



ANACOSTIA WATERFRONT INITIATIVE

10 YEARS OF PROGRESS



Government of the District of Columbia | September 2010







Dear Waterfront Stakeholder,

Ten years ago, on March 22, 2000, nineteen Federal and District agencies committed themselves to the unprecedented effort of restoring the Anacostia River and its waterfronts. Now, in 2010, the rebirth of Washington as a sustainable, waterfront city is becoming a reality and there are numerous examples of significant progress that should be recognized and celebrated.

The actions the District has taken and obstacles we have faced in implementing the Anacostia Waterfront Initiative are of national interest for cities across the country that seek to recapture under-utilized properties along their waterfronts. This summary of progress attempts to capture the execution strategies we implemented, as well as highlight lessons we learned during the past decade.

More important than sharing the District’s experience in waterfront revitalization with our sister cities, however, is communicating with the residents of Washington about the progress made toward improving their communities and the environment in the District of Columbia. While seemingly slow, and sometimes contentious, tremendous investments have been made and strides taken to realize our shared vision of a vibrant Anacostia waterfront.

More than \$1.8 billion in Federal and District funds have been invested toward advancing the Anacostia Waterfront Initiative, with \$7 billion in private investment that followed in the Capitol Riverfront alone. DC Water’s implementation of the Long-Term Control Plan has closed 36 combined sewer outlets in the Anacostia watershed. The Capitol Riverfront is a new neighborhood of two million new square feet of mixed-use development, anchored by the Navy Yard, Nationals Ballpark, a revitalized Arthur Capper Carrollsburg and the U.S. Department of Transportation. The U.S. Army Corps of Engineers has

just completed a two-year study of the entire Anacostia watershed, which documents more than 2,000 projects in Montgomery County, Prince George’s County and the District of Columbia that would contribute to the improved environmental conditions of the river. Finally, more than 100,000 construction jobs were created by development activity associated with revitalizing the District’s waterfronts.

Of course, the work of restoring and revitalizing the Anacostia River and its waterfronts is not done. However, I have great expectations that the next ten years of progress will be transformative for the District.

I would like to extend special thanks to President Obama, who has demonstrated leadership in advancing the agenda of the Anacostia River by appointing a Special Assistant to the Chesapeake Bay and Anacostia River, as well as by issuing a Presidential Executive Order to clean up the Chesapeake Bay. Thank you also to Congresswoman Eleanor Holmes Norton, Congressman Steny Hoyer, Governor Martin O’Malley, the members Congress from the State of Maryland, and members of the DC Council for your leadership. Lastly, and most importantly, thank you to all the civil servants, contractors, consultants, non-profit partners, volunteers and citizens who have contributed time, energy and imagination to the long-term realization of the Anacostia Waterfront Initiative.

Respectfully,

Adrian Fenty
Mayor, District of Columbia



The river as envisioned by the Anacostia Waterfront Initiative.

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WASHINGTON, DC: A MODEL FOR GREAT WATERFRONT CITIES

Washington has an unrivaled opportunity to enhance its identity and quality of life. Rescuing the Anacostia River from its status as one of the country's most polluted rivers means providing residents with a river open to fishing and swimming, and offering an urban lifestyle and amenities sustainably balanced with the District's rich natural areas.

Rather than a city divided, in part by which side of the river one resides, AWI's vision provides for a shared Washington identity as a special waterfront neighborhood.

In developing the AWI, member agencies of the District and Federal governments worked together to define the elements that would redefine Washington as one of the world's great waterfront cities. The components identified are Environment, Transportation, Parks, Destinations and Neighborhoods, which are respectively represented by the themes Restore, Connect, Play, Celebrate and Live.

Washington has made great strides to add its name to the list of great urban waterfronts during the past ten years. This report is a synopsis of that success as well as a reflection on the original vision outlined in the AWI Framework Plan.

RESTORE



ENVIRONMENT: A CLEAN AND ACTIVE RIVER

Charting the course for environmental healing and rejuvenation involves eliminating pollution, controlling run-off, restoring streams and wetlands and promoting water-based activities.

AWI Environmental Goals

- Provide a river suitable for swimming by 2025
- Restore riparian function in the watershed in both urban and natural environments
- Implement green guidelines and standards to require sustainable development
- Increase all types of maritime activity
- Enhance environmental education on the river's watershed

CONNECT



TRANSPORTATION: BREAKING DOWN BARRIERS AND GAINING ACCESS

Rethinking the design of transportation infrastructure to gain multi-modal access to waterfront lands and better serve neighborhoods.

AWI Transportation Goals

- Provide continuous pedestrian and bicycle access along the entire waterfront
- Aggressively promote a modal shift to public transit
- Create great urban boulevards with mixed uses, landscaping and great civic spaces
- Redesign bridges across the Anacostia River in the tradition of great civic architecture
- Redesign highways and freeways to reduce barriers between neighborhoods and waterfront parks
- Reconnect the city street grid to waterfront parks

PLAY



PARKS: A GREAT RIVERFRONT PARK SYSTEM

The District's series of isolated parks should become a system of interconnected and continuous waterfront spaces that attract residents and visitors to gather and play.

AWI Parks Goals

- Improve circulation to and between waterfront open spaces to create an interconnected park system
- Enhance underutilized parkland along the river to become important public amenities
- Ensure continuous access along the waterfront for pedestrians and bicyclists
- Increase recreational opportunities in the waterfront parks system
- Create distinct park destinations at neighborhood, regional and national scales

CELEBRATE



DESTINATIONS: CULTURAL DESTINATIONS OF DISTINCT CHARACTER

Bring life and celebration to the waterfront while enhancing and protecting the distinct character of communities along the waterfront.

AWI Cultural Goals

- Highlight the unique character of the river heritage and basins, including natural and urban elements
- Enhance and reinforce existing assets as emerging cultural institutions along the waterfront
- Create park destinations for public concerts, picnics and local neighborhood festivals
- Develop the area into a regional destination for special events
- Construct memorable shorelines that appropriately relate each basin

LIVE



NEIGHBORHOODS: BUILDING STRONG WATERFRONT NEIGHBORHOODS

Promote sustainable economic development and reconnect the city to the river and the waterfront park system.

AWI Neighborhood Goals

- Promote mixed-use waterfront neighborhoods with opportunities to live, work and play
- Invest in existing neighborhoods to improve services and amenities available to current residents
- Create the opportunity for more than 20,000 additional mixed-income households to live in waterfront neighborhoods
- Revitalize existing commercial areas and connect these historic centers to new public amenities

EXECUTIVE SUMMARY

An unprecedented commitment to the Waterfront Revitalization Endeavor was made by the Government of the District of Columbia, four local quasi-governmental corporations, and fourteen federal agencies in March 2000, when these entities executed a memorandum of understanding (MOU) to restore and revitalize the Anacostia River and its waterfronts.

Ten years later, the vision for transforming Washington's waterfronts has taken shape and is on course to accomplishing the ultimate goal: a vibrant mix of natural and neighborhood assets along a clean Anacostia River and preservation of our natural resources for the benefit and enjoyment of residents and visitors.

This ten-year summary of progress seeks to capture the strategies that have been established and advances made in implementing the Waterfront Revitalization Endeavor, now known as the Anacostia Waterfront Initiative (AWI). This document follows the organization and agenda established in the AWI Framework Plan, published in 2003.

The AWI directly impacts communities in Wards 5, 6, 7 and 8, but was intended to impact and transform the city as a whole. When comparing data from 2000 to 2009, all major indicators for the advancement of environmental, economic, and community goals within the Anacostia Waterfront Development Zone are positive. The AWI, when complete, will require an estimated \$25 billion in private and public investment, and is projected to yield \$1.5 billion in additional tax revenues for the District per year. The following major milestones have been achieved:

- The 2003 publication of the AWI Framework Plan, which sets forth the vision and goals for restoring and revitalizing the Anacostia waterfront.
- On December 15, 2006, Congress approved Federal District of Columbia Government Real Property

Act of 2006, which was a unique inter-agency land exchange that enables the District to redevelop 500 acres of waterfront land.

- To date, approximately \$1.8 billion in public investment has been made or committed in the Capitol Riverfront, matched by an estimated \$7 billion in private investment.

RESTORE: ENVIRONMENT

- To date, DC Water has reduced combined sewer overflow by 36% and is implementing the Long Term Control Plan, a \$2.6 billion endeavor to replace 17 CSOs and build tens of miles of new underground wastewater tunnels.
- The District has achieved an approximate 50% decrease in the concentrations of the oxides of nitrogen and sulfur that lead to acidification of water bodies.
- The District approved the AWI environmental standards for sustainable development in 2007.
- 95 acres of new wetlands have been planted throughout the District's portion of the watershed.

CONNECT: TRANSPORTATION

- District Department of Transportation (DDOT) awarded its largest construction project, the \$300 million 11th Street Bridges project, in August 2009.
- Scheduled for three years of construction, DDOT instead was able to remove the South Capitol Street viaduct and improve surrounding streetscapes in nine months to coincide with the opening of the new Nationals Ballpark.
- Of the 20 miles planned in the Anacostia Riverwalk Trail, more than 10 miles are complete; the remaining segments of the trail are in design.
- The District published the Anacostia Waterfront Transportation Guidelines, which guide low impact development standards in the public streetscape.

PLAY: PARKS

- Over \$100 million in public investment has been made to create and renovate parks, including The Yards Waterfront Park, Canal Park, Diamond Teague Park, Kingman Island, Marvin Gaye Park and the Anacostia Riverwalk Trail.
- The Yards Waterfront Park is the centerpiece for the Capitol Riverfront neighborhood, with 5.5 acres of public gathering spaces, an award-worthy pedestrian bridge and retail pavilions.
- Watts Branch Park has been transformed from a grassy field and drug-infested park to a renovated series of amenity parks dedicated to Marvin Gaye, a Washington native who grew up in the nearby neighborhood.

CELEBRATE: DESTINATIONS

- In 2004, the District successfully recruited Major League Baseball back to Washington and, in 2008, opened the \$611 million, state-of-the-art, LEED-certified baseball stadium for the Washington Nationals.
- Opened in 2004, the Mandarin Hotel is the newest five-star hotel in the District, perched on 12th Street SW overlooking the Tidal Basin and Southwest Waterfront.
- In October 2010, Arena Stage will open its doors to the \$135 million, renovated and expanded Mead Center for American Theater.

LIVE: NEIGHBORHOODS

- The total population of the AWI has increased from 16,675 to 23,280 (40% increase).
- The total number of households has increased from 8,021 to 11,324 (41% increase).
- Annual real property tax revenues increased from \$35 million in 2005 to \$109 million in 2009 (211% increase), which outpaced the District's overall property tax revenue growth.

- The Capitol Riverfront is the first new waterfront neighborhood to evolve and now boasts 10 million square feet of new residential, office and retail space, as well as is home to the Washington Nationals.

LESSONS LEARNED

Transforming 2,800 acres of neglected waterfront land and restoring one of the nation's most polluted rivers is complex and a long-term undertaking, as is coordinating among multiple Federal and District agencies to achieve a shared goal. The following is what we have learned so far:

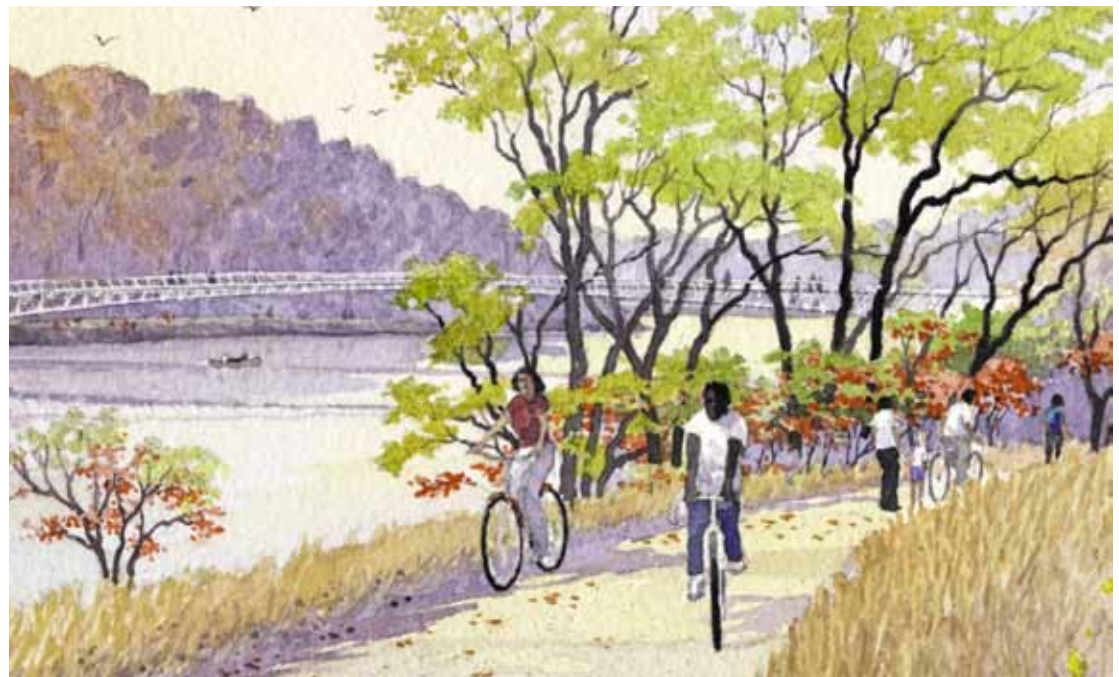
- Implementing an agenda that is as broad and deep as that described in the AWI Framework Plan requires a guiding document to keep all stakeholders aligned and moving in the same direction.
- Private and public partners must appreciate and understand each other's priorities and constraints to successfully deliver on the revitalization aspirations of the community.
- Ample planning time and innovative funding approaches are required to address the extraordinary infrastructure requirements of waterfront projects. Public funding must be leveraged to attract private and philanthropic investment.
- Coordinating with Federal partners is most effective when the lead Federal agency has prioritized the project of concern. Without a Federal champion, projects within the District that require Federal cooperation or action move forward slowly. The District must engage people who are educated about Federal processes and how to navigate Federal approvals. At the same time, the Federal government should designate leaders within its agencies whose responsibilities include implementing the AWI.

OPPORTUNITIES FOR THE NEXT 10 YEARS

To date, the District has been able to achieve real progress on the AWI agenda by making investments on land that the District controls. With many of these opportunities realized, the next decade should focus on improving coordination with Federal agencies that have interest in the AWI. The 2010 Presidential Executive Order to Restore and Protect the Chesapeake Bay has elevated the AWI as a Federal priority and is an encouraging demonstration of environmental leadership from the White House. The specific areas that the District and Federal governments could improve process and communication include at minimum:

- Simplifying, to the maximum extent possible, duplicative or circular Federal and District administrative, approval and permitting processes;

- Identifying a list of mutual priority projects to be implemented in the near- and long-term, so that agencies have adequate time to plan and fund their commitments;
- Creating a dedicated work group focused on innovating and identifying new models for enhancing Federal and District public spaces and maximizing community benefits.
- Cross-leveraging Federal and District financing tools so that the Nation's capitol is developed as a premier waterfront city and world-class example of sustainability.
- Identifying opportunities with U.S. Department of Housing and Urban Development, U.S. Department of Transportation and the Environmental Protection Agency for inter-agency cooperation to deliver a demonstration sustainable community project in the District.



Artist's rendering of the Anacostia Riverwalk trail at Kenilworth Park

ENVIRONMENT: A CLEAN AND ACTIVE RIVER

Largest project: The Long-Term Control Plan is a \$2.6 billion, 20-year implementation plan to replace 17 combined sewer outfalls. Tens of miles of tunnels will be buried 100 feet underground and transport wastewater from Northeast Washington under the Anacostia River to the Blue Plains Wastewater Treatment Plant.

Green roofs: The District is second only to Chicago in the number of green roof acreage. The 68,000 square foot green roof on top of the U.S. Department of Transportation headquarters is the largest green roof in the city.

Innovation: Canal Park is the first-of-its kind, sector-wide stormwater management demonstration project where multiple property owners filter stormwater runoff, which is used to water landscape and supply the park's water feature and ice-skating rink.

New ideas: The Green Build-Out Model is testing whether low impact development can reduce stormwater runoff by 90%, which has the potential to save millions in infrastructure dollars.

Technology at work: The Anacostia River Monitoring Program allows the public to access real-time water quality data on the www.green.dc.gov website.

National leadership: In 2009, the District passed a nationally recognized "Bag Law" (the Anacostia River Clean Up Act of 2009), which placed a 5¢ fee on all plastic bags. This legislation has resulted in an unprecedented change in behavior and reduction in plastic bag use.



A primary goal of the AWI is to restore the environmental conditions of the Anacostia River, reestablish its natural ecosystems, provide a safe and clean shoreline, and promote sustainable development. The Anacostia watershed encompasses 176 square miles, a quarter of which is in the District and remainder of which is in Prince George's and Montgomery Counties. In the past ten years, significant progress has been made to:

- Synthesize data from multiple stakeholders to develop action and implementation plans
- Collaborate across the three jurisdictions along the Anacostia watershed (District of Columbia, Montgomery County and Prince George's County)
- Identify critical investments needed to reduce toxins, pollutants and trash
- Establish sustainable development standards
- Implement stream restoration projects and the Long-Term Control Plan (LTCP)

Progress across the environmental agenda has been steady. The next decade provides a significant opportunity to accelerate progress in water quality, implement environmental plans, and advance sustainable building practices. This chapter focuses

on the major environmental accomplishments to date and outlines ongoing efforts to improve the watershed's conditions.

MAJOR ACCOMPLISHMENTS

The first decade of AWI has yielded design, construction, regulatory, legal and monitoring activity of all scales and scopes, which together benefited the Anacostia's terrestrial and aquatic ecosystems and made neighborhoods along the river more sustainable and livable. The governing jurisdictions, Environmental Protection Agency (EPA), National Oceanic and Atmospheric Administration (NOAA), DC Water and other environmental stakeholders have worked consistently on multiple aspects of the environment agenda as demonstrated by the following notable efforts:

1. Finalization, in 2002, of the DC Water-managed LTCP to replace and reduce the adverse effects of the combined sewer overflow (CSO) system.
2. Negotiation of and compliance with EPA Total Maximum Daily Loads (TMDL) permits and the Municipal Separate Storm Sewer System permit that regulate more than 20 different nutrient/toxin loads and trash and stormwater volumes.

- Publication of the U.S. Army Corps of Engineers' Anacostia Watershed Restoration Plan (AWRP), which identifies more than 2,000 watershed restoration projects in Montgomery County, Prince George's County and the District.

Additionally, recent federal attention has been brought to the Chesapeake Bay region as a result of President Obama's Executive Order to restore and protect the Chesapeake Bay. This will impact the future of the initiative by focusing national attention and Federal funds on the region. The environmental agenda could be further accelerated by increased focus on environmental conditions and improved access to Federal lands along the Anacostia river.

Water Quality

The Anacostia River is historically one of the most polluted rivers in the region. More than 20 TMDLs govern nutrient and pollution load in the Anacostia River. These levels are regulated and monitored by the District Department of Environment (DDOE). Also, the \$2.6 billion LTCP being implemented and managed by DC Water will replace 17 CSO outfalls and related infrastructure. The Anacostia 2032 Plan details strategies and tactics for reducing pollutants and toxins in the river. The Anacostia 2032 Plan outlines



Constructing wetlands at Kingman Island

KEY CAUSES OF ENVIRONMENTAL DEGRADATION

The three general causes of environmental degradation are: (1) pollutants and toxins, (2) sedimentation and erosion and (3) trash.

Pollutants and Toxins

The poor water quality of the Anacostia River results from multiple contaminants and toxins, most of which enter the river by stormwater runoff, CSOs and several known point-sources of contamination.

Stormwater runoff picks up pollutants as it meets roads, roofs and other terrain, and requires maintenance and management by all jurisdictions in the watershed. The CSOs are being replaced by DC Water as part of its LTCP. Remedying point-sources of toxins requires negotiation and legal agreements for remediation actions among responsible parties.

Sedimentation and Erosion

Once one of the deepest rivers in the Chesapeake Bay watershed, the Anacostia

how to eliminate combined sewer overflows into the river, eliminate pollution discharges, restore natural riparian functions, expand wetlands, and increase oxygen levels in the river. As a result, the District and its partners have implemented important guidelines to effectively limit the amount of contaminants in the river. Several key indicators of shared successes include:

- Reduced combined sewer overflow by 36%.
- Reduced concentrations of oxides and sulfurs in the river by nearly 50%.
- Completed rehabilitation of the Potomac Pump Station, the Main and O Street Pump Stations and the East Side Pump Station. The design for the Poplar Point Pump Station is complete and the facility is slated for completion in 2011.
- Replaced 4.5 miles of stormwater and sewer

River is now slow-moving and shallow, measuring no more than 20 feet at its greatest depth. As of 2000, more than 70% of the land in the Anacostia watershed was developed and impervious surfaces covered 25% of the area. The region's urban development has resulted in siltation and erosion, which has degraded the river's life-supporting oxygen content, vegetation and its ability to naturally filter and flush contaminants.

Trash

Each year, approximately 20,000 tons of trash and debris are washed into the Anacostia River from stormwater runoff and littering. Plastic bags, Styrofoam products, snack wrappers, bottles and cans make up 85% of the trash polluting the Anacostia. Maryland and the District voluntarily signed the Trash Free Potomac Watershed Treaty to reduce trash in the Anacostia River. The EPA also issued these two parties a first-of-its-kind Trash TDML.

lines under the Anacostia Combined Sewer Separation Project. An additional 6.5 miles are set for completion in 2011 as part of the Rock Creek Sewer Separation effort.

- Completed design of the Pope Branch restoration, which includes rehabilitating 0.4 miles of water, stormwater and sewer lines and four sewer outfalls; and stabilizing 4,200 feet of stream.
- Developed the Anacostia River Monitoring Program.
- Currently designing the Northeast Boundary Swirl Facility.
- Currently implementing the Outfall Sewer Rehabilitation project, which will rehabilitate 20,000 feet of influent sewers to Blue Plains Advanced Water Treatment Plant.



DC WATER'S LONG-TERM CONTROL PLAN (LTCP)

Combined sewer overflows (CSOs) are a product of the area's combined sewer system, a system in which both stormwater and wastewater are conveyed in the same pipe. Combined sewer systems make up approximately one-third of the District's sewers. DC Water has been making headway on reducing CSOs. In 2005, DC Water and the District entered into a consent decree to reduce CSOs into the Anacostia River by 98%. This decree was the product of extensive collaboration and review by the EPA, Department of Justice (DOJ), DDOE and the public.

Air Quality Improvements

Depending on the type of air pollutant, pollutant levels have been reduced by approximately 20% to 50% in the District overall since 2000. Of particular interest for the impact on water quality is the 50% decrease in concentrations of nitrogen oxides and

The overall implementation of DC Water's LTCP is expected to cost \$2.6 billion and will be operational by 2025. The first stages of the plan – the nine minimum controls – have already been completed and have resulted in a 36% reduction in CSOs. The larger project is a tunnel system that will store the combined sewage during a rain event until the system can process it. These massive tunnels will take years to build; however, DC Water has completed much of the design and soil testing and site preparation has begun at Blue Plains for construction of the first tunnel.

More information on legal requirements and planning details can be found in the consent decree and the LTCP document.

sulfur that lead to acidification of water bodies. On-road vehicle traffic also is important; between one-third to half of any given air pollutant is emitted by on-road vehicles. Therefore, the role of public transportation and alternative transportation options is vital to the improvement of air quality in the region.

Across the District, between 2005 and 2010, the annual growth rate in vehicle miles traveled in the District was generally flat (0.25%), a good trend for the District. Between 2000 and 2009, ridership on Metrorail increased by more than one-third. Also, the District has the strictest regulation of and most extensive enforcement against engine idling in the Washington region. The government's vehicle emissions inspection and maintenance program was one of the most effective air pollution control programs.

Finally, under the 2009 Urban Tree Canopy Goal, Mayor Fenty established a 40% canopy cover goal for 2035. Approximately 6,000 trees were planted annually in the city, which has improved both air quality and stormwater management.

Elimination of Pollutant Discharges

The government agencies responsible for monitoring pollution discharges and enforcing corrective actions include: EPA, NOAA, Maryland Department of Natural Resources, Montgomery County Department of Natural Resources, and Prince George's County Department of Environmental Resources. The following pollution reduction milestones have been achieved during the past decade:

- Created more than 98 acres of wetland at Kingman Island in partnership with the U.S. Army Corps of Engineers and NPS. This wetland filters water from the Anacostia River by absorbing and reducing pollutants carried to the river from upstream activities.
- Completed the *Anacostia 2032: Plan for a Fishable and Swimmable Anacostia River*, which serves as a roadmap to restore the river.
- Planned and implemented several non-point source pollution watershed implementation plans for each of the Anacostia River tributaries.
- Worked with NPS to produce a resident Canada

geese management plan.

- Applied with EPA to create the Anacostia River No Discharge Zone.
- Completed stream habitat and stormwater monitoring of Watts Branch to determine pollutant load reductions.
- Contributed annual funding to the U.S. Geological Survey's gauge station, which is located where the Anacostia River enters the District. This enables monitoring of pollutant loads originating from Maryland.

Toxins Remediation

The toxin remediation agenda involves eliminating ongoing sources of toxic pollution, remediating toxins in the river bed, remediating contaminated brownfields, and bio-engineering contaminated landfill sites. Examples of toxin remediation efforts include:

- The District Department of the Environment (DDOE), the U.S. Navy and EPA are working together to implement a Federal Facilities Agreement that addresses cleanup for the Navy Yard. The U.S. Navy already has performed numerous short-term cleanups at the facility. Given the complexity of the cleanup process at the site, the District expects several more years of work.
- In April 2010, DDOE and NPS contacted Washington Gas about implementing the remedies described in a record of decision. All parties expect to begin work at the site in the near future.
- In September 2008, DDOE and NPS entered into an enforceable agreement to implement a Remedial Investigation/Feasibility Study (RIFS) for the site. DDOE is implementing the RIFS with NPS oversight.

Habitat Enhancement

The District and its AWI partners have established a habitat enhancement agenda that is intended to: (1) create and restore wildlife habitat along the river's edge; (2) daylight tributary streams and restore estuary environments; (3) manage the river's buffers and introduce native plants; and (4) punish dumping of refuse and support habitat clean-up.

While the water quality agenda has required coordination among jurisdictions, the habitat enhancement agenda has required coordination among several different agencies: DDOE, District Department of Parks and Recreation (DPR), District Department of Transportation (DDOT), NPS and DC Water.

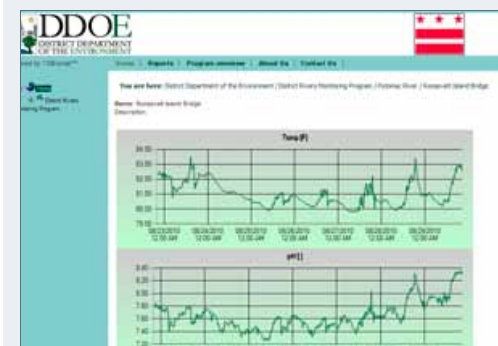
During the past decade, habitat enhancement efforts include:

- Completed 100% design for restoration of two stream miles of Watts Branch through Marvin Gaye Park; expected to be completed in 2011.
- Completed 60% design for restoration of Pope Branch; expected to be completed in 2011. This is a design-build partnership with DC Water.
- Installed several roadside bioretention systems to capture and treat roadway runoff, create habitat and preserve green space. The largest of these projects in the District will be installed soon as part of the Nannie Helen Boroughs Great Streets Initiative.
- Developed RiverSmart Homes, a homeowner education and incentive program that provides \$1,600 to homeowners to make changes to their landscaping to create habitat, promote stormwater infiltration and beautify their properties.
- Required the installation and use of marine pumpout stations at all District marinas.
- Hatched and stocked native fish in the Anacostia River and its tributaries.

Trash Reduction and Clean-Up

Each year, approximately 20,000 tons of trash and debris wash into the Anacostia River from stormwater runoff and littering. Consequently, AWI has taken several tangible steps to curb the amount of trash flowing into the river:

- Conducted a comprehensive survey to determine trash sources in the Anacostia River, which ultimately led to the development of the Anacostia Bag Law.
- Installed trash screens in the Fort Dupont, Watts Branch and Nash Run tributaries. Fort Dupont was acknowledged as the first trash-free tributary of the Anacostia River.



ANACOSTIA RIVER MONITORING PROGRAM

The goal of the Anacostia River Monitoring Program has been to generate a reliable scientific water quality database to: (1) aid in future management decisions concerning protection of the river and its aquatic resources from environmental pollutants and degradation; and (2) protect the public from potential hazards arising from polluted water.

Beginning in 2008, real time water quality monitoring information was made publicly available at www.greendc.gov every 15 minutes.



Volunteers planting a green roof

- Maryland and the District drafted and signed the *Trash Free Potomac Watershed Treaty*, which establishes TDMLs for trash and sets the goal of a trash-free watershed by 2013.
- Placed approximately 500 storm drain markers per year on catch basins in the Anacostia watershed.
- Currently developing a Trash TMDL implementation plan.
- Currently installing a trash, oil and grease collection device on Hickey Run. This tributary attracts 12% of District trash that finds its way into the Anacostia watershed.

Sustainable Development

Significant advances in sustainable development have been made within AWI and the District as a whole. The *Green Building Act* and the *National Capitol Revitalization Corporation and Anacostia Waterfront Corporation Reorganization Act* were both passed in 2007, which together establish the legal and policy frameworks for sustainable development along the

District's waterfronts. All projects within AWI are required to abide by sustainability requirements:

- LEED Gold certification for new construction
- LEED Silver certification for residential
- EnergyStar reporting
- Project alignment with greenhouse gas reduction goals with the "2030 Challenge"
- On-site stormwater retention and reuse by a one-inch-in-24-hours standard
- Compliance with Green Marina certification standards
- Protection and restoration of streams, tributaries, wetlands and other natural habitat and resources to the maximum extent possible
- Incorporation of vegetated buffers, increased tree canopy and low impact development (LID) techniques, as described in DDOT's LID Streetscape Standards

AWI's focus on sustainable development has resulted in several important accomplishments:

- Constructed the first LEED-certified ballpark in the country.
- Awaiting LEED certification for more than 30 buildings.
- Designed Canal Park as one of the District's first demonstration projects for managing stormwater runoff.
- Provided rebates for 114,000 square feet of green roof area, representing one-quarter of green roofs installed in the District.
- Audited approximately 1,000 homes through RiverSmart Homes.
- Formed the Green Marina Partnership, in which 11 of 12 marinas in the area participate.
- Installed 35 RiverSmart school demonstration sites, with five additional sites scheduled for completion by year-end.
- Constructing a large-scale LID project to reduce stormwater pollution on Jay Street in the Watts Branch watershed.
- Installed seven roadside bioretention systems in the Pope Branch watershed.
- Actively installing three regenerative stormwater conveyances to address stormwater volume in the Pope Branch watershed.
- Actively installing two innovative stormwater reuse projects on fire stations, which include cisterns that capture stormwater to prime and wash fire engines.
- Using stimulus funding to install green roofs on libraries and green features at Anacostia High School and H.D. Woodson High School.



DC Water's trash skimmer boat

Education and Outreach

AWI partners have understood the importance of keeping the public informed and educating the community on the environmental implications of the AWI. This has involved offering homeowners detailed information on how to positively influence their environment, providing environmental education to school children, and reaching out to landholders and businesses influenced by changing environmental rules and regulations.

- Managed the Aquatic Resource and Education Center in Anacostia Park, which hosts 2,300 students annually for environmental education events.
- Distributed information to thousands of homeowners stating methods for reducing stormwater pollution from their properties.
- Educated more than 100 teachers on how to maintain and use RiverSmart school sites, and trained hundreds of teachers on how to teach environmental education through Project Wet and Wild.
- Developed a website to track environmental action and progress through “Spotlight on the Anacostia” as part of the Green DC initiative.

- Organized an annual Anacostia Fair to provide environmental education to hundreds of District school children.
- Reached out to local auto body shops to inform them of required spill prevention plans.
- Reached out to local marinas to inform them of new environmental regulations through the Clean Marinas program.
- Tracked and funded environmental non-profit organizations that provided meaningful watershed education experiences to school children in the district.
- Implemented the Mayor’s Green Summer Program, in which participants installed 500 storm drain markers in the Anacostia watershed.

LESSONS LEARNED AND OBSTACLES OVERCOME

With success and progress come lessons learned and opportunities for improvement. Achieving AWI’s environmental goals is a highly complex and multifaceted task, requiring coordination and collaboration among numerous stakeholders.

Additionally, securing funding for projects has proved a significant challenge that requires a comprehensive funding strategy spanning projects small and large. From a technical perspective, the task of remediating and restoring ecosystems within the context of a broader urban environment has been one of great uniqueness and of great struggle. The following sections highlight specific challenges that have been faced during the past decade, and detail steps that were taken to overcome challenges and the future plans to mitigate these obstacles.

Administrative Challenges

Cleanup of the Anacostia watershed is subject to the regulatory requirements of three jurisdictions, the cooperation and agreement among these jurisdictions and several federal agencies, and the mandates and cleanup priorities of the Chesapeake Bay Watershed. On one hand, being a part of the Chesapeake Bay Watershed provides increased Federal support for the Anacostia River. On the other hand, it also detracts resources and complicates the coordination effort. In short, the effort to restore the Anacostia watershed is made more complex since multiple jurisdictions preside over the effort.

Having described the challenges, the District and its partners are working together during the next phase of AWI implementation to develop a streamlined process that integrates jurisdictions and agency stakeholders to reduce time and costs. Specific challenges faced include securing permits from various parties, negotiating funding and liability among parties, and transferring funds between agencies to complete the work.



Tagging and monitoring fish populations



Living Classrooms' trash cleanup at Kingman Island

Management and Funding

Delivery responsibility for environmental projects is assigned to the agencies that set regulatory requirements and manage infrastructure that impacts the environment, such as DDOE and DC Water in the District. Non-profit partners also manage and implement many environmental projects.

Funding for these projects originates from local budget allocations, multi-jurisdictional commitments, Federal earmarks, philanthropic contributions, and legal settlements. The approach to managing and funding the environmental agenda depends on the type, scale and scope of the project; whether it is located across jurisdictional boundaries or property lines; requirements for multi-agency implementation.

The following categories encapsulate three different funding strategies and legal approaches that apply to AWI environmental projects:

Regional projects (e.g. DC Water's LTCP,

AWRP): Typically, these projects have regional impact, require cross-jurisdictional commitments or are of a scale that the local jurisdictions cannot fiscally cover costs without federal assistance. The LTCP has received Federal funding and also has been paid for by increased service rates.

Delivering these types of projects requires a convincing champion, as well as strong leadership from a single entity responsible for managing the effort. The success of the overall project depends

greatly on the leadership of the lead agency and persistence to secure federal funding. Maryland and the District have received authorization, but not appropriation, for \$40 million in Federal funding in the 2007 *Water Resources Development Act*.

Multi-faceted projects (e.g. Watts Branch, streetscape LID implementation):

These projects combine discrete projects delivered by different agencies, which together provide the desired environmental and community outcome. The challenge facing these types of projects is that the project must be a priority for multiple agencies, and funding and scheduling of the separate pieces of the project must be done in concert.

The renovation of Marvin Gaye Park and restoration of Watts Branch tributary is a successful example of how multiple agencies jointly delivered a project that rehabilitated degraded infrastructure, stream and habitat, and developed a unique community amenity.

Discrete projects (e.g. wetland rehabilitation, tree planting, LID measures): Discrete projects are typically easier to implement and deliver due to their more manageable scale and scope. However, these projects often do not garner funding priority. DDOE and EPA are currently testing a Green Build-Out Model to determine the correlation between LID installation and stormwater reductions.

The hypothesis is that LID can decrease stormwater runoff by up to 90%, which implies that investing in LID may be more cost effective than investing in large infrastructure projects. LID also may provide tree canopy, neighborhood beautification and new habitat opportunities, in addition to stormwater management.

Legal approaches (e.g. Navy Yard, Washington Gas): Paying for brownfield remediation can be a contentious process. If owners voluntarily clean up their properties, they typically fund the remediation themselves. On properties that have a history of multiple ownership or old historical contamination activity, the owner is challenged to remediate the property or take legal measures to ensure that their property is cleaned.

In the case of the Navy Yard and Washington Gas, the owners have or are working to reach legal agreement to remediate historical contamination. Positive remediation outcomes are desired by all parties and decisions made to date have been reasonably collaborative.

SKIP THE BAG, SAVE THE RIVER

Trash studies done on the Anacostia River found that disposable plastic bags were one of the largest sources of litter. Plastic bags can trap fish, birds and other wildlife, as well as block the flow of water in streams and tributaries. In 2009, the District Council unanimously passed the Anacostia River Clean Up and Protection Act of 2009, the “Bag Law” which has gained national recognition for its unprecedented efficacy.

The 5¢ fee on disposable bags has proven to be wildly successful in reducing the number of plastic and other non-reusable bags significantly: several grocery stores have reported a 50% reduction. “This small financial burden is causing a very big emotional reaction,” said one observer.

Also authorized in the District Bag Law is the issuance of a “Save the River” commemorative license plate. As of May 2010, residents can purchase the Anacostia River license plate for \$25 per plate when they register their car. Proceeds from the sale of the plates go to fund education and cleanup of the District’s rivers and tributaries.



TRANSPORTATION: BREAKING DOWN BARRIERS AND GAINING ACCESS

Environment first: District Department of Transportation (DDOT) achieved its first ever Record of Decision for the 11th Street Bridges project in July 2008. This project was recognized by the Federal Highway Administration (FHWA) with an environmental excellence award.

Largest project: DDOT awarded its largest construction project, the \$300 million 11th Street Bridges project in August 2009.

Fast track delivery: Scheduled for three years of construction, DDOT fast-tracked near term improvements on South Capitol Street in nine months to coincide with the Nationals Ballpark opening.

Innovative delivery: DDOT utilized a design-build-to-budget delivery mechanism to save \$150 million on the 11th Street Bridges project.

New ideas: The District adopted Grant Anticipation Revenue (GARVEE) Bond legislation to provide critical financing capacity to implement the 11th Street Bridges and potentially other AWI transportation projects.

Technical innovation: Looking for new sustainable and cost-effective construction methods, DDOT is utilizing a Fiber Reinforced Polymer bridge to carry pedestrians and bicyclists across the CSX railroad tracks on the Anacostia Riverwalk Trail.

Multi-modal commitment: AWI transportation projects encompass and support a full range of mode choices: pedestrian, bicycle, transit, automobile and water taxi. Each AWI project also looks for ways to increase the connection of modes to improve transportation options across the District.



Waterfront metro station

The primary goals of AWI's transportation agenda as outlined in the AWI Framework Plan include:

- Providing continuous pedestrian and bicycle access along the entire waterfront
- Promoting the use of alternative transportation choices and public transit
- Beautifying streetscapes by integrating mixed-use development, landscaping and civic spaces
- Creating distinctive bridges that serve as gateways across the Anacostia River
- Redesigning highways and freeways to reduce transportation barriers between neighborhoods and the water
- Reconnecting the city street grid to waterfront parks

During the past ten years, the transportation agenda has enhanced the priority of multi-modal transportation in response to increased energy and fuel costs. Additionally, Federal demands for increased transportation security have driven requirements for infrastructure integrity and efficient ingress and egress routes between the District and surrounding communities.

AWI priorities were the driving force behind the District Department of Transportation's (DDOT) planning initiatives, which include the Middle Anacostia Crossings Study, Anacostia Access Plan and AWI Transportation Master Plan. These studies provide the framework for DDOT's current and future AWI transportation improvements.

MAJOR ACCOMPLISHMENTS

Multi-Modal Transport

AWI's transportation agenda has placed particular emphasis on alternative transportation options. As a result, the District has made an effort to integrate alternative forms of mobility into its projects, including specific focus on:

- Streetcar
- Water Taxi
- Metro
- Pedestrian
- Bicycle

Streetcar Service

The ongoing Anacostia Initial Line Segment (AILS) is the first segment in the streetcar program. It has been designed to connect the underdeveloped southeast section of the city to the rest of Washington, and will be a critical element in the District's multi-modal transportation network. The AILS project is planned to run from South Capitol Street Operations and Maintenance Facility to the Anacostia Metro Station. The entire network will total 37 miles of streetcar track across the District, consisting of eight lines built in three phases. The narrow streetcar design will run within a normal travel lane and share valuable road space with other vehicles.

The streetcar system will make it easier for residents to move between neighborhoods and ultimately spur economic development. The goals of the new streetcar system are simple:

- Link neighborhoods with a modern, convenient and attractive transportation alternative
- Provide quality service to attract and reach new transit ridership
- Offer a broader range of transit options for District residents

- Reduce short inner-city auto trips, parking demand, traffic congestion and air pollution
- Encourage economic development and affordable housing options along streetcar corridors
- Provide additional transit connectivity to Metro

Water Taxi Service

Water taxi service began in 2009 between Nationals Ballpark and destinations in Virginia and Maryland by way of a public pier at Diamond Teague Park. Local charter companies operate approximately one dozen different vessels to the pier for home games at the park and other special events. The half-acre park also connects the piers and the ballpark to the Anacostia Riverwalk.

Metro

Metro ridership has skyrocketed in the Anacostia waterfront area in recent years. Ridership at the Anacostia, Navy Yard and Southwest Waterfront stations has increased by more than 1 million riders (a 40% increase) between 2003 and 2008. This increased transit usage coincides with increased economic development throughout the area.

Circulator Service

Transit usage also has expanded in the Anacostia waterfront area. The Circulator service between Union Station and the Navy Yard was initiated in 2009 and saw an increase in ridership by 26% over its first year of service. More than 37,000 trips are taken on the Circulator each month.

Bicycle Accessibility

Since 2002, more than 13 miles of new bike lanes, exclusive of multi-use trails in Wards 6, 7 and 8, have been constructed. This includes new trails on North Carolina, New Jersey, Alabama and Potomac Avenues, and First, 11th, 14th, 15th and 25th Streets SE.



Top: Laying rail for the streetcar system

Middle: DC bike share

Bottom: Miss Christin at Diamond Teague



Pedestrian bridge at Marvin Gaye Park

Improved Waterfront Access

Anacostia Riverwalk Trail

During the past decade, AWI projects have better connected people and neighborhoods to the Anacostia River and enhanced recreational opportunities in the area. In line with AWI Framework Plan goals, DDOT has prioritized projects that link pedestrians and cyclists to the Anacostia River.

The Anacostia Riverwalk Trail is a 20-mile, shared-use path located along the west and east sides of the Anacostia River that stretches from Prince George's County to the Tidal Basin and National Mall. It provides a safe and convenient means for users to access the Anacostia waterfront and enjoy Anacostia Park and other riverfront amenities.

DDOT has completed trail segments near RFK Stadium on the west bank of the river and the River Terrace Trail on the east bank. Construction began in Fall 2009 on bridges and trails over the railroad tracks east of the river in Anacostia Park and west of the river

to the immediate north of Sousa Bridge. Construction commenced in 2010 for the section of trail along Anacostia Drive in the National Park Service's (NPS) Anacostia Park.

Key elements of the Anacostia Riverwalk Trail include:

- Integrated sustainable planning and design elements, including Low Impact Development (LID) technology, rain gardens and bioswales.
- Constructed consistent, shared-use path signage, educational signage, storm drainage LID systems, landscaping features and site furnishings.
- Developed enhanced trail viewsheds and features that bring users to the water's edge. This has required extensive coordination with stakeholders, including NPS, the Anacostia Watershed Society and the National Arboretum.
- Designed pavements to minimize impacts to the natural environment and to reflect sensitive habitats. Alternatives to asphalt pavement have been explored for the path that traverses

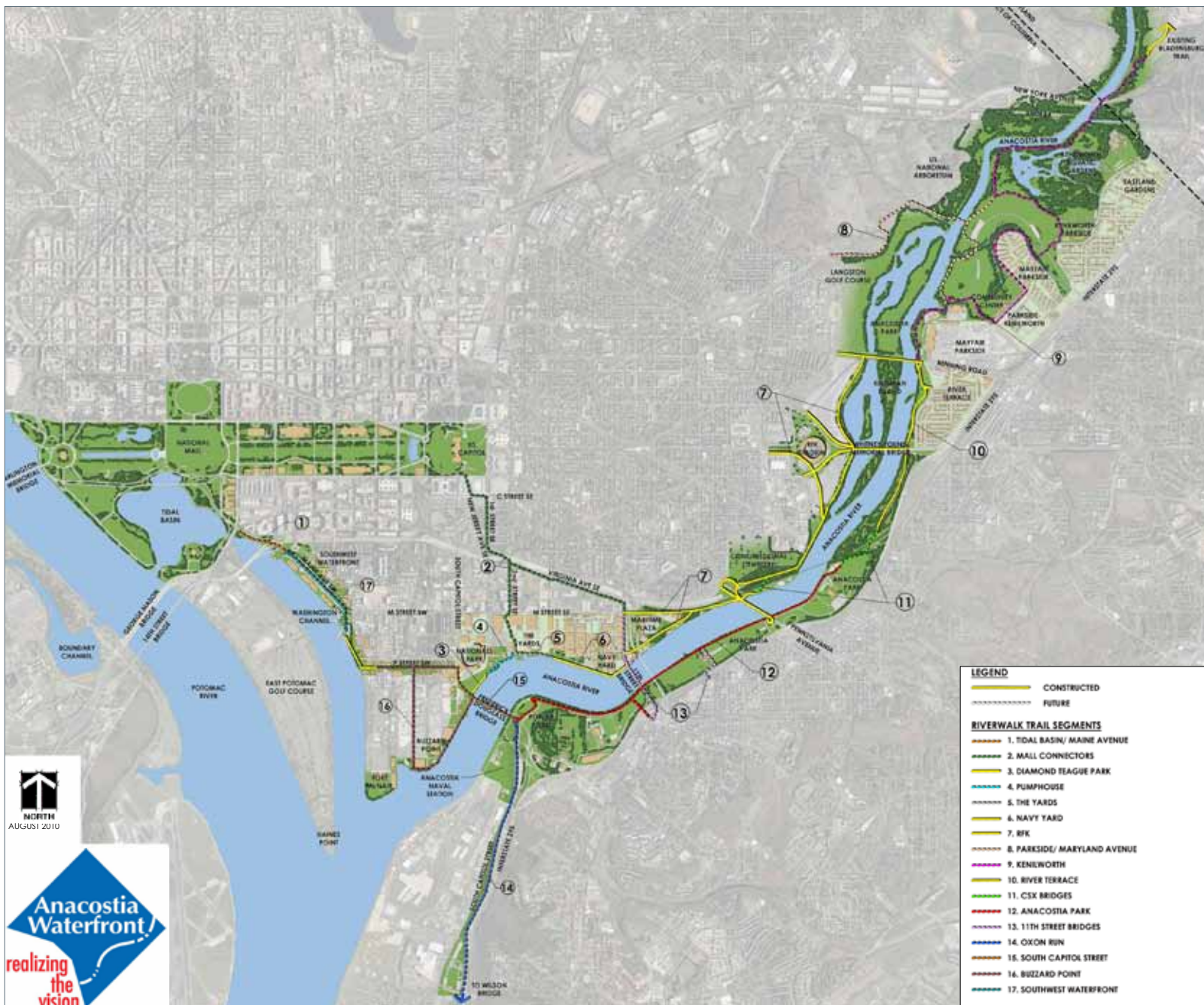
Kenilworth Gardens. Options include using a crushed gravel material that will provide a safe and American Disabilities Act-compliant surface, while indicating to users that slower speeds are encouraged.

- Developed a system of signs throughout the trail that provides educational opportunities to users:
 - Integrated informative signage that connects users to adjacent neighborhoods and to the surrounding natural and man-made systems.
 - Developed signage near unique river habitats that details the District's preservation and restoration efforts. Some signs also explain or illustrate to users how existing utilities along the river operate.
 - Coordinated signage efforts with DC Cultural tourism.
- Designed a fiber reinforced polymer for the bridges that carry the Anacostia Riverwalk across active CSX railroad tracks, the use of which has garnered DDOT a federal earmark.

DDOT is currently in the process of linking trail access points to neighborhoods and points of interest. Thirteen of the planned 20 miles of the Anacostia Riverwalk have been completed. Regionally, the Anacostia Riverwalk will connect to the Fort Circle Trails, Bladensburg Trail, Mount Vernon Trail as well as the Chesapeake & Ohio Trail. Nationally, the Anacostia Riverwalk Trail will provide access to a network of bicycle trails linking Maine to Florida. The District's Metrorail system will also interface with the Riverwalk to create a full range of transportation alternatives.

Parkside Pedestrian Bridge

Design is underway and construction is scheduled to commence in 2012 on the Parkside Pedestrian Bridge. This bridge will improve access from the Parkside



Anacostia Riverwalk Trail System

neighborhood to Marvin Gaye Park, the Anacostia Riverwalk and the Minnesota Avenue Metro station. This will reduce walking distances, encourage Metro ridership, spur economic development and help create a distinctive gateway to the Anacostia waterfront.

Improved Access Across the 11th Street Bridges

As part of the 11th Street Bridges project, the Anacostia Community Boathouse Association was relocated to the site formerly known as the Anacostia Marina in June 2010. The relocated facility is now connected to the Anacostia Riverwalk Trail and expands recreational opportunities for local residents and rowers alike.

The reconstructed 11th Street Bridges will provide safe and convenient bicycle and pedestrian connections across the Anacostia River, while eliminating several barriers that separate local neighborhoods from waterfront recreational opportunities. Also, as part of the 11th Street Bridges reconstruction, DDOT is building a new pedestrian bridge to connect Anacostia High School and Anacostia Park.

High Quality Streets and Streetscapes

Great cities have great streets. DDOT adopted a streetscape approach to AWI projects that utilizes open spaces, integrates LID techniques, and promotes economic development. Each transportation project incorporates multiple modes of transportation that fit both the context of the corridor and AWI's overall vision.

In 2008, DDOT finalized the Anacostia Waterfront Transportation Architectural Design Guidelines, which provide direction for new transportation infrastructure within AWI boundaries to assure continuity with regards to right-of-way design and retention of neighborhood character. These guidelines present 130 transportation elements — 47 of which offer LID opportunities — and provide a template for streetscape improvements made as part of the AWI program.

Since 2001, DDOT has planted more than 5,500 trees throughout Wards 6, 7 and 8, with more than 2,300 new trees being planted in 2009 alone. These efforts have not only have expanded the overall tree canopy in the District, but also have enhanced the aesthetic appeal of neighborhood streetscapes. Enhanced streetscapes are especially evident around

the new Nationals Ballpark on South Capitol Street and adjacent roads as part of the Kenilworth Avenue corridor and 4th Street SW improvements.

River Crossings

Middle Anacostia Crossings Study

In 2002, DDOT conducted the Middle Anacostia Crossings Study to evaluate traffic conditions and to recommend options for: (1) improving bridge and roadway connections across the Anacostia River; and (2) enhancing mobility on both sides of the River. The study identified several short- and long-term improvements, which included:

- Reconstructing the 11th Street Bridges to provide access to I-295
- Separating interstate (regional) traffic from the local traffic
- Improving riverfront access
- Constructing pedestrian and bicycle improvements

The recommendations of this study have formed the basis for many of the completed, ongoing and future improvements in the AWI study area.



Construction on the 11th Street Bridges



Environmental pier at Diamond Teague Park

DESIGN-BUILD-TO-BUDGET ON THE 11TH STREET BRIDGES

DDOT used an innovative design-build-to-budget concept to deliver the 11th Street Bridges project with maximum scope for minimum cost. In November 2007, a major project review with FHWA projected the cost of the 11th Street Bridges project at \$460 million. Since this greatly exceeded the approved budget, DDOT elected to use a design-build-to-budget delivery approach.

The winning bid came in at \$300 million to provide 85% construction delivery on the project. Portions of the funding for this project were made possible through the Federal GARVEE bonds, which required new legislation be passed in the District. The project is scheduled for completion in 2013.

11th Street Bridges Project

DDOT completed planning and environmental studies on the 11th Street Bridges, which identified the need to replace obsolete infrastructure and provide missing freeway connections to improve traffic flow to and from downtown Washington. The study concluded that the pair of 40-year-old bridges crossing the Anacostia River should be replaced in order to:

- Reduce traffic congestion and improve mobility on both the 11th Street Bridges and on local streets by providing missing highway links and improving pedestrian, bicycle and transit access.
- Increase the safety of vehicular, pedestrian and bicycle traffic in the Anacostia neighborhood by providing dedicated facilities to serve each mode of travel.
- Replace deficient infrastructure and roadway design with necessary safety enhancements to the bridges and approach ramp structures.

- Provide improved connectivity between the underdeveloped Anacostia neighborhood and other neighborhoods.
- Incorporate alternative modes of transportation such as buses and streetcars.
- Improve existing routes and offer emergency evacuation alternatives for the nation's capitol.

DDOT received a Record of Decision on the 11th Street Bridges Environmental Impact Statement (EIS) in July 2008. This milestone represented the first record of decision ever achieved by DDOT. The 11th Street Bridges project was then recognized by FHWA by being selected for an environmental excellence award.

South Capitol Street Corridor

South Capitol Street connects downtown Washington to neighborhoods in Southeast and Southwest Washington, as well as Prince George's County in Maryland. The street was originally envisioned as a



Frederick Douglass Memorial Bridge

primary corridor in Pierre Charles L'Enfant's 1791 plan for the District of Columbia, a symbolic gateway to the city and its monument-laden core.

Today, South Capitol Street lacks any real characteristics that link it to its intended role as a symbolic gateway. It has evolved into an urban freeway that serves as a conduit for through-traffic at the expense of serving the needs of local residents and businesses. Transportation infrastructure is in deteriorating condition and has largely failed to provide connections to community destinations for pedestrians, bicyclists, transit riders and motorists.

Despite the inadequacies of the transportation infrastructure in the corridor, new development

has rapidly transformed former industrial and military zones into thriving mixed-use communities and employment centers. Public investment, which has focused on new development, has stimulated private investment in residential, office and retail development throughout the corridor.

Planning and environmental efforts are underway to transform South Capitol Street into a grand urban boulevard that improves safety, provides multimodal transportation options and supports economic development. South Capitol Street's transformation will improve accessibility by:

- Eliminating grade separations
- Accounting for missing traffic movements

- Calming traffic conditions

The improved street also will provide unobstructed vistas of monuments in downtown Washington and the U.S. Capitol building. Environmental studies are scheduled to be completed in 2011, with construction planned shortly thereafter. Upon completion, a new signature bridge will carry traffic across the Anacostia River into the heart of the District.

Recent efforts to eliminate freeway-style barriers, enhance streetscapes and improve pedestrian crossing signals are transforming South Capitol Street from an urban freeway into a grand boulevard. During Phase I, DDOT made several significant improvements to the Frederick Douglass Memorial Bridge including:



- Completed bridge rehabilitation in 2007. The makeover of the bridge has extended its lifetime and made it a more viable entrance into Washington.
- Lowered the bridge to create an at-grade intersection with South Capitol Street and Potomac Avenue. This has provided improved access to new development in the South Capitol Street area near Nationals Ballpark.
- Included bridge enhancements and streetscape improvements to connect the structure to the aesthetic context of the surrounding neighborhood.

OBSTACLES OVERCOME AND LESSONS LEARNED

With success and progress come challenges, lessons learned and opportunities for improvement. Implementing the AWI transportation agenda has been a complex and multi-faceted task, requiring the engagement and support of local, regional and federal agencies as well as various other public and private stakeholders. In response to challenges faced, DDOT has enhanced its approach to infrastructure implementation in the AWI area as outlined in the recently published DDOT Action Agenda.

Administrative challenges

Administrative challenges are inherent when working with a broad range of local and Federal stakeholders having disparate motives and priorities. Specific challenges have included securing permits from multiple parties, transferring funds between agencies to advance and complete work, and negotiating complex agreements between agencies.

These challenges have been addressed through proactive communication with all stakeholders to identify and address issues early in the project development process. Additionally, memoranda of understanding have been developed between agencies to document agreed-upon processes and outcomes.

Funding challenges

Major infrastructure projects require a broad range of local, regional and Federal contribution and support. With these projects, funding requirements span multiple fiscal years and are subject to the broad economic conditions of both the national and global economy.

Securing Federal earmarks requires dedication and a champion. DDOT's development of a comprehensive funding strategy for AWI transportation projects has helped identify additional revenue sources and

FUNDING SUMMARY

- 11th Street Bridges
 - Phase I construction underway (scheduled for completion in 2013): \$300 million
 - Phase II construction (scheduled 2013-2015): \$65 million
- South Capitol Street Corridor (scheduled for completion in 2018): \$806 million estimated
- Anacostia Riverwalk Trail (scheduled for completion in 2017): \$55 million estimated
- Anacostia Initial Line Segment (AILS) Streetcar (scheduled for completion in 2012): \$25 million estimated for Phase I.
- Parkside Pedestrian Bridge (scheduled for completion in 2013): \$5 million estimated
- Kenilworth Avenue Corridor (scheduled for completion in 2018): \$75 million estimated
- Middle Anacostia Crossings projects (scheduled for completion in 2018): \$50 million estimated

opportunities to leverage local funding, and has provided a roadmap for the implementation and timing of improvements.

Community challenges

When executing large infrastructure projects in an urban environment, project administrators must take special precautions to balance future gains against short- and long-term impacts. By its very nature, construction can be disruptive to both District residents and visitors. Constant and effective communication with stakeholders has been critical to mitigating adverse effects to local residents, businesses and visitors. DDOT has implemented new ways of reaching out to the community, including increased use of social media sites, to broaden its outreach audience.

PARKS: A GREAT WATERFRONT SYSTEM

World-class project: The Yards Waterfront Park is the centerpiece for the Capitol Riverfront neighborhood, with 5.5 acres of public gathering spaces, an award-worthy pedestrian bridge and retail. It is the city's first multi-use park, where recreation and retail coexist.

Contiguous trails: The Anacostia Riverwalk Trail together with the Washington, Baltimore and Annapolis Trail will allow cyclists to ride 50 miles from downtown Washington to Baltimore when complete.

Water taxi service: The pier at Diamond Teague Park welcomed water taxi service from Alexandria and National Harbor for the first time in Spring 2010 and provides regional intermodal access to the Nationals Ballpark.

Canoes and kayaks: Demand for non-motorized boat recreation is continually increasing and being served along both the Anacostia and Potomac Rivers.

Community heritage: Watts Branch Park has been transformed from a grassy field and haven for illicit drug activity into an attractive chain of high-quality community parks dedicated to Marvin Gaye, a DC native who grew up in the neighborhood.

Financial commitment: The District has invested approximately \$100 million in the design and construction of the RiverPark System during the past decade.



Outdoor movie night at Canal Park

The AWI Framework Plan laid out a strategy to create a RiverPark system of interconnected waterfront parks joined by the Anacostia Riverwalk Trail. These recreational, contemplative and civic spaces are being provided for residents and visitors to enjoy the Anacostia River's:

- Boating and maritime activities
- Recreational facilities
- Special and memorable places
- Views and vistas
- Great public and open spaces
- Enhanced promenades and trails

To date, nearly \$100 million has been invested in the design and construction of the RiverPark System. As of 2010, residents and visitors are able to enjoy more than 10 miles of Riverwalk trails, Diamond Teague Park, the waterfront park at The Yards, Marvin Gaye Park

and Canal Park. Additionally, character determinations have been made for the parks at Southwest Waterfront, and planning efforts for Anacostia Park and the park at Poplar Point are underway.

MAJOR ACCOMPLISHMENTS

Access and Connections

Numerous improvements have been made to connect waterfront parks to neighborhoods and create new gateways to the river's edge. The following efforts represent some of the significant access and connectivity improvements achieved during the past decade:

Anacostia Riverwalk Trail

The Anacostia Riverwalk Trail, a 20-mile pedestrian and bicycle trail, serves as both a recreational amenity and commuting alternative for Washington-area

residents. It is also the central link between waterfront neighborhoods and the river's cultural sites. To date, more than 10 miles of the trail have been built by the District Department of Transportation (DDOT). DDOT also has incorporated pedestrian and bike trails into the design for the 11th Street Bridges. Two large segments of the Riverwalk Trail are currently in design, which upon construction will nearly complete the 20-mile system.

Marvin Gaye Park

A new bicycle and pedestrian trail has been constructed through Marvin Gaye Park (formerly Watts Branch Park), a 1.6-mile long park system that runs along the Watts Branch tributary to the Anacostia River. In 2001, DDOT identified the Watts Branch Trail for improvements under the National Recreational Trails program of the Federal Highway Administration. Design of the trail improvements began in 2003 and DDOT completed the trail improvements, including trail reconstruction and widening, a new pedestrian bridge, lighting and landscaping, in 2006.

Diamond Teague Park

A new water taxi pier and environmental pier opened in Spring 2010 at Diamond Teague Park to provide regional water taxi access from Alexandria, National Harbor and Georgetown. Water taxi service and docks for kayaks and canoes serve as priority access features for the RiverPark system, welcoming recreational boaters and visitors to the District's park amenities.

Feet on the Street

In 2009, DDOT and the National Parks Service (NPS) teamed up to host a car-free community event in Fort Dupont Park in Southeast Washington to promote physical activity, clean transportation and community spirit. The event was hosted at Fort Dupont, one of the largest parks in the District with 376 acres to explore.

MARVIN GAYE PARK

The late R&B singer Marvin Gaye grew up in the East Capitol Dwellings, a public-housing complex that once abutted Watts Branch Park. Formerly dubbed "Needle Park" because of its reputation as a haven for drug users, Watts Branch Park was renamed in 2006 to Marvin Gaye Park to honor the singer, and has undergone a significant transformation with help from the District, Washington Parks and People and other organizations.

As part of the renovation, the District and community volunteers removed more than 2.5 million pounds of trash, 6,000 hypodermic needles and 78 abandoned cars from Marvin Gaye Park and the adjacent Watts Branch tributary. More than 1,000 trees were planted and the park now hosts a market, outdoor movies and concerts during the summer.

DDOT also constructed a new bicycle and pedestrian trail that spans the 1.6-mile long park. The trail connects a number of community pocket parks (e.g. Lady Bird Johnson Park and Heritage Green) throughout Ward 7 and the Fort Circle Park system.



DIAMOND TEAGUE PARK

Diamond Teague Park is named after a young member of the Earth Conservation Corps who was murdered months before he was scheduled to leave for college on an environmental conservation scholarship.

The original Diamond Teague Memorial Park, constructed by the Earth Conservation Corps, was developed to accommodate the new Nationals Ballpark.

However, the District constructed a new Diamond Teague Park at the foot of the stadium offering a water-taxi service, an environmental pier for non-motor boats and floating wetlands that are reflective of Teague's commitment to the environment. The piers at Diamond Teague are the first fixed piers built in the District since the Urban Renewal in the 1960s.



Roadways in the park were closed to motor vehicles during the day, allowing residents and visitors to walk, bike, skate and play along the 1.6-mile corridor. The event included organized activities and programs, such as guided nature hikes, bike rides, tours, classes, rentals and workshops. It also increased awareness for the Fort Circle Park System.

Active Uses

Event and activity opportunities provided by RFK Stadium, the DC Armory, East Potomac Park, Langston Golf Course and local recreational facilities connected to the Riverwalk Trail offer active uses along the Anacostia River's edge.

Anacostia Park is currently undergoing a planning study to determine the types of improvements and recreational offerings best suited for its waterfront assets.

Recreation

The themes of recreation and an active lifestyle permeate the programmed offerings along the waterfront, which is evident in the historic number of people using the tennis center, swimming pool and golf course at East Potomac Park. These themes are also evident in the activities that are organically



Living Classrooms rowing class

organized in the more intimate setting at Canal Park now that the park has become publicly accessible. Some of the new recreational activities taking place on the waterfront include:

- In 2010, the first Metro Dash Race, an annually planned national team-building and physical challenge event, hosted its finish line and big finale at Canal Park. The event attracted 600-700 people in its first year.
- Fitness in the Front, a free fitness class offered Saturday mornings during the summer, attracted 600-800 participants.
- Hooping in the Park, a weekly hula-hoop class, is offered during the summer months.
- Private boot camp sessions are offered twice daily at Canal Park.
- The Front Run Club meets every Thursday evening at Canal Park.
- An ultimate Frisbee league meets on Tuesday evenings.
- Nationals Ballpark serves as one of two start points in the District's Bike-to-Work Day.
- The District hosted the American Odyssey Relay Race finish line celebration at Southwest Waterfront in April 2010. The race is a 200-mile team relay race from Gettysburg, PA to Washington, DC. The pocket park at Southwest Waterfront hosted the finale event where food and beverages were permitted. The event brought approximately 2,000 to 2,500 people to Southwest Waterfront throughout the day.

Water-Based Recreation

Demand for water-based recreation is increasing steadily all along the District's waterfront. Significant investments in water-based recreation during the past decade include:

- Completed in 2010, Diamond Teague Park includes a 250-foot long environmental pier dedicated for non-motorized boat docking and use.
- A replacement boathouse and dock for the Anacostia Community Boating Association were constructed at Boathouse Row in 2010.
- Since May of 2001, Living Classrooms' historic Chesapeake Bay buy-boat has provided more than 12,000 participants with educational opportunities to learn about the Anacostia River.
- For the past two years, the Nation's River Bass Tournament has given more than 500 youth an opportunity to compete in a fishing tournament and learn about the Anacostia River.
- During the past seven years, Living Classrooms, the Anacostia Watershed Society, the Chesapeake Bay Foundation and the Interstate Commission on the Potomac River Basin have coordinated programs for 200 schools and thousands of students. These programs are intended to restore American shad in the Anacostia River and expose students and teachers to fishing, canoeing and kayaking.

Civic Activities

Increasing community and civic activities are being organized along the waterfront, creating greater demand for waterfront activities and events.

- Since 2006, the U.S. Department of Transportation has organized a weekly Tuesday farmer's market along 3rd Street SE, south of M Street SE, that specializes in prepared foods.
- Starting in 2010, the Capitol Riverfront Business Improvement District (BID) hosts a weekly Thursday farmer's market that attracts several hundred people each week.
- The Capitol Riverfront BID launched a summertime lunchtime concert series this year.



CANAL PARK

Canal Park is a three-block park along 3rd Street SE between I and M Streets SE. Its name references the Washington Canal, which once connected the Potomac and Anacostia Rivers.

Construction will begin September 2010 to build a community park with a unique water feature that serves as a children's fountain in the summer months and provides water for the ice skating rink in the winter. The fountain will be supplied with water filtered by a unique underground stormwater management system.

Canal Park is a demonstration project that will prove that property owners can share a stormwater water management facility while providing high quality community space and amenities.



THE YARDS WATERFRONT PARK

The Yards Waterfront Park offers an exceptional range of high-quality civic and recreational offerings reflective of the District's vision for all of its marquee waterfront parks.

The park is set to open in September 2010 on schedule and with much anticipation. This 5.5-acre public waterfront park is a world-class amenity and destination that offers a unique retail complex and marina.

This park will be one of the city's first multi-use parks, where pedestrians-oriented recreation and retail will exist.

The park will also include engaging green and open spaces, environmentally sustainable landscape treatments and an architectural pedestrian bridge as its centerpiece.

The Riverwalk Trail connects The Yards Waterfront Park to the Navy Yard esplanade and Diamond Teague Park.

Hosted each Wednesday between May and August, the concert attracts an estimated 500 to 700 people each week.

- For the past three years, Canal Park has hosted an outdoor movie series, which has grown from 30 people the first year to 300 people in 2010.
- In summer 2009, the annual Artomatic art show drew between 1,000 and 1,500 visitors to the Capitol Riverfront.
- In May 2010, Washington Project for the Arts organized its first art parade, where artists created floats to parade down M Street SE. Several hundred people attended in its inaugural year.
- Launched in 2008, an annual holiday market draws several thousand people to the four-day winter market.

Passive Uses

AWI contains two very unique national park assets: (1) the National Arboretum, managed by the U.S. Department of Agriculture; and (2) the Kenilworth Aquatic Gardens, managed by NPS. Combined, they cover more than 1,150 acres of waterfront property and are home to thousands of species of flora and fauna. Together with Kingman Island, the park assets north of the Sousa Bridge are primarily natural park refuges. The quality and character of the passive parks maximize scenic vistas, preserve natural landscape and provide education about natural resources.

The Anacostia Waterfront also is home to the Congressional Cemetery, a unique park-like destination, where 13 member of Congress and two Vice Presidents are laid to rest. Congressional Cemetery has become Capitol Hill's No. 1 passive park.

The AWI describes two new waterfront parks that will serve as a transition between the natural character of the National Arboretum, Kenilworth Aquatic Gardens and Kingman Island: The Meadows at Hill East and

Poplar Point. These new waterfront parks will be designed and constructed as the redevelopment of Hill East and Poplar Point occurs, respectively.

OPERATIONS AND MAINTENANCE

Operations and maintenance requirements for parks within the RiverPark system vary greatly. As a result, three different models are being applied to support and program waterfront parks effectively:

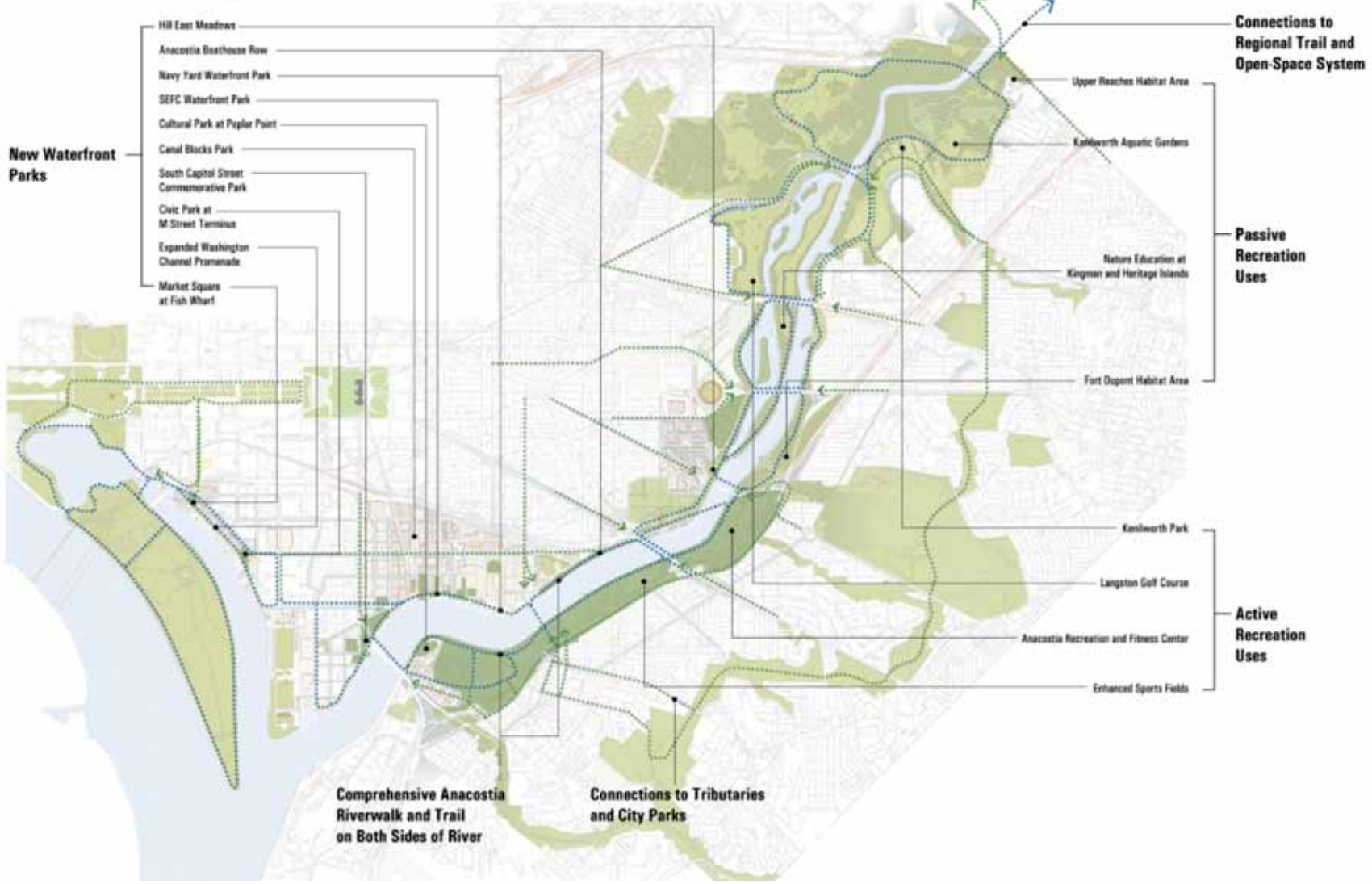
1. **Private partnerships.** Waterfront parks that are labeled as destinations are connected to the branding of a redevelopment effort (e.g. The Yards Waterfront Park). These parks which lend themselves to a higher level of programmed activity, are being managed by private partners. These partners are typically local business improvement districts or property owners. Property owners and businesses have an interest in generating activity and maintaining amenities at the park, and often have the expertise to organize events and raise funds to support the greater park usage.
2. **District-managed parks.** The waterfront parks that are similar in size and scope to the District's existing park portfolio, such as Diamond Teague Park, are being maintained by the District Department of Parks and Recreation. These parks possess similar maintenance and operations requirements and fall squarely within the District's park management competencies.
3. **Shared Operations and Maintenance:** Several larger parks, such as The Meadows and Poplar Point, will likely require a hybrid approach that combines government, private and non-profit funding. The concept of a park conservancy is being explored, but has not yet been determined. This model would permit both public and philanthropic funding.

KINGMAN ISLAND

Kingman Island is a natural sanctuary for marsh wildlife and wetlands. It is a park with its own identity that belongs to both sides of the Anacostia River. Kingman Island was opened for public access in 2007 after being closed for five years. The plan for the island calls for the construction of a comprehensive environmental learning lab complete with walking trails, an environmental learning center and kayak and canoe piers. Living Classrooms is the entity responsible for managing Kingman Island and its educational activities. To date, more than 6,800 youth have participated in educational programs and more than 23,000 volunteer hours have been logged. The District recently completed design for a trail and a new memorial on Kingman Island and will commence construction on this phase of the project in September 2010.



THE PARKS INITIATIVES MAP



DESTINATIONS: CULTURAL DESTINATIONS AND PLACES OF DISTINCT CHARACTER

Environment first: Nationals Ballpark is the country's first LEED-certified ballpark, and serves two million patrons using recyclable and sustainable products.

Theater excellence: Now in its sixth decade, Arena Stage is one of the nation's original resident theaters, and has a distinguished record of leadership and innovation in the theater field. It is opening its \$135 million renovated and expanded Mead Center for American Theater in October 2010.

World-class hospitality: Opened in 2004, the Mandarin Hotel is the newest five-star hotel in the District, perched on 12th Street SW overlooking the Tidal Basin and Southwest Waterfront.

Longest running market: Operating since the early 1800s, Washington's Fish Market is the longest continuously running fish market in the country and will be the anchor destination at the Southwest Waterfront.

The big idea: National Capital Planning Commission's (NCPC) Capitol Space Plan was published in April 2010 for the capitol region's park system and contemplates connecting the 22 Civil War forts by contiguous trails and green space to celebrate and highlight the District's rich Civil War history.

Distinguished character: Congressional Cemetery has become Capitol Hill's No. 1 passive park and serves as the resting place for 13 members of Congress and two U.S. Vice Presidents.



Arena Stage and the Mead Center for American Theater

Several distinct waterfront destinations have emerged during the past decade throughout the Washington area. With new waterfront investments in Georgetown, Alexandria, Prince George's County and other District waterfronts, the Anacostia and Potomac Rivers are poised to offer unparalleled cultural and entertainment experiences for residents and visitors alike.

The AWI Framework Plan's destinations agenda established the goals of protecting and enhancing the District's cultural heritage and creating attractions to draw visitors to the waterfront. Implementation of this agenda depends, in part, on the timelines set forth for each destination's adjoining target area since several of the proposed destinations require integration with their respective neighborhood development strategies. To date, several important investments in destinations have been or are being made.

MAJOR ACCOMPLISHMENTS

Arena Stage at the Mead Center for American Theater

In 2001, Arena Stage began its campaign to raise \$135 million to renovate its two existing stages — the Fichandler and Kreeger Theaters — and expand its facility by constructing the Kogod Cradle. The three stages will be connected by a common lobby. The new 200,000-square-foot theater campus was designed by Bing Thom Architects and construction began on the facilities in 2008. The Mead Center will open in October 2010 and is expected to exceed its average attendance record of 250,000 patrons and 20,000 youth annually.

Nationals Ballpark

After Major League Baseball announced its return to Washington in 2004, the District committed to

REGIONAL WATERFRONT DESTINATIONS

Washington Harbor

Washington Harbor, a mixed-use retail, office and residential development in Georgetown, opened in 1999. It is anchored on each end by a beautiful 10-acre waterfront park and the House of Sweden, a sustainably-managed embassy and event center.

National Harbor

Opened in April 2008, National Harbor is a 300-acre, seven million-square-foot mixed-use development in Prince George's County. This conference center, retail and hospitality destination already attracts more than 12 million visitors annually.

Old Town Alexandria

The City of Alexandria is currently undergoing a master planning process to re-envision the waterfront in Old Town. Once complete, the new design will enhance the restaurant and retail offerings of Old Town and connect to the area's existing set of vibrant waterfront parks.

constructing a new \$611 million baseball stadium along the Anacostia River to be home to the Washington Nationals.

Completed in 2008, the ballpark attracts 2 to 2.5 million visitors per year, hosted Pope Benedict XVI in 2009, and is the first LEED-certified ballpark in the nation. The stadium is the entertainment anchor for the Capitol Riverfront and will be complemented by the retail and entertainment offerings of The Yards and Half Street SE.

The piers at Diamond Teague opened in Spring 2010 to offer regional intermodal access to Nationals Ballpark.

NCPC Capitol Space Plan

In April 2010, the NCPC adopted the Capitol Space Plan, a plan to integrate the District's parks that was jointly developed by NCPC, the National Park Service (NPS) and the District. Particularly relevant to AWI is the plan's concept of connecting the 22 Civil War forts located in and around the District via a 23-mile bicycle and pedestrian trail. Many of the Fort Circle Parks (e.g. Fort Stanton, Fort Dupont, Fort Chaplin and Fort Mahan) are located along the tributaries and streams of the Anacostia River and offer exciting opportunities to revitalize people's appreciation of the District's Civil War history, promote stewardship of the Anacostia River, and enhance the educational opportunities east of the river.

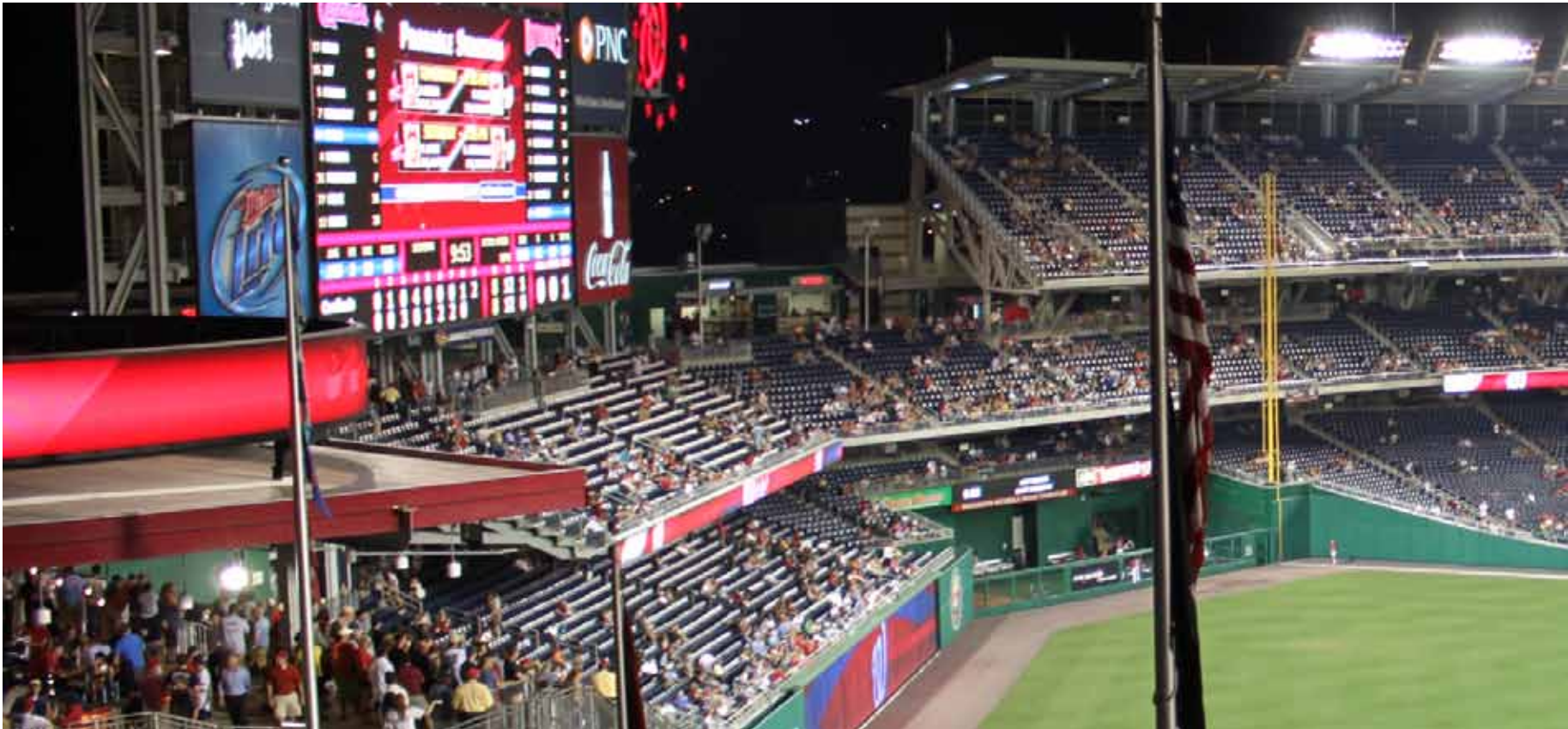
Historic Congressional Cemetery

Congressional Cemetery lies along the banks of the Anacostia River and has long been one of Washington's most overlooked historical resources. Thirteen members of Congress and two vice presidents are buried in the cemetery, along with more than 55,000 other individuals. Preservation efforts are being led by the Association for the Preservation of the Historic Congressional Cemetery, a unique non-profit corporation that holds a long-term lease with District government to operate the cemetery. This organization is restoring the cemetery's brick burial vaults, preserving and enhancing its landscape, and taking steps to maintain its historic archives. During the past decade, the Association for Preservation has been active in planning and receiving required approvals to reinvest in the cemetery by:

- Securing congressional appropriations
- Closing streets that exist only on paper
- Completing a new master plan
- Becoming the No. 1 passive park on Capitol Hill



Southwest Waterfront Fish Market

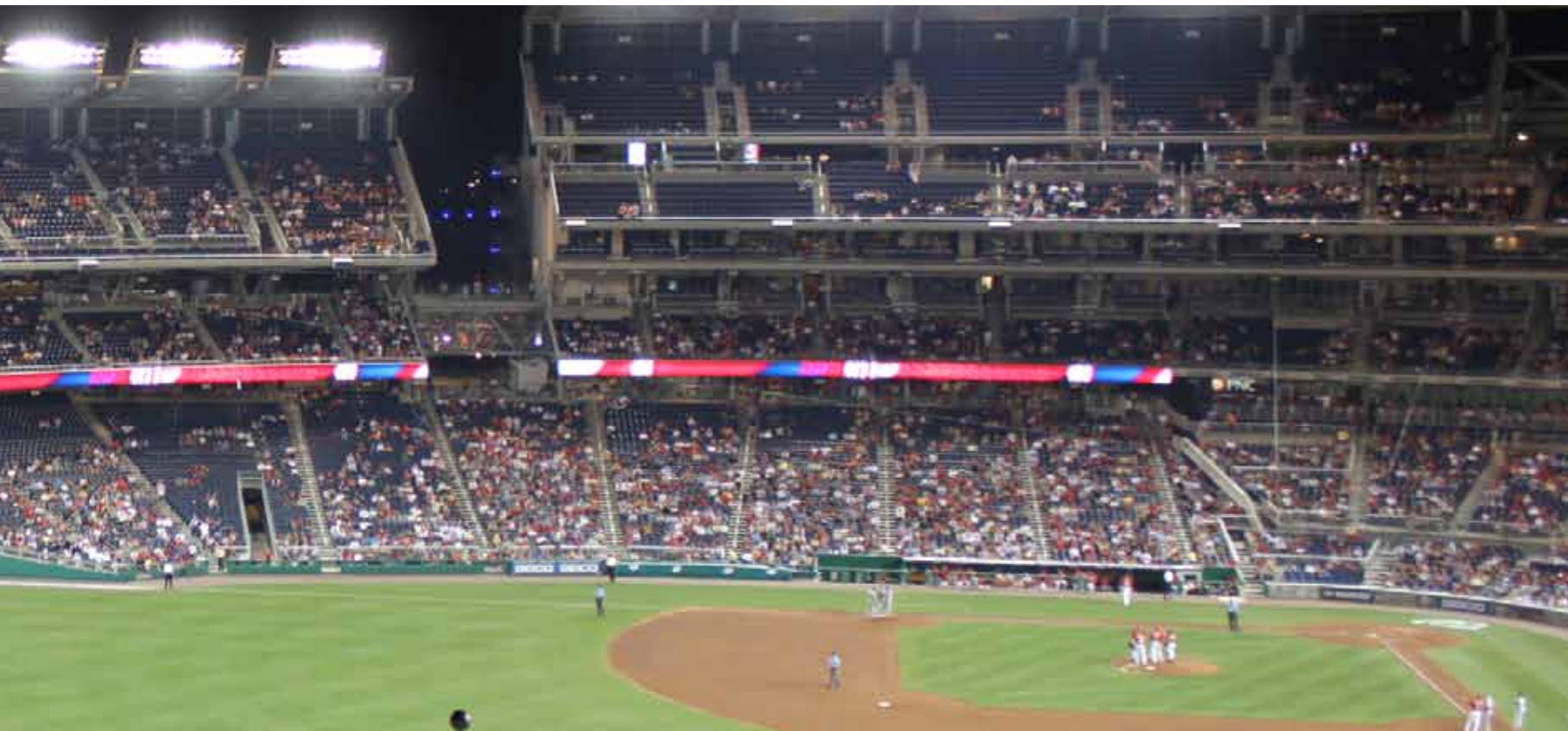


Nationals Ballpark

Additional Accomplishments

While not as prominent as the construction of the Mead Center and Nationals Ballpark, several additional significant advancements and plans for enhancing the District's waterfront destinations include:

- In 2004, NPS released an historic resource study on the Civil War defenses of Washington. This report details the history of the Civil War in the Washington area and its accompanying historical analysis provides a comprehensive study of the Fort Circle Parks.
- In 2006, NCPC outlined three alternatives for the future vision of RFK Stadium in its RFK Stadium Site Study Alternative Concepts Report. These alternatives included: (1) a modernized regional recreational facility that integrates the DC Armory, the sports fields flanking the river and local trails; (2) a new cultural node on the east end of Independence and Constitution Avenues with new national museums and cultural attractions; and (3) the expansion of the site and integration with the Capitol Hill East neighborhood.
- The master plan for Southwest Waterfront was presented in 2007, setting a vision for a vibrant maritime entertainment district. Its goal is to draw many of the National Mall's 17 million visitors into the neighborhood to visit: (1) the oldest continuously-operating fish market in the United States, (2) a new 150,000-square-foot local maritime center and (3) the newly renovated Arena Stage.
- Designs for monuments that will be placed along the river have been completed for Barney Circle, Monument Circle at Massachusetts Avenue NE and Memorial Tree Grove at Kingman Island.
- Concept plans for a new environmental center on Kingman Island were completed in 2006.



DELIVERING DESTINATIONS

AWI's destination agenda clearly establishes the goal of attracting and developing world-class destinations along the Distric's waterfronts that honor and celebrate local heritage and cultural assets. Successfully delivering destinations of distinction presents a unique set of obstacles, primarily related to raising funds for initial construction and remaining financially solvent when operational. Exacerbating this problem is the fact that many museums in Washington are free of charge, which may discourage visitors from patronizing museums or other destinations that require an entrance fee.

The financial realities of building and operating a cultural destination are fundamentally different than the more widely understood market forces that affect real estate development or funding processes for public infrastructure and parks. Despite examples of successful destinations in the area that charge entrance fees (e.g. Spy Museum and Newseum), private owners may find it difficult to effectively build and operate new cultural destinations in the absence of public support and in the face of existing competition.

To ensure that existing cultural assets within the AWI are enhanced and new destinations are created, considerations have been made to:

- Attract more residents and visitors to the AWI so that demand is created and sustained
- Invest in innovative marketing and continuous outreach
- Develop unique-to-DC museum concepts
- Allow generous flexibility in master development plans to accommodate the creation of a new destination with a varying delivery schedule

NEIGHBORHOODS: BUILDING AND SUSTAINING STRONG WATERFRONT NEIGHBORHOODS

Environment first: Environmental standards require LEED Gold certification, integration of low impact development technology and restoration of natural resources for all public-private projects in the AWI.

Federal partnership: The District provided land to the U.S. Marine Corps to build the Marine Bachelors Barracks. Congress authorized an inter-agency land exchange to allow the District to redevelop 500 acres of waterfront property.

Encouraging private partners: The District has partnered with at least eight nationally-recognized private partners to deliver highly complex projects and utilize innovative public financing tools to catalyze development. In 2009, the District authorized the creation of the Capitol Riverfront Business Improvement District.

Preservation of affordability: Arthur Capper Carrollsburg has been redeveloped into a mixed-income neighborhood that reflects the history and character of historic Capitol Hill. The new project maintains the same number of affordable units and provides for new workforce housing units. All public-private waterfront projects will be programmed as mixed-income communities.

Innovative zoning: The District adopted a first-of-its-kind form-based code for Hill East Waterfront in 2006 to respond to untested market demand in the area.

Community always: More than 3,000 residents participated in the development of the AWI Framework Plan and more than 10 community plans have been created and publicly vetted.



Arthur Capper Carrollsburg and Capper Senior Housing

The Anacostia Waterfront Development Zone weaves through Wards 5, 6, 7 and 8, where nearly 25% of the District's population resides. Currently, more than 50,000 people live within a 10-minute walk of the Anacostia River, but few identify their communities as waterfront neighborhoods.

The AWI Framework Plan calls for 20,000 units of new housing and 20 million square feet of new, commercial retail and service-oriented space to be integrated with the District's existing neighborhoods. Ultimately, the estimated \$25 billion in total private and public investment it will take to deliver the neighborhoods along the waterfront promises to generate significant additional tax revenue and thousands of new jobs for the District.

The balance between neighborhood integrity, economic opportunity and environmental sustainability is the pulse of the AWI vision. In order to deliver the AWI neighborhood vision, several critical obstacles were removed and advances achieved during the past decade:

- The Federal government invested in the Southeast Federal Center and disposed of federally-owned property to private parties for development. This has generated new tax revenue for the city and opened land along the waterfront for development.
- The 2003 publication of the Anacostia Waterfront Initiative Framework Plan, which sets the vision, context, history and goals for restoring and revitalizing the 2,800 acre waterfront zone.

- Completion of the *Federal and District of Columbia Government Real Property Act of 2006*, effectuated an inter-agency land exchange of approximately 500 acres. This significant milestone is the primary reason that the AWI is possible.
- The District invested approximately \$1.2 billion in road and utility infrastructure, parks and the Nationals Ballpark to significantly increase attention and access to the river and support redevelopment.

In addition, the *National Capitol Revitalization Corporation and Anacostia Waterfront Corporation Reorganization Act of 2008* sets clear guidance for the economic development and environmental expectations for all public-private projects within the Anacostia Waterfront Development Zone:

- 30% of all residential units built as part of the project must be affordable to 30-60% of area median income households
- 35% of procurement and contracting dollars expended on the construction of projects must be awarded to local businesses, with a preference for enterprises located in Ward 8
- 51% of new jobs created by the projects are to be filled by District residents, with a preference for residents of Ward 8
- Environmental standards for the project must comply with AWI standard for development:
 - LEED Gold certification for commercial or civil buildings
 - LEED Silver certification for residential buildings
 - ENERGY STAR reporting
 - Alignment with greenhouse gas reduction goals to meet the “2030 Challenge” for carbon emission neutrality
 - On-site stormwater retention and reuse

by a one-inch-in-24-hours standard

- Green Marina certification standards
- Restoration of streams, tributaries, wetlands and other natural habitats
- Incorporation of low impact development techniques

TARGET NEIGHBORHOODS

The delivery strategy for the neighborhoods was to first invest in neighborhoods that could reasonably and quickly generate strong market demand, while at the same time start building infrastructure in neighborhoods that required more time to develop market demand.

Near Southeast

Near Southeast was the logical first investment due to its proximity to Capitol Hill, the Federal government’s plans for Southeast Federal Center, and the number of under-utilized properties, which made land acquisition easier. Today, the neighborhood has an identity that is defined and promoted by the Capitol Riverfront Business Improvement District. It is also home to the U.S. Department of Transportation headquarters, the Nationals Ballpark, the Navy Yard and thousands of new residents and employees.

The East of the River Gateways

The East of the River Gateways has undergone infrastructure and planning investments — efforts that have resulted in the development of affordable and market-rate housing; construction of transportation infrastructure that links both sides of the river and provides pedestrian-friendly streetscapes; integration of sustainable technology into newly constructed facilities; enhancement of waterfront amenities with improved access; and incorporation of mixed-use commercial and residential developments.

Southwest Washington

Southwest Washington is the only target area maintaining an identity as a waterfront neighborhood, primarily because Southwest Waterfront was the city’s commercial port since the 18th century. Given the area’s maritime history and proximity to the National Mall, the neighborhood has attracted considerable private investment. Home to Arena Stage, the Fish Wharf, Fort McNair, Waterfront Station, three marinas and the District’s cruise ship amenities, Southwest Washington is the next AWI target area that is being revitalized.

Poplar Point and Hill East

Poplar Point and Hill East are target areas that still require resolution of Federal interests, significant infrastructure investment and flexibility with regard to development rules and regulations due to untested market conditions in these areas.

The quality of resulting neighborhood development is impressive. The following highlights are a few of the results that measure improved neighborhood outcomes.

- Annual real property tax revenues increased from \$35 million in 2005 to \$109 million in 2009, a 217% increase, which outpaced the District’s overall property tax revenue growth of 70% during the same period.
- In 2005, the Anacostia Waterfront Development Zone generated 3.3% of the District’s overall real property tax. In only four years, the percent share of property taxes generated increased to 6.1% in 2009.
- The total population within the Anacostia Waterfront Development Zone has increased by 140% from 8,021 to 23,280.
- All neighborhoods increased the number and mix of market-rate and affordable housing without losing any existing affordable units in the process.

- Approximately 100,000 people were employed by businesses and contractors, primarily associated with the construction of the Nationals Ballpark, Mandarin Oriental Hotel, The Yards and Waterfront Station.
- Nearly 70% of all new hires employed for projects with District First Source Agreements were District residents.
- The population within the Anacostia Waterfront Development Zone has increased, but air pollution in the District has not increased, primarily due to availability of MetroRail, MetroBus, Circulator, bicycle and other transit options.
- Increased membership in local boat clubs and marinas along with increased participation in volunteer and educational programs indicate increased demand for water-dependent programs.

MAKING NEW NEIGHBORHOODS POSSIBLE

The primary takeaways for successfully catalyzing large-scale neighborhood development are:

- **Public-private partnerships are essential:** No one party, public or private, can make it happen alone.
- **Infrastructure planning is needed:** Costs must be properly planned and accounted for at every stage of a major development process.
- **Reducing investment risk speeds progress:** Reducing risks for private investment is the most efficient and effective way for the public sector to promote high quality neighborhood development.

Public-Private Partnerships

The Capitol Riverfront offers multiple examples of how public-private partnerships have succeeded in creating a new neighborhood. The General Services Administration (GSA) worked with TBG Companies to develop the U.S. Department of Transportation

headquarters and Forest City to develop The Yards. The Office of the Deputy Mayor (DMPED) partnered with the Forest City to build the infrastructure and waterfront park at The Yards. DMPED also recruited and attracted the Nationals to Washington and located their new stadium along the waterfront. The District Housing Authority partnered with Urban Atlantic/Forest City/EYA to redevelop Arthur Capper Carrollsburg. DMPED partnered with Canal Park Development Association to develop Canal Park. In all, approximately \$1.2 billion in public funding has been invested in the Capitol Riverfront, which has been matched by \$1.8 billion in private funding to date and another \$5 billion in planned private investment.

Infrastructure Planning

The District categorizes the infrastructure replacement needs along the waterfront into two categories: (1) infrastructure and (2) extraordinary infrastructure. The first category represents the utility, roads, streetscape or light environmental remediation requirements to service an individual building or development, which can either be paid for by the private developer or by traditional public funding sources such as tax increment financing or a direct subsidy.

The extraordinary infrastructure category includes infrastructure needs that exceed the investment capacity of either a private investor or the tax revenue generating capacity of the District. Repairing or replacing the seawall along the river's edge, expanding the 11th Street Bridges, conducting deep contamination remediation and other similar infrastructure investments typically require Federal assistance or creative financing, depending on the need. Proper capital planning should be conducted at least five years in advance of needing to utilize such funds, particularly if a Federal earmark or authorization is required.

Reducing Investment Risk

The most efficient and cost-effective way for the government to encourage private investment is for the public sector to reduce project development risk. This means that the public sector should clear as many title and land ownership issues as it can, confirm the development potential for the site by receiving approval for public plans (eg. Small Area Plans) and apply for and receive Federal or Congressional approval for outstanding encumbrances. Examples of such activities and accomplishments include:

- DC Council approval of three Small Area Plans (Southwest Waterfront, Deanwood) and form-based zoning for Hill East Waterfront
- Satisfaction of the Federal requirement to relocate a U.S. Postal Service mail sorting facility before finalizing the transfer of Hill East
- Congressional approval to lift an antiquated 10-year lease restriction on wharf properties, which was preventing private investment in the District's marinas
- Selective use of District condemnation authority to promote public purposes at the Capitol Riverfront
- Request for Congressional approval to narrow the Washington Channel in front of Southwest Waterfront, now pending confirmation
- Environmental Impact Statement process at Poplar Point and related planning for relocation of NPS and U.S. Park Police headquarters
- Delivery of the 11th Street Bridges for more than \$100 million below the Federal Highway Administration's \$460 million project estimate by coordinating National Environmental Policy Act requirements, permitting and right-of-ways prior to contracting with the construction company under a design-build-to-budget contract.



Riverfront farmer's market

NEIGHBORHOODS: CAPITOL RIVERFRONT



The AWI Framework Plan established that two target areas merge to form the Capitol Riverfront: Near Southeast and South Capitol Street Corridor. The Capitol Riverfront is the first neighborhood within the AWI where significant results can be observed.

Developing the Capitol Riverfront became a reality in 1995 when the U.S. Navy decided to move NAVSEA to Southeast Washington, which in turn created demand for three new private office buildings on M Street.

Investment and development efforts began in earnest when the U.S. Department of Transportation (DOT) headquarters site was chosen; the GSA selected Forest City to develop the Yards; the District received a \$35 million HOPE VI grant for the redevelopment of Arthur Capper Carollsburg; and Maritime Plaza Phase I completed construction.

Since 2001, Forest City developed The Yards; a new Major League Baseball stadium was constructed on the waterfront; and the DOT headquarters building

generated \$100 million in tax increment financing to help fund multiple public infrastructure and parks projects.

In all, between 2000 and 2010, \$1.2 billion in District and Federal investments have been made in the Capitol Riverfront, matched by \$1.8 billion in private investments. Public funds were utilized to pay for multiple infrastructure needs, fund a significant entertainment attraction, and create affordable housing options. However, in planned investments, the District and Federal governments will have invested \$1.8 billion total compared to \$7.2 million in total private sector investment, a 1:4 public-to-private investment ratio. This is the ratio to examine as future neighborhood projects are planned.

NEIGHBORHOOD ACCOMPLISHMENTS

Restore

- Three LEED buildings constructed and two currently under construction

- First LEED-certified ballpark in the country
- Capitol Quarter is one of the nation's largest LEED for Homes communities, with townhomes built to U.S. Green Building Council residential standards
- The District's largest green roof (65,000 square feet) atop the DOT headquarters
- Neighborhood-wide low-impact development (LID) solutions, such as permeable pavers, larger tree boxes to mitigate runoff and bioretention swales

Connect

- In 2007, the South Capitol Street viaduct was removed and improved at-grade
- In 2007, the Navy Yard metro station added a second entrance to accommodate increased access to Half Street SE and Nationals Ballpark
- In 2009, a DC Circulator route was established to connect Capitol Riverfront to Union Station
- In Spring 2010, Diamond Teague Park piers opened for water taxi service and dockage for non-motorized watercraft

Play

- The waterfront park at The Yards was completed Fall 2010
- Canal Park construction will commence Fall 2010
- The Anacostia Riverwalk Trail is almost fully constructed throughout the Capitol Riverfront
- In 2009, the Boathouse Row planning study was completed
- Diamond Teague Park opened its piers and memorial park in 2010

Celebrate

- Nationals Ballpark receives more than two million visitors annually
- The Navy Museum and USS Barry receive 250,000 visitors annually

- Barracks Row, an emerging retail corridor, connects historic Capitol Hill and Eastern Market to the waterfront and is an asset to both neighborhoods

Live

- 10.2 million total new square feet of office, retail, residential and hotel space is planned or constructed
- 1,400 new affordable housing units (16% of total housing count) planned or constructed
- Currently, the estimated daytime population is 35,000

KEY PROJECTS

U.S. Department of Transportation Headquarters

The new DOT headquarters is located on an 11-acre parcel along M Street SE and provides identity and definition to the area. This project is the first new cabinet-level headquarters to be designed and constructed in the District in more than three decades. The 2.1 million square foot complex consists of two towers and is home to the agency's 5,000 employees. The development includes a nine-story western tower and an eight-level eastern tower situated on opposite sides of 3rd Street SE, which has been converted into a pedestrian promenade. The building boasts several

sustainable development features, including the District's largest green roof at 68,000 square feet. Construction also required remediation of more than 100,000 cubic yards of contaminated soil from the site since it was previously a factory for fabricating battleship gun barrels for the Navy. Although a highly-secure facility, the building today presents an open appearance to the public and embraces the surrounding community. The project also included the construction of new streets, sidewalks, plazas and retail pavilions, as well as a "walking museum" that illustrates DOT's important functions.

Arthur Capper Carrollsburg and Capper Senior Housing

In 2001, the District received a \$35 million Hope VI grant to redevelop the 23-acre Arthur Capper Carrollsburg public housing project as a mixed-income community. A portion of the site was acquired by the U.S. Marine Corps to build the Marine Bachelor Quarters.

The site was master planned by a joint venture partnership between Urban Atlantic and Forest City. EYA, a development firm, has successfully developed the Capitol Quarter into a townhouse community of market-rate, workforce-rate and affordable housing units.

To date, nearly 2,000 new residences have been delivered, including 340 of the 700 planned new public housing units and 1,200 new market-rate and workforce-rate units. Construction started on the townhouses in June 2008 and was completed in Summer 2010.

In addition to the Capitol Quarter, the Arthur Capper Carrollsburg master development includes new senior buildings, 700,000 square feet of office space and 50,000 square feet of retail space contained in multiple buildings throughout the site.

Nationals Ballpark

Nationals Ballpark is home to the Washington Nationals. In 2004, the District approved \$611 million to construct the ballpark. The stadium is the first LEED-certified ballpark in the United States.

The principal owners, the Lerner family, spent tens of millions of dollars in additional upgrades to the 41,000-seat, 79-suite ballpark, including expansive restaurant fair from visible deck locations and two state-of-the-art scoreboards. The U.S. Capitol building and the Washington Memorial are visible from sections of the upper deck. The Nationals attract between 2 and 2.5 million patrons to the Capitol Riverfront each year and are the defining feature of the neighborhood.



The Yards

This prime waterfront development created by Forest City serves as the centerpiece development along the water's edge. Currently underway, The Yards project includes re-opening several public streets to better access the waterfront, and construction of a 5.5-acre world-class park, a terraced performance venue, community water feature, biking and jogging trails and riverside places in which to eat and shop. The adaptive reuse of historical industrial buildings together with the construction of new buildings will ultimately render:

- 2,800 new residential units for rent and for sale
- 1.8 million square feet of new office space
- 400,000 square feet of retail shops and dining places

Canal Park

Canal Park, a three-block, two-acre stretch of parkland that juts north from M Street, received final approval for its innovative design from the National Capitol Planning Commission in 2010.

The park, slated for completion in late 2011, provides for a combination of large and small open spaces, three pavilions, an urban plaza and prominent water features such as ponds, fountains and a seasonal ice rink. The Canal Park Development Association has a 20-year license to develop and maintain the park, with the District funding a majority of the upfront construction costs.

Each park block will have a distinctive design, with a shaded boardwalk that runs the length. Green features include a linear rain garden, which will act as an on-site water collection, treating and reusing stormwater runoff. The open green space between K and I Streets could be used for movies or concerts, with seating room for 500 and standing room for 1,200 accommodated by a sunken amphitheater. A two-level pavilion will serve as an observation area and café with outdoor seating.



Pedestrian Bridge at The Yards

Diamond Teague Park

Diamond Teague Park, a new 39,000-square-foot public plaza, is located at the terminus of First Street SE at the Anacostia River across from Nationals Ballpark.

The park opened in 2010 and includes the first fixed pier structure in the District since urban renewal. It provides regional intermodal transit to the park as well as an environmental pier that provides canoe and kayak access. Diamond Teague Park also includes improvements to the Earth Conservation Corps pump house, green space and floating wetland

The remainder of the public plaza will be completed when the adjacent Florida Rock Properties' RiverFront on the Anacostia development is completed.

Maritime Plaza and Stuart Petroleum Site

Maritime Plaza and the vacant Stuart Petroleum site are located on a quiet piece of waterfront property east of the 11th Street Bridges, south of M Street SE and overlooking Boathouse Row.

Formerly a natural gas refinery, the property's first building was completed in 2001 and Phase II wrapped up in 2003. Maritime Plaza also has approved land entitlements for another two office buildings.

In 2009, the owner of the former Stuart Petroleum site revealed his plans to redevelop the site and bring retail and office uses to the area. The plans also include narrowing Virginia Avenue SE to create a more pedestrian-scale public right-of-way. The plan also

defines a public plaza within walking distance of the marinas and Anacostia Riverwalk trail that provides scenic overlooks of Boathouse Row.



NEIGHBORHOODS: SOUTHWEST WATERFRONT



The Southwest Waterfront is the portion of the waterfront along Water Street between 6th and 10th Streets SW.

Given the proximity of the Southwest Washington community to the entire waterfront, the redevelopment progress for this target area of the AWI Framework Plan also includes redevelopment efforts for Waterfront Station, Arena Stage, the new Mandarin Hotel and planning for Buzzard Point and 10th Street SW.

These additional efforts contribute significantly to the quality of this unique stretch of waterfront near the National Mall. The corridor is book-ended by two world-class facilities: the Mandarin Hotel and Arena Stage. The redevelopment effort for the

Southwest Waterfront aims to meet the level of quality established by these two extraordinary amenities.

Southwest Waterfront development has been very active since 2003 when the Southwest Waterfront Small Area Plan was approved by the DC Council. The Small Area Plan dictates a mix of residential, retail, office, hotel and cultural uses, as well as significant park space for the redevelopment of the 23 acres of prime waterfront property.

In 2006, Hoffman/Struever Waterfront was selected to redevelop the property. They released a master planning document the following year to refine the Small Area Plan and propose a grand vision of a vibrant, active and dense world-class waterfront.

In 2009, the Land Disposition Agreement was executed by the District and its master development partner. The District contributed \$198 million in tax increment financing to offset infrastructure costs and catalyze the \$1.3 billion project.

Other significant accomplishments include:

- A win-win compromise was reached between the developer and existing long-term tenants at Southwest Waterfront that provided these tenants affordable units in the future development.
- Multiple Congressional actions were initiated and approved to resolve title and other encumbrances on the property.
- A presentation was made to the U.S. Army Corps of Engineers to review marina design, seawall design and navigation channel adjustments.

NEIGHBORHOOD ACCOMPLISHMENTS

Restore

- Achieve LEED Gold Neighborhood Development certification goal.
- Comply with Green Building standards to meet AWI's sustainability requirements.
- Obtain Green Marina certification for two newly developed marinas.
- Maximize low impact development features along Maine Avenue SW and other streets in the development.

Connect

- Remove Water Street SW and convert Maine Avenue SW into an urban boulevard with bike lanes and widened pedestrian sidewalks to promote access and retail activity.
- Demolish surface parking and provide parking underground to optimize the pedestrian experience.
- Build a grand staircase at the terminus of 10th

Street SW to connect the National Mall to the Southwest Waterfront.

- Widen the existing 10-foot-wide waterfront promenade to 60 feet for exciting waterfront activity.
- Orient buildings perpendicular to the water to enhance pedestrian access to the water and improve view corridors.

Play

- Create new pocket parks at the terminus of 7th and 9th Streets SW, each with their own character and identity.
- Enhance the Anacostia Riverwalk Trail along Maine Avenue SW so that bicycles and pedestrians can safely and contiguously enjoy the trail.
- Build a new 5.5-acre civic park starting at 6th Street SW extending to the Titanic Memorial, which will improve the connection between Southwest Waterfront and Fort McNair.

Celebrate

- Recruit a new national museum to locate at the 10th Street Overlook.
- Renovate the Washington Fish Market, also called the Fish Wharf, into a highly pedestrian-accessible destination with a new fish cleaning building, outdoor seating and buried utilities.
- Recruit a new 150,000-square-foot cultural destination.
- Build new fishing piers, renovate the marinas and build a new water taxi pier to provide water-side activity and access.

Live

- Develop approximately 2 to 2.5 million square feet of mixed-use development with new rental and for-sale housing options, two or three new hotels, office space, neighborhood-serving retail along Maine Avenue SW and destination retail facing the water.

KEY PROJECTS

Waterfront Station

Waterfront Station is a two million-square-foot mixed-use development planned and developed by Vornado/Forest City. Phase I opened in Fall 2009 and includes 800,000 square feet of office and neighborhood-serving retail. The development has resulted in:

- 1,700 District government employees moving to Southwest Waterfront
- Creation of five new retail outlets for residents, including renovation of the neighborhood Safeway
- Reopening 4th Street between I and M Streets SW and reestablishing the Washington street grid

\$14 million in public funding was provided for parks and construction of 4th Street SW, with an additional \$800 million in private investment. The construction start date for Phase II, a 1.2-million-square foot expansion with residential units, has yet to be determined. However, land use approvals have been completed.



Artist's rendering of the Southwest Waterfront



Mandarin Hotel

Mandarin Hotel

Built in 2003, the Mandarin Hotel is the District's newest 5-star hotel. It has 400 suites and rooms and overlooks the Southwest Waterfront and Washington Channel. The hotel's primary restaurant, CityZen, is regularly voted as a top 10 restaurant in Washington DC. It is also complemented by the Sou'Wester and Empress Lounge. The hotel received \$40 million in public tax increment financing.

Arena Stage at the Mead Center for American Theater

Arena Stage is the second largest performing arts complex in Washington after the Kennedy Center and will be one of the country's leading centers for the presentation and development of American theater. The founding of Arena Stage 60 years ago changed American theater, and the new center secures the

future of Arena Stage as both a nationally significant and locally treasured cultural center for the District. The new center features the new Kodog Cradle, a 200-seat space with flexible seating and state-of-the-art technical capabilities. The renovation strived to preserve significant elements of the original center's character through the preservation of the round, 680-seat Fichancher Stage, and the 500-seat Kreeger Theater.

Buzzard Point

Buzzard Point is a nearly hidden area within the AWI that is currently home to a power plant, U.S. Coast Guard headquarters, automobile impound lots and low-density housing. Interest in the site increased as a result of:

- The removal of the South Capitol Street viaduct and improved access to Nationals Ballpark

- Private assemblage of 100 V Street
- DDOT's plans to build a new street car line to service Buzzard Point
- The announcement that U.S. Coast Guard headquarters will move to St. Elizabeth's campus

In 2009, a planning assistance team from the American Planning Association reviewed the potential for the site and provided recommendations for building a new mixed-use and high-density neighborhood that contains parks and waterfront cafés on the river.



Top: Artist's rendering of Arena Stage

Left: Waterfront metro station; Right: Artist's rendering of Buzzard Point

NEIGHBORHOODS: HILL EAST WATERFRONT REDEVELOPMENT



Site plan for Hill East Waterfront

Hill East Waterfront comprises 67 acres on the west bank of the Anacostia River, just south of RFK Stadium. Previously known as Reservation 13, Hill East is home to DC General Hospital, the District of Columbia jail, other government facilities and parking lots. These properties obstructed public access to the water, making the area largely inaccessible and aesthetically uninviting to residents.

In October 2002, the DC Council approved the Hill East Master Plan, which envisions transforming Reservation 13 into a mixed-use waterfront neighborhood. However, significant infrastructure work is needed throughout the entire site before any vertical development can occur. Since the master plan

was approved, the District has completed design for the newly-configured road and utility network.

In April 2009, the District Zoning Commission approved new form-based codes specific to the future Hill East development. The purpose of the form-based codes is to avoid prescribing uses for each building, and instead prescribe density and aesthetic requirements. This zoning tool is the first of its kind in the District and an example of the types of innovations being adopted to encourage waterfront development.

In 2009, the District solicited a master developer for the estimated \$1.5 billion project. However, due to changes in market conditions, the District has decided

to proceed with the redevelopment of Hill East on a phased basis, rather than developing the entire 67 acres in one effort as originally intended.

Phase I of the development program will create a sense of place for a Village Square concept that will be anchored by the Metro and include medium density housing and neighborhood retail amenities. To allow Phase I to proceed, the District committed \$4.5 million in 2010 to demolish an existing building and construct an interim parking lot. The phased approach provides the District and the developer the flexibility to adapt to today's economic climate without compromising the overall vision of the master plan.

NEIGHBORHOOD ACCOMPLISHMENTS

Restore

- The master plan incorporates specific guiding principles to promote sustainable development for all future buildings and environmental sensitivity to the river.
- The redevelopment effort is a national model for the development of sustainable public infrastructure for stormwater management and energy conservation.

Connect

- The extension of Massachusetts Avenue NE as a grand boulevard in the tradition of L'Enfant's plan opens access to the Anacostia waterfront and extends the neighborhood street grid.
- Park Drive, Monument Circle and the Overlook form a grand termination to Massachusetts Avenue NE, provide a significant location to view the river, and connect the tree-lined streets of the neighborhood to Park Drive and The Meadows.
- Tree-lined streets and bikeways link the surrounding Capitol Hill neighborhood to the river and riverfront recreational areas.

- Pedestrian access to the Stadium Armory Metro Station has been improved.

Play

- The master plan recommends creating a grand riverfront park called The Meadows, as well as a contiguous recreational trail along the riverfront that is currently under construction. The Meadows is a new waterfront park with a focus on the river and a place of both active and passive recreational activity.
- The Park within Hill East is envisioned as a smaller version of the lush, green, neighborhood squares of Capitol Hill (e.g. Stanton Park and Lincoln Park). The area is filled with trees yet is residential in character.

Celebrate

- RFK Stadium is a regional draw for DC United games and other performances.
- First floor retail is planned for destination shopping.

Live

- Hill East has 4.5 million square feet of mixed-use build-out potential. The master plan recommends 800 units of new housing. These units will be a mix of housing types that complement the existing historic neighborhood.
- The new Village Square will be a mixed-use center with neighborhood retail at ground level. The square will be a vibrant, central gathering place close to the Armory-RFK Stadium Metro.



RFK Stadium

NEIGHBORHOODS: POPLAR POINT



Poplar Point is a 130-acre urban waterfront redevelopment opportunity located east of the Anacostia River in Ward 8. Bound by South Capitol Street, I-295 and the 11th Street Bridges, the open space currently is used by the National Parks Service (NPS) and U.S. Park Police. The inter-agency land exchange of the site to the District of Columbia is part of the *Federal and District Real Property Act of 2006* and is contingent on the District meeting several statutory and regulatory requirements. The inter-agency land exchange requires the District to maintain 70 acres of land for park purposes, relocate NPS and U.S. Park Police facilities and designate two memorial sites.

Planning efforts began in 2006 and have undergone several iterations since then. Ultimately, planning efforts for Poplar Point will create a new waterfront neighborhood with a mix of uses including office, retail, residential and hospitality as well as active, passive and civic recreational open spaces.

Since September 2007, the District has undertaken a series of actions to develop the Poplar Point area:

- Identified a potential developer for the project
- Initiated the National Environmental Protection Act-required Environmental Impact Statement (EIS)
- Started the Small Area Planning process
- Coordinated with NPS on the Remedial Investigation and Feasibility Study
- Solicited community input in numerous formats

In February 2009, the District and its selected developer mutually terminated their development relationship. Since that time, the District has taken on the responsibility of seeing the development process through the EIS, RI/FS and Small Area Planning processes.

The EIS will analyze three build alternatives and one no-build alternative for Poplar Point. In addition, the EIS will evaluate the relocation alternatives for NPS and U.S. Park Police facilities. Each alternative will analyze a range of office, retail, residential, hospitality, cultural and recreational uses on the site.

The purpose of the Remedial Investigation is to characterize the nature and extent of potential releases of contaminants at the site, assess potential risks to human health and the environment and collect the information needed to support the development and implementation of remediation efforts.

The purpose of the Feasibility Study is to develop and evaluate remediation alternatives for the District in order to select a site remedy. In all cases, the response from the community, developers and decision-makers is unanimous in their indication that Poplar Point is a premier waterfront development opportunity within the District.

NEIGHBORHOOD ACCOMPLISHMENTS

Restore

- Remediation of contaminated soils and wetlands needed to correct years of environmental neglect
- Integration of the top U.S. Green Building standards, sustainability elements and neighborhood-scale energy and stormwater management solutions
- Abundant environmental education opportunities

Connect

- Connections from Historic Anacostia, Barry Farm and other surrounding communities to the Anacostia River Waterfront access along the water's edge with trails, recreational opportunities and park space



Poplar Point Alternative 1



Poplar Point Alternative 2



Poplar Point Alternative 3

Play

- A world-class 70-acre waterfront park with multiple passive, active and civic-use opportunities
- Seamless connectivity to Anacostia Park and its recreational and civic gathering places

Celebrate

- Two future memorial sites of historical and cultural significance
- Celebration of the site's unique historical significance
- A future Frederick Douglass Memorial Garden

Live

- Approximately 6.5 million square feet of new commercial, retail, residential and cultural amenities, which will create thousands of construction jobs and permanent new job opportunities
- Thousands of new units of housing at multiple income levels
- New retail and restaurant amenities serving local residents and visitors
- Numerous recreational, educational, contemplative and water-based amenities

ANACOSTIA PARK

The Anacostia Park system spans more than 1,200 acres of active and passive parkland on both the east and west banks of the Anacostia River, which includes Kenilworth Park and Aquatic Gardens, River Terrace, Langston Golf Course and Boathouse Row. With the 70-acre park mandate for Poplar Point and a very active park to the north, the District and NPS have developed a vision that integrates future development with existing and improved parkland to create a new park experience for District residents and visitors.

Recently, NPS and the District have undertaken a planning process to improve the overall functionality of Anacostia Park. Linking Anacostia Park to the Anacostia Riverwalk Trail and constructing an improved park road system will better unify Anacostia Park and other open spaces along the river as a continuous corridor. Moreover, integrating the park into a larger, regional system that includes existing, neighboring communities and new developments will transform the riverfront into an extended network of green space with recreational uses and attractive vistas for residents and visitors alike.

NEIGHBORHOODS: EAST OF THE RIVER GATEWAYS



EMERGING NEIGHBORHOODS

During the past decade, neighborhoods along the Anacostia River have received growing public and private attention and investment. Particular focus has been put on the gateways to the communities bordering the Anacostia River. The east-of-the-river gateways are commercial nodes as well as entry points to the Anacostia River Park System. The gateways will provide enhanced retail and commercial services, increased local and pedestrian access to waterfront open spaces, and improved connections to the western side of the river. The six gateways include Howard Road, Historic Anacostia, Pennsylvania Avenue, Randle Circle, Benning and Watts Branch.

Howard Road

Howard Road Gateway is poised to become a thriving mixed-use node through the redevelopment of Poplar Point. Approximately 11 acres of land along Howard Road are privately owned with current uses that include several auto-related establishments, a charter school, single-story office space and row house residences both occupied and abandoned. Reconfiguring the transportation system around the Howard Road gateway is essential for creating access to Poplar Point.

Historic Anacostia

Martin Luther King Jr. Avenue and Good Hope Road make up the north and east boundaries of Anacostia and serve as the neighborhood's commercial arteries. The residential Howard Road serves as the boundary

to the west and Fort Stanton Park the boundary to the south. There has been much investment in this area during the past several years with further anticipated changes. A few initiatives that hold considerable potential for Anacostia's prosperity include:

- The 11th Street Bridge renovation
- The new streetcar system
- The Four Points developer's plan for a 1.5 million square foot mixed-use complex in the neighborhood's center

The 11th Street bridge replacement project will create two bridges to improve Anacostia's accessibility. The new streetcar system will greatly improve connectivity between the east-of-the-river gateways and the rest of the District. Its first phase, half of which is already complete, intends to initiate operations in Anacostia in 2012 and will connect the neighborhood with H Street NE and Union Station.

Pennsylvania Avenue

As one of the more accessed gateways across the Anacostia, Pennsylvania Avenue has completed or is in the process of completing a number of developments and improvements. The most prevalent is the completed construction of The Grays at 2300 Pennsylvania Ave. The 118 affordable housing units in this apartment building are rented at or below 60% area median income (AMI). The major retail anchor is the Yes! Organic located on the ground floor, which provides a much needed grocery store in the neighborhood.

Additionally, having been designated a Great Street by the District Office of Planning, Pennsylvania Avenue is currently undergoing surface renovations totaling \$25 million to improve pedestrian safety and increase aesthetic appeal. Improvements include the installation of a median, sidewalks between 27th Street SE and Southern Avenue, new tree boxes and street lights.

BENNING

Planned as the Downtown of Ward 7, development projects have seen steady progress near the intersection of Benning Road and Minnesota Avenue NE. In the summer of 2008, a new public parking garage was built adjacent to the Minnesota Avenue Metro Station. The garage will also be available to employees of the new Department of Employee Services (DOES) headquarters. The \$48 million, 225,000 square foot office building will include ground floor retail and is expected to be completed in Fall 2010.

Completed in April 2010 on its existing site, the Benning Road Library is a welcome addition to Benning Road. The \$12 million, environmentally-friendly facility has a vegetative green roof, energy-efficient lighting and flooring made of recycled materials. The library boasts 40,000 books, 32 public computers and public meeting rooms.

Residential development also is on the horizon for Downtown Ward 7. Land development has begun for a 325-unit affordable apartment building and 48 market-rate townhomes directly on the corner of Minnesota Avenue and Benning Road NE. This \$108 million project will boast community and retail space while bringing density and greater aesthetic appeal to a major cross section of Ward 7.



Residents enjoying Marvin Gaye Park

Randle Circle

Randle Circle is adjacent to the primary entrance into Fort Dupont Park and is in the process of improving pedestrian access. As DDOT expands the Capitol Bike Share program, one station considered is at Randle Circle. This would help to increase neighborhood bicycling access and increase access to residents west of the river. Slated to begin operations in September 2010, the newly installed station will have upwards of 10 bicycles to share.

Watts Branch

Watts Branch Creek is a major tributary into the Anacostia River and presents an excellent opportunity to connect residents to its environmental assets. As a result, the District has made significant upgrades to Watts Branch Creek and adjacent Marvin Gaye Park. In the summer of 2009, a \$2.4 million project redeveloped two of the park's main entrances: Heritage Green and Lady Bird Johnson Meadows. This involved constructing a number of improvements, including a community stage, plaza, new shade trees, shrubs and ground covers as well as a bicycle trail that runs throughout the park. The redevelopment was completed in Summer 2010.

APPENDIX

GLOSSARY OF ACRONYMS

AWDZ	Anacostia Waterfront Development Zone
AWI	Anacostia Waterfront Initiative
CSO	Combined Sewer Overflow
DC	District of Columbia
DC Water	Formerly the Water and Sewer Authority (WASA)
DDOE	District Department of Environment
DDOH	District Department of Health
DDOT	District Department of Transportation
DHCD	District Department of Housing and Community Development
DOA	U.S. Department of Agriculture
DOD	U.S. Department of Defense
DOI	U.S. Department of Interior
DOJ	U.S. Department of Justice
DOT	U.S. Department of Transportation
DPR	District Department of Parks and Recreation
DMPED	Deputy Mayor for Planning and Economic Development
EPA	U.S. Environmental Protection Agency
HUD	U.S. Department of Housing and Urban Development
LTCP	Long Term Control Plan, managed by DC Water
NCPC	National Capitol Planning Commission
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
OP	District Office of Planning
USACE	U.S. Army Corps of Engineers

ENVIRONMENTAL RESOURCES

- DC-WASA Combined Sewer Overflow Anacostia River Trash Reduction Demonstration Project: Fresh Creek Netting TrashTrap System, prepared by Metropolitan Washington Council of Governments (October 2001)
- Potomac River Watershed Trash Treaty, executed by the District of Columbia and Maryland delegates (May 2007)
- Anacostia Watershed Trash Reduction Plan, prepared by the Anacostia Watershed Society (December 2008)
- *Anacostia River Clean Up and Protection Act of 2009*
- Combined Sewer System Long Term Control Plan, prepared by Greeley and Hansen, LLC (July 2002)
- Consolidated Civil Action No. 1:00CV00183TFH, Final and Executed Version of Consent Decree (March 2005)
- Anacostia 2032: Plan for a Fishable and Swimmable Anacostia River, District Department of Environment (May 2008)
- Anacostia River Watershed Restoration Plan and Report, by the US Army Corps of Engineers (February 2010)
- Watts Branch Draft Watershed Implementation Plan (2008)
- Kingman Island Ecological Risk Assessment (2002)
- Heritage Island Ecological Risk Assessment (2002)
- Kingman Island Habitat Restoration Assessment (2005)
- Fort Dupont Draft Watershed Implementation Plan (2005)
- Hickey Run Watershed Implementation Plan (2005)
- Pope Branch Watershed Implementation Plan (2005)
- Anacostia Watershed Implementation Plan (2005)

Total Maximum Daily Load (TMDL) Permits

- Total Maximum Daily Loads of Trash for the Anacostia River Watershed (April 2010)
- Anacostia Biological Oxygen Demand Total Maximum Daily Load (2001)
- Anacostia Sediment Total Maximum Daily Load (2002)
- Kingman Lake Bacteria Total Maximum Daily Load (2003)
- Kingman Lake Organics and Metals Total Maximum Daily Load (2003)
- Kingman Lake Biological Oxygen Demand and Oil and Grease Total Maximum Daily Load (2003)
- Watts Branch Sediment Total Maximum Daily Load (2003)
- Anacostia Bacteria Total Maximum Daily Load (2003)
- Anacostia & Anacostia Tributary Organics and Metals Total Maximum Daily Load (2003)
- Anacostia Oil and Grease Total Maximum Daily Load (2003)
- Fort Davis Biological Oxygen Demand Total Maximum Daily Load (2003)
- Anacostia Sediment Total Maximum Daily Load (2007)
- Anacostia PCB Total Maximum Daily Load (2007)
- Anacostia Nutrients and Biological Oxygen Demand Total Maximum Daily Load (2008)

TRANSPORTATION RESOURCES

South Capitol Street Corridor

- Anacostia Access Transportation Study (2004)
- South Capitol Street Bridge Alignment Study
- Anacostia Gateway Transportation Study (2004)
- South Capitol Gateway and Corridor Improvement Study (2004)
- Greet Streets – South Capitol Street / MLK Framework Plan (2006)
- Frederick Douglass Memorial Bridge Rehabilitation and Improvements (2007)
- South Capitol Corridor Environmental Impact Statement (2009)

Middle Anacostia Crossing/11th Street Bridges

- Pennsylvania Ave. SE Transportation Study (2003)
- Middle Anacostia River Crossings Transportation Study (2005)
- Capitol Hill Transportation Study (2006)
- Minnesota Avenue Extension Environmental Assessment (2007)
- 11th Street Bridge Environmental Impact Statement (2007)
- Pennsylvania/Potomac Ave. Intersection Improvements Environmental Assessment (2009)
- Ramp improvement to 295 NB from Pennsylvania Avenue (2009)

Kenilworth Avenue Corridor

- Kenilworth Avenue Corridor Transportation Study (2007)
- Nannie Helen Burroughs Interchange (2009)
- Nannie Helen Burroughs Bridge (2009)
- Parkside Pedestrian Bridge (2010)
- Nannie Helen Burroughs Streetscape (2010)

Anacostia Riverwalk Trail

- Anacostia Riverfront Trail Environmental Assessment (2004)
- East Bank Segment
- Kenilworth Segment (Design 2010)
- West Bank – 11th Street to Benning Road
- FRP bridges over CSX (2010)

Other Studies

- DC Streetcar Alternatives Analysis Needs Assessment (2004)
- Anacostia Initial Line (2010)
- Southwest Waterfront Maine Avenue Study (2005)
- Maine Avenue improvements (2010)
- Marvin Gaye Park Trail Rehabilitation
- AWI Transportation Architecture Design Guidelines (2005)
- St. Elizabeths Transportation Access Study (2005)

PLANNING RESOURCES

- Southwest Waterfront (Completed 2003)
- Hill East (Reservation 13) Master Plan (Completed 2003)
- Ward 7 Waterfront Plan (Completed 2007)
- Benning Road Corridor Redevelopment Framework (Completed 2008)
- Pennsylvania Avenue SE Corridor Development Plan (Completed 2008)
- Deanwood Strategic Development Plan (Completed 2008)
- Center City Action Agenda (Completed 2008)
- Hill East District Map Amendment (Completed 2009)
- Boathouse Row Planning Study (Completed 2009)
- Retail Action Strategy Retail Road Map and Neighborhood Submarkets (Anacostia/Poplar Point, Capitol Riverfront, Pennsylvania Avenue SE, Benning Road / Minnesota Avenue, Nannie Helen Burroughs) (Completed 2009)
- Poplar Point EIS and Small Area Plan (Ongoing 2010)

For more information, please contact:

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