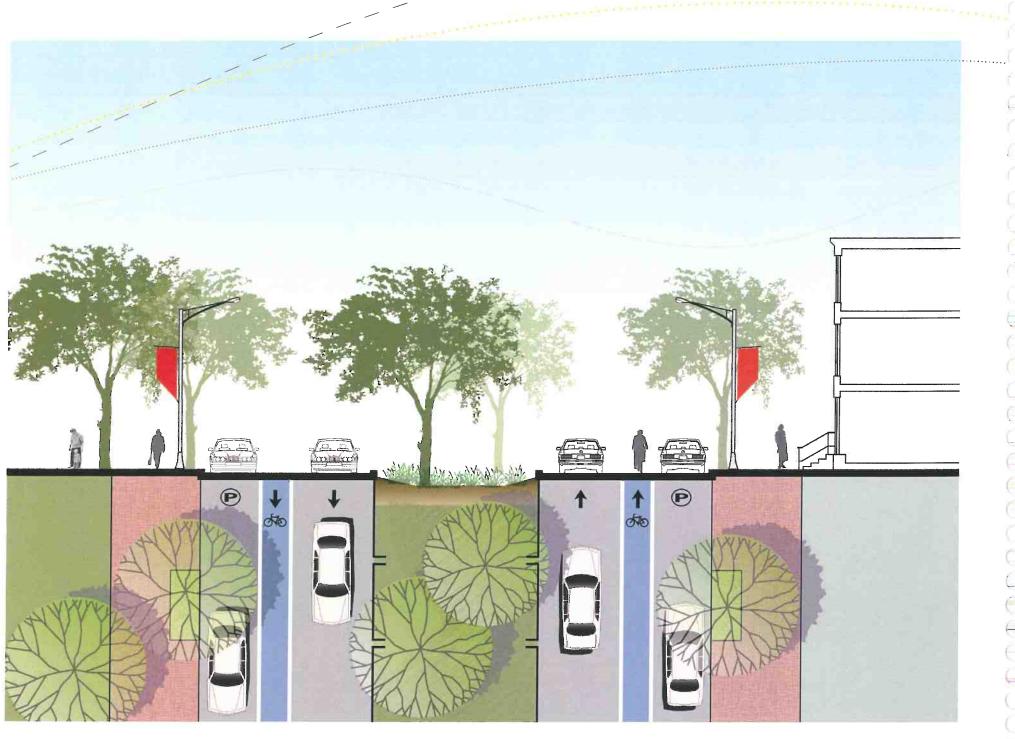
Camden Greenways

Since 1993, Camden Greenways Inc., a local non-profit, has worked to advance a vision for a robust network of trails lining Camden's waterways. Camden Greenways stated mission is "to implement the comprehensive Greenways Plan that details an extensive linear park system along the Delaware River, Cooper River, and Newton Creek in Camden, New Jersey." The organization's stated goals are to:

- Establish a continuous 9.5 mile multi-purpose trail for walking and bicycling.
- Protect open space, riverside vegetation and wildlife habitat.
- Make Camden more attractive and keep it cooler in the summer.
- Improve water quality in the Cooper and Delaware Rivers, and Newton Creek for recreational activities.
- Provide and "outdoor classroom" where school children and adults can learn more about nature.
- Encourage economic development adjacent to the greenway to provide jobs for Camden residents.
- Help the overall economy of the city.

In 2008, Coopers Ferry began working in partnership with Camden Greenways Inc., the Rails-To-Trails Conservancy, Camden County and City, and the State of New Jersey to develop a plan to extend the Camden Greenway throughout Camden and Burlington County to provide transportation and recreation opportunities for pedestrian and bicycle travel. Through its technical planning assistance program, the New Jersey Department of Transportation contracted the RBA Group to complete a Bicycle and Pedestrian Plan for the Camden GreenWay. NJDOT's study furthers the development of the trail location and linkages, and explores the feasibility of various options for the various segments and connections.

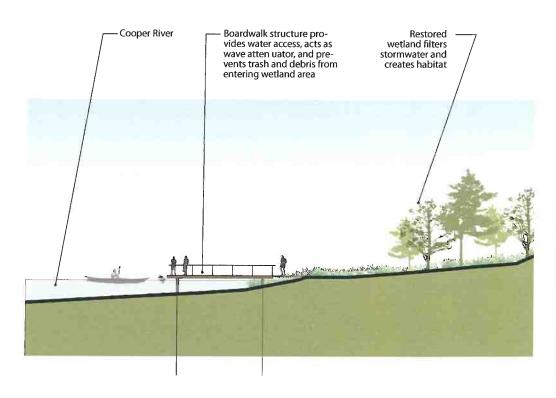


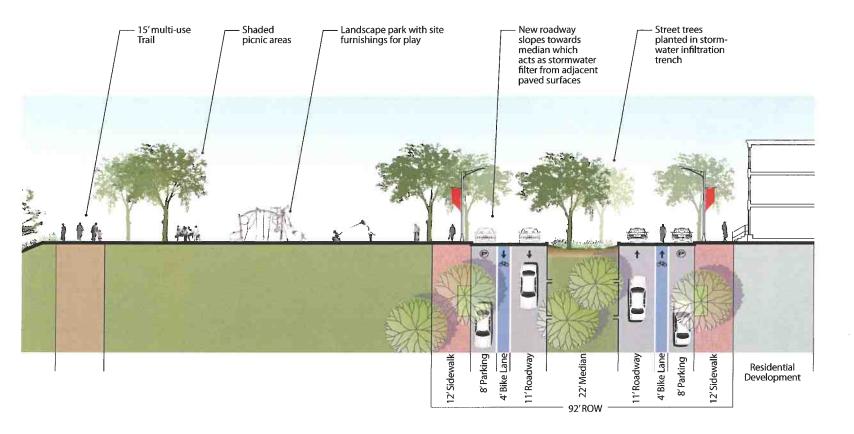


The Cooper River Greenway

A stabilized natural edge along the Cooper River. Detailed design of the edge will be based on further site investigations.



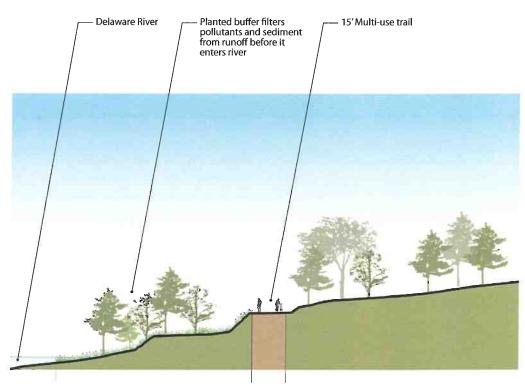


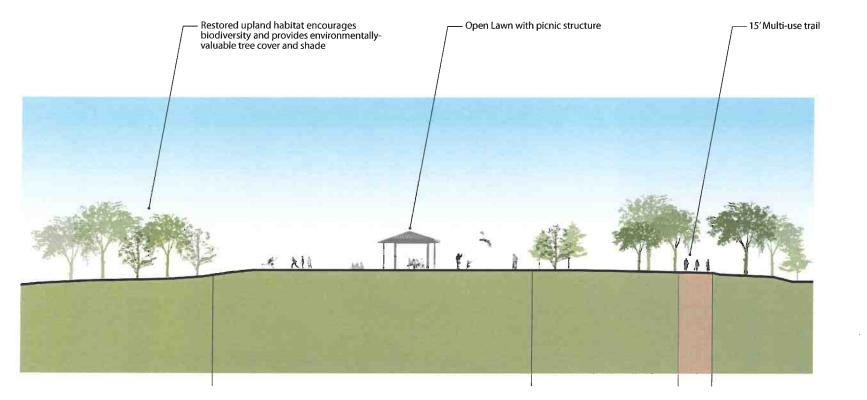


Community Park at State and Harrison Edge Treatment

The edge treatment along the former Harrison Avenue Landfill will be designed in accordance with the approved Remedial Action Workplan. Several edge treatment options will be evaluated. For the Community Park, the preferred edge is a stabilized and vegetated slope.

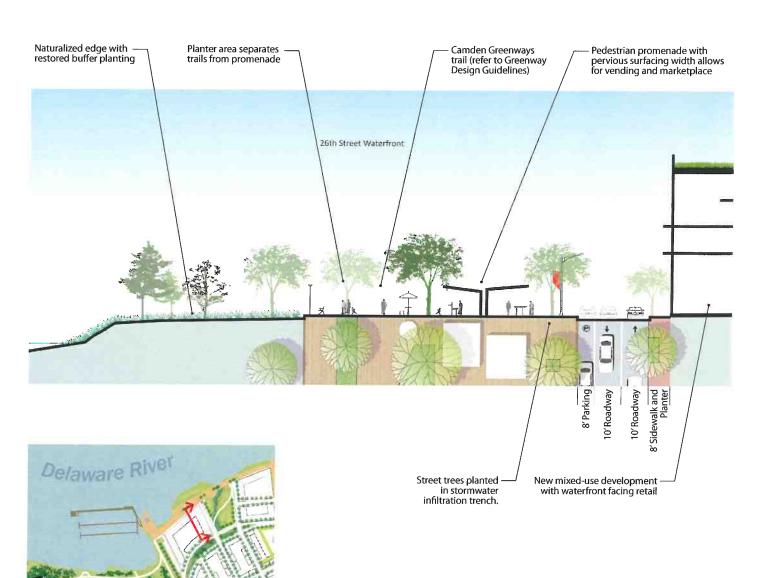






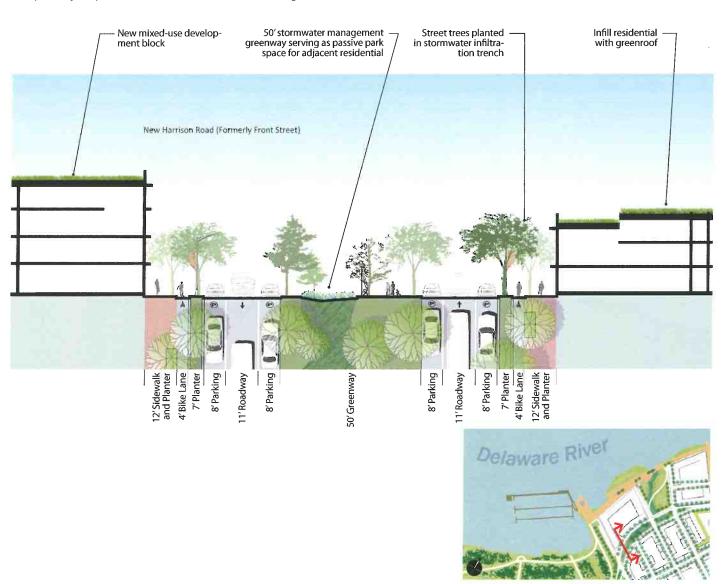
The 27th Street Waterfront

A naturalized edge between 26th and 27th Street.



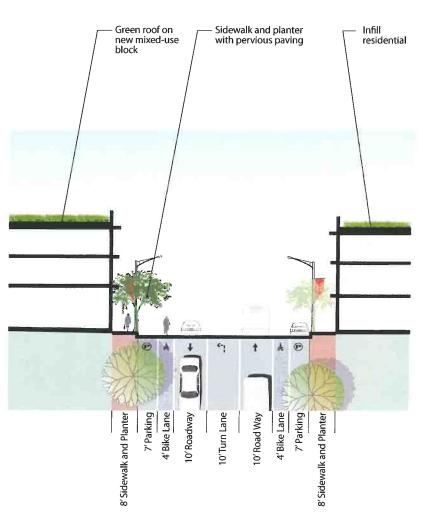
The Harrison Avenue Greenway

The rerouted Harrison Avenue creates an opportunity for a 50' linear parkway for passive recreation and stormwater management.



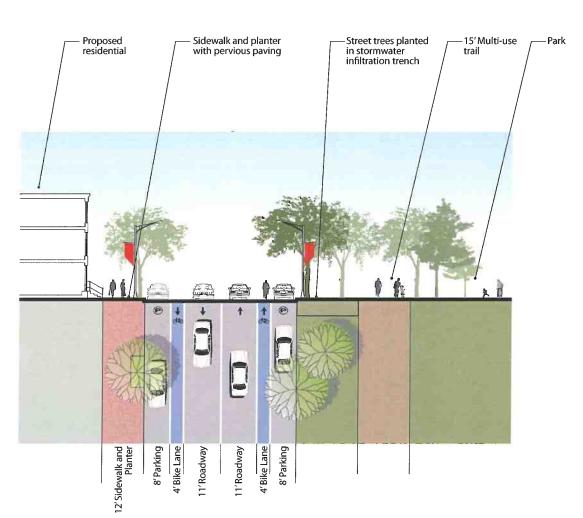
Former Harrison Avenue Between 25th & 27th Street





36th Street Park Entrance





Stormwater Management

A majority of the area considered in this plan sits within the 100 or 500 year floodplain. Currently, neighborhoods near the waterfront experience significant flooding, including flooded streets and basements. Stormwater from the larger neighborhood is directed, via underground stormwater infrastructure, to outlets at the waterfront. During periods of flooding, the stormwater infrastructure is unable to efficiently move stormwater away from the neighborhood. Given that this area of Camden is served by a sewer system in which sewage and stormwater overflows merge during storm events, floodwaters sometimes include combined discharges. This condition creates quality of life and public health impacts. Future neighborhood and waterfront enhancements must work to alleviate these impacts. In addition, odors noted to be occasionally emanating from the pump station at Harrison and 27th Street would be addressed by modified and/or improved odor control technologies.

Development and management practices throughout the neighborhood influence the amount of stormwater that is directed into the underground stormwater system. Building stormwater storage capacity into neighborhood streets and open spaces is an important future investment to make. Promoting stormwater infiltration

by using pervious surfaces where possible will allow stormwater to recharge the ground water table instead of running off into our waterways. Even residences can play a significant role through the use of water barrels or other cisterns to store stormwater runoff from roofs, directing rainwater into planted areas instead of drains, and even by adding green roofs.

This plan recommends extensive wetland development along the Cramer Hill waterfront. Among many other benefits, wetlands would help to store and filter stormwater collected along the waterfront, helping to mitigate the impacts of new and existing development. Given the severity of existing flooding patterns, even in the absence of building development at the waterfront, any new development should manage all site stormwater through incorporation of best management practices. Those practices include use of pervious surfaces, incorporation of stormwater storage in streets and buildings, reuse of building grey water, vegetated buffers for water features, and other considerations for more detailed study during subsequent phases of work.

New buildings and roads at the waterfront should be designed in anticipation of and adaptation to periodic flooding. Determination of appropriate finish floor elevations for buildings and the elevations and drainage patterns of roadways that serve those buildings will be key design considerations. The waterfront plan recommends a network of boardwalks—including the central promenade—that hover above the proposed wetlands and other park areas with relatively low elevations. The boardwalk elevations should be above the 100 year floodplain and the boardwalks should be resilient to the impacts of severe flooding and its associated debris.







Wetland Design Guidelines

The Waterfront Park Master Plan relies heavily on the use of wetlands to manage stormwater from any proposed adjacent development. The following answers to two frequently asked questions will help residents and stakeholders to better understand the role of wetlands in the natural and urban environment.







What are Wetlands?

A wetland can be thought of as a shallow, planted depression in the ground that collects and filters rain that runs off streets and buildings. There are two types of wetlands proposed in this project—freshwater wetlands and tidal wetlands.

- Freshwater wetlands are on land and can take many forms, from a large pond to a small rain garden. These collect stormwater from adjacent development and retain it for a period of time to allow for sediments and pollutants to be filtered out through the underlying soils.
- Tidal wetlands are those areas along the waterfront subjected to
 the ebb and flow of the Delaware River. There are areas along
 the backchannel that currently have healthy tidal wetlands, and
 other areas where the conditions seem favorable for planting
 new tidal wetlands. In the areas where the current is too strong
 for new plants to take hold, a wave attenuating boardwalk structure is proposed to allow for the planting of new tidal wetlands.
 This will enhance existing mudflats and provide stormwater
 management.

Why Do We Need Them?

Wetlands offer many benefits. They:

- reduce or eliminate the need for expensive infrastructure to manage stormwater.
- reduce flooding because they provide excess water with a place to go.
- provide habitat for small mammals, birds, fish, and insects;
 this is important because a biologically-diverse environment
 is less prone to pests like mosquitoes.
- filter pollutants—this means that the wetland plants actually clean the water, which promotes a healthier environment for everyone.
- beautify the landscape.
- provide a recreation resource.
- fulfill stormwater management requirements.

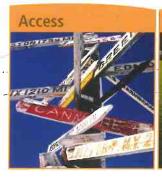
Sustainability Guidelines

These Design Guidelines are set forth as a guide for developing and implementing the Waterfront Park Master Plan. As in the North Camden Waterfront Park Plan, the Sustainability Guidelines ensure that the creation of a revitalized waterfront addresses the fundamental quality of life issues as the park plans are designed and implemented. Making sure that all waterfront improvements enhance resident's quality of life, provide everyone access to resources, and contribute to a cleaner environment.

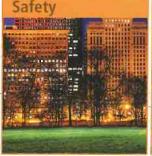
The following three sustainability agendas outline that potential.

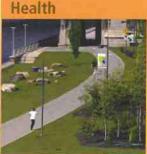
Equity Agenda

The Equity Agenda seeks to guide investment in the Cramer Hill waterfront park to create enriching environments that improve access, health, and opportunities.



Recreation





Stewardship & Education



- Provide physical and visual access to the waterfront park by expanding the existing street grid.
- Provide a continuous waterfront promenade and trails to ensure public access to the entire waterfront.
- Enhance all circulation networks including bicycle, bus, pedestrian, vehicular, NJ Transit, NJ Department of Transportation, Camden Greenways, and boating.
- Install clear, easy-to-read multi-lingual signage throughout the waterfront park to aide wayfinding for residents and visitors.

- Ensure a variety of recreational opportunities and distinct park destinations throughout the waterfront park.
- Value thoughtful and inclusive recreational programming along the waterfront park as a critical factor in the park's ultimate success.
- Promote connectivity of recreation with larger networks, including trails, water transportation, sports organizations, and recreation providers.
- Promote park programming that ensures a lot of use throughout the day to enhance community health and safety.

- Incorporate principles of Crime Prevention through **Environmental Design** (CPTED): natural surveillance, natural access control, and natural territorial enforcement.
- Frame new development to embrace parkland to providing "eyes on the park" for surveillance.
- Selectively clear vegetation for visual access and locate seating and gathering areas to avoid isolation.
- Locate lighting and police kiosks through the park.
- Promote intensive park programming to ensure a continuously-populated environment.
- Design and implement a Safety Plan that uses all members of the community early on in the park planning process.
- This safety plan may include: Urban Park Rangers, a Police Substation, Neighborhood "Angel Watch"

- Create expansive fields, safe trails, and programs to promote physical activity.
- Create an extensive alternative-transportation network to encourage walking and biking and to reduce automobile emissions.
- Mitigate poor water quality by implementing stormwater best management practices to filter pollutant discharges.
- Mitigate brownfields through remediation and improve air quality with natural filters including trees and park vegetation.

- Create exceptional wetland habitats and education programs, providing pioneering environmental education assets.
- Provide history and environmental education and stewardship programs that are culturally relevant and age specific.
- Enhance the existing network of partnerships for environmental stewardship and education.
- Use the park design and construction processes to educate and train residents on landscape construction and management.

Environmental Agenda

The Environmental Agenda sets a path for environmental healing along the Cramer Hill waterfront, outlining ways to manage stormwater, restore habitats, and encourage water activities and stewardship.

Energy



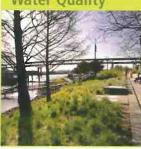
- Implement renewable energy infrastructure where feasible to meet park energy needs.
- Minimize energy requirements through design strategies such as the clustering of energydependent programming.
- Employ energy efficient maintenance procedures. such as using non-motorized equipment (rakes instead of leaf-blowers) and using photovoltaics to charge motorized equipment.
- Develop planting palettes that minimize mowing and place plants to assist with thermal control.





- Increase biodiversity and limit the spread of invasive plants by specifying only native plants such as red maples (Acer rubrum) and sycamores (Platanus occidentalis) for the park landscape.
- Create a variety of ecological habitats such as wetlands, meadows, and woodlands to encourage species biodiversity.
- Maintain a landscape management plan that controls invasive plant species.

Water Quality



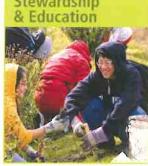
- **Employ Low Impact** Development (LID) techniques throughout the park to manage stormwater.
- Apply best practices for controlling pollutants associated with vessel operation, repair, maintenance, and storage with maritime recreation.
- Create and maintain bio-engineered riparian edges to stabilize the soil and encourage stormwater filtration.
- Use only chemical-free fertilizers, herbicides, and pesticides on the waterfront park landscape.

Remediation



- Investigate a variety of remediation techniques for brownfields and select strategies that optimize landscape use and development value.
- Prior to park development, stabilize land to prevent further contamination.
- Enforce penalties for dumping on park land. stabilize land to prevent further contamination.
- Enforce penalties for dumping on park land.

Stewardship



- Provide programs and opportunities that educate park visitors about the environmental features of the park.
- Promote environmental stewardship through community participation in park-maintenance activities.
- Develop a wide and deep network of partnerships for park-based education and stewardship.

Economic Agenda

The Economic Agenda promotes sustainable economic development, encouraging opportunities to live, work, play, and learn along the waterfront park.

Attractions



- Create recreational and cultural destinations along the waterfront park to attract regional visitors and residents.
- Capitalize on the park's exiting assets, such as its views and proximity to Philadelphia, to hold large-scale events.
- Build upon the landscape character of the waterfront to create a regionally unique waterfront-connected to the water and to its neighborhood.

Development & Growth



- Create service and retail employment opportunities within mixed-use development lining the park; outreach and teaching opportunities within the educational and cultural centers, and construction and maintenance opportunities at the public park facilities.
- Create a development framework that encourages mixed-use and mixed income housing.
- Support investment through an amenity base of safe, excellent park environments, programming, and maintenance.

Amenities



- Revitalize the waterfront landscape, providing a variety of amenities, to support development programs.
- Focus on maintenance to convey a positive image of the neighborhood.
- Provide a range of park programs to enhance visitor and resident experience of the place.

Capacity



- Create a workforce development consortium to ensure Camden residents are educated and trained to benefit from new employment opportunities.
- Capitalize on growth opportunities to build capacity for local organizations.
- Foster partnerships between private and public sector to develop and maintain programs for the waterfront park; for example on the downtown Camden waterfront, a public/private partnership between private developer Steiner + Associates and the NJ Green Acres Program both provided matching funds for this park. Steiner funds ongoing park maintenance.
- Engage investors and market experts in the planning and design of the waterfront park.

Stewardship & Education



- Work with waterfront developers to anticipate necessary job training and potential training partnerships.
- Use the park design and construction processes to educate and train residents on landscape construction and management.
- Focus on state-of-the-art sustainable approaches and materials for park development and maintenance, to provide a forum for marketable knowledge acquisition.

Harrison Avenue Landfill Mitigation and Reuse

Equity The cleaning and reuse of the former Harrison Avenue Landfill site creates a community resource from a formally neglected, unsafe and environmentally degraded site. The new community park will be a source of pride for the neighborhood and will serve as the southwestern gateway to the waterfront. The library, community center proposed for the corner of Harrison Avenue and State Street will be a civic anchor and bring resources to both the North Camden and Cramer Hill communities.

Environment Restored upland habitat encourages biodiversity and provides environmentally-valuable tree cover while new and restored wetlands provide a wealth of benefits: they filter polluted runoff before reaching the Delaware River, create a nurturing environment for plants and wildlife, and absorb floodwaters, helping to reduce the neighborhood's flooding problems.

Economy Nature trails, active recreational fields and a new Library/Community building provide recreational and educational resources for residents of all ages, supporting schools, youth and other community groups. An 18-hole miniature golf course provides a revenue-generating activity that will create local jobs and revenue from the course will support park programming.

200-Berth Marina

Equity Slips allow boat access to the Delaware.

Environment New marine facilities provide the opportunity to apply green marina and boating best practices.

Economy Supported by adjacent development, the amenity attracts visitors and creates a unique sense of place.



The Cooper River Greenway

Equity Open lawn and picnic areas provide passive recreation opportunities on the waterfront while boat launches provide active recreational opportunities on the Cooper River, a resource already enjoyed by Pennsauken, Cherry Hill, Collingswood and Haddon Townships.

Environment

The enhanced and repaired riparian edge along the river will help prevent flooding, clean the air, improve water quality and increase residents' health by creating an attractive environment for biking, strolling, walking and other forms of active recreation.

EconomyBoat launches and docks provide regional access to the Cooper River and the Delaware River back channel, attracting residents, business owners and tourists to the Cramer Hill waterfront.



The 27th Street Waterfront Park

Equity Active residential and commercial uses around the park create a safe, year-round active waterfront destination. The adjacent stage and amphitheater provide a venue for gatherings to honor the neighborhood's rich cultural heritage and diversity.

Environment The new park will feature a number of stormwater best management practices including bio-retention areas to filter and detain stormwater.

Economy With bucolic views of Petty's island, a broad range of park programs and a high standard of design and maintenance, this new waterfront park is able to support adjacent development and can attract diverse users, businesses and regional visitors. New mixed-use development will contain diverse services and retail options that create jobs and contribute to the local tax base.

The Waterfront Esplanade

Equity The generous pathway provides continuous public access to the waterfront for strolling, biking, sitting and fishing, providing a unique vantage point towards the Back Channel of the Delaware River.

The new park will feature a number of storm water best management practices including bio-retention areas and pervious materials, roads and parking areas that prevent excessive and damaging runoff.

The public esplanade is an amenity that supports development programs and serves as a local and regional destination. The wide pathway provides opportunities for vending and market stalls that can support small independent businesses and spur local investment and employment.

Harrison Avenue Greenway

Environment Stormwater management channel helps to improve water quality.

Economy The re-routed Harrison Avenue brings new blocks of mixed-use development that will integrate market-rate and affordable housing with existing and infill housing to create a vibrant mixed-income community.





Back Channel Park

Equity Expansive fields and safe trails promote physical activity while connecting users to other Camden neighborhoods.

Environment Wetlands improve water quality and help to prevent flooding. Wetlands create habitat, filter pollutants, encourage biodiversity and enhance the visual quality of the landscape. Varieties of ecological habitats are created in the Back Channel Park, including tidal wetlands, riparian zones, meadows, open fields and woodlands that can serve as outdoor classrooms for locals and visitors.

Economy This recreational destination on the Camden Greenways trail system will attract visitors and residents to the banks of the Delaware. A welcome center at the foot of 36th Street will serve as the entry point for visitors of the Cramer Hill waterfront and future state park on Petty's island.

Cove Park

Equity A new pier extends into the Back Channel, affording unique viewsheds and fishing opportunities.

Environment The restored cove and enhanced wetlands create habitat, filter pollutants, encourage biodiversity and enhance the visual quality of the waterfront.

Economy Early phase waterfront park development projects provide immediate job and training opportunities.

Plant Selection Guidelines

Native, non-invasive plant species should be specified in all landscaped areas of the waterfront park. Native plants are those that naturally occur within the local area. Typically, native species require less maintenance and are more resistant to drought and disease than exotic species. Because they do not have the invasive tendencies of many exotic species, they encourage biodiversity and premium wildlife habitat. They are often more aesthetically pleasing and can help to provide a sense of place for the region. There are thousands of native plant species to choose from, and lists can be obtained from the Native Plants Society of New Jersey (www.npsnj.com).

Parking Area Guidelines

Local zoning outlines parking requirements for building uses, and therefore adjacent development projects will need to address provision of parking within their project boundaries. No specific standards control the quantity of parking for parkland. Through public-private partnership agreements, parking targets for the waterfront park should be established and incorporated into the waterfront development parcels, tucked inside building envelopes. Additional on-street parking spaces will be made available upon the construction of new roads. The number of spaces per block will vary depending on other parking restrictions like bus stops and hydrants. It's possible that approximately 20 spaces per block, or a total of 800 additional on-street parking spaces, will be made available in the neighborhood, assuming that all new roads have two-sided parking. The proposed library/ community center parking lot and any additional surface parking should employ green parking lot guidelines.

Boat Launch Guidelines

As a general reference, one lane of a boat launch will accommodate approximately 50 launchings and 50 retrievals per day, tides permitting. Where only one lane is possible, it should be about 20 feet wide. In order to assess the necessary length of the ramp, note that the top elevations of the ramp should be at least 2 feet above the highest expected water level and the bottom elevation should be at least 3 feet below the lowest expected water level for which the ramp is expected to operate. The ramp grade should be uniform and be between 12.5% and 15%. A parking area with spaces large enough to accommodate cars with trailers attached should be provided near the boat launch with a minimum of ten parking spaces.

Below:
A small sampling of the many native plants for wet places in New Jersey.



Betula nigra river birch



Clethra alnifolia sweet pepperbush



Aronia arbutifolia red chokeberry



Acer rubrum - red maple



Iris versicolor - blue flag



Typha latifolia - broadleaf cattail



Lobelia cardinalis cardinal flower



Salix discolor pussy willow

Camden Greenways Trail Design Guidelines

The Camden Greenways Plan and Design Guidelines, published by Camden Greenways, Inc., represent excellent, collaborative effort conducted by Camden Greenways, Inc. and its partners to create a comprehensive network of trails for Camden that connect to the larger regional trail system and provides detailed design guidelines for the implementation of those trails.

The trail delineated in the Waterfront Plan complies with the optimum widths and buffer areas outlined in the Greenway Design Guidelines, allowing for emergency vehicular access and adequate space for regrading. Where possible, a wider trail corridor should be provided for better visibility and safety. Signage, seating, landscaping, and site furnishings should adhere to the standards set forth in the Greenway Design Guidelines. The greenway should also comply with AASHTO standards for shared use trails to safely accommodate bicyclists and pedestrians.

As a general rule, the trail should be lighted in urban areas where adjacent land use supports night-time activities, and should remain unlit in more secluded areas to discourage night-time use. To ensure continuous access at night, an additional road-side trail that takes advantage of street lighting has been delineated. Trail surfaces can be asphalt, porous asphalt, or a crushed aggregate, and should be determined based on adjacent land use, stormwater plans, and projected use. Seasonal boardwalks are proposed on some of the most sensitive areas.

In order to provide a greater sense of public safety and security along the Camden Greenway, trail design should follow the basic principles of Crime Prevention Through Environmental Design (CPTED): natural surveillance, natural access control, and natural territorial reinforcement. These principles require continued physical site maintenance that show personal or group ownership in order to be effective.



Above:

1996 Camden Greenways Concept Plan drawn by Delta group updated in 2007.

For more specific trail design guidelines, please refer to the Camden Greenway Memorandum of Understanding Greenway Design Guidelines.(www. camdengreenways.org), the 2009 RBA Group Feasibility Study for the Camden GreenWay, and the NJDOT Bicycle and Pedestrian Plan Local Planning Assistance Program.





Phase Ia (Early Action 1-3 years)

1. Parcel Acquisition:

- a) Underwater Technics Inc. (8.1 Acres)
 - Currently vacant
 - Great scenic qualities
 - Immediate river access point in the heart of the neighborhood
- b) Neff Machine Co. (.66 acres)
 - Currently vacant
 - Allows access off 27th Street ROW
- c) Riverfront Recycling (14.11 acres)
 - Incompatible use
 - Some indication landowner willing to sell
 - Waterfront development opportunity

2. Remediation & Site Master Plan:

- a) Harrison Avenue Landfill (62 acres)
 - Build on momentum from Kroc Center
 - Public agency support already exists (NJDEP -Office of Brownfield Reuse and Brownfield Redevelopment Group)
 - Requires Approved Remedial Action Plan
 - Issue RFP for park design development following the completion of the Remedial Action Plan
- b) Underwater Technics Inc. and Neff Machine Co.
 - Requires additional site investigation
 - Begin detailed site design for the "Cove Park" based on site investigation findings
- c) CCMUA Site
 - Requires additional site investigation
 - Public agency support already exists (NJDEP—Office of Brownfield Reuse)
 - Requires approved remedial action plan
 - Non-profit support exists for site development and management

3. Fundraising For Catalyst Projects:

- a) Cove Park- NJ Green Acres Program
- b) 27TH Street extension to Cove Park NJDOT funding sources
- c) Harrison Avenue Trails Rails-to-Trails Conservancy
- i. Brownfields assessment and remediation
 - Hazardous Discharge Site Remediation Fund
 - EPA Brownfield Assessment Grants
- ii. Park Design
 - Camden County Open Space Trust Fund
 - William Penn Foundation
- iii. Park and Trail Development
 - NJ Green Acres Program
 - NJDOT Bikeways Program
 - SAFETEA LU II
 - Camden County Open Space Trust Fund
- iv. Road Extensions
 - NJDOT

4. Ownership, Maintenance And Management Of Waterfront Parkland

- a) Create park management agreement for waterfront park parcels prior to developing each section. This can be based on partnerships between government agencies and non-profit partners and will detail responsibilities for programming, design, use, and stewardship.
- b) Create public safety plan for park system

Phase Ib (Secondary Action 3-5 years)

1. Remediation And Implementation:

- a) "COVE PARK" Catalyst Project
 - Implement Site plan for 8.76 acre park with fishing pier, trails, picnic pavilions, open lawns and parking
- b) Harrison Avenue Trails Catalyst Project
 - Develop 1.6 mile trail connected to Kroc Center, open playfields, and other amenities
- c) CCMUA Site Park Enhancement
 - Transfer Land from CCMUA to public agency partner
 - Subdivision and rezoning of parcels to allow for new residential development.
 - Initiate stormwater management coupled with Von Nieda Park improvements
 - Create passive recreational opportunities which take advantage of the site's natural assets
 - Secure small initial capital investment
 - Make improvements to existing habitat
 - Develop park management agreement

2. Identify Developer:

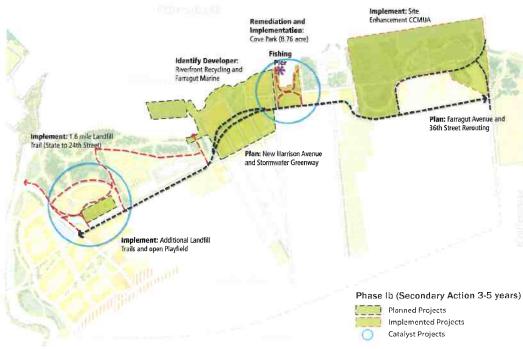
- a) Riverfront Recycling and Farragut Sportmans Club site
 - Mixed-use waterfront development with public park amenity
 - Full public marina

3. Plan, Fund, And Implement:

Following a mutual agreement with a developer, develop site plan, fund and implement roadway improvements, and dedicate right-of-way as City roads.

- a) Harrison Avenue Rerouting and Stormwater Management Linear Park
 - NJDOT—Division of Local Aid and Economic Development
 - Federal Funding Sources—(SAFETEA LUII 2010, NJ Green Acres Programs)
- b) Farragut Avenue and 36th Street Rerouting
 - NJDOT -Division of Local Aid and Economic Development



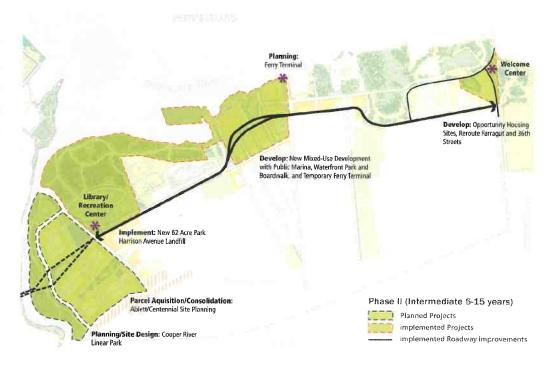


Phase II (Intermediate 6-15 years)

1. Implement:

- a) 62 Acre Harrison Avenue Park
 - Great access point from State and Harrison, great views
 - Opportunities for both active and passive recreation
 - Already in public ownership
 - Construction
- b) Library and Recreation Center
 - Plan and design facility
 - Identify funding sources
 - Begin Construction
- c) Harrison Avenue Greenway and Streetscaping
- d) Riverfront Recycling mixed-use development, marina, waterfront park and boardwalk

(Note: Farragut Sportsmens Club lease ends 2015)



- e) Farragut Avenue and 36th Street—park, housing, trails, welcome center
 - Requires land assembly and development interest
 - Some parcels in public ownership
 - Value of parcels will increase in future based on new waterfront park and future Petty's Island State Park
 - Capital investment needed for roadway improvements, park and park facility building

2. Parcel Acquisition/Consolidation and Site Planning:

- a) Ablett/Centennial Redevelopment
 - Consolidate properties: numerous property owners
 - Federal funding availability
 - Housing Authority priorities

3. Planning And Site Design

- a) Cooper River Linear Park
 - Develop detailed site plan
 - Seek vendor to operate canoe/kayak rentals
 - Seek funding opportunities
- b) Express Marine Park and Marina
 - Develop detailed site plan
 - Establish public/private partnership to develop
 - Seek marina operator
- c) Express Marine Mixed-Use Development
 - Market study to determine feasibility of size and scope of marina
 - Develop detailed site plan alternatives based on habitat and development issues
- d) Permanent Ferry Terminal at 27th Street
 - Develop detailed site plan
 - Seek funding opportunities
 - Seek ferry operator
- e) Bridge over Cooper River
 - Feasibility study

Phase III (Future 15-30 years)

1. Parcel Acquisition

- a) Express Marine (9.42 acres)
 - Currently operating water dependent business
- b) Tucker Towing (1.67 acres)
 - Parcel currently vacant

2. Develop:

- a) Cooper River Park
 - Property assembly required
 - Stormwater management
 - Develop trail, piers, park
- b) New Ablett/Centennial mixed-use development and Express Marine Park
- c) Permanent ferry terminal

3. Plan:

- a) Bridge over Cooper River
 - Detailed study and funding



- Cost Estimate Details
- || Regulatory Constraints
- Shoreline Photographs of the Cramer Hill Waterfront
- IV Programming Survey
- V Comments from Community Meetings and Break-out Sessions

Cost Estimates

Cost Estimate Note: The estimates provided in this plan do not include any possible contamination abatement or mitigation. More detailed costs and feasibility assessments will be needed prior to implementation of any public elements. The low end cost estimate figure is based on the minimum basic amenities to create a usable park space as currently described in the master plan. The high end

estimate is based on square footage cost comparisons of recently built waterfront park projects that include significant amenities to create a local and regional draw. All costs, unless noted, do not include roadways, acquisition costs, environmental assessment, site remediation, surveying or escalation, valued at 3–5% a year.



The 18.3 acre **Cooper River Greenway Park** estimated implementation cost is between \$6,068,880 and \$8,000,000.

Cooper River Greenway Park	QUANTITY	UNIT	UNIT COST	SUBTOTAL	TOTAL
Boat Pier	2	unit	\$25,000	\$50,000	
Greenway Trails	3,937	If	\$225	\$885,825	
Selective Clearing, Fine Grading, Seeding	19	ac	\$1,800	\$34,200	
New Wetlands	150,700	sf	\$13	\$1,959,100	
Wetland Restoration	70,800	sf	\$9	\$637,200	
Playground and surfacing	1	unit		\$75,000	
Lawn	108,500	sf	\$3	\$271,250	
Irrigation of lawn areas	108,500	sf	\$1	\$108,500	
Meadow planting	52,000	sf	\$6	\$312,000	
Benches	12	unit	\$600	\$7,200	
Park Lighting (only playground/ picnic lawn area)		lump sum		\$65,000	
Picnic Pavillion	1	unit	\$30,000	\$30,000	
Interpretive Signage Panels	8	unit	\$1,000	\$8,000	
Trash receptacles	16	unit	\$400	\$6,400	
Bike racks	3	unit	\$700	\$2,100	
Pinic Tables	9	unit	\$600	\$5,400	
Riverbank Enhancement/Stabilization	3,200	lf	\$325	\$1,040,000	
Subtotal Construction Costs	S				\$5,497,175
Site Engineering/Design fees (10-12% typ.)	%	10%		\$549,718
Permitting Fees & Compliance	e	%	4%		\$21,989
Total Cost: Cooper River Greenway Park	•				\$6,068,881

Community Park at State and Harrison					
Phase I	QUANTITY	UNIT	UNIT COST	SUBTOTAL	TOTAL
Greenway Trails Phase I	4,800	lf	\$225	\$1,080,000	
Trails (Temporary Unpaved)	3,200	lf	\$38	\$121,600	
Selective Clearing, Fine Grading, Seeding	5	ac	\$1,800	\$9,000	
Pinic Tables	. 6	unit	\$600	\$3,600	
Benches	8	unit	\$400	\$3,200	
Bike racks	2	unit	\$700	\$1,400	
Picnic Pavillion	1	unit	\$30,000	\$30,000	
Trash receptacles	16	unit	\$400	\$6,400	
Lawn	175,000	sf	\$3	\$437,500	
Irrigation of lawn areas	175,000	sf	\$1	\$175,000	
Meadow planting	86,000	sf	\$6	\$516,000	
Subtotal Construction Costs					\$2,383,700
Site Engineering/Design fees (10-12% typ.)		%	10%		\$238,370
Permitting Fees & Compliance		%	4%		\$9,535
Total Cost Community Park at State and Harrison Phase I					\$2,631,605



The (Phase I-18 acres) Community Park at State and Harrison estimated implementation cost is between \$2,630,000 and \$12,000,000.

Cove Park (Catalyst Project)	QUANTITY	UNIT	UNIT COST	SUBTOTAL	TOTAL
Greenway Trails (Permanent Paved)	930	lf	\$225	\$209,250	
Trails (Temporary Unpaved 14' wide, 3" thick)	650	lf	\$38	\$24,700	
Pinic Tables	3	unit	\$600	\$1,800	
Landscaping (Tree planting)	9	ac	\$12,500	\$109,500	
Bike racks	1	unit	\$700	\$700	
Fishing pier	1	unit	\$25,000	\$25,000	
Selective Clearing, Fine Grading, Seeding	9	ac	\$1,800	\$16,200	
Subtotal Construction Costs					\$387,150
Site Engineering/Design fees (10-12% typ.)		%	10%		\$38,715
Permitting Fees & Compliance		%	4%		\$1,549
Total Cost Cove Park (Catalyst Project)					\$427,414



The Cove Park Catalyst project estimated implementation cost is between \$427,000 and \$1,800,000.



The 45 acre (CCMUA site) Back Channel Park estimated implementation cost is between \$5,719,000 and \$7,800,000.



The (Phase II- 44 acres) Community Park at State and Harrison estimated implementation cost is between \$4,881,060 and \$14,00,000.

Back Channel Park	QUANTITY	UNIT	UNIT COST	SUBTOTAL	TOTAL
Wetland Enhancement/New Wetlands	400,000	sf	\$9	\$3,600,000	
Greenway Trail (Paved)	6,519	If	\$225	\$1,466,775	
Trails (Seasonal wooden boardwalk 8'wide)	2,400	sf	\$35	\$84,000	
Interpretive Signage Panels	6	unit	\$1,000	\$6,000	
Benches	4	unit	\$400	\$1,600	
Native Meadow Restoration	2	ac	\$1,000	\$2,000	
Landscaping (Tree Planting, Seeding, Mulch)	lump sum			\$20,000.0	
Subtotal Construction Costs					\$5,180,375
Site Engineering/Design fees (10-12% typ.)		%	10%		\$518,038
Permitting Fees & Compliance		%	4%		\$20,722
Total CCMUA Site					\$5,719,134

Community Park at State and Harrison Phase II	QUANTITY	UNIT	UNIT COST	SUBTOTAL	TOTAL
Landscaping (Tree Planting, Seeding, Mulch- 13 acre active park)	13	ac	\$50,000	\$650,000	
Greenway Trails Phase II (Paved)	12,882	lf	\$225	\$2,898,450	
Playground (2-5 age range)	1	unit	\$50,000	\$50,000	
Playground (5-12 age range)	1	unit	\$80,000	\$80,000	
Outdoor Basketball courts	2	unit	\$45,000	\$90,000	
Picnic Pavillion (30,000-\$60,000)	1	unit	\$30,000	\$30,000	
18-Hole Miniature Golf Course (20,000 min-65,000sf max)	1	unit	\$350,000	\$350,000	
Multi-use playfield (soccer, baseball)	1	ac	\$100,000	\$100,000	
Parking (\$1800- \$3000 per space)	80	unit	\$1,800	\$144,000	
Lighting for Parking lot	8	unit	\$3,600	\$28,800	
Subtotal Construction Costs					\$4,421,250
Site Engineering/Design fees (10-12% typ.)		%	10%		\$442,125
Permitting Fees & Compliance		%	4%		\$17,685
Total Community Park at State and Harrison Phase II					\$4,881,060

Riverfront Park	QUANTITY	UNIT	UNIT COST	SUBTOTAL	TOTAL
Riverfront Park (landscaping)	3	ac	\$50,000	\$160,000	
Riverfront Park (earthwork amphitheater)	lump sum			\$60,000	
Riverfront Park (stormwater feature)	30,000	sf	\$9	\$270,000	
Harrison Avenue stormwater greenway	72,983	sf	\$9	\$656,847	
Boardwalk and railing	138,000	sf	\$14	\$1,863,000	
Movable tensile-fabric canopy structures	lump sum			\$600,000	
Colored Concrete Stage	1,200	sf	\$48	\$57,600	
27th Avenue Ice Rink, Water Feature, Urban Plaza	40,000	sf	\$30	\$1,200,000	
Short-term Ferry Terminal (boat dock)					
Lighting	lump sum			\$180,000	
Site Furnishing	lump sum			\$24,000	
Subtotal Construction Costs					\$5,071,447
Site Engineering/Design fees (10-12% typ.)		%	10%		\$507,145
Permitting Fees & Compliance		%	4%		\$20,286
Total Riverfront Park					\$5,598,877



The 16 acre **Riverfront Park** estimated implementation cost is between \$5,598,877 and \$18,750,000.



The **30th and Farragut Neighborhood Park and Trails** estimated implementation cost is between \$521,949 and \$1,742,400.



The **200-Berth Marina** estimated implementation cost is between \$4,788,000 and \$5,300,000.

30th and Farragut Neighborhood Park and Trails	QUANTITY	UNIT	UNIT COST	SUBTOTAL	TOTAL
New Neighborhood Park (Passive 1.67 acres)	72,800	sf	\$5	\$364,000	
Stormwater feature	12,000	sf	\$9	\$108,000	
Greenway trail Paved (36th street)	780	lf	\$1	\$780	
Subtotal Construction Costs					\$472,780
Site Engineering/Design fees (10-12% typ.)		%	10%		\$47,278
Permitting Fees & Compliance		%	4%		\$1,891
Total 30th and Farragut Neighborhood Park and Trails					\$521,949

200-Berth Marina	QUANTITY	UNIT	UNIT COST	SUBTOTAL	TOTAL
200 slips (piling, elec, water, cable)	200	unit	\$10,000	\$2,000,000	
Dredging	53,000	cyd	\$30	\$1,590,000	
Engineering design fees	lump sum			\$250,000	
Permitting Fees & Compliance	lump sum			\$150,000	
Subtotal				\$3,990,000	
20% Contingency		%	20%	\$798,000	
Total Cost 200 Berth Marina					\$4,788,000

Refer to map on right.

Park Section		Low End Cost Estimate	High End Cost Estimate
Cooper River Greenway Park		\$6,068,880	\$8,000,000
Community Park at State and Harrison (Phase I Catalyst Project)		\$2,630,000	\$12,000,000
Cove Park (Catalyst Project)		\$427,000	\$1,800,000
Back Channel Park (CCMUA Site)		\$5,719,000	\$7,800,000
Community Park at State and Harrison (Phase II)		\$4,881,060	\$14,000,000
Riverfront Park		\$5,598,877	\$18,750,000
30th and Farragut Riverfront Park and Trails		\$521,949	\$1,742,400
200-Berth Marina		\$4,788,000	\$5,300,000
	Total	\$25,595,766	\$69,392,400



Regulatory Constraints

Development within the Cramer Hill Waterfront Park must comply with various regulatory policies, including those of the New Jersey Department of Environmental Protection (NJDEP) and the United States Army Corps of Engineers (USACOE). These regulatory policies are particularly stringent due to the existence of the waterfront (Cooper River and Back Channel of the Delaware River), wetlands, threatened and endangered species, and flood hazard areas. Additional approval will be required from the City of Camden and Camden County.

These policies and approvals, along with their applicability to the subject Park, are described below:

Coastal Permit Program - NJAC 7:7

This Chapter establishes the procedures by which the NJDEP will review permit applications and appeals under the Coastal Area Facility Review Act (CAFRA NJSA 13:19-1 et seq), the Wetlands Act of 1970 (NJSA13:9-1 et seq), and the Waterfront Development Law (NJSA 12:5-3), briefly as follows:

- CAFRA: The Waterfront Park is not within the coastal area defined by the Act, so there is no CAFRA jurisdiction. As such, there is no further discussion regarding CAFRA.
- Wetlands: Coastal wetlands have not been mapped pursuant to the Wetlands Act of 1970, so there is no jurisdiction over coastal wetlands. As such, there is no further discussion regarding coastal wetlands.
- Waterfront Development: The filling or dredging, or placement or construction of structures, pilings or other obstructions in any tidal waterway, or in certain upland areas adjacent to tidal waterways (outside CAFRA jurisdiction) are regulated.

Water Front Development (NJAC 7:7-2.3)

Regulated waterfront areas include the following:

- All tidal waterways and lands lying thereunder, up to and including the mean high water line; and
- Adjacent upland areas within 100 feet of the mean high water line. For properties within this 100 feet that extend beyond the 100 feet, the regulated area shall extend inland to the lesser of the following distances:
 - 1) 500 feet from the mean high water line; or
 - i. To the first paved public road, railroad or surveyable property line that
 - A. Existed on 9/26/80; and
 - B. Generally parallels the waterway.

Certain portions of the Park includes these regulated areas, so Waterfront Development permits will be required. There are exemptions for certain activities; however, it is unlikely that significant development associated with the planned Park would meet the exemption requirements.

Of particular note regarding Park improvements proposed within the Back Channel is the existence of submerged (aquatic) vegetation habitat, as preliminarily identified by S.T. Hudson in two areas:

1) from the confluence of the Cooper River with the Back Channel to Farragut Marina, on the southerly side of the existing pier and

2) across the waterfront of the CCMUA site up to the 36th Street bridge. Development in this habitat is prohibited except for the following:

Note: To ensure the feasibility of the Cramer Hill Waterfront Park Master Plan, Dresdner Robin was engaged early in the process to review the regulatory constraints affecting park development.

- 1. Trenching for utility pipelines and submarine cables,
- 2. New dredging of navigation channels maintained by the State or Federal Government,
- Maintenance dredging of previously-authorized existing navigation channels.
- New and maintenance dredging of previously-authorized operating marinas and any necessary access channels to the expanded portion of such marinas and existing launching facilities,
- 5. Maintenance dredging to regain access to existing private docks, piers, boat ramps and mooring piles not associated with marinas that were previously dredged,
- 6. Construction of a single non-commercial dock or pier, and
- Extension of existing piers or floating docks through submerged vegetation habit to water at least four feet deep at mean low water for the purpose of eliminating dredging or boating through submerged vegetation habitat.

All of the above exceptions are subject to numerous conditions and restrictions. Further, development in upland or water areas adjacent to/within this habitat that results in erosion or turbidity increases in the waters supporting the submerged vegetation or prop or hull scour through use of the development is also prohibited unless mitigating measures are provided. Compensation for unavoidable, permanent significant impacts to this habitat may be required.

Freshwater Wetlands Protection Act Rules (NJAC 7:7A)

This Chapter constitutes the rules governing implementation of the Freshwater Wetlands Protection Act and the NJ Water Pollution Control Act. Regulated activity in a regulated area requires approval. The general process is as follows:

NJDEP Letter of Interpretation (LOI) (NJAC 7:7A-3)

A LOI provides the NJDEP's official determination of one or more of the following:

- 1. Whether there are any freshwater wetlands, transition areas, and/or State open waters present on a site or potion of a site;
- 2. Where the boundaries of freshwater wetlands, transition areas and/or State open waters are located on a site; and/or
- 3. The resource value classification of freshwater wetlands on site.

A LOI does not grant approval to conduct any regulated activities—its sole function is to provide or confirm information about the presence or absence, boundaries, and/or resource value classifications. The following are the three types of LOIs:

- A presence/absence LOI (also called a footprint of disturbance LOI), in which NJDEP determines whether any regulated areas exist and, if so, the resource value classification for any wetlands;
- 2. A line delineation LOI, in which NJDEP delineates the boundary lines of regulated areas; and
- 3. A line verification LOI, in which NJDEP confirms or modifies a delineation proposed by an applicant.

Freshwater wetlands are divided into three classifications based upon resource value, which is then utilized for determination of transition area widths, as follows:

- Exception Resource Value—these wetland areas discharge into FW-1 or FW-2 trout-production waters or their tributaries, are present habitat for threatened or endangered species, or are documented habited for threatened and endangered species, and which remain suitable for breeding, resting, or feeding by these species. Transition areas for exceptional resource value wetlands are 150 feet wide.
- Ordinary Resource Value—these wetland areas do not exhibit
 any of the characteristics above and are isolated, a drainage
 ditch, a swale or a detention facility created by humans in an
 area that was upland at the time the facility was created. There
 are no required transition areas for ordinary resource value
 wetlands.
- Intermediate Resource Value—these are wetland areas that are not defined as exceptional or ordinary. Transition areas for intermediate resource value wetlands are 50 feet wide.

Based upon the Bald Eagle Foraging limit available on the NJDEP Landscape Project database, it is anticipated that any freshwater wetlands will be subject to a 150 foot transition area.

NJDEP Freshwater Wetlands General Permits, Transition Area Waivers and Individual Freshwater Wetlands and Open Water Fill Permits

Upon identification of the limits of regulated areas and transition areas (if applicable), proposed activities need to be assessed to determine whether the activities are regulated. Regulated activities include the following:

- Removal, excavation, disturbance or dredging;
- Drainage or disturbance of the water level or water table so as to alter existing elevation of groundwater or surface water;
- Dumping, discharging or filling with any materials:
- Driving of piles;
- Placing of obstructions which will affect the values or functions of a freshwater wetland;
- Placement of any portion of a residential development project

Non-regulated activities include limited surveying or wetland investigations for the purposes of establishing a boundary line, placement of certain temporary structures for observing, managing, or harvesting fish or wildlife, installation of small guy anchors to support a utility pole, hand trimming of vegetation, and pile driving under certain conditions.

Approvals for regulated activities fall within one or more of the following categories:

- Freshwater Wetlands General Permits (NJAC 7:7A-4 and 5)—
 There are currently 27 General Permits (GPs) available for regulated activities that, generally, cause only minimal adverse
 environmental impacts. Examples of general permits include
 maintenance and repair of existing features (GP#1), hazardous site investigation and clean-up (GP#4), minor road crossings (GP#10B), bank stabilization (GP#20) and redevelopment
 of previously disturbed areas (GP#27). There are also several
 "combined" wetlands general permit authorization and flood
 hazard area authorizations. Flood Hazard Area permit issues are
 discussed in more detail below.
- Transition Area Waivers (NJAC 7:7A-6)—There are six different types of transition area waivers available. In general, a transition area waiver authorizes disturbance of a transition area and modification to the limit of the area. Certain GPs include authorization for disturbance to a transition area for activities covered by the GP.
- 3. NJDEP Individual Freshwater Wetlands and Open Water Fill Permits (NJAC7.7A-)

Essentially, an Individual Permit (IP) is required when a regulated activity in a regulated area does not meet the criteria for a General Permit and/or Transition Area Waiver. An IP has very stringent requirements, including justification that there is no practicable alternative, that the activity is in the public interest, etc.

Development of the Park will likely require numerous wetlands approvals.

Flood Hazard Area Control Act Rules (NJAC 7:13)

This Chapter sets forth requirements governing disturbance to land and vegetation in the following areas:

- 1. The flood hazard area of a regulated water—The Cooper River and the associated Back Channel are regulated waters. Utilizing FEMA 100 year floodplain mapping information, there are numerous locations throughout the Park impacted by the floodplain.
- 2. The riparian zone of a regulated water—The riparian zone consists of the land and vegetation within and adjacent to the River and Back Channel. Similar to the freshwater wetland transition areas, the width of the riparian zone varies depending on certain conditions. The zone is measured landward from the top of bank. The maximum width is 300 feet, which occurs generally along Category One waters. A 150 feet zone is required generally along trout production and maintenance waters, waters flowing through areas containing documented habitat for threatened and endangered species and waters flowing through areas containing acid-production soils. A riparian zone of 50 feet would occur along all other regulated waters. It is anticipated that 50 feet and 150 feet buffers may apply.

Based upon our understanding of the regulations and similar situations involving overlap of the above regulated areas with areas regulated by the Waterfront Development regulations previously discussed, a separate Flood Hazard Area (FHA) approval is only required for areas beyond the overlap. Verification of FHA jurisdiction can be obtained from NJDEP by requesting an applicability determination.

NJDEP Tidelands

Tidelands, also known as riparian lands, are all those lands now or formerly flowed by the mean high tide of a natural waterway. All tidelands are owned by the State of New Jersey unless the State has sold its interest in the form of a tidelands (riparian) grant. These grants are generally only used for lands that have already been filled in and are no longer flowed by the tide. Tidelands licenses are short-term revocable rental documents allowing, generally, for structures such as docks, bulkheads, dredging, etc. Licenses are project-specific and expire—some can be renewed. A tidelands lease is a long-term rental document generally issued for homes on the water.

To determine applicability of tidelands regulations throughout the Park, NJDEP Tidelands maps and/or individual parcel surveys/title research would be required.

NJDEP Bureau of Safe Drinking Water BSDW (NJAC 7:10)

Approval is required from NJDEP Bureau of Safe Drinking Water (BSDW) for projects meeting the following requirements:

- 15 or more realty improvements
- Installation of 1500 feet or more of water main
- New non-residential average demand greater than 6,000 gallons per day
- Interconnection with another public community water system Individual projects meeting the above standards will require BSDW permits.

NJDEP Treatment Works Approval TWA (NJAC 7:14A-22)

Approval is required from NJDEP Bureau of Financing and Construction Permits, Division of Water Quality, for projects meeting the following requirements:

- Building, installing, modifying or operating any sewer line, pumping station or force main which services more than two buildings or will convey 8,000 gallons per day or more of flow to a treatment works.
- Extension of any sanitary sewer main within a public Right-of-Way. Individual projects meeting the above standards will require BSDW permits.

In addition to the standards outlined under 7:14A-22 for a TWA, the July 2008 adoption of revised Water Quality Management Rules creates potentially significant constraints to providing sanitary sewer service to the Park parcels. In summary, sewer service areas are required to be modified to provide service only to areas not identified as "environmentally sensitive", which are defined based on a composite geographic information systems (GIS) analysis as any contiguous area of 25 acres or larger consisting of the following:

- Areas mapped as endangered or threatened wildlife species on the NJDEP's Landscape Plan database,
- Areas mapped as Natural Heritage Priority Sites (with exclusions) on the NJDEP's website,
- Special water resource protection areas along a Category One water and their tributaries as identified on the NJDEP's website,
- Wetlands as mapped on the NJDEP's website,
- Certain coastal planning areas identified on the CAFRA Planning

Map,

- And additional special restricted areas where local mapped information exists delineating these areas, or through narrative description in a wastewater management plan where a reliable mapping source does not exist. These restricted areas include:
- Environmentally sensitive areas in which Federal 201 grant limitations prohibit the extension of sewer service,
- Beaches, as defined at NJAC 7:7E-3.22,
- Coastal high hazard areas as defined at NJAC 7:7E-3.18, and
- Dunes as defined at NJAC 7:7E-3.16.

There are numerous exclusions to the above areas, such as an NJDEP LOI demonstrating an area is not wetlands, but many require formal amendments and approval by NJDEP. These revised Rules also require NJDEP approval of county-wide Wastewater Management Plans (WMP) prior to issuance of any TWAs. Each county is required to submit their plan to NJDEP by April 2009, but it is unclear how long it will take NJDEP to review and approve the plans, which would restrict issuance of TWAs. Based upon conversations with the Camden County Municipal Utilities Authority (CCMUA), there is a Memorandum of Understanding with DEP that allows CCMUA until Dec 2009 to submit an updated Plan pursuant to the 2008 regulations. The CCMUA will attempt to maintain the existing sewer service area for Camden, which includes the entire City; thereby; eliminating environmental issues associated with various properties throughout the Park.

US Army Corps of Engineers (USACOE) - Wetlands **Jurisdictional Determination (JD)**

Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, the discharge of dredged or fill material into waters of the United States, including adjacent and isolated wetlands, is an activity regulated by the Corps of Engineers.

The first step to determining the extent of Corps jurisdiction is to identify the location and extent of wetlands on a parcel of land, similar to the NJDEP LOI process. The Corps of Engineers wetland delineation verification process is known as a "jurisdictional determination" (JD).

Due to the location of the overall Park tract adjacent to the River and Back Channel, it is anticipated that the USACOE jurisdiction will be limited to wetlands within 1,000 feet of the mean high water line of those waterbodies, which encompasses significant portions of the overall tract.

Upon determination of the jurisdictional limits, the second step is to identify the need for permits associated with regulated activity, as discussed below.

US Army Corps of Engineers (USACOE)-**Wetlands Permits**

Similar to NJDEP wetland permitting, there are several different types of permits for activities within Corps jurisdiction, as follows:

Nationwide Permits (NWPs)—NWPs are general permits for certain specified activities nationwide. If certain conditions are met, the specified activities can take place without the need for an individual or regional permit. A prospective permittee must satisfy all terms and general conditions of an NWP for a valid authorization to occur. Nationwide Permits authorize a category of activities throughout the entire nation, and are valid only if the regional conditions applicable to the permits are met. If these conditions are not met, a regional or individual permit will be required. The following are examples of available NWPs: fish and wildlife harvesting, survey activities, outfall/ intake structures, utility lines, bank stabilization, minor discharges, minor dredging, modifications of existing marinas, temporary construction, clean-up of hazardous and toxic waste, etc.

- Individual Permits (IPs)—Activities that do not meet the conditions of NWPs will require IPs. Similar to the NJDEP Individual Permit, the Corps IPs have stringent requirements, including alternatives analyses, etc.
- Joint State and Federal Permits—A State Programmatic General Permit (SPGP) is a type of general permit founded on an existing state, local or other Federal agency program and designed to avoid duplication with that program. In New Jersey, there are SPGPs for work in substantially developed artificial tidal lagoons and their access channels, and for existing/proposed non-commercial piers. docks, etc. and replacement of bulkheads within 18" of an existing bulkhead.

It appears numerous parcels will likely require a NWP, IP and/or SPGP.

US Army Corps of Engineers (USACOE) -**Development Permits**

The purpose of the Department of the Army regulatory program is to protect the navigable waters of the United States and other waters of the United States. With respect to the Waterfront Park, the jurisdictional limits of this program extend from the main bodies of the Cooper River and Back Channel of the Delaware River, landward to the spring high tide line.

The USACOE regulates activities such as dredging, filling, repairs of existing marine structures and construction of new structures. During the review of these proposed activities the USACOE will coordinate the review process of a permit application with the U.S. Environmental Protection Agency (USEPA), U. S. Fish and Wildlife Services, National Marine Fisheries and the U. S. Coast Guard.

Depending on the proposed activity the USACOE will issue a Nationwide Permit for Minor Activities or an Individual Permit (Section 10/404) for dredging, filling and new construction.

City of Camden Approvals

Any type of development on the Park parcels, including subdivision of lots, will require approvals from the City of Camden, as follows:

- Planning Board / Zoning Board of Adjustment
- Water / Sewer Utilities
- Building Permits
- Construction-related Permits, such as road opening permits

Camden County

Certain types of development throughout the tract, including subdivision of lots, will require approvals from Camden County. The following approvals are anticipated:

- Camden County Planning Board—subdivision of lots
- Camden Co Municipal Utilities Authority (CCMUA)—sanitary sewer
- Camden County Soil Conservation District and Construction General Permit (RFA)—soil erosion and sediment control plan certification

Summary of Key Regulatory Issues

Key issues identified at this time:

- Waterfront Development: A significant portion of the overall Park is within the 500 foot jurisdictional range. Particular focus should include impacts to submerged aquatic vegetation habitat.
- Wetlands: A current wetland delineation meeting both NJDEP and USACOE standards is required to determine jurisdictional limits for individual properties.
- **Wetlands Buffers:** The presence of the Bald Eagle foraging habitat on the site will likely render the wetlands buffers at the 150 foot range.
- **Tidelands:** Investigation of potential tidelands issues is beyond the scope of this Plan. This should be investigated, as resolution of tidelands issues can be time consuming.
- Sanitary Sewer Service: The revised Water Quality Management Rules create potentially significant constraints to providing sewer service to the Park parcels. This needs to be further evaluated with the Camden County Municipal Utilities Authority (), who is required to submit a county-wide Wastewater Management Plan to NJDEP.





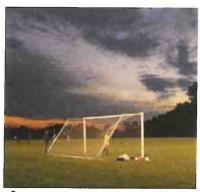
Selected images from the photographic survey conducted by S.T. Hudson Engineers.

Programming Survey

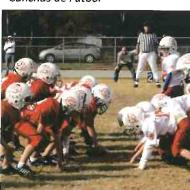
An easy-to-read graphic survey asked residents and future park users to prioritize park activities.

Sports and Play - Please Circle Three (3)

Deportes y Juego -- Favor de Seleccionar Tres (3)



Soccer Canchas de Fútbol



Football Canchas de Fútbol Americano



Basketball Canchas de Baloncesto



Baseball Parque de Pelota



Tennis Courts Canchas de Tenis



Playgrounds Patios de Recreo

Passive Uses and Trails - Please Circle Three (3)

Usos Pasivos y Veredas -- Favor de Seleccionar Tres (3)



Community Gardens Jardines para la Comunidad



Game Tables Mesas de Juego



Covered Picnic/BBQ Areas Áreas Cubiertas para Picnics/BBQ



Open Lawn Áreas Verdes



Bike Paths Caminos Designados para Bicicleta



Waterfront Promenade Paseo Marítimo



Ampitheater Amfiteatro al Aire Libre



Festival Grounds Área para Festivales Públicos

Nature and Education – Please Circle Three (3)

Naturaleza y Educación -- Favor de Seleccionar Tres (3)



Boardwalk Paseo Tablado



Environmental Education Educación sobre el Medio Ambiente



Habitat Restoration Restauración de Hábitat



Nature Trail Corredor Natural



Bird Watching Áreas para Observar Aves



Stream Restoration Restauración de Arroyos

Special Places and Events – Please Circle Three (3)

Lugares Especiales y Eventos -- Favor de Seleccionar Tres (3)



Farmers Market Mercado Abierto para Agricultores



Public Art Áreas Designadas para Arte Público



Dog Park Parque para Perros



Ice Skating Patinaje Sobre Hielo



Flea Markets Mercado Informal "Pulguero"

Getting In the Water – Please Circle Three (3)

Llegando al Agua -- Favor de Seleccionar Tres (3)



Fishing Pier Muelles para Pesca



Boat Launch *Rampa de Lanzamiento*



Marina Marina



Canoeing and Kayaking Alquiler de Canoas y Kayak



Interactive Water Park
Parque Aquático Interactivo

Buildings In the Park - Please Circle Three (3)

Edificaciones en el Parque -- Favor de Seleccionar Tres (3)



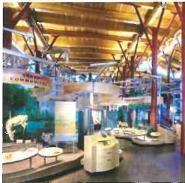
Boating Concessions *Concesionario para alquiler de botes y kayak*



Restaurants and Waterfront Dining Rampa de Lanzamiento



Concessions Concesionario

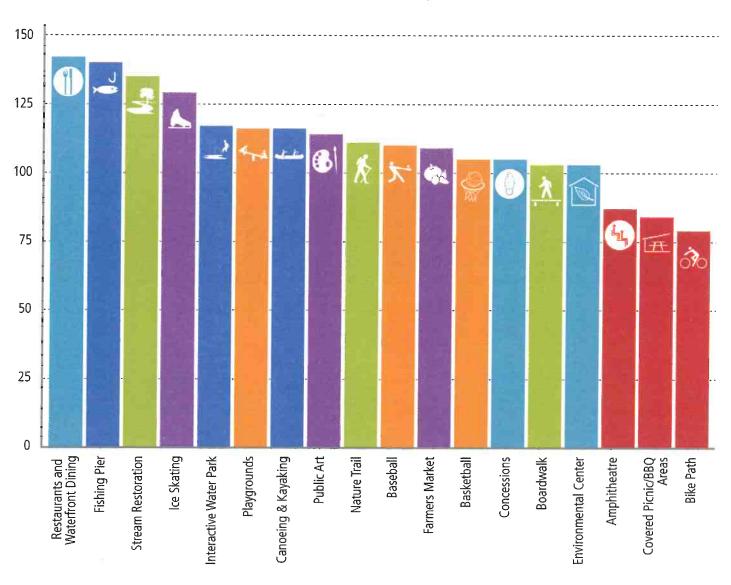


Environmental Center Centro Educacional para el Medio Ambiente

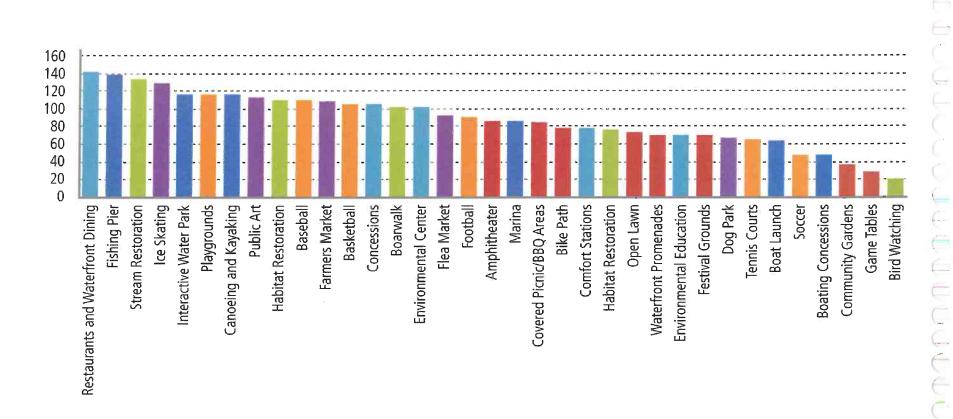


Comfort Stations Estación con Facilidades Públicas

Programming Survey Priorities (Based on 188 Responses)



Programming Survey Results (Based on 188 Responses)



Comments from Community Meetings and Break-out Sessions

Public Meeting #1: December 15, 2009 Sharp Elementary School

- Kids play on Farragut near 33-36th
- Fish in pond
- Concentrate on youth
- Boat ramp @ 29th & Harrison near Waterview is a goldmine (used to have baptisms there)
- Create accessible recreation in areas that are overgrown/inaccessible
- Recreating access
- Children
- Elder job creation, i.e. waterfront restaurant
- Security
- People don't clean up after; who will maintain?
 Especially bbg/picnic shelter.
- Place to ride your bike safely would be great.
- Where would you put an amphitheater?
- Is a bar an appropriate use for the waterfront?
- Prioritize child-focused activities.
- "Little Puerto Rico" cultural events.
- Integrate waterfront plan w/ plans for Petty's Island Coordinate Planning efforts for the waterfront
- Other assets include deer @ 36th/Harrison.
- Family friendly atmosphere
- Would be nice to have a nice sit down restaurant
- Local owned & operated restaurant—no chains.
 It's nice to be local/down-home
- Riverfront Recycling for dining & other uses.
- Residential used should not impede public access to the waterfront
- Insure good linkage between Von Neida's & waterfront.
 Opening up creek/opportunities to deal with flooding.
- NO CASINO
- Used to fish along waterfront; no access

- Ice skating rink on waterfront @ 27th St.
- Bowling, movie theatre
- Facilities that have multiple uses.
- Outdoor Pool as destination
- Boat tours in summer
- Make the waterfront Camden-centered
- Capitalize on unique qualities: -natural resources, -bald eagle & urban skyline, -balance to preserve natural resources
- Opportunities for kids; sailing clubs/educ
- Hire Camden residents in development of waterfront.
- Vacant lots how do you incorporate into neighborhood?
- · Advertising future meetings:
- There is a lack of respect for public art
- Well-lit spaces.
- Safe spaces.
- Von Neida Park floods and is rendered unusable.
- Needs additional lighting
- There is no supervision at night and there is an overall lack of security.
- Well lit trails so that one can feel safe during evening family outings.
- Open air movie showings.
- Overall lack of security.
- Need to reduce the amount of foul odor along the river.
- Empty and damaged homes that are falling down.
- City Hall archives are not up to date with the current stock of unoccupied housing.
- Security / Lighting
- Maintenance there is a need for more trash cans and trash pick-up services by the City.

- The intersection of River Road and 29th Street floods.
- The area where Riverfront Recycling is at—What can go there?
- Residents go to Cooper River Park for family activities.
- There is a need for spaces for gathering as a community.
- The authorities that do show up don't do anything.
- In the last ten (10) years the neighborhood has deteriorated.
- Reduce the amount of housing stock designated for Section 8 Housing.
- The future of our children is at stake.
- Social activities within the community are limited due to lack of adequate facilities.
- The majority of activities that are done within the community are focused on sports—need more variety
- It is not safe for kids to go out on their bicycles.
- Security is an issue at all parks.
- The enforcement of fines as a deterrent to bad behavior
- Important: Visual access to water from neighborhood
- Develop. Streets to encourage visual access and physical access to water
- Focus on youth, training + edu as sites are dev't in site programs
- Tie-ins w/ local schools, CCOP issue
- Early education in personal finance and entrepreneurial finance especially for women. Croc Ctr? -lots of hope in this—historical Cramer Hill Girls Club was a precedent
- Variety of activities, esp for young children
- For neighborhood plan: -tie-in to libraries provide computer training, etc.
- Security: what kind of activity will make people feel safe?
 -lighting, -police presence or townwatch (substation),
 -OPEN-visual access
- Bike trails, Johnson Park works

- Canoeing program (w/ education) helps w/ security, recreation, education
- Areas near Cooper River w/ trees and no visibility Access do not feel safe.
- Support for stream restoration as long as sewage and pests not increased near houses.
- In are near Von Neida—sewage backup during flooding
- Cultural activities + features (Rutgers is the main resource for this now)
- A lot of artists are in the neighborhood but diversity is the hallmark of the place--let's showcase that it's a source of pride
- Visual character ties to diversity, a quilt with something for everyone. Do not be generic and homogenous
- Fear inhibits community interactions
- People do not know about the habitats + natural resources and so is not yet a priority.
- Something to generate revenue
- Encourage block parties.
- Not enough play areas for small children
- See Pennsauken's little neighborhood play garden lots
- Von Neida is over programmed so neighborhood do not use it in summer. Lights are too soft.
- Having a place for family and neighborhood cook-out and gathering -lots of competition for these.
- Seniors needs to feel safe enough to get out like a senior center or move intergenerational interaction -feedback for Kroc Ctr.
- Community garden can be a good conduit for this. -Educational and workshops, shade and gathering place, seating.
- Safety, particularly @ 33rd St. & Harrison b/c of proximity to water. Will having more people going through make the area less safe?
- Children in yards can be less safe

Public Meeting #2: January 26, 2009 Veterans Memorial Middle School

- End of 27th as main point. Restaurants.
- Former ballfield at end of Von Neida
- No more low-income housing. Moderate is good.
- 100 surveys not enough.
- Include a marina access to water
- Restaurants along watefront
- Excellent job on goals and recommendations so far 2x
- Prioritize implementation
- 27th is the spine for both sides of Cramer Hill
- Security and Safety @ 36th Street at the park for kids primarily
- Owls, deer, parrots, hummingbirds, rabbits. West side retain them
- At Kroc, provide waterfront access through the site
- Provide water-based tours from the waterfront
- Think about what the narrative is and how it taps into the history and centrality of the place

Public Meeting #3: February 16, 2009 Christus Luthern Church

- Bridge over Cooper River: What is the feasibility? Having bridge will have direct impact on land use
- How will you deal with private property owners that own waterfront property?
- How will the landfill be remediated?
- Will capping the landfill impact tree planting?
- What type of remediation?
- Rerouting Harrison Ave: does this impact existing housing?
- Does this impact housing values? Increase speeds?
- Impact on wetlands.
- Is there a plan to fix portion of Harrison where sewer has collapsed?
 Bainbridge/25th?
- Concerned about children's safety along streets and trails
- How do you ensure that deer will remain? I enjoy seeing them.
- Parking (providing for new uses)
- Ensuring safety of neighborhood's kids.

^{*}Note: WRT did not attend Meeting #4, on March 16. Only Interface Studio presented. No surveys were distributed

Public Meeting #5: April 20, 2009 Christus Luthern Church

- Don't tinker with State Street Bridge (keep intact)
- Don't mess with (e) traffic patterns
- 27th Harrison smell. CCMUA Site
- Who will maintain entire park system
- J.G. more resources in State or County park system
- 1 like ideas JOBS creation
- Human Capitol Plan
- Will there be another opportunity for residents to prioritize
- Kroc Center what is the plan
- Guarantee jobs for bldg entire waterfront neighborhood, students, residents
- Put the money in Camden
- Incentives for hiring Camden residents (Human Capitol Plan)
- Why narrow the streets between 27th/26th River Road? Concerned about bus traffic. Allow emergency vehicles.
- Concerned about paid parking for new development.