middle branch



The Rowing Club was constructed in the 1980's and is still operating successfully today.

Open Space and Recreation

"One touch of nature makes the whole world kin." - William Shakespeare

Sustainable open space and recreation systems protect and enhance the social, ecological and economic viability of community open spaces. These spaces are not treated as 'isolated' or 'empty' areas between properties, but rather inter-connected elements, with each serving as integral pieces of a larger system. In the Middle Branch Plan, the water and ecological systems provide the foundation of the waterfront community. The overall goals of the Middle Branch Open Space and Recreation program are to maintain a sufficient amount and distribution of open space such that diverse uses and opportunities can be created, including natural habitat areas, passive recreation areas and active recreation areas.

- Natural habitat areas will be set aside for visual enjoyment and guided education only. These areas will 'belong' to the birds and animals for their use.
- Passive recreation areas will include spaces for sitting, picnicking and quiet contemplation.
- Active recreation areas include spaces for ball playing, scull racing, fishing or other water-based recreation.

All of these spaces will highlight the intrinsic attributes of the Middle Branch's environment, minimize ecological impacts and provide economic and social benefits on a long term, sustainable basis. In the Middle Branch, open space and recreation will contribute to the quality of life, accessible to everyone. Our open space and recreation system will bring communities together through accessibility, programming and education.



People escaped the city and came to the quiet Middle Branch to recreate. By the 1920's, industrial land use had replaced many of the harbor's recreational opportunities.

I. History

Historically, the Middle Branch of the Patapsco River was endowed with rich marshes, a wooded shoreline and a complex marine community including shad, herring, perch and rockfish. It's more isolated location south of the Harbor allowed it to become an important recreation area for the growing city. In the early 1800's a resort known as Spring Gardens was opened on the location now containing the BGE Spring Gardens gas storage facility on the northeastern shore of the Middle Branch. By 1815, an elegant resort known as Fletcher's Fish House operated on the south shore of the River, with a marina, restaurant and other facilities for recreation. Other recreation facilities included Klein's Park, Meeter's Park and the Maryland Yacht Club located on the shores now occupied by Harbor Hospital. Members of a rowing club known as the Patapsco Navy proudly raced in its waters.

The Middle Branch recreational sites also always shared space with industrial uses. Other development along the north and northwest shores during the 1800s included a few breweries, coal yards, Carr Lowry Glass Company and some residential development.

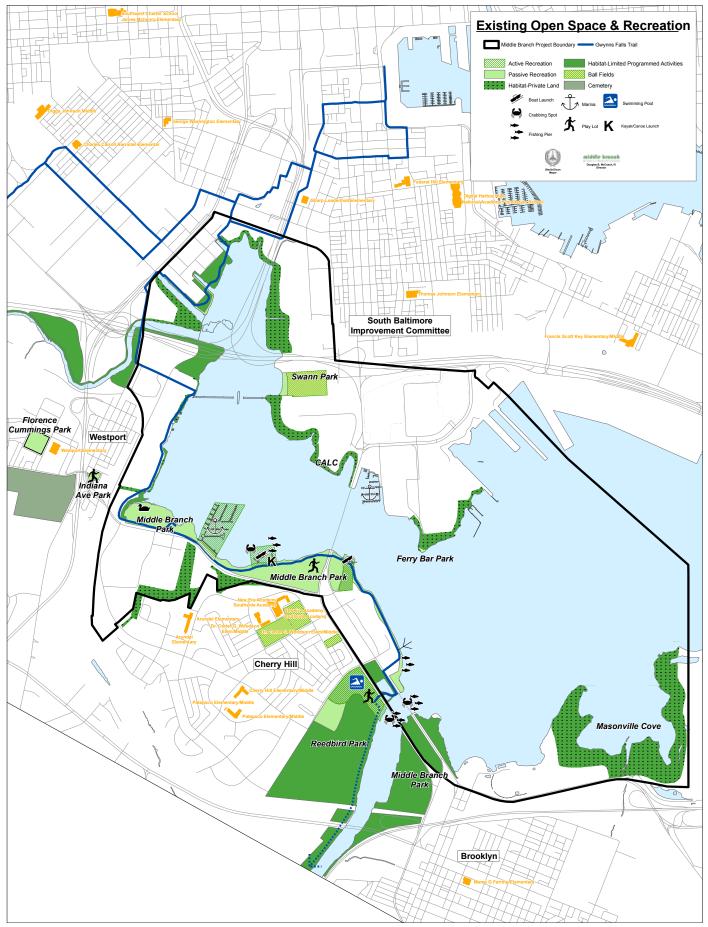
In the 1970's Baltimore began its first renaissance, establishing the now famous Inner Harbor out of abandoned shipping piers. At that time the City also began the revitalization of the Middle Branch, establishing the 1978 Middle Branch Park Plan. City agencies set about purchasing and relocating a junkyard on the south side of the River. Waterview Avenue was also moved away from the shoreline, creating a forty acre waterfront park on what was wasteland. The shoreline park – stretching along Waterview Avenue from Kloman Street to the Hanover Street Bridge, includes the Vietnam Veteran's Memorial and Harbor Hospital Center. The Reedbird landfill was closed in the 1970's, stretching

the open space system to the Patapsco River on its east side. The Middle Branch Park system now offers the largest expanse of natural shoreline in the entire Baltimore Harbor. The Baltimore Rowing and Water Resources Center (the "Rowing Center") was constructed in the 1980's and is still successfully operating today.

Throughout the 1980's and 1990's, the remaining industrial and recreational uses had an awkward relationship, neither really complementing nor harming the other. The Carr Lowry Glass Company and BGE Gas processing facility partnered with the City to create vegetated buffers along their shoreline to improve habitat in the area, but the facilities could not allow public access to their waterfront because of safety and security concerns.

II. Existing Parks, Recreation Facilities And Activities

- The Baltimore Rowing Club and Water Resources Center (located in Middle Branch Park). The first floor of the Rowing Center is leased to local boating clubs for boat storage space. The second floor of the Rowing Center is rented to the public for private events. The facilities are well appointed and have excellent views. It is very popular and affordable and is booked most weekends. The Rowing Center also houses the offices of the Aquatics Division of the Department of Recreation and Parks. (See Map 1)
- Middle Branch Park (101 acres). Middle Branch Park is currently not programmed for daily
 recreation activities but is the location for several special events including the July 4th concert
 and youth fishing instruction. It is used occasionally for picnicking, but could host more regional
 events given its size and location. The shoreline of Middle Branch Park is predominately
 open lawn with easy access to the water. The park includes piers for both motorized and nonmotorized boat launch as well as several fishing/crabbing piers. The Waterview West portion
 of the park includes a bird observation deck and restored natural habitat. The Gwynns Falls
 Greenway passes through the park.
- *Reedbird/Cherry Hill Park (40 acres).* This park is used primarily by residents from the adjacent community of Cherry Hill. There are basketball courts, tennis courts, a playground, a swimming pool with spray pad and limited areas for picnicking. The athletic fields can accommodate football, soccer and baseball and are home to Baltimore's oldest cricket league. The community utilizes the park for its annual picnic. The shoreline of Reedbird Park is vegetated with few formal access points to the water. The park is the terminus of the Gwynns Falls Greenway
- Swann Park (11 acres). Athletic fields are the dominant use of this shoreline park. The current field layout includes 4 baseball/softball fields and one football field. The park shoreline is not heavily vegetated but there are no formal access points or docks. This park was recently found to have unsafe levels of arsenic in the soil and was closed for cleanup and renovation. It is anticipated to re-open in 2008.



Map 1 - Existing Open Space & Recreation

- *Ferry Bar Park (0.4 acres).* Ferry Bar Park is a passive park area, popular for picnics and boat watching. The shoreline is a gently sloping pebble beach.
- *Sculling and Canoeing.* The Baltimore Rowing Club and other clubs practice in the Middle Branch, using the Rowing Center facilities as a base. In addition the Department of Recreation and Parks sponsors canoeing trips.
- *Fishing and Crabbing.* There is a considerable amount of recreational and subsistence fishing and crabbing from existing piers in Middle Branch Park, Harbor Hospital, and from informal locations along the Hanover and Potee Street bridges.
- *Swimming.* The swimming pool at Reedbird Park was recently restored and is well used by the community. The waters of the Middle Branch are not yet clean enough for beach swimming.
- *Walking and Biking.* The Gwynns Falls Greenway is located along the southern shore of the Middle Branch, extending from the City line in west Baltimore 14 miles to the Middle Branch and from the Inner Harbor 1.0 miles to the Middle Branch. This facility is used for biking and walking.
- Baseball/Softball/Football/Soccer. Swann Park and Reedbird Park contain athletic fields that are used by local leagues. The Swann Park fields are very popular for baseball, softball and football. Digital Harbor High School plays their home games for baseball, football, soccer and lacrosse at Swann Park. The fields of Swann Park will be cleaned and restored in 2008. The Reedbird Fields are not as popular for league play as field flooding sometimes interrupts games. Athletic fields are also located on the grounds of Southside High School (soccer).
- *Small Parks and Playgrounds.* Playgrounds can be found in several park and school locations near the Middle Branch: Middle Branch Park, Reedbird Park, Indiana Ave, Florence Cummins Park, Westport Elementary School, Carter G. Woodson Elementary and Cherry Hill Elementary.



At Middle Branch, there is a unique opportunity to help students attending local schools learn about the environment and their impact on it.

III. Opportunities for Improvements to Recreation and Open Space

- Capitalize on the shallow, quiet nature of the Middle Branch estuary for passive boating and fishing recreation. Increase non-motorized boat rentals and use of the Middle Branch for small paddle vessels. Increase number of fishing and crabbing piers.
- Expand rowing facilities. The number of Rowing groups is almost double the amount of available space for scull storage and club events. There is a serious need for more waterfront space for sculling groups. There may be room to expand the existing Rowing Center to meet these needs, or to capitalize on the south parking lot at Harbor Hospital for a new facility.
- Expand special event rental facilities at existing Rowing Center. The facility is in high demand for much of the year. The



Photo by Andrew Nagl Fishing is just one of the many water-based activities that this master Plan hopes to facilitate.

meeting space is limited to 100 persons and has limited kitchen capacity for catering. The Department of Recreation and Parks should consider expanding the facility to add additional, more flexible space with a modernized catering-friendly kitchen. The enlarged facility also could include facilities for park users such as public bathrooms and information regarding activities at Middle Branch Park.

- *Educational opportunities.* Restoration efforts and existing habitat provide a unique opportunity to educate local youth and citizens about the environment and their impacts on it.
- *Business opportunities.* Vending stands, kayak rentals and eco-tourism provide opportunities to encourage community based youth and senior enterprises to help educate and support the local community. These opportunities should be considered as the park system is improved and expanded.
- *Restore existing play fields.* There are several opportunities to restore community play fields at Carter G. Woodson Elementary School, Florence Cummings Park and Swann Park.

- *Recreational trails.* The Middle Branch estuary is enclosed in a fashion similar to the Inner Harbor and bisected by a series of bridges. In addition, the Gwynns Falls Greenway already passes through the area along the southern shore. This creates wonderful opportunities to establish a series of loop trail systems around the Middle Branch waterfront, connecting development villages and surrounding communities with the larger Baltimore community.
- *Parks programming.* Increased population and activity along the waterfront provides new opportunities to establish park friends groups for the Middle Branch Park system to adopt, program and care for park areas.
- Public access. Much of the Middle Branch shoreline is already preserved for public access through the Middle Branch Park system. The foundation of the success of Baltimore's Inner Harbor is the continuous access to the waterfront. Public access is also imperative to the success of the Middle Branch waterfront redevelopment and will be an integral part of the green necklace around the water.
- The United States Army Corps of Engineers Tidal Middle Branch Restoration project. This project creates excellent opportunities for wetland marsh creation and habitat restoration along the waterfront that can be integrated into the park system.
- *Masonville Cove Environmental Center.* The proposed Environmental Center at Masonville Cove provides excellent opportunities for eco-tourism and environmental education. This facility also provides public access to the waterfront for the Brooklyn and Curtis Bay communities.

IV. Constraints

- Middle Branch is a finite ecological resource. While the Middle Branch estuary is large and can
 accommodate a wide variety of use, it is not infinite. Intensive programming or encroachment
 into ecologically sensitive areas will destroy the ecological balance we hope to achieve.
 Baltimore cannot expand recreational uses and activities to the point that they hurt the
 environmental integrity and habitat of the Middle Branch. Thoughtful consideration must be
 given to the location and types of recreational uses.
- *Distribution of waterfront uses.* There must be a balance in the type of habitat/open space provided in the Middle Branch Estuary. The types of planting areas, wetlands and uses should be distributed to maximize and protect habitat.
- *Trash and water quality issues.* Floating debris and bacteria are major impediments to the use of the Middle Branch for water based recreation. The floating debris also destroys wetlands marsh and underwater grasses by smothering them. These issues must be dealt with for the revitalization of the Middle Branch to be a success. (See Water Quality chapter)

- Water depth. The Middle Branch estuary is very shallow, with depths averaging three feet or less in many areas at mean low tide. This situation was created by continuous deposition of silts and sediments from feeding streams, rivers and tidal deposition. While this creates an excellent condition for nonmotorized boating, if allowed to continue with no intervention the estuary will become too shallow for recreational use.
- Surrounding topography and road network. While the immediate southern shore area of the Middle Branch is



Photo by Andrew Nagl

Some estuaries will be reserved for "passive recreation." Wildlife will be protected and people will be able to participate in low-impact activities such as environmental education and photography.

somewhat flat, the topography rises steeply just beyond Waterview Avenue. This creates a large physical separation between Cherry Hill and Middle Branch Park. In addition, on the southeastern shore, Cherry Hill residents are separated from the waterfront by Hanover and Potee Streets, two major thoroughfares into the City. The situation is also challenging for the Westport community where CSX rail lines and the light rail are between them and the waterfront. A network of highways, including I-95, poses a challenge for people to access the waterfront from the northern communities.

V. Guiding Principles

1. Ensure public access along the waterfront

- Maximize and protect public access to the waterfront at all waterfront sites.
- Provide a variety of experiences at the waterfront, including fishing piers, bird watching, sitting, etc.
- Create a comprehensive recreational path system that links communities, the waterfront, downtown, Masonville Cove and the Gwynns Falls Greenway.

Vision

Develop a comprehensive open space and recreation system that protects and promotes the natural shoreline, water based activities and resources of the Middle Branch.

- Implement the recommendations of the Baltimore Bicycle Master Plan.
- Encourage "defensible" space in all public access designs.
- · Limit parking lots and transportation corridors in pedestrian zones.
- Link existing public access systems to new waterfront trails, paths and parks.

2. Increase environmental education opportunities

- Expand educational resources that capitalize on the unique qualities of the Middle Branch Estuary for the benefit of all City residents. (Support development of CALC and Masonville Cove Environmental Center).
- Identify ecologically sensitive areas that are protected for wildlife habitat and organized environmental education
- Assure that environmental education programming is linked to surrounding communities by bicycle paths and provides opportunities for local youth to participate.
- Build on the eco-tourism potential of the area by identifying and documenting shore bird sightings and educational signage.
- Utilize environmental education to establish an environmental job training program for City youth.

3. Create a continuous open space system

- Require waterfront sites to maintain a continuous public walkway, with fishing piers when possible.
- Link all major parks with waterfront green system; create 'nodes' of green space and activity linked by the greenway system.
- Consider acquisition of the CSX Swing Bridge as part of the continuous open space experience.
- Create a continuous green buffer along the waterfront at appropriate sites.

4. Protect and enhance natural resources

- Embrace guidelines of the Critical Area Management Program, enforce Critical Area regulations at all development sites.
- Do not expand recreational and development activities to the point that they hurt the environmental integrity and habitat of the Middle Branch. Thoughtful consideration should be given to the location and types of recreational uses.
- Remove invasive exotic plants from forests, green spaces and replace them with native species.
- Implement the United States Army Corps of Engineers Middle Branch Restoration Plan and the Patapsco Urban River Restoration Program.
- Preserve scenic vistas and views to the Middle Branch from surrounding communities and waterfront sites.
- Protect water quality by planting riparian buffers, creating rain gardens, etc.



Photo by Andrew Nagl Boat launch - Broening Park

5. Create unique recreational opportunities

- Capitalize on the unique nature of estuary as 'safe harbor' for non-motorized boating such as canoes, kayaks, rowing sculls, paddle boats and small sailboats.
- Discourage increases in motorized boating.
- Consider creating a 4 knot speed limit for motorized vessels within the Middle Branch west of the Hanover Street Bridge.
- Increase programmed activities at appropriate areas of parks, and create park friends groups to increase a sense of ownership.
- Create an organized program to maximize navigational safety amongst water based users.
- Consider expanding existing rowing facility at Middle Branch Park or creating new facility on the south parking lot of Harbor Hospital.
- Limit expansion of 'non-water dependent' recreational uses into existing waterfront park areas unless it is appropriate from an ecological perspective.
- Encourage community based youth and senior enterprises on the water.

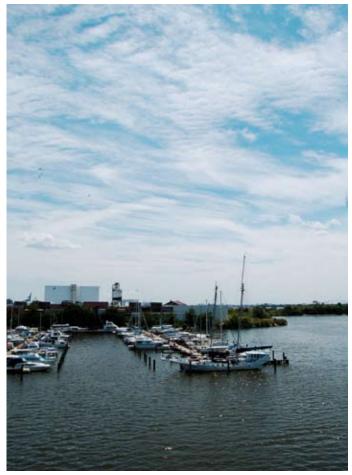


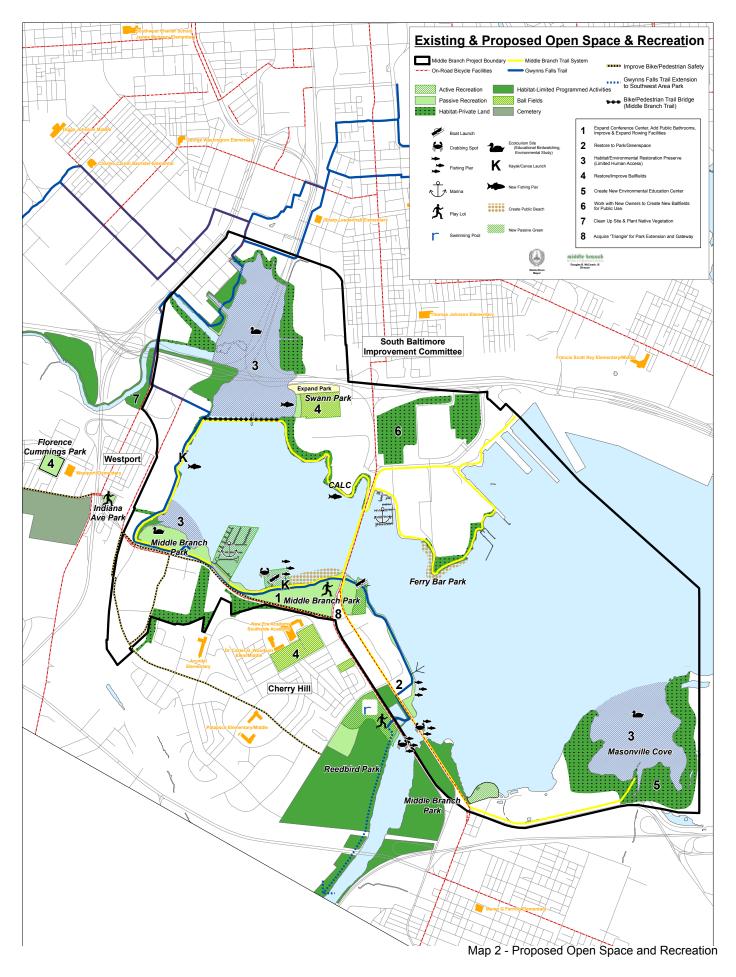
Photo by Andrew Nagl

Recreational sailing is one of the many things that attract people to the area.

For a detailed view of existing and proposed open space and recreation facilities, see Map 2.

VI. Recommendations

- Create a study group with membership from the Department of Recreation and Parks, communities and local rowing clubs to explore expansion of rowing facilities and the Rowing Center.
- Create a Friends Group to begin programming and volunteer opportunities for Middle Branch Park and Reedbird Park.
- Implement USACE Tidal Middle Branch Project.
- Establish a group tasked to recommend habitat improvements and guide the location and expansion of water based recreational facilities.
- Create a new comprehensive recreational path system that links existing and new communities, the waterfront, Downtown, Masonville Cove, and the Gwynns Falls Trail.



middle branch



Careful planning will help the Middle Branch estuary become a healthy, mixed use community.

Design and Development

"We shape our buildings, then our buildings shape us."

- Winston Churchill

Sustainable design and development caters to the health of both communities and their surrounding environment. Intent on improving citizen quality of life, it promotes connectivity by encouraging compact, pedestrian scaled mixed-use development and focusing development around expanded high quality mass transit resources. It respects the natural environment by promoting buildings that are energy efficient, protect natural habitat and green spaces, and utilize creative stormwater management techniques for greater water quality.

In the Middle Branch, the water and ecological systems provide the foundation of the community. New developments along the waterfront will capitalize on its unique character to attract a new population to Baltimore. Land uses will speak to each other across the water, acting as a series of "villages" connected by a green thread, much like a charm bracelet. Each "village" will be unique, yet all will

respect the ecosystem of the Middle Branch so as to protect the habitats and wildlife that make the Middle Branch special. Furthermore, these "villages" will connect to existing communities, improve overall access, and establish new connections to green space and the water.

I. History

Land uses along the shores of the Middle Branch have historically lacked a strong residential component. The Middle Branch evolved from a recreational resource and small industrial center in the 1800's into a solid industrial area by the mid 1950's before being forgotten as an industrial backwater by the 1970's.

Land use along the north and northwest shores during the 1800's included a few breweries, coal yards, the Carr Lowry Glass Company and some limited residential development.

The development and expansion of the B&O and Western Maryland railroads and completion of the Hanover Street Bridge in 1916 provided direct transportation links to Brooklyn, Fairfield,



Photo by Andrew Nagl

The master plan promotes land use that ensures healthy communities. Neighborhoods like this one should be protected and should benefit from development.

Hawkins Point and Cherry Hill, and opened these areas to increased residential and industrial growth. By the 1920's industries had expanded and built new facilities replacing much of the recreational activities. However, as the Middle Branch silted in and became less useful for shipping, industry began to turn its back on the waterfront, using it instead for storage of materials or merely as a dumping ground.

In 1971, the City zoned nearly the entire waterfront of the Middle Branch for light and heavy industry reflecting the intense industrial economy at that time. By the 1970's major land uses included the City's Central Repair and Maintenance Garage, the Western Maryland Railroad yard at Port Covington, Allied Chemical Company, BGE Spring Garden gas processing facility, BGE Westport power generating station, Carr Lowry Glass Company, several junkyards, and the Locke Insulator Manufacturing, Inc. By this time, virtually no recreational resources remained, and the Middle Branch was forgotten as an ecological resource.

Starting in the 1950's industrial development in Baltimore began to stagnate and entered a period of slow decline. The underlying reasons for this decline included the deterioration of the railroad's facilities due to lack of investment and competition from other transportation modes, and increased industrial competition from other regions and countries. Slowly many of the industrial waterfront properties along the Middle Branch became vacant and prime for speculation and eventual redevelopment. Beginning in the late 1970's and early 1980's the rail yard and docks at Port Covington

began to fall into disuse. In the early 1990's BGE closed the Westport power plant, and Carr Lowry Glass Company closed their doors in 2004 after over 100 years of operation. During the late 1990's, the old Western Maryland rail yards at Port Covington were finally redeveloped as a shopping center including with a Wal-Mart and Sam's Club and printing press for the Baltimore Sun. Most recently, in 2006 the Carr-Lowry Glass Company was demolished in preparation for the Westport Waterfront mixed use development. Today there exists only a few remaining stable industrial users along the Middle Branch; they include Locke Insulator, the Baltimore Sun, Browning Ferris Industries, Baltimore Gas and Electric power generating facility and the gas processing facility.

The real estate boom of the early part of this decade saw a renewed interest in waterfront property for residential and mixed use development. For the first time, non-industrial users noticed the available land along the shores of the Middle Branch, and began to purchase marginal or vacant industrial sites for redevelopment. Today the majority of waterfront land has been purchased by groups interested in redeveloping the waterfront into mixed use communities.

II. Existing Conditions

North Shore

The north shore of the Middle Branch begins at the southern end of M&T Bank Stadium. It is dominated by highway and rail infrastructure, with I-95 and I-395 slicing through and over the land. It is also a major gateway to the city along Russell Street through the Carroll Camden Industrial Area. The light rail parallels I-395 crossing north to south, and CSX rail lines are located along the northern border between the stadium and the water.

Land uses are currently dominated by industrial and commercial uses including:

- The Baltimore Animal Shelter
- BGE Spring Garden, a gas processing and storage facility
- RESCO trash incinerator
- *Gateway South Redevelopment.* This site currently houses an architectural salvage company, a chemical company, and the Greyhound Bus facility. The Baltimore Development Corporation has selected a developer to convert the area to a Sportsplex with 600,000 square feet of offices.

West Shore

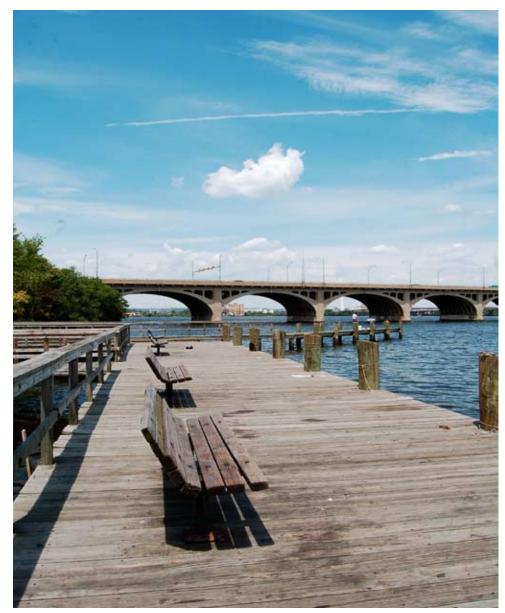
Until recently, the west shore was dominated by vacant or marginal industrial uses. Today it's receiving the most advanced activity toward land use changes and redevelopment.

Major sites on the West Shore include:

- *Brice Concrete*. This site is located at the northeast intersection of Waterview Ave, adjacent to the water; it has contained a variety of different concrete batching facilities over the past twenty years.
- *Westport Waterfront Redevelopment.* This site extends almost the entire length of the western waterfront and is over 40 acres in size. The Turner Development company has proposed to

convert the area to a mixed use, transit oriented community. Plans are for over 1600 units of new housing, and over 3 million square feet of office space.

- BGE power substation site. The substation is located west of Kloman Street, adjacent to the proposed redevelopment site. This facility, behind the northern portion of the Westport Waterfront Redevelopment, consists of a field of electrical transformers with some limited space for offices. Given its visual appearance it presents a challenge to redevelopment.
- Kloman ballfields. An open space located south of I-95 along the waterfront that is owned by the City of Baltimore. This site is designated Resource Conservation in the Critical Area Management Plan, and is preserved for habitat enhancement.



The inclusion of public access to the waterfront is an important part of design and development on the Middle Branch.

Photo by Andrew Nagl

South Shore

The south shore of the Middle Branch study area is dominated by habitat and parkland with some industrial and institutional uses mixed in.

- Masonville Cove. The Masonville Cove is owned by the Maryland Port Administration and located adjacent to their facilities. This shallow habitat area is one of the largest waterfowl staging areas in the City. Remarkably, it is surrounded by heavy industry and commercial shipping.
- Harbor Hospital. Harbor Hospital Center maintains a green buffer along the water with a public access easement containing the Gwynns Falls Trail. There are also two public boat ramps on this property, and the Middle Branch Park system.
- *Waterview Industrial Area.* A large industrially zoned area is at the southwest intersection of the Middle Branch. There are a variety of industrial uses located here including warehousing and light manufacturing, garages

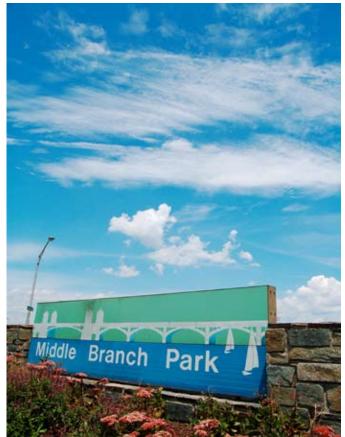


Photo by Andrew Nagl

for various types of mechanics, a gas station, a scrap yard, and a bus lot. The majority of the operations are marginal and several vacancies exist within this area. The largest site contains a large modern warehouse that is in good condition, but currently unutilized.

- *Cherry Hill.* The community of Cherry Hill is located at the top of a ridge overlooking the Middle Branch. This community is 96% African American. Cherry Hill has a home ownership rate that is higher than the city average. Land is available for redevelopment within the community at now-vacant public housing sites.
- *Middle Branch Park.* Middle Branch Park encompasses the entire southern shore and includes a play lot, rowing facilities for the Baltimore Rowing Club and rental facility for special events. The western edge of this 40 acre park is a natural habitat area with boardwalks for viewing wildlife.

East Shore

The east shore is comprised of the lands of the former rail yards of the western Maryland railroad, which include Port Covington, Swann Park and the Dickman Street area.

Major sites include:

- American Forestry Products. A lumber yard.
- Schuster Concrete.
- Swann Park ballfields.

- Browning Ferris Industries. Offices and truck storage for a waste management company
- Baltimore City's central repair garage.
- Port Covington industrial and commercial center. This facility contains a Sam's Club, Wal-Mart and the Baltimore Sun newspaper plant. Major areas of flat, clear developable land are available.
- *Tidewater Yacht Services.* An industrial repair marina is located along the north east shore adjacent to the South Locust Point Marine Terminal and other deep water commercial shipping uses.
- Nick's Seafood Restaurant and marina.
- · Locke Insulator Company, Inc.

III. Opportunities

The Middle Branch is blessed with an abundance of natural resources and is geographically situated to have great views of downtown and the harbor. The past industrial activity has left many large vacant brownfield sites which are ready for redevelopment and renewal. These are opportunities that must be capitalized on to release the full potential of the Middle Branch. (See Map 5 - Issues and Opportunities)

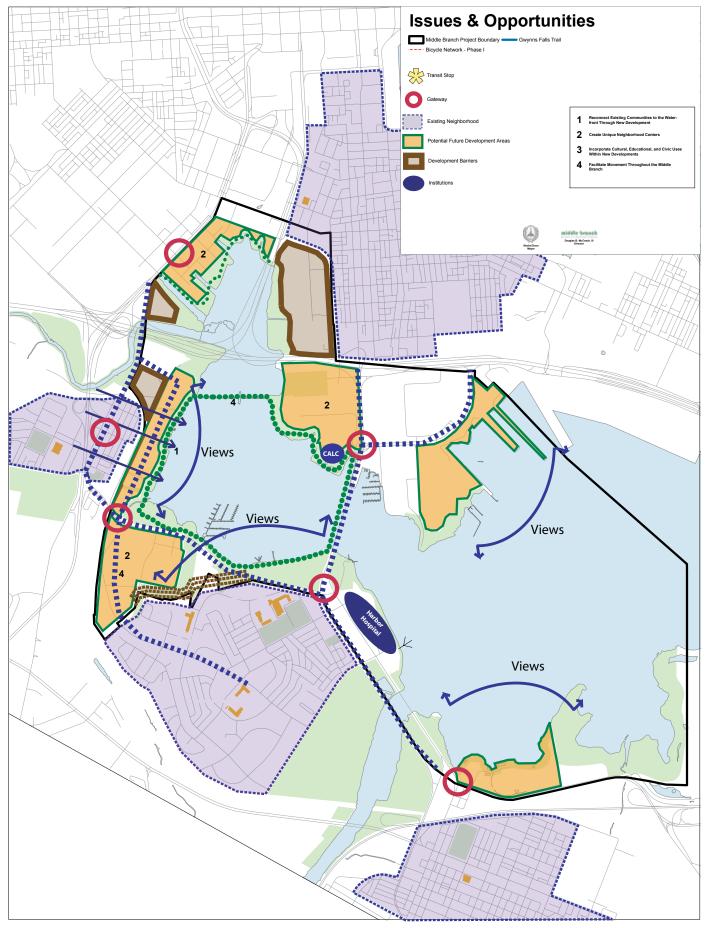
Below is a detailed list of the opportunities for the redevelopment of the Middle Branch:

- · Acres of large vacant or underutilized waterfront property ready for development.
- · Links to mass transit and Interstate roadways.
- Gateway to the city from the South.
- Existing green waterfront and the Middle Branch Park system.
- · The natural habitat of the Middle branch estuary.
- · Close proximity to downtown and Baltimore-Washington International airport.
- Spectacular views of both downtown and the outer harbor.
- Public institutions like Harbor Hospital and the National Aquarium Center for Aquatic Life and Conservation.
- Bike trail connections and potential bike loop around the Middle Branch.

IV. Constraints

The redevelopment and revitalization of the Middle Branch has been slow to progress. While great potential exists for the area, several obstacles lie in the way of this progress. Poor and outdated infrastructure, disconnection from the city transportation grid, and contaminated brownfield sites are just of few of the challenges that must be overcome. The following is a detailed list of the issues that must be resolved in order for the successful redevelopment of the Middle Branch can occur:

- Establishing connections to existing communities to connect them with the waterfront.
- Overcome topographical conditions to link existing communities to new development areas.



Map 3 - Issues and Opportunities

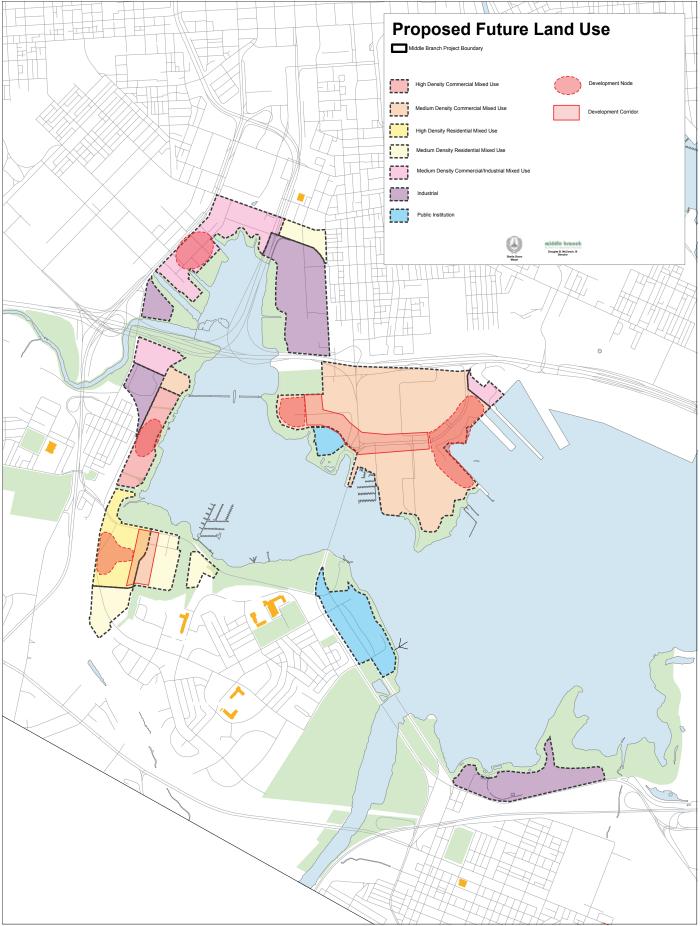
- Remediate polluted brownfield sites.
- · Repair the ecosystem-habitat and water quality.
- Upgrading and expanding the utility infrastructure to meet new service demands (Sewer/Water/ Electric)
- Repair and upgrade the road system of the Middle Branch to manage potential increased traffic volume
- · Linking the Middle Branch area with the transportation grid of the city
- Ensuring traffic and other impacts are properly mitigated and managed
- Ensure compatible development with existing heavy industrial uses such as RESCO and BGE Spring Gardens



Thoughtful urban design has the power to improve quality of life.

Vision

Ensure that opportunities for economic development integrate and support the Middle Branch ecosystem, existing communities and the unique character and location of the Middle Branch.



Map 4 - Proposed Future Land Use

V. Guiding Principles

1. Ensure land use that promotes healthy communities

- Promote mixed use communities that are diverse in income, age, and family type.
- · Ensure existing communities benefit from new development.
- Promote distinct and unique developments around the Middle Branch.
- Locate high density and traffic intensive uses around existing and planned high quality mass transit resources.
- Change outdated zoning and land use regulations.
- Promote communities that provide basic needs including: public institutions, affordable housing, and neighborhood retail.
- Ensure a proper buffer between new development and existing industrial and maritime land uses.
- Promote sustainable land use practices such as energy and water conservation, green roofs, and walkable communities.
- Encourage walking and bicycling to destinations by creating pedestrian and bicycle friendly street systems with commercial and park destinations within close proximity to residences.

2. Facilitate a more effective and sustainable infrastructure

- Improve movement throughout the Middle Branch.
- Redevelop existing roadways as pedestrian friendly parkways and boulevards.
- Benchmark existing utility and transportation infrastructure capacity and coordinate improvements to meet increases demand from new development.
- Promote sustainable stormwater solutions for run-off from streets and other impervious areas and on-site stormwater treatment within buildings.
- Coordinate acquisition and parcel assembly for greatest overall benefit.

3. Capitalize on the unique presence of open space surrounding the water

- Develop guidelines for the placement and design of tall buildings and urban form.
- Increase neighborhood connectivity, both visually and physically, to the waterfront.
- · Create connections from new developments to existing communities and the water.
- Promote open space as the connecting tissue between new and existing communities.
- Establish a sustainability policy for the Middle Branch related to design and development.
- Preserve scenic views and vistas to the Middle Branch from surrounding communities and waterfront sites.

4. Develop and maintain a strong connection to the land

- Respect sensitive habitat and shoreline conditions by defining generous setbacks and buffers to them.
- Identify and develop "gateway entrances."
- Ensure protections to the watershed through sustainable stormwater treatments.
- Encourage interaction with the waterfront at strategic locations.
- Create new green spaces and habitat areas within developments.



Photo by Andrew Nagl

A comprehensive trail system will be part of the Middle Branch redevelopment.

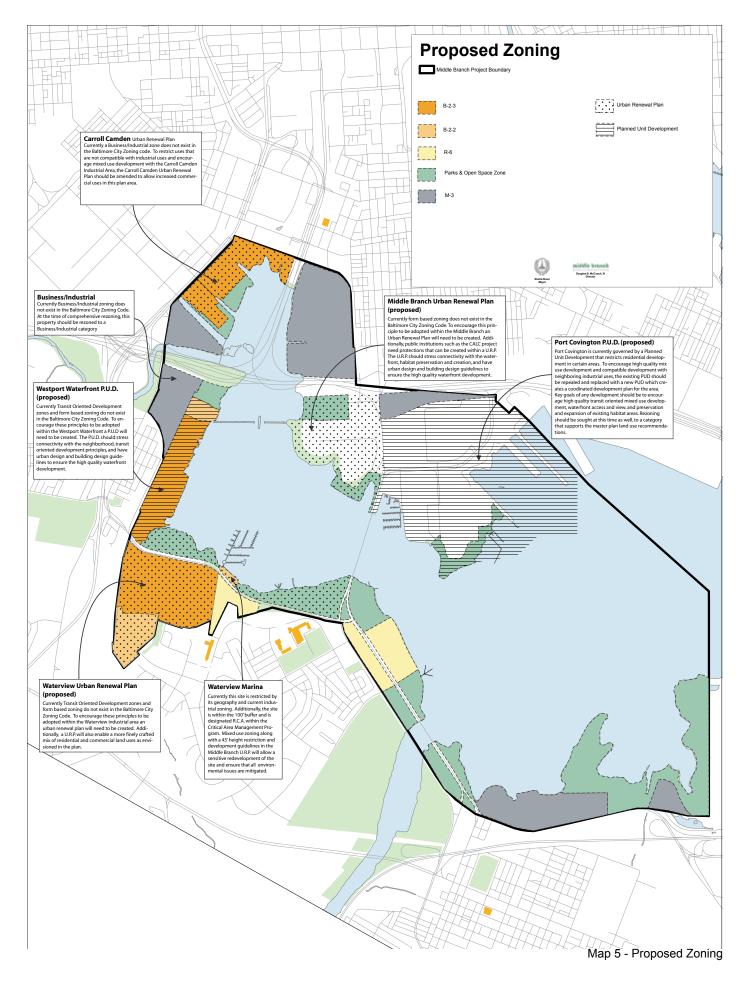
- Link all development sites through a waterfront green system that integrates parks, habitat areas and connections to the surrounding communities.
- Require that all waterfront sites maintain a continuous green buffer along the waterfront where appropriate.

VI. Recommendations

Recommended Land Use Densities and Zoning Maps indicating proposed land use densities and zoning have been created according to the existing conditions, opportunities and constraints, and guiding principles identified in this Chapter.

North Shore

The north shore has many existing heavy industrial land uses, and is in close proximity to the Carroll Camden Industrial Area. This area benefits from good highway access and proximity to the Hamburg Street Light Rail stop. This area is proposed to have Medium Density Commercial/Industrial land uses to ensure appropriate neighboring land uses that are compatible with the existing industry, but allow for a range of commercial development to take advantage of the good transportation access. Many of the properties in the North Shore are small in size and need more intense zoning to achieve the same build-out as larger parcels in other parts of the plan. For this reason higher zoning categories have been chosen in this area. Since a business/industrial zone currently does not exist in the Baltimore City Zoning Ordinance, the recommendation for implementation of the master plan is to rezone the properties to a business zone, B-2-3, and amend the Carroll Camden Urban Renewal Plan to only allow mixed-land uses which are compatible with existing industry.



West Shore

The west shore has excellent transportation access and resources with multiple access ramps to I-295 and a light rail stop in the Westport community. To encourage transit oriented development and redevelopment of the Westport neighborhood, High Density Commercial Mixed Use is recommended for the Westport Waterfront. This will allow a range of economic and residential development which will provide both employment and housing opportunities for existing and new residents. Because Transit Oriented Development zoning is not a part of the Baltimore City Zoning Ordinance, to implement the master plan the properties should be rezoned to a high density business zone, B-2-3, and a Planned Unit Development will be required. To implement the transit oriented principles as well as provide for high quality waterfront development that integrates with the existing neighborhood, urban design and building guidelines should be part of the Planned Unit Development.

South Shore

The south shore has a mix of transit access and resources. The Waterview Industrial Area is in close proximity to the Cherry Hill light rail stop,

but much of the area does not have direct access to a highway or mass transit. Recognizing this limitation, primarily residential land uses are envisioned with limited supporting commercial for this area. Close to transit areas, High Density Residential Mixed Use is recommended, while farther away Medium Density Residential Mixed Use is. Given the lack of a transit oriented development zone in the current Baltimore City Zoning Ordinance, the High Density areas close to transit will be rezoned to a high density business zone, B-2-3. Additionally, they will be overlaid with an Urban Renewal Plan to tailor the land use and limit the size and nature of commercial uses and provide guidelines for transit oriented development. Medium density areas will be rezoned to a medium density business zone, B-2-2, and have either a Planned Unit Development or an Urban Renewal Plan to tailor and limit commercial land uses.

East Shore

The east shore has excellent highway access to I-95 and possesses a greater potential connection to the south Baltimore peninsula than any other area in the plan. It also enjoys a long shoreline with excellent views of the outer harbor and the Middle Branch Basin. This

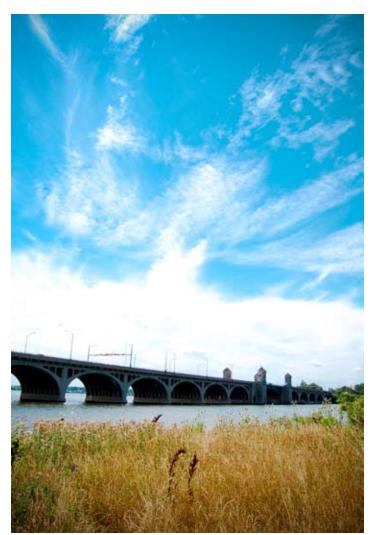


Photo by Andrew Nagl

Developing Middle Branch into Baltimore's "Green Gateway" will allow man and nature to coexist in a comfortable and attractive way.

plan proposes high intensity mixed use land use in this area to take advantage of these opportunities. However, the area lacks any high quality mass transit connections and is isolated physically from the South Baltimore Neighborhoods by the I-95 overpass. Additionally, the area is served by only a limited number of roadways, most of which are regional connections, which are unable to handle a large growth in local traffic. Overcoming these issues and creating major transit connections is imperative to allowing high intensity development in the area. Currently, no high quality mass transit connections to this area are planned, however this plan recommends that a study be undertaken immediately to more comprehensively plan transportation options for this area. Following this study, rezoning recommendations for high intensity zoning (density above 70 units/acres and FAR above 4) can be made based on the principles of Transit Oriented Development. The eastern shore is made up of two principle areas, Port Covington, and the Aquarium/Dickman Street Area. The current recommendations for these areas are as follows:

Port Covington: Port Covington is a large area comprising over 165 acres with well defined natural and physical boundaries. The area also benefits from relatively few property owners. The lack of high quality mass transit connections prevents any long range opportunity of high intensity transit oriented development from occurring. Additionally, some current properties in the area are active industrial businesses which would potentially be threatened by immediate mixed use rezoning of the area. Along with the proposed transportation study, this plan proposes a detailed planning process to begin with all the property owners of the Port Covington area to develop a plan for long range high intensity development based on the planning and implementation of high quality mass transit connections. At the conclusion of this process and contingent upon private/public partnerships to achieve the development of high quality mass transit, high intensity zoning recommendations will be made, a new Port Covington Planned Unit Development will be created to ensure high quality transit oriented development.

Aquarium/Dickman Street Area: While having excellent views to the middle branch basin, this area suffers from inadequate connections to the transportation roadway system. Planning has been underway to add an additional access point to this area but there are several obstacles still be overcome. Beginning with the proposed transportation study, this plan proposes a detail planning process to begin with all property owners of the aquarium dickman street area, in conjunction with the port covington property owners, to develop a plan for long range high intensity development based on a quality mass transit connections. At the conclusion of this process and contingent upon private/public partnerships to achieve the development of high quality mass transit, high intensity zoning recommendations will be made, planned unit developments and urban renewal plans will be created to implement a development plan for the area, and design guidelines and form controls will be created to ensure high quality transit oriented development. If the transportation study concludes that additional access points can not be created and mass transit connections can not be achieved, then high density can not be recommended for this area. The recommendation will then be developed in this area as a medium density commercial mixed use area. Properties will be zoned to a medium density business zone, B-2-2. This will allow a substantial amount of development in this area, but ensure the viability of the transportation roadway network to handle increased traffic

General Development Recommendations

- Adopt zoning changes recommended in this plan.
- Continue with a more focused planning process for the following development areas to create a more detailed development and implementation strategy: Waterview Industrial Area, Harbor Hospital, and Port Covington.
- Adopt or amend existing or new Urban Renewal Ordinances and/or Planned Unit Developments to implement the opportunities, guiding principles and recommendations contained in the Master Plan based on the principles of public access, improved transit, green shoreline, sustainable development practices and habitat restoration.
- As development plans proceed, adopt Planned Unit Developments to ensure the Goals, Opportunities, Principles, and Recommendations of the Master Plan are implemented.
- Complete a study of existing utility infrastructure to guide improvements, green building goals and design guidelines.
- Begin a transportation study to plan for increased transportation options, focusing on mass transit connections, to the East Shore *area*.
- The recommendations contained in the community master plans should be the foundation for approving zoning changes, urban renewal ordinances, planned unit developments and capital improvements.