The Smithsonian Anacostia Community Museum Urban Waterways Project is a long-term research and educational initiative based upon research on the Anacostia River and local communities, as well as research examining urban waterways in communities in other cities. The project raises public awareness about human-biosphere interaction, engenders appreciation for rivers and their role in sustainable urban development, and fosters civic responsibility and advocacy for waterways. It is particularly focused on working with communities on the frontline and most affected by development and environmental impacts.
Introduction: Urban Waterways and the Impact of History

Katrina D. Lashley

In our exploration of the relationships between residents and the urban waterways that run through or along their communities, ACM has been, from the beginning, very conscious these relationships should be viewed and dissected from multiple perspectives. They change over time; evolving and devolving... partners often become estranged, connections reach the breaking point and must be rebuilt. This issue traces how the relationships between the communities in the Urban Waterways network and their waterways have changed over time, highlighting some of the various stages in their evolution and devolution.

Hyon Rah traces the various roles waterfronts have played in their cities and how these multitudes of pasts can be adapted, incorporated into current redevelopment trends which aim to provide residents with greater access to their waterfronts. Noel Lopez explores the history of the health of the Anacostia River through the fortunes of the shad. In Baltimore, Paul Travers highlights the legacy of the Patapsco’s industrial past, its detrimental impact on the health of the river and its environs, and the Green Revolution which occurred along its banks. The revolution involved a combination of commercial, environmental, and community interests and redefined the relationship between the Patapsco and the people of Baltimore. The redefining of an urban waterway is echoed in Louisville’s Waterfront Development Corporation’s exploration of power of the Ohio River in limiting the non-commercial engagement between the citizens of Louisville and their waterfront and subsequent attempts to bridge the disconnection between the waterfront and the city’s residents. The City Project traces the history of the various communities that lived along the LA River, starting with the over 100 Native American villages located near what would later be downtown LA and continuing to the present, highlighting the practices which contributed to the effects of the 1938 Floods and subsequent actions of the Federal government. They also point to the ongoing legacy of environmental injustice in communities in the midst of plans to revitalize some portions of the river. On O’ahu, Donna Ann Kamēhā‘iku Camvel and Hokulani Aikau describe the re-engagement of a community with its traditional and environmental practices after years of imposed land and water mismanagement. An interview with London Legacy Development Corporation’s Paul Brickell highlights how the interplay of history and the River Lea have shaped East London and the importance of harnessing these water narratives in the regeneration of communities. Finally, Joe Womack introduces one of our newest communities, Africatown, by tracing the establishment of a community by the last known shipment of slaves into the States. Bounded on three sides by water, Africatown is a community which has been impacted by the industrialization of its waterways and whose residents are invested in a healthier, sustainable future for their community.

Katrina Lashley, Project Coordinator
Adaptively Reusing America’s Urban Waterfronts
Hyon Rah

If you were asked to describe a typical urban waterfront in the United States, what would your answer be? Perhaps you would talk about a public park with well-kept landscaping, space for recreation, and facilities for cultural events such as outdoor concerts. The answer to the same question would have been very different 50 years ago, and might have involved an industrial site, such as a power plant or a factory, or something equally unrelated to leisurely purposes. Going back another 50 years would likely have yielded quite a different answer.

As histories illustrate, many urban waterfronts in the United States have undergone a series of defining phases since their initial settlement. During the industrial era, many urban waterfronts served as their cities’ commercial and industrial engines, characterized by structures that were economically beneficial (e.g. warehouses, mills, power plants, and factories), but not necessarily accessible to the greater community. Following the shift from industry-based to service-based economies, numerous urban waterfronts experienced declining economic significance, becoming underutilized or even abandoned. The subsequent phase for urban waterfronts, in many cases, has proven to be a kind of renaissance, as these sites have been rediscovered and repurposed as civic centers.

When it comes to redeveloping urban waterfronts with a past significance, assessing what is already present is a sensible starting point. Any given site may be dotted with buildings, infrastructure, or other remnants of its previous uses. Since these artifacts may often represent the particular forces that shaped not only the site itself but the city as a whole, an argument can be made for retaining them in some vestige - The extent to which those artifacts may remain as part of any new development, the greater the opportunity to foster education and appreciation for the particular place and the community’s history. This process - also called adaptive reuse - gives existing structures a new life beyond their original purposes, and, when applied systematically, helped preserve the city’s local character throughout. Adaptive reuse, a widely used concept in urban sites, can be a unifying mechanism for preserving and promoting local history and community identity throughout the city. What makes urban waterfronts particularly amenable to adaptive reuse, especially in the United States, is the changing phases of waterfront usage. A scan of a few projects across the country reveals how effective such approaches can be for forging a way forward.

Hyon K. Rah is a hybrid designer-engineer who has worked around the world, specializing in sustainable architectural and urban design, and water resource management projects.
Gasworks Park - Seattle, WA

Seattle’s Gasworks Park is located on a prominent hilltop along the shore of Lake Union, with a panoramic view of the downtown. The park features the unexpected pairing of an old gas-production plant atop a series of rolling, grassy mounds. The coal gasification plant stopped being operational in 1956, and the land was acquired by the City of Seattle to be converted into a park due to its waterfront location and connection to other Seattle neighborhoods along a bike trail.

Since its opening in 1975, Gasworks Park has revived an area which used to be a light industrial zone suspended between two established residential neighborhoods. The site is now heavily used throughout the year, by both residents and visitors. It is host to various concerts and festivals and is one of the two locations for Seattle’s Fourth of July fireworks. It has also become one of the most popular wedding venues in the city.

At the time of planning, the current appeal of Gasworks Park to its visitors was not a given. Rather, it is much to the credit of the gamble the city took in reimagining the role of the site, which used to be home to a coal-burning gasification plant. A decision was made to repurpose the remnants of the gas-production plant, celebrating the industrial heritage of the site rather than removing what, especially at the time of development, could have been deemed unsightly and not worth keeping. Today, a portion of the plant serves as a “play barn” for children, while other parts have been modified for park visitors to climb and otherwise explore. The height these structures provide is an added bonus for those wishing to take in the view of the water and downtown Seattle from a higher vantage point. In addition to the functional advantages it offers, the former gas plant, through its transformation, serves as a reminder of the changing course and priorities in urban development over time.

Spectacularly sited on Lake Union, Gasworks Park is a popular destination for Seattle’s residents and visitors that features the unexpected pairing of industrial and natural.

Credit: Will Parker on Flickr
Station Square – Pittsburgh, PA

Around the same time Gasworks Park opened in 1975, a fervent debate was taking place on the other side of the country in Pittsburgh over the fate of the Pittsburgh & Lake Erie Railroad buildings, which were no longer used as passenger terminals. Perched on the South Shore of Monongahela River directly across downtown Pittsburgh, Station Square is composed of five historic railway buildings that were repurposed as offices, retail and entertainment spaces rather than being torn down to make way for brand-new structures. With the addition of a hotel, an outdoor amphitheater, a riverwalk, and a dock for Pittsburgh’s river cruise, the former transportation hub for the city was effectively transformed into the center of entertainment. While the Station Square development accomplished Pittsburgh History & Landmark Foundation’s mission to preserve the site’s history as a transit hub, it was perhaps the most successful in serving the new demands of the city. Through its 19 years of continued development starting in 1976, Station Square became home to 3,000 jobs and 143 businesses, and supported Pittsburgh’s transition from an industry to service-based economy. Easily accessible from downtown across a bridge either on foot or by car or light rail, Station Square, one of key connectors between Pittsburgh’s waterfront and the rest of the city, remains one of the most active areas in Pittsburgh today, providing amenities to the city’s residents and visitors while contributing to the local economy in a big way.

Station Square in Pittsburgh connects the waterfront to the rest of the city by providing entertainment and employment while celebrating the past. Credit: tunnelarmr on Flickr
Oakland Global Trade and Logistics Center – Oakland, CA

The redevelopment of Oakland Army Base on Oakland’s Outer Harbor is a more recent example of adapting historical structures for the benefit of the local community. When faced with the opportunity to redefine the waterfront following the base closure in 1999, the City of Oakland chose a path to recalibrate the existing infrastructure of the old army base into the Global Trade and Logistics Center to support the nearby Port of Oakland, the fifth busiest port in the nation. This plan addresses fundamental issues necessary for this site and its nearby community to thrive. It offers an economic engine and a new community identity, both of which suffered when the army base, along with other military bases in the area, shut down in the late 1990s. In addition to taking advantage of the waterfront location and the existing infrastructure, this plan takes into consideration the history and the character of the area that the institutional presence has shaped, and the need for middle-class jobs that have never been replaced since the base shut down. This project is projected to create about 1,500 construction jobs, and around 1,800 permanent positions upon completion. Priorities for hiring will be given to local residents, and regulations will be in place to ensure equitable economic opportunities for the residents of Oakland. While it might not sound as exciting or engaging a plan as, say, a waterfront amusement park (which was in fact considered for this site), it is a farsighted plan that is sensitive to the area’s cultural heritage and the current needs for a sustainable future as a cohesive community.

Looking forward, as more communities develop waterfront properties, it will be wise to reflect once more on the profound changes undergone by America’s waterways as they adapted to the changing priorities of their communities.

Port of Oakland, the fifth busiest port in the nation, will be supported by the Global Trade and Logistics Center less than 3 miles away, a former army base. Credit: tunnelarmr on Flickr
As illustrated through the examples of Gasworks Park, Station Square, and Oakland Global Trade and Logistics Center, adaptive reuse in urban waterfronts can take many different forms depending on their context and history. In the case of formerly industrial properties, as in Gasworks Park, this may include remembering an industrial past some residents may not at first seek to memorialize due to the pollution it caused, but which is sometimes more complex and interesting than appears at first glance. In the case of a former transportation hub, Station Square development honored the site’s grand past, and, at the same time, was able to add significance as an economic and entertainment center for the community. In the case of a former military facility, the reuse of Oakland Army Base may not be as recognized (after all, a logistics center does not exactly exude glamor), but is similar to the previous examples in spirit: a thoughtful continuation of the site’s legacy as major source of employment, pride, and stability for the local community. In all these cases, adaptive reuse provided an opportunity to remember the past and the evolution of the city through capitalizing on what was already there.

Looking forward, as more communities develop waterfront properties, it will be wise to reflect once more on the profound changes undergone by America’s waterfronts as they adapted to the changing priorities of their communities. Our priorities may again change, perhaps sooner than we might expect, and these priorities will impact the uses of our urban waterfronts. As one example, many waterfront properties around the country are already prone to storm surges and erratic hydrological events. These are factors, among many others, of which one should be mindful of before contemplating the preservation and commemoration of a site. As with other development strategies, adaptive reuse has its risks and rewards, which should be evaluated carefully before implementation.

Asked 50 years from now to describe a “successful urban waterfront,” what will most Americans say? Based on the shifting priorities and physical transformations we have witnessed, it is impossible to say. That said, if adaptive reuse continues to be successful, perhaps the answers will have a common thread – design that creatively blends attention to a site’s past, present, and possible future uses and its larger implications to the community.
Ethnographic Overview and Assessment (EOA) of Subsistence Fishing on the Anacostia and Potomac Rivers and Rock Creek

Noel Lopez

Project Overview
The EOA Subsistence Fishing study is a multi-year (3) attempt to document non-recreational fishing practices along Rock Creek and the Potomac and Anacostia Rivers. The study area, focused on National Park Service managed areas, covers 47 miles of DC, Virginia and Maryland shoreline (fig. 1). Encompassing five Park Units, researchers interview participants on the Potomac from Great Falls to Piscataway Park on the Maryland shore, and Mount Vernon on the Virginia; on the Anacostia from the DC/Maryland line down to its confluence; and all areas south of the Porter Street Bridge on Rock Creek. Fieldwork is conducted year round for two years. Some of the research questions include: biographical history of anglers, significance of fishing locations, nature of subsistence activities, frequency of use, sharing norms or traditions associated with fishing, and the extent that the community(s) and individuals depend on fishing activities in the park. Part of the goals for this project is to aid park managers in culturally informed decision-making and document local fishing practices.
When I tell people I am on a research team studying subsistence fishing along the various Washington waterways, a common response is they had no idea anyone fishes on the banks of the Potomac or the Anacostia. I am now quite used to fielding questions that start with... “Don’t they know that the river is polluted?” or “People eat fish from the Potomac/Anacostia?” or even, “Wait, there are fish in the river?”

I wonder if it’s because, for some, our waterways are seen only as impediments to traverse; a tangible cause of the traffic affliction that ails the region. Perhaps for others, our waterways are invisible, unseen aspects of the region’s landscape that come to focus in a disjunctive way. These waters are parsed pieces that encroach onto our topographical reality only when we interact with them for recreation or in travels. Therefore, they are never experienced as a great rushing whole: the Potomac and its tumbling power, Rock Creek and its meander, Anacostia and its humble origins to its widening at the confluence. Seeing these waterscapes are sublimated, it comes as a surprise to many people they are the source of fish and a fishing culture. But these waterways have, time and again, been linked to the pulsing heart of our Federal City. And no fish has had as great an economic and social impact on the DC region as the shad.

John Smith wrote accounts of anadromous fish runs on the Potomac being so plentiful they were caught using frying pans. Today, most people have no idea the Potomac has been repeatedly called “America’s best fishing hole.”¹ The fortunes of the shad could be seen as emblematic of the health of our waters. So, what happened to the shad?

The Washington waterways provided plentiful food-gathering opportunities to pre-Columbian communities and early European settlements. Archeological, ethno-historical, and linguistically data paints a vivid picture of the intensity of fishing and trade on these rivers by the Native Peoples of the Potomac Valley. In particular, the spring runs of anadromous fish were of particular importance since, at least, the pre-contact period. According to Dr. Stephen Potter, National Park Service Regional Archeologist, anadromous fish like the American and Hickory Shad were, “an important resource to the local people since 1500 B.C. ²” Dr. Potter points to the fortuity of the early spring fish runs coinciding with an emptying of those, “agricultural surpluses and nut harvests,” that sustained native populations through the winter months.

One method used to catch the teaming masses of shad by native peoples on the Potomac was fish weirs. A weir is a sometimes V-shaped funneling structure, made of wood or stone that sits in the river to ensnare fish. As the fish were funneled towards the narrowed opening, wooden baskets were lowered into the water, catching fish in a sieve like fashion. Because organic materials rot, there are no remnants of wood weirs, save for what can be found in the anaerobic conditions beneath the bed of the river. Stone weirs, on the other hand, remained visible long after they fell into disuse.

John White’s famous watercolor The Manner of Their Fishing (1583-93), serves a representation of both the variety of aquatic life and of fishing techniques of the region. (Fig. 2. has White’s depiction of a wooden weir). During the colonial period as, “many, probably 30 or more, V-shaped ‘fish pots’ in the river” were identified by George Washington. However, the Maryland State Assembly ordered the destruction of weirs in 1768 due to their hampering of easy passage over the Potomac. The actions of the Maryland State Assembly could be seen as emblematic of larger trends, disregarding the cultural folkways of indigenous people for the sake of commerce. Nonetheless, shad became just as important to Virginians and Marylanders as it was to indigenous communities, and many of the same traditional fishing locations became sites of commercial fisheries.

Before the American Revolution, the bulk of labor in the region focused around the cultivation of tobacco; but that began to change in 1774. As a result of an economic boycott of British trade, codified by the Continental Congress, diversification of food production was needed. A fact that the battles of Lexington and Concord in 1775 underscored as war with the Empire was certain. John McPhee, in his book Founding Fish, conjectures the fish run that fed George Washington’s army in May 6, 1778 at Valley Forge on the banks of the Schuylkill River, was of shad.

The Potomac and Anacostia Rivers became an important resource to the local economy during the late 18th century. As the city grew, so did the volume of commercial and individual fishing. By the late 1800s, the fisheries of the Potomac annual shad catches almost “equaled nearly twice the entire number of barrels of the sea herrings put up in Canada.” This trend continued until halfway through the 20th century, which saw a precipitous drop in the size of the shad run.

3. Quinn, David B. “White, John.” Dictionary of North Carolina Biography. Ed. William Samuel. Powell. Chapel Hill U.a.: U of North Carolina Pr., 1996. N. pag. Http://ncpedia.org/biography/white-john. Web. Quinn further elaborates, “His use of perspective was intermittent: often he used a half plan, half bird’s-eye view for his landscapes, but most of his figure drawings of Indians were formed with a rare fidelity to life, and so they have an authority that no other early pictures of North American Indians had or were to have for a very long time. They are consequently priceless ethnographic documents, detailing artifacts and clothing with care and understanding, and showing the two village communities he drew as living entities.”
Unfortunately, eating fish from the Potomac and Anacostia rivers became a public health concern in the late 1950s, and the deaths of millions of migratory fish (which included shad) in the spring of 1962 changed the perception of the river for many residents. Ironically enough, as pollution and overfishing was strangling the life from our waterways, an inadvertent discovery helped solidify the legacy of our local fisheries and an appreciation of this region’s indigenous people’s food gathering techniques.

Conducting “a water pollution investigation” using aerial photography, Dr. Carl Strandberg, an early environmentalist and adviser to the Federal Government, first noticed stone weirs. In 1965, Drs. Strandberg and Ray Tomlinson, discovered and identified 36 such stone structures using photoarcheological reconnaissance8. Today, over 50 weirs have been identified on the Potomac.

While 20th century pollution would seem the likely culprit of the collapse of the local shad fisheries, it should be noted that changes to water quality started as far back as during the Colonial period. It began with the needs of the British Empire: tobacco and hardwood. Tobacco was the cash-crop during the 17th century, and the region with its climate and soil provided the perfect conditions for top-quality harvests. Forests were clear-cut, and the lumber shipped to England. Much of the arable land was then cultivated with the same crop repeatedly9. The demands of a cash crop like tobacco on the land were harsh and coupled with rapid deforestation led to soil exhaustion and erosion. As the nation moved away from hoe-farming to plough-based agriculture, the problems only intensified. One of the more salient effects of 18th century soil erosion was the siltation of the Anacostia which left Bladensburg basically landlocked by the 1850s. Less than half a century earlier, it was a bustling port town.

Because of the intensive efforts by local and national agencies, non-profits and community members (that began in the 60s), by the 1990s, water quality in the Rivers began improving. It also marked the slow return of shad stocks.

Last year, despite a fall in the shad runs10 of every Bay tributary, the run in the Potomac was larger than that of years prior. In 2015, the field team began interviewing anglers throughout the region. Four team members went out early in the morning to late at night, during the weekends and weekdays, looking for anglers. However, a late start to the field season meant the team missed the 2015 Shad run. This year, for a short period of time at the end of March, the Potomac will swell with life. The river will churn with fish rushing upstream like boats against the current. At the very edges of the river and under bridges and standing on piers, anglers will stand shoulder to shoulder casting and reeling and releasing, again and again. Our team will be there. I hope you will be there too, watching the river run silver once again.

The Patapsco: River of People - River of Promise
Paul Travers

Mention the “greening” of the Patapsco River, and most people will immediately think of Harborplace and the flood of tourist dollars that swirl around the edges of the inner harbor. Few people think about “greening” in relation to the actual river, but since the mid-1980s, the river’s history has focused on its ecological, not financial, comeback. It is a history in the making that has witnessed an unprecedented paradigm shift about our relationship with river.

When the City of Baltimore was charted in 1729, the Patapsco River quickly became a blue-collar river of commerce and industry for a booming seaport. For 250 years, the river was an industrial workhorse that never tired and never slept, with never a second thought about its health. A polluted river was simply an inconvenient by-product in an economic equation that emphasized profit and marginalized pollution. However, starting in the 1970s, that viewpoint started to change just as clean water laws were being enacted. With the mass exodus of city residents to the suburbs and the slowdown in the economy due to foreign markets, the harbor shoreline was being abandoned. The river, literally and figuratively, was left for dead from toxic waste discharges, raw sewage spills, and stormwater runoff. The river’s ecosystems were slowly suffocating. The only wildlife to be seen was dead fish bobbing on the surface of the fluorescent green water. As industry continued to fade downriver, business leaders and city officials scrambled for ways to bring back people and jobs. To their credit, the plan would ultimately revitalize the harbor, revive the “green” movement, and resurrect the river.

Ground zero for the “green” revolution was the Inner Harbor. By the 1960’s the area, once homeport to a bustling steamship business, had been filled in and paved over to redirect traffic. It was the perfect place for a shopping district. Opened on July 2, 1980, Harborplace, twin, two-story galleries with restaurants and boutique stores, transformed the decaying waterfront into a world-class tourist destination. People, once again, were getting close to the river, even if they had to hold their noses as they peered down into its polluted waters. Around the same time, a wetland between Fort McHenry and Port Covington was being constructed as litigation for the new harbor tunnel. While the event didn’t garner media attention, it proved pivotal in the move to “green.” With natural wetlands non-existent along a man-made shoreline, the restoration project became a living laboratory to demonstrate the ability of the river to heal itself with human intervention. For the first time, the river and its inhabitants were reversing roles. People were serving the river.
With the success of Harborplace, waterfront property became a hot commodity, as developers began revamping the shoreline into the Gold Coast. From residential developments at Locust Point, the “gold” fever crossed the river with the mixed-use district at Harbor East, which became the new upscale downtown Baltimore. “Green” fever was also rapidly spreading, as developers promoted their commitment to the environment with certified “green” buildings and spaces. Later, the new visitors’ center at Fort McHenry and the Under Armour headquarters at Tide Point were two of the more notable “green” projects. West of Fells Point, the “brownfield” of the old Allied Chromium Plant was being transformed into Harbor Point, another “green” mixed-use district. While the river was cleverly being used as a marketing tool, despite its deplorable condition, there was a silver lining. The majority of new residents were educated, white-collar professionals who had paid a king’s ransom to live near the river. They were not going to tolerate a cesspool in their backyard. Community groups began clamoring for a cleaner river, and local politicians and other developers were hearing their voices.

In 1982, another seminal event in the “greening” of the Patapsco River occurred with the arrival of Greenpeace, the international ecological organization known for its unorthodox tactics. That summer, their forty-foot ketch Aleyka sailed up the river with the SCM Corporation centered in it cross hairs. Calling attention to corporate polluters, the group attempted to stop the flow of chemical waste by inflating a portable raft inside a discharge pipe. That tactic failed, but the group successfully captured media attention that focused the spotlight on pollution issues in the watershed. River communities in the shadows of heavy industry were now studying the causes and effects of pollution and asking questions about environmental justice. The mantra to “Save the Patapsco” had been a subliminal message for “Power to the People.” Residents rallied around protestors but wondered who would champion their cause after the group departed. Nearly twenty years later, they had an answer.

In 2002, the first Patapsco Riverkeeper was formed by a handful of conservation-minded citizens who lived near the Main Branch of the river. Modeled after the acclaimed Hudson Riverkeeper, the group wielded the citizen’s lawsuit as its primary tool to stop polluters. After the group disbanded in 2006, the “river keeper” was revived by Baltimore native Eliza Steinmeier. An environmental lawyer with an extensive background in protecting and publicizing endangered waterways, she established the Baltimore Harbor Waterkeeper as the official watchdog of the Patapsco River. Before stepping down in 2011, she also spearheaded the move to consolidate five watershed groups as Blue Water Baltimore, a unified voice with more money and more political clout. After twenty years, the environmental movement was firmly rooted along the river.
Environmentalists weren’t the only ones taking action to connect the people with its river. In 2005, local businessmen formed the Waterfront Partnership of Baltimore to unite businesses and other non-profits to clean up the river. In April 2010, the group announced the creation of the Healthy Harbor Initiative to make the harbor swimmable and fishable by 2020. In addition to an annual report card on the health of the river, other projects included floating wetlands, oyster habitats, and a “water wheel” to collect trash. At the same time, the National Aquarium was renovating its waterfront campus to highlight the river ecosystem in its backyard. In 2014, oyster “biohuts” were installed along the harbor’s bulkheads. In 2016, the Aquarium unveiled plans to establish an interactive floating wetland alongside its building. Meanwhile, the Maryland Port Administration was continuing its efforts to “green” the port after creating an environmental miracle downriver at Masonville Cove. Beginning in 2007, the agency began a massive clean-up to restore former wetlands which had become a toxic, underwater junkyard. On Earth Day, April 22, 2009, port officials, community leaders, and politicians dedicated the Masonville Cove Environmental Education Center.

Peering into the crystal ball, the environmental future of the Patapsco River is bright. The seeds of the “green” movement are finally bearing fruit. At the Middle Branch, Under Armour is transforming the waterfront into a corporate campus with the focus on environmental sustainability. Along the Main Branch, dams are being removed to return the river to its natural state. While progress has been slow when compared to other rivers on the Atlantic seaboard, the environmental infrastructure has been established to fully restore the river. Community events, outreach projects, and education programs will continue to be essential in fostering environmental stewardship among the public. Since the 1980s, we have realized our link to the river as part of our connection to nature and learned our role as caretaker impacts every aspect of life. A river simply reflects those it serves. Find a healthy river and you’ll find a healthy city. While a fishable and swimmable Patapsco River may be decades in the future, it is the goal that is steadfastly being pursued. Every year people are getting closer to the river physically, intellectually, emotionally, and spiritually, one small step at a time. In the future, the “greening” of the historic Patapsco will be fulfilled when people can finally immerse themselves in the sacred waters as their environmental baptism. And to think, this “green revolution” started with a shopping center!
Established in 1986, the Waterfront Development Corporation (WDC) plans, coordinates and implements strategies to revitalize Louisville’s Waterfront.

**The History of Louisville’s Riverfront**
Louisville Waterfront Development Corporation

The falls area of the Ohio River at what is now Louisville, Kentucky, supported a succession of Native American cultures for some 12,000 years prior to European colonization. The area was a natural river crossing point for migrating buffalo seeking the salt-licks and nutritious cane of the Kentucky region during the winter, and was plentiful with fish and mussels. The French explored the Ohio Valley in the late 17th century and established settlements in present-day Illinois and Indiana but lost the area to the British by the treaty in 1763 that ended the French and Indian War.

**The Birth of a City**
During the American Revolution, Virginian George Rogers Clark conceived a scheme to strengthen Virginia’s claim to the territory northwest of the Ohio River by seizing British outposts in the Illinois country. In 1778, Lieutenant Colonel Clark stopped at the falls, landing on now-vanished Corn Island to train his 175 Virginia militiamen. When he left for the Illinois country, he left behind some sixty civilians who had accompanied him. This small band became the beginnings of Louisville.

The Falls of the Ohio are a series of rapids composed of layers of limestone, which were exposed by the melting water of glacial retreat over some 20,000 years. This resulted in a series of rapids with a river bed drop of over 26 feet. The Falls are the only natural obstruction in the nearly 1,000 mile length of the Ohio River.

This natural obstruction became a stopping place for the riverboats above and below the Falls. As river travel technology changed from keelboats to steamboats in the early 1800s, Louisville’s existence as a town tied to river traffic portage and commerce was permanently established. The 1830 opening of the Louisville and Portland Canal, which allowed boats to bypass the Falls for a cost, demonstrated the extent of maritime commercial commitment. Warehouse and shipping industries lined Louisville’s banks as water traffic intensified, and the industrial character of the waterfront that would last nearly two-hundred years was firmly fixed.

An east to west aerial view of the old Louisville waterfront.  
*Photo: Louisville Waterfront Development Corporation*
The resulting traffic contributed to the separation of the waterfront from downtown by impeding pedestrian movement to the wharf and river areas.

The Golden Age
Mid-nineteenth-century modes revolutionized river travel, prompting the growth of new and existing ports around the Falls, such as Shippingport and Portland (which had suffered from the construction of the canal), New Albany, and Jeffersonville. Maritime commerce around the Falls was at an all-time high by the 1850s, as cities such as St. Louis, New Orleans, Cincinnati and Pittsburgh were now more accessible.

By the mid-1800s rail travel had developed extensively, and in 1870 the Falls and river were crossed for the first time by a railroad link connecting north to south from New York to New Orleans. The expansion and development of railroad transportation began to dominate the riverfront. As railroad lines increased along the waterfront, non-commercial public access to the river’s edge was further hindered.

The Waterfront Falls into Neglect
By World War II, changes in industry and continual advances in transportation methods (particularly trucking) led to the virtual abandonment of the wharf area, which became relegated largely to parking. In the 1950s and ‘60s, Louisville saw the expansion of the automobile and extensive construction of elevated roadways. Drivers could now cross the waterfront into downtown quickly and efficiently, extending commutable distances well outside Louisville’s boundaries. The resulting traffic contributed to the separation of the waterfront from downtown by impeding pedestrian movement to the wharf and river areas.

Efforts to re-establish the connection between the city and the waterfront began as early as 1931 with a riverfront redevelopment plan championed by Harland Bartholomew and continued with subsequent lofty but unrealized plans in the ‘50s and ‘60s. In 1962, the Belle of Louisville was purchased. As a public attraction at its postage-stamp sized wharf, the restored steamboat served as the only accessible public activity on the waterfront at the time.

The construction of the elevated I-64 highway in the 1960s represented the final and most significant barrier in the continuing separation of waterfront and city.

In 1973, a concerted effort to revive the waterfront as an urban open space resource was sparked by the development of the Belvedere, an elevated plaza built over the interstate highway. However, no real connection was made to the Ohio River more than 50 feet below plaza level. Waterfront planning lay dormant until 1986, when the Waterfront Development Corporation was created by the City of Louisville, Jefferson County, and the Commonwealth of Kentucky, which created a renaissance of riverfront-related interest in the community.
By any measure, Waterfront Park is a resounding success that has reconnected Louisville to the Ohio River and created a beautiful new front door to the Commonwealth of Kentucky from what was once an inaccessible eyesore.

A New Millennium
In 1991, the Louisville Waterfront Master Plan was adopted by city ordinance, and this document has guided the design and development of Waterfront Park and the surrounding Waterfront neighborhood. With the completion of the first three phases of Waterfront Park in 2013, and plans underway for Phase IV, the park has become a new town commons for the city and a central gathering space for events and celebrations, drawing more than two (2) million visitors each year for festivals, concerts, charity events, walks across the Big Four® Bridge, and passive recreation.

As a vital economic engine for downtown Louisville, waterfront development has sparked an estimated $1.3 billion investment in the surrounding areas, including residential developments such as Waterfront Park Place and RiverPark Place, the minor-league baseball stadium Louisville Slugger Field, and the Yum! Center sports and concert arena.

By any measure, Waterfront Park is a resounding success that has reconnected Louisville to the Ohio River and created a beautiful new front door to the Commonwealth of Kentucky from what was once an inaccessible eyesore.
Robert Garcia is the Founding Director and Counsel, The City Project, a non-profit legal and policy advocacy organization based in Los Angeles, California.

The Flow of History along the L.A. River

Robert Garcia

The Los Angeles River has played a critical role in the development of various communities in the city and region, from Native American times through the present. The river will do so into the future under the U.S. Army Corps of Engineers’ (USACE) $1.4 billion plan to revitalize 11 miles of the river, which USACE drowned in concrete in the 1930s to control floods. The river, which should be naturally green, is not. The natural river flowed gently in dry seasons, flooded in wet seasons, and jumped its bed, changing courses, from time to time. The river flows 52 miles from the headwaters in Canoga Park, east across the San Fernando Valley, and south past downtown L.A. to the ocean in Long Beach. The area along the river near what became El Pueblo de Los Angeles and Los Angeles State Historic Park downtown served as an “Ellis Island” for the region. People of color and low-income people disproportionately live along the river, lack parks, green space, and school fields, and are burdened by toxics, pollution, and health vulnerabilities. The history of the people along the river is in large part a history of displacement.1 The people who fought epic battles to green the river face gentrification and displacement from their homes and jobs, as neighborhoods become greener, more desirable, and more expensive. Whose dreams will come true, and who will be left behind by river revitalization?

Native Americans and the River

Native Americans lived along rivers since time immemorial in Native terms, and for over 7,000 years in Western terms. Yangna, the largest of about 100 Tongva or Gabrieleño villages, lay along the river near what became El Pueblo and downtown Los Angeles. The Native American people were largely decimated by succeeding onslaughts of Spaniards, Catholic missionaries, Mexicans, and Yankees beginning in the mid 1700s. Yangna was relocated from the west to the east side of the river not long after contact, and destroyed in the mid-1800s.2 Today the village of Yangna is commemorated by a simple bronze plaque at Union Station.

There are nearly 170,000 Native American residents throughout the nine counties of Southern California, with more than 30 federally-recognized Native American tribes, according to 2000 census data. Robert Bracamontes writes, “I am Acjachemen, Nican Tlaca, indigenous to this land…. The river, its water, is the life line of our people. For the present settlers, it is a tributary for pollution, commerce and invasion. For us it is everything. . . . For us the land gives us food, a place to play peon, a place where we are put to rest in peace, a place for ceremony, a place where life and culture are one.”3

Native Americans had a passion for soccer-like games on flat lands along river beds throughout California. According to Tongva Chief Anthony Morales, for example, families played “shinny,” similar to soccer, and other sports. Chief Morales supports places to play for children along the river, urging public officials to “work together to ensure that the children… are not displaced the way the Tongva people once were.”

El Pueblo de Los Angeles along the River

The Spanish expedition that first saw the river in 1769 included the explorer Gaspar de Portola and Father Juan Crespi. The expedition camped in what is now Elysian Park overlooking L.A. State Historic Park. Father Crespi described in his journal “a very green lush valley” with a “good-sized, full-flowing river” about seven yards wide “with very good water, pure and fresh.” Father Crespi felt “this pleasing spot among the trees on this pleasant river” was the best site for a settlement - even though they felt an earthquake. The party named the river El Río de Nuestra Señora la Reina de Los Angeles de Porciúncula. Porciúncula (little portion) is the name of the chapel in Italy that is the cradle of the religious order started by St. Francis of Assissi.

A diverse group of people founded the original Pueblo, which took its name from the river, in 1781. Los Pobladores included 44 Spanish, Native American, Black, mestizo, and mulatto settlers, and four Spanish soldiers. The heart of El Pueblo was the Plaza and La Placita Catholic Church, the oldest building in Los Angeles still used for its original purpose. The original Pueblo covered about 28 square miles on both sides of the river.

Mexico, including California, became independent of Spain in 1821. After the Mexican-U.S. War, Mexico ceded California to the U.S. in 1850.
Today Latinos are once again in the majority in Los Angeles, and the largest racial or ethnic group in California.

Los Angeles became the most important city in Southern California in large part because of its water supply. The Zanja Madre, or “Mother Trench,” provided water from the river to El Pueblo from 1781 until 1904. The Zanja system permitted early L.A. to develop an agricultural economy and vineyards, citrus groves, vegetable gardens, and fields of flowers. Remnants of the Zanja run through L.A. State Historic Park. The Los Angeles-Owens River aqueduct, developed by former Zanjero or water master William Mulholland, replaced the river as the main water source when it was completed in 1913. The river provided up to 20% of the city’s water until the 1940s.8

Today Latinos are once again in the majority in Los Angeles, and the largest racial or ethnic group in California. Through the 1930s, Mexican Americans disproportionately lived in the area nearby known as Sonoratown. During the Great Depression, 350,000 Mexican Americans, including United States citizens, were deported to Mexico from the freight train station at the site of the park because of discrimination and competition for jobs. This offers lessons about mass deportations today. The Zoot Suit riots broke out during World War II when Anglo sailors and soldiers stationed in Chavez Ravine drove east across the North Main Street Bridge over the L.A. River and beat up Mexican Americans and Blacks.9

Chavez Ravine, up the hill from the river, was a bucolic Latino community through the 1950s. The city forcibly evicted the residents with promises to build affordable housing. The city razed the community and destroyed their way of life, then broke its promises to the people and sold the land to the Dodgers. The Dodgers drowned Chavez Ravine in a sea of asphalt to build Dodger stadium with parking for 16,000 cars and not a single place for children to play. Los Desterrados - those who lost their land, their homes, and their community - still reunite once a year to commemorate the destruction of Chavez Ravine.10 Ironically, some of Los Deterrados moved from Chavez Ravine to Northeast L.A., and now face displacement from river revitalization.


The residents today face displacement as non-Hispanic white folks increasingly move back into the area, as the Baldwin Hills oil fields are transformed into the largest urban park designed in over a century.

A Black Poblador, Francisco Reyes, served as alcalde (Mayor) of El Pueblo in 1793, almost two hundred years before Tom Bradley, the first Black man elected Mayor under statehood. Pío Pico, the last Mexican governor of California before statehood, was born of African, Native American, and European ancestry under a Spanish flag. Despite the prominent role of Blacks in early Los Angeles, Black residential and business patterns began to change under discriminatory housing and land use patterns in the twentieth century. Black people increasingly were pushed out of the Plaza area and segregated a few miles away in South Central Los Angeles. After the U.S. Supreme Court struck down racially restrictive housing agreements, Black folks moved west into the Baldwin Hills, which became the heart of professional and middle-class African American L.A. in the wake of massive white flight. The residents today face displacement as non-Hispanic white folks increasingly move back into the area, as the Baldwin Hills oil fields are transformed into the largest urban park designed in over a century.

The Chinese first arrived in California driven by dreams of opportunity after the 1849 Gold Rush and statehood in 1850. The Chinese were discriminated against, denied a decent livelihood, dehumanized, segregated, and lynched. Barred from lucrative gold mining work, they turned to dangerous work building the railroads and domestic work for a livelihood. By the end of the nineteenth century, Chinese residents had been squeezed through discrimination into a small area east of the Plaza towards the river, where the risk of flooding was greatest. In 1871, a mob that included police officers committed the lynching murders of nineteen Chinese residents. The Chinatown Massacre first brought Los Angeles to national and international attention. Until well after World War II, most Chinese could not rent an apartment or buy a home in most other parts of L.A. The Chinese Exclusion Act of 1882 banned immigration by Chinese laborers into the United States for the next 60 years, and barred immigrants already here from becoming naturalized citizens or having their spouses join them.
In the 1930s, the city razed Old Chinatown to make room for Union Station. New Chinatown sprung up on the hill northwest of L.A. State Historic Park. By 1990 the city of Montebello in the San Gabriel Valley about ten miles east of the river became “the first suburban Chinatown” in the U.S., and now has a majority Asian population.\footnote{See generally Dolores Hayden, The Power of Place: Urban Landscapes as Public History 210-25 (1997); Brian Niiya, ed., Encyclopedia of Japanese American History (2001) at 111-12.}

The Great Wall of Los Angeles: Chinese Massacre 1871 (detail). Photo ©Judy Baca and SPARC

The first Japanese emigrant party to the mainland U.S. reached California in 1869. Japanese migration increased significantly in the 1880s, in part because of the demand for labor caused by the Chinese Exclusion Act of 1882. Little Tokyo, south of Old Chinatown, became the residential, business, and cultural center of the Japanese American community. The U.S. Supreme Court upheld the relocation of Japanese Americans to concentration camps during World War II in Korematsu v. United States, 319 U.S. 432 (1943). That decision has been discredited in the court of history and offers valuable lessons about calls for mass incarcerations today. As the Japanese Americans left, African Americans lured from the South by defense jobs moved to the area that became known as Bronzeville. After 1945, the Japanese returned, and Little Tokyo began to rebuild on a much smaller scale. Today, a public walking tour combined with public art interprets the social, political, and commercial history of the people and place. Bronze lettering embedded in the sidewalk carries quotations, timelines, drawings, and other interpretive materials. This Little Tokyo Historic District is a best practice for telling the history of the river and the people.\footnote{See “Best Practice HUD Los Angeles State Historic Park Healthy Green Land Use for All” (The City Project Blog 2014), www.cityprojectca.org/blog/archives/32984.}

Italians and French immigrants who played an important part in the development of El Pueblo later assimilated into the broader culture and region.

**Community Agitation to Green the River**

Andrew Cuomo, who was then Secretary of the US Department of Housing and Urban Development, provides a best practice example for healthy green land use planning by and for the people along the river. The City of Los Angeles and a wealthy developer proposed building 32 acres of warehouses with federal subsidies on the last vast open space in downtown L.A. Secretary Cuomo, in 2000, withheld federal subsidies for the warehouse project unless there was a full environmental review that considered the park alternative and the impact on people of color and low-income people. Secretary Cuomo relied on Title VI of the Civil Rights Act of 1964 and the President’s Executive Order 12898 on environmental justice and health.
This park is here because of the struggle and agitation by the community.

Secretary Cuomo acted in response to an administrative complaint filed by members of the diverse Chinatown Yard Alliance, including The City Project. Members of the alliance also filed and settled a related lawsuit under California environmental laws. Secretary Cuomo’s decision withholding corporate subsidies led to the creation of what is now L.A. State Historic Park. The site could have been warehouses. Instead, it’s a park.

This community victory is a seminal moment for people, planning, and parks, and a best practice for greening the L.A. River.17 “On a deserted railroad yard north of Chinatown, one of Los Angeles’ most powerful and tenacious real estate developers, Ed Roski, Jr., met his match,” as reported on the front page of the L.A. Times. The City Project “organized a civil rights challenge that claimed the project was the result of discriminatory land-use policies that had long deprived minority neighborhoods of parks.”18 The L.A. Times magazine called the community victory “a heroic monument” and “a symbol of hope.”19 Kevin De Leon, the president of the California Senate, emphasized at the ground breaking for the park: “This Park is not here because of the vision of politicians, or some design or plan. This park is here because of the struggle and agitation by the community. The community stopped the industrial warehouses to create the park in the most park-poor city in the nation.” According to Senator De Leon, “Deservedly, their action is renowned as one of the most significant environmental justice victories in Los Angeles, and is the catalyst for the revitalization of the Los Angeles River.”20

A similar alliance filed a successful lawsuit under California environmental law to stop a commercial development in favor of what is now Río de Los Angeles State Park at Taylor Yard, an abandoned railyard along the river in Northeast L.A.21

Los Angeles is famous for forgetting. The City of Los Angeles whitewashes its official history of the river by banishing the community agitation, HUD complaint, and lawsuits that led to L.A. State History Park, Rio de Los Angeles State Park, and the greening of the river.22

River revitalization will affect quality of life, public health, the economy, climate, and the environment, as well as civil rights and moral values.

Revitalization and Displacement along the River

The USACE river plan, drawing in part on The City Project’s work, recognizes there are unfair disparities in access to parks and recreation along the river and in the region based on race, color, or national origin, this contributes to health disparities based on those factors, and environmental justice and civil rights laws and principles require agencies to alleviate these disparities. The plan is a national best practice for diversifying access to and support for parks and recreation through the planning process.23

River revitalization will affect quality of life, public health, the economy, climate, and the environment, as well as civil rights and moral values. Who benefits and who gets left behind will determine the success of the green justice movement. It is necessary to transform renters into buyers to avoid displacement and gentrification. This will require housing affordable for all; a living wage; contracts for small, minority, women, and veteran-owned enterprises; a truly progressive income tax; a robust social safety net; prioritizing investment of public and private dollars in the most underserved communities, and alleviating structural inequalities based on income, wealth, race, ethnicity, and gender. Displacement and gentrification go beyond hipsters and condos to the values at stake in creating the kind of society where we want to live and raise children, along the river and beyond. It’s our river.


People of Color, Parks, and Poverty along the River. Image by The City Project and GreenInfo Network
The Great Flood of ‘38 and its Subsequent Impacts on the River and Adjoining Communities

Ariel Collins

The Great Flood of 1938 was the most devastating flood in Los Angeles history. More than 100 people died, and the county experienced property damage of more than $900 million in today’s dollars. The Los Angeles Basin has a long history of flooding, including several major floods in the 1880s. Over the decades, the county constructed sporadic flood-control projects along the entire river; but it was the flood of ‘38 in particular that most dramatically changed the character of the river, including its appearance and course. This flood led to the federal government’s decision to line the river almost entirely in concrete. By the time the U.S. Army Corps of Engineers completed the last flood control project three decades later, the once natural and erratic stream had become the most engineered, artificial river in the nation.

The Los Angeles River spans 52 miles and crosses 13 cities in Los Angeles County. Beginning in Canoga Park in the western San Fernando Valley, the river flows east and curves along Griffith Park (the largest urban park in the nation), travels south through downtown Los Angeles, and ends at the Pacific Ocean near Long Beach, one of the world’s busiest port regions. Several major rivers and tributaries flow in the Los Angeles Basin, including the Rio Hondo, Arroyo Seco, Tujunga Wash, Ballona Creek, Compton Creek, and the San Gabriel River.

The Los Angeles River was once the primary source of water and a major resource that contributed to the growth of the region. But in the face of increased development, by the turn of the century Angelinos considered the river a nuisance. It was now something to be controlled to prevent property damage and loss of life. As the population of Los Angeles expanded and development increased, humans made flooding worse by building on the floodplain and creating makeshift irrigation systems and levees. Early flood-control plans were localized and uncoordinated. Flooding was hazardous but sporadic in the semiarid climate, and county officials focused on more pressing development - building the railroad - instead of investing in a comprehensive flood-control program.

Flood-control planning could never keep up with the rapid population growth and development in Southern California. Engineers later built dams and debris facilities in the mountains surrounding Los Angeles. The end of the river was even moved one mile east in order to prevent future damage to the ports. But the county lacked sufficient funds to implement much of their plans, which were quickly becoming
With the Great Flood of 1938, the federal government significantly changed its approach to flood control for the region.

With the Great Flood of 1938, the federal government significantly changed its approach to flood control for the region. Engineers saw the need for a more extensive, long-term plan based on updated calculations from the flood.

The U.S. Army Corps’ “Los Angeles County Drainage Area Project” now called for dramatically deeper and wider channels. Almost all of the trees and vegetation were removed, and the entire river was encased in a layer of reinforced concrete. The river was transformed into a “water freeway.”

The Army Corps flood-control program in Los Angeles is still one of the largest and most expensive public works project west of the Mississippi. Thousands of local workers were employed, most through the Works Progress Administration (WPA), a New Deal program. Leading up to World War II, flood-control projects received national attention and significant funding. The region was becoming an important defense industry center, and the county’s ports were strategically situated on the Pacific Coast. With the river paved, Southern California could now continue its rapid urbanization without the risk of flooding.
Adjoining communities experience the river differently, depending on where they live along the river’s 52-miles.

The Los Angeles River today does not look like a river in most areas. Federal flood-control projects dramatically transformed the course and appearance of the river. Only a narrow channel of water flows swiftly through the center, surrounded on each side by a wide concrete riverbed and high concrete banks. Because of its concrete channels and low water flow, the river became a popular location for racing - in both movies and real life. Up until the late 1980s, politicians even considered using the channel during the dry season as a freeway to relieve Los Angeles’s notorious congestion.

Adjoining communities experience the river differently, depending on where they live along the river’s 52-miles. People living south of Los Angeles city limits and within one mile of the river are disproportionately youth, of color, in poverty, and without access to a car, compared to the county as a whole. These same communities have the worst access to green space and recreational opportunities and suffer disproportionately from chronic health conditions such as obesity and diabetes. Much of the river is fenced off and not easily accessible to the public. In these areas south of Los Angeles, the river is bordered by industrial zones and the 710 Freeway (formally known as the “L. A. River Freeway”), a major transportation corridor that connects the city to the Long Beach and Los Angeles ports.

Historically, Angelenos viewed the river as something to be tamed, an insignificant landmark, and later as a dumping ground. Flood control was always the priority, and beautification plans were only introduced later to enhance the property value of the area. Beginning in the 1970s, community groups have organized to green the river and restore some of its natural character. Federal flood-control projects eliminated any remaining wildlife habitat along the river’s banks and stream, but a riparian ecosystem now thrives in the three portions of the river the Army Corps left unpaved - the Sepulveda Basin in the San Fernando Valley, six miles of the river near Griffith Park, and areas north of Long Beach. The Army Corps of Engineers’ recent $1.4 billion plan to revitalize 11 miles of the river include these more natural areas along Griffith Park.

Memories of the Southern Los Angeles River
Nancy Negrete

In recent years, the Los Angeles River is a topic more people are discussing - locally and throughout the nation. Los Angeles is not known for its river - we’re known for freeways and a historic drought and water crisis. Nonetheless, a great amount of money and resources are slated to come in to revitalize parts of the Los Angeles River. In September 2015, the US Army Corp of Engineers (USACE) finalized its $1.4 billion plan to revitalize the river, a 600-page document on how to revitalize the LA River and the environmental, economic, social, and health effects.¹

The efforts and USACE plan focus on revitalizing 11 miles of the LA River - from the Valley to downtown LA. The entire LA River stretches 52 miles, starting in the north from Canoga Park, flowing through the San Fernando Valley, to downtown LA, through Southeast Los Angeles and eventually ending at the ocean in Long Beach.

The LA River holds historical, political, racial, and economic significance. The river is where the Tongva people, the original inhabitants of the LA basin, first settled, before the Spanish arrived in 1781. Today, the LA River corridor is home to more than one million people and flows through more than 15 cities, including Los Angeles and Long Beach.²

While our local and national leaders plan and fundraise for revitalizing these 11 miles of the river, I can’t help but wonder about the other 41 miles. I grew up and currently live in the city of Lynwood in Southeast Los Angeles. Lynwood is a low-income, predominantly Latino and black neighborhood. From the time I was born until I turned 18, I lived a 10-minute walking distance from the river. Currently, the river is a 5-minute drive from my house. Growing up, I visited the river many times. My dad, sisters, and I would ride our bikes on the bike trail along the river, starting at Hollydale Park in South Gate. We traveled only about three miles north before we all got very tired. The river has very wide bike paths, so many families ride their bikes along the river.

For as long as I can remember, there wasn’t much water in the river. The river was mostly concrete. Still today, when anyone mentions the LA River, they always make it a point to say how the river cannot compare to the Hudson or Colorado River, for example.

The communities that live along the southern reaches of the river live in the worst 10% of polluted and vulnerable census tracts in California.

Environmental Justice for the Los Angeles River - Freeways, Factories and Families

‘Environmental justice’ and ‘environmental racism’ were not terms I heard of until I left for college. Yet, environmental racism has been - and continues to be - a topic of concern for many residents in East LA, Southeast LA and South LA in particular. Of the communities that live along the southern reaches of the river, 37% of communities within half a mile of the river are in the worst 10% of polluted and vulnerable census tracts in California. 94% of those communities are people of color. This is illustrated in the following map and analysis of pollution, vulnerability, and people of color along the river. 3

Environmental justice embraces the principle that all people and communities are entitled to equal protection of our environmental, health, employment, education, housing, transportation, and civil rights laws, according to Dr. Robert Bullard, the father of the environmental justice movement. Unfortunately, people of color and low-income people disproportionately live in environmentally-degraded communities burdened by toxics and pollution, are the most vulnerable to health problems, and lack access to parks and green space. This is true for families who live in the southern portion of the river.

The memories I have about the Los Angeles River are ones of environmental injustice, lack of green space, and multiple freeways and factories crisscrossing the river.

Factories align the LA River in Southeast LA.  
*Photo by Nancy Negrete/The City Project*

The southern communities of the LA River can tell of many environmental, social, health and economic injustices. For example, Exide, a battery-recycling plant in Vernon less than 100 feet from the river, was closed down recently because it emitted lead poisoning into neighboring communities. Communities in Boyle Heights and Commerce are trying to recover from years of exposure. Exide is just one example of what communities along the river battle against every day.

The memories I have growing up along the LA River are the realities many of us still experience on a daily basis.

Today, the communities who live near the Southern part of the river are still facing environmental risks we faced decades ago. As Los Angeles gears up to revitalize the northern part of the LA River, the southern communities continue to organize everyday around issues of environmental justice. We continue to advocate for parks and green space instead of creating more freeways. We fight for the right to breathe clean air. We tackle the issue of homelessness along the river. The LA River is important because of the communities that surround it - Black, Latino, Native, Asian, immigrant, first generation, multi-lingual and low-income families that live and work nearby.

The memories I have growing up along the LA River are the realities many of us still experience on a daily basis.
An Africatown native, Joe graduated from the historic Mobile County Training School in 1968 and earned a business degree from Saint Paul’s College in Virginia in 1972. Mr. Womack has dedicated himself to advocating for the health of the Africatown community through his work with the Mobile Environmental Justice coalition.

The Africatown Community

Joe Womack

The Africatown Community, located in Mobile, Alabama, is the place in America where the last shipment of slaves landed in 1860. They landed on the banks of the Mobile River, fed themselves off fish and game located in Hog Bayou and were baptized in the Three Mile Creek.

Africatown is bounded on three sides by water. To the north lies Hog Bayou while the Mobile River sets to the east and The three Mile Creek is on the Southern Boundary. The Hog Bayou area was rich with all types of game. Deer, wild hogs, rabbits, raccoons and opossums are a few of the wild games the residents of Africatown hunted and fed themselves during their early settlement days. There never were or have been houses located in Hog Bayou. Local residents agreed to leave this land for wild life to roam. The Mobile River was mostly used for fishing. There was housing built to within 15 yards of the river, and residents often swam in the river for recreation. The Three Mile Creek sits on the southern boundary of Africatown. Churches used the Three Mile Creek to baptize their church members.

Africatown wetlands are part of the Tensaw River Delta. The Tensaw River Delta is the largest river delta in the United States and is protected by The National Wildlife Association. However, the wetlands surrounding Africatown were not protected, thus allowing heavy industry to invade the area. In the 1940’s, land along the Mobile River and Hog Bayou waterways were zoned heavy industrial, thus allowing International Paper Company and Scott Paper Company to move in along the shores of the waterways and moving local residents back from the water. Because the paper mills hired local residents, population in Africatown grew to about 15,000 people. However, there was a tradeoff residents were not aware of, the presence of constant pollution. The smell in the air was horrible, noise was constant, and white ash would fall from the sky like snow in the month of July. The ash falling from the skies was so bad and corrosive a brand new car would rust out in three years, unless it was covered and washed at least three times a week. As children, we would play outside and constantly had to cover our food in order to enjoy it. We would have to run home in the middle of playing a baseball game to help our mother take clothes of the clothes line so she would not have to wash them all over again. A fair amount of those who were born after 1945 are dying or suffering from disabling illnesses before the age of 65. The waterways along the paper mills became polluted, and vegetation around the paper mills begin to die.
Fish are jumping around Hog Bayou and birds are nesting again in the area. It seems now that the environment has returned to its former self, industry wants to return.

During the presidency of President Bill Clinton, new and tougher environmental protection laws were enacted. The Environmental Justice Policy Act was passed, and Alabama strengthened its pollution-control laws. Amid these changes, both International Paper Company and Scott Paper Company were given a choice, either spend money to improve pollution control at their facilities, or close the facility. Both industries elected to close their doors. During a six-year period, the industries continued to downsize their facilities and payroll until the doors were finally closed around the year 2000. International Paper Company tore down their entire facility, while Scott Paper Company sold their facility to Kimberly-Clark. Most of the land where International Paper occupied has sat vacant for years. Air in the area is much better, while trees and other forestry in the area where International Paper sat has begun to turn greener and greener. Fish are jumping around Hog Bayou and birds are nesting again in the area. It seems now that the environment has returned to its former self, industry wants to return.
In their plans for Africatown’s future, residents expressed a desire for a waterfront community with boat launches, picnic areas, walking and biking trails, tourist attractions, historic museums and family-friendly businesses. Their plans emphasize a strong desire against further industrialization of the area. The primary key to all this happening is to repopulate the community with more people. More people would help revitalize the local middle school and local churches. People love water, and Africatown has plenty of water for everyone to enjoy. The surrounding waterway system is there. Now all that is needed is the will of those responsible to commit the funds necessary to make Africatown residents’ dreams a reality.
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Urban Waterways, Native Hawaiian Traditional Customary Practices and Western Science
Donna Ann Kameha`iku Camvel and Hokulani Aikau

In the fall of 2015, two simultaneous research projects were conducted on the island of O‘ahu in Hawai‘i by two graduate students, one trained in Hawaiian Studies, the other in hydrology, from the University of Hawai‘i at Mānoa. The co-joined projects focused on the life giving combination of fresh water or wai, as it’s called in the Hawaiian language. In combining our respective expertise and knowledge bases, we began building a multi-disciplinary gateway to bridge Native Hawaiian traditional, customary, and contemporary practices (TCCP) with Western science. While the critical component of study at each field site was water, inquiry, analysis, and hypothesis were formulated and conducted on very different approaches, methods and objectives. This article focuses on one of the project sites, He‘eia, an ahupua‘a (land division) on the windward side of O‘ahu island, and the outcome of the research conducted there.

The project integrated mo`olelo¹ (traditional Hawaiian literature and history) with the science of hydrology and its procedural testing. We began with the assumption that mo`olelo is the repository for TCCP and when used in conjunction with science can provide a fuller understanding of our waterways. What resulted was a kind of praxis that put into productive dialogue Native Hawaiian customary practices and the science of hydrology. This kind of interdisciplinary collaboration illustrates what is possible when Indigenous sources and scientific approaches are combined.

Located on the windward side of O‘ahu in the district of Ko‘olaupoko is the He‘eia ahupua‘a. An ahupua‘a is a land unit, its boundaries surround a mostly contiguous cultural landscape often bordered by mountain ridges which enclose one or more of a combination of Hawaiian tropical rainforests, arid scrub, temperate subalpine woodlands, coastal mesic and cloud forests. Perennial streams, springs, bogs and wetlands provide water (fresh and estuarine) for most ahupua‘a, which ultimately flows to the coastal shoreline, into nearshore fisheries, emptying into the ocean. Located within the ahupua‘a are ‘ili, smaller land parcels where people lived.

Mo`olelo was used to analyze Native Hawaiian land use and tenure, the meanings of place-names, site-specific identification such as stream names. Research was conducted at the level of the `ili. Hawaiian language was also used to compose oli; chants that describe the landscape, revere legendary or sacred places, and illuminate the connections between science and culture.

¹ Hawaiian language is used liberally in this article; translations are provided on the initial use of a Hawaiian word, and prose are followed with an explanation of its meaning. I do not italicize Hawaiian words because in Hawai‘i, `ōlelo Hawai‘i is not a foreign language but the native language of this place and its people.
When rainfall is at its peak, or when extreme weather occurs, the gulches and ravines are filled with a deluge of water creating magnificent cascading waterfalls feeding the streams to full and sometimes beyond capacity increasing stream volume and flow.

The He‘e‘ia ahupua‘a includes a wetland and a walled fishpond. The light green area in the image is the wetland where Kāko‘o Ōiwi, a Native Hawaiian non-profit organization is working to restore lo‘i kalo (wetland taro farming). The He‘e‘ia stream flows through this wetland and empties into the restored fishpond. This article focuses on the ʻili of ʻIolekaʻa, located in the crescent-shaped valley and the He‘e‘ia wetland.

ʻIolekaʻa stream receives its water from the kumuwai, aquifer that is located at the base of Pali ʻIolekaʻa. When rainfall is at its peak, or when extreme weather occurs, the gulches and ravines are filled with a deluge of water creating magnificent cascading waterfalls feeding the streams to full and sometimes beyond capacity increasing stream volume and flow. The two perennial streams (ʻIolekaʻa and Kaiwikeʻe) meet at the adjoining ʻili of Waipao and become Haʻikū Stream. The stream then leaves the upland portion of the ahupuaʻa, entering an urbanized subdivision and becomes Heʻe‘ia stream. It then flows into and thru the Heʻe‘ia Uli wetland finally emptying into the coastal fishpond and Kāneʻohe Bay.
Since the 1990’s, the state of Hawai‘i has been the current land owner and the wetland has been fallow except for cattle grazing and illegal dumping.

The lō‘i system in He‘e‘eia Uli was highly productive and has been described as the calabash (poi bowl) for O‘ahu because of the many acres of kalo grown here. However, over the past 165 years the engineering success of the irrigated pond system has been severely compromised. Three historical events, the Mahele in the 1850’s, the plantation economy during the territorial period of 1900 – 1959, and the suburban development combined with the flood of 1969, capture the transformation of the ʻāina from a source of physical and spiritual nourishment to land as property with economic value. With those changes, the cultivation of Hāloa (taro), so bound up in the moʻolelo and genealogy of the Hawaiian people and the ʻāina they cared for, ceased in Heʻe ia Uli, as foreigners, missionary descendants, and other business opportunists sought profit in the production of sugar, pineapple, and rice.

In what is referred to as the Mahele, a systematic process of land privatization, the collective interest in land was divided amongst the ali‘i (chiefly class), the makaʻāinana (the people), and the ʻaupuni (the government). In the mahele of 1848, the ahupuaʻa of Heʻe ia was given to High Chief Abner Paki. In 1871, his daughter, Bernice Pauahi Bishop, inherited her father’s lands, leasing land in Heʻe ia to Chinese planters, where rice replaced most of the kalo grown in the wetland. The transition from taro to rice had very little impact on the overall system. Indeed, interviews with kūpuna (elders) suggest that although Chinese planters moved into predominantly Hawaiian communities, Hawaiian values and practices were pervasive. They describe growing up in a multi-ethnic community where Hawaiian, Chinese, and Japanese families shared resources from the lō‘i and from the sea.

At the turn of the 20th century, the commodification of Heʻe ia’s lands escalated amidst the leasing of these lands for growing sugarcane and pineapple. These endeavors dramatically modified the land causing ecological and cultural damage to the wetland, the muliwai (estuary), and the adjoining fishpond. One of the most significant impacts was topsoil erosion. The solution, planting mangrove trees in the muliwai. Although mangrove were marginally successful in trapping down-stream sediment, it also had a severe impact on the estuary, which formed a natural fish nursery for native fish. Today, the mangrove trees have completely inundated the stream and fishpond transforming the water quality and preventing native vertebrate and invertebrates from the living in the stream.

Since the 1990’s, the state of Hawai‘i has been the current land owner and the wetland has been fallow except for cattle grazing and illegal dumping. In 2010, Kākoʻo ʻŌiwi secured a 38 year lease for the nearly 400 acres parcel. They have been gradually removing non-native invasive plants and restoring the lōʻi and planting kalo. Kākoʻo ʻŌiwi has on average 3-6 full time employees who maintain two acres of lō‘i and a one acre garden. They rely heavily on volunteers who participate in their monthly community workdays. An orientation is provided for the volunteers who learn about the cultural landscape, its landmarks, names, and history of the wetland and the moʻolelo of Heʻe ia Uli and its relationship to the ahupuaʻa.
This trans-disciplinary project recognizes that the restoration process is taking place in a social, political, cultural, and ecological context very different from the past when the lo`i system was fully functioning. Today, the challenges of restoration are manifold. We set out to address the challenge of how to bring ʻike kūpuna (knowledge of our ancestors) into productive, active dialogue with Western science. One of the first steps in this endeavor was to create a shared lexicon of terms.

![Community workday at the He`eia wetland. Photo: Donna Camvel 2013](image)

**English/Hawaiian Lexicon**

Provided here is a small sampling of terms developed for this shared lexicon. The goal was to move beyond merely transliterated or “Hawaiianized” words to finding a coherence between the semantics of science and the function of elements (tangible and non-tangible) in the Kānaka ʻŌiwi worldview. The lexicon provides the English word with a Hawaiian definition and explanation of word, its meaning and its function.

**Atmosphere:** lewa: sky, atmosphere, space, air, upper heavens: aerial. Lewa hoʻomakua: space just above the surface of the earth. Lewa lani lewa: lower atmosphere. Lewa lani: highest stratum of the heavens. Lewa lilo loa, lewa luna lilo: outer space, highest atmosphere, also lewa mawaho or outer space.


*Photosynthesis (the process by which primary producers create energy by using inorganic nutrients, sunlight, and water).*

_Ikehu = lā + [Hawewe: to pour down as the sun, to vibrate, as heat. Ikehu: (ika + ehu), energy, power._

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2. “Cultural Attachment” embodies the tangible and intangible values of a culture—how a people identify with, and personify the environment around them. It is the intimate relationship (developed over generations of experiences) that people of a particular culture feel for the sites, features, phenomena, and natural resources etc., that surround them—their sense of place. This attachment is deeply rooted in the beliefs, practices, cultural evolution, and identity of a people. The significance of cultural attachment in a given culture is often overlooked by others whose beliefs and values evolved under a different set of circumstances” (cf. James Kent, “Cultural Attachment: Assessment of Impacts to Living Culture.” September 1995).
**Source:** (of water): Kumu wai: Māno: dam, stream or water source, head waters, place where water is obstructed for distribution in channels, channels. Wai: water. Figurative: heart and circulatory system; source of water and of life. Hence, the waters of life.

*Wai* = water, liquid

**Spring water** = wai puna (spring), wai māpuna (bubbling spring; froth, as of a rough sea; source. Fig. surging of emotion.

**Water source** = māno wai, po`o wai, makawai (māno wai: Fig. heart and circulatory system: source of water and of life). Māno: dam, stream or water source, head waters.

**Charged water** = wai pipi`i, wai pi`ipi`i (pi`ipi`i: bubbling forth, as water, effervescence, charged water or liquid).

**Conclusions**

This project provides critical insights into the nature of water science in different settings from both an Indigenous and scientific perspective. We came to realize that the interdisciplinary “stories” in hydrology and Hawaiian mo`olelo tell of regeneration, life, and cycles on a continuum. When we put these stories into dialogue, there is a depth of knowledge awaiting us. It is clear that working hand in hand, Western scientists and Kānaka `Ōiwi (Native Hawaiian) scholars can benefit from each other’s expertise. Additionally mo`olelo, existing and created, informs, substantiates and incorporates the findings of those practices as a multidisciplinary outcome for further research.
Paul Brickell is the Executive Director of Regeneration and Community Partnerships. Paul joined the London Legacy Development Corporation (LLDC) in October 2011.

London and the River Lea

From an interview with Paul Brickell, Executive Director of Regeneration and Community Partnerships for the London Legacy Development Corporation (LLDC).

The history of East London really is the history of two rivers, The River Thames and the River Lea. The River Thames is clearly the reason London is here, but the River Lea runs north from the Thames up into Hertfordshire which is countryside; it is still farmland, and those rivers have driven the economy of the area for at least five hundred years.

The first map, the first urban master plan, of this area was drawn by a Dutch engineer in 1542. He was dreaming about a network of canals as a way of avoiding the big loops in the Thames and getting produce and goods down the River Lea and into the center of the city, at that point, across what were marshes, all marshland. And after about a couple hundred years, they began to build canals and a consequence of the building of the docks...because the port of London got too small, they built the docks in the early eighteenth century for bigger ships. After they built these canals, factories began to grow up along them. A bit later, they built a bigger set of docks, called The Royal Docks, down by the River Thames, and the area became the hive of industry serving the docks. It was where goods came in and you made things and then you’d send them out again. This was the gateway to Empire. It was where ideas came in with the goods. They came in at the speed of steam and sail. Now they come in at the speed of light, because there’s a big information technology industry occurring.

The port of London began to fail because they couldn’t bring the large container ships in to the docks, which closed really quickly in the seventies and eighties... everything that went with them went. So you very quickly ended up with a forgetting, that the River Lea and all these canals were there.

The reason why this area has been so vulnerable to change and the industries is because it’s on the edge of the historical city of London, outside the city jurisdiction. And the reason for that is the river.

In the mid ninth century, the Vikings invaded up the Thames and then came up the Lea aiming to cut London off. King Alfred blockaded the River Lea at the mouth, cutting the invaders off from their supply lines. Both sides agreed to a treaty, the line of the treaty was the River Lea because that’s where the armies had stopped. Everything to the east of the Lea was under the rule of the Danes, the Vikings, and...
These communities have a multitude of stories in them just how deep in our minds and our institutions this river is. Wherever there is a river, somehow that’s at the very heart of our being, even if we don’t know it.

In terms of regeneration, the waterways have been a kind of central motif. East London is a water city. Water drove it. Water is here now. And people want to live and work near water suddenly again. We’ve come to understand that a lot of the people who’ve lived round here awhile have all these stories about this river that they’ve also forgotten, because the river’s forgotten in five or ten years. And then we also have a very big incoming Bangladeshi population. When you start talking to Bangladeshi people about water they totally get it because they live in Bangladesh, a delta, a river delta. Their lives and their families’ lives have been driven by another great big river in the world. So suddenly you’ve got a way of bringing what is quite an isolated and disaffected community to saying “Actually, we’re about rediscovering water.” They get that. They understand it.

It’s community. It’s the memory of fathers and grandmothers… and great-grandmothers, and that’s how you understand things. These communities have a multitude of stories in them that illustrates just how deep in our minds and our institutions this river is. Wherever there is a river, somehow that’s at the very heart of our being, even if we don’t know it.

We’ve used the images of the water, the water ways, the water city as a way to say “Let’s try and overcome those political boundaries and do something together,” which is a testament to how deep in our minds and our institutions this river is.
Urban Waterways Gulf Coast Research Continues
Katrina Lashley

In the summer of 2014, Urban Waterways P.I. Dr. Gail Lowe led a research trip to Gulfport... specifically Turkey Creek, a historically African-American community founded by several formerly enslaved families in 1866 on three hundred acres of formerly uninhabited wetlands. Over the years, the thriving community was spared the violence of the Reconstruction Era due to its relative isolation. At the center of this community was the creek itself, which served as a type of cultural center, a place of celebration for the important milestones in the community, and the site of childhood memories.

Turkey Creek, like many other communities in the nation, faced increasing pressures from development as the city of Gulfport, founded in 1899, grew up around and eventually included the Turkey Creek Community. Battling an invisibility imposed on them by developers and officials, the residents of the community battled threats to the existence of their community in the forms of local developers, Hurricane Katrina, and the BP Oil Spill. Their efforts were documented in Leah Mahan’s *Come Hell or High Water: The Battle For Turkey Creek* (2013) which traces the efforts of residents and their allies to save the community. Dr. Lowe’s research trip was focused on meeting with and documenting the stories of some long-time residents of Turkey Creek, local activists, and faculty from the University of Southern Mississippi.

In December of 2015, Urban Waterways Project Coordinator Katrina Lashley and ACM photographer, Susana Raab, traveled to the Gulf to further document what some refer to as the “red beans south” – the strip of land which lies south of the I-10, whose cultural and ecological heritage is shared east to west, stretching along the Gulf. The aim was to highlight the activism of some of those communities whose existence has helped to create the very culture the Gulf coast is celebrated. These communities have also for but who have been the first to feel the impacts of natural disasters and mismanagement of natural resources.
Inequitable recovery practices and efforts to help those communities which needed aid the most was, and continues to be, a major focus of the Mississippi Center for Justice which was founded in 2003 by Martha Bergmark to restore a capacity and public interest in civil rights in Mississippi.

As part of this trip, a series of questions were explored. Who were some additional residents who had played vital roles in the organizations established in the aftermath of Katrina when those who had been the hardest hit found themselves lost in the bureaucracy of Katrina recovery? What were some of the victories won to ensure homeowners received the aid they needed? How had people responded to the BP Oil Spill just five years after Katrina? How had residents marked the 10th and 5th anniversaries of Hurricane Katrina and the BP oil spill, respectively?

Arriving in the Gulf Coast as refugees, many members of the Vietnamese communities continued the livelihoods they’d known for generations… fishing. Kaitlin Troung, community activist and founding president of Asian Americans for Change, Mickey Sou, another former president of the organization and Thao Vu of the Mississippi Coalition for Vietnamese American Fisher Folk and Families have memories of Biloxi’s close-knit Vietnamese community with its small businesses, Buddhist temple, and Catholic Church, and markets where parents worked in the fishing industry, on boats or in processing plants, and encouraged their children to achieve academic success. They also have memories of the storm and its aftermath, as residents struggled to meet their basic needs. A community who had in some ways been civically disconnected from the larger Biloxi political and social system soon found itself at the mercy of a relief system which did not make allowances for limited language access or showed a lack of understanding of the mechanics of an industry that had just been decimated. While some groups had existed prior to Katrina, many were formed in response to the lack of housing, incredible damage to the infrastructure of the fishing industry, the community’s need for advocates who would keep them informed, and a wave of disaster profiteering.

Inequitable recovery practices and efforts to help those communities which needed aid the most was, and continues to be, a major focus of the Mississippi Center for Justice which was founded in 2003 by Martha Bergmark to restore a capacity and public interest in civil rights in Mississippi. President Reilly Morse, a Gulfport native, experienced the storm and its aftermath which saw a near total breakdown of civil government. Over the course of the next year, as local governing society was restructured, the Center played a role in helping people navigate the process for obtaining aid from FEMA. Like activists in other communities, they were very aware of the need for oversight and accountability in terms of housing relief and mounted challenges to ensure low-income households and communities of color would not be left out of recovery efforts. The concern for equitable recovery led to a coalition of
The importance of preserving the ecological and historical heritage of communities impacted by natural disasters and ecological mismanagement is exemplified by the success of the Turkey Creek community in reaffirming its various values in the eyes of outsiders.

The community groups across the Gulf. Steps (named in memory of all that was left of many people’s homes) was founded as a public protest to the handling of money for housing recovery and to ensure pre-existing and new organizations would have a unified plan for handling interview requests, ideas for funding, and volunteers. Today Steps continues as 45 non-profit, civic, and community organizations focused on creating sustainable communities through affordable housing, economic and environmental justice, preservation of historical communities, and human rights.

The importance of preserving the ecological and historical heritage of communities impacted by natural disasters and ecological mismanagement is exemplified by the success of the Turkey Creek community in reaffirming its various values in the eyes of outsiders. Due to its established worth in the eyes of various stakeholders, it was no longer a community that could be an easy target for disaster profiteering that took place in some communities in the aftermath of Katrina.

Such an awareness of a community’s various heritages may prove invaluable, as communities along the coast face continuous threats to their livelihoods and ways of life. Five years after Katrina, the BP oil spill proved to be another challenge to communities trying to rebuild from the effects of Katrina. Concerns of the true impact of the spill not being addressed - the economic effects on communities reliant on the fishing industries, the safety of seafood, and immediate and long-term health impacts on residents - along with the role of the oil industry in the region and the sense that to the nation at large the oil spill was a small occurrence that has been contained, left some residents questioning the viability of remaining in the area.

Some communities are beginning to follow Turkey Creek’s lead. The community of Africatown a few miles north of downtown Mobile Alabama shares a similar heritage. Founded by what were the last known illegally imported enslaved individuals to the US, the community has a strong connection to and sense of its past and its importance to the larger American narrative. The community has also suffered from years of political and environmental neglect. A legacy of pollution at the hands of the paper mills who provided employment and left residents with stories of ash raining down on clothes hanging out to dry, and a pervasive smell. Pollution has also left a legacy of cancer-related deaths. Residents are advocating against years of environmental injustice and disrespect and in many ways the community is starting on the path Turkey Creek has travelled for the past sixteen years.
In terms of lessons learned, residents and those working in the various organizations along the coast, realization that civic and ecological responsibility are key in the creation of sustainable communities for those working in the various organizations along the Gulf, residents understand what is at stake. At the level of decision makers, change has been slower to come.

The efforts of Africatown residents is one example of the continued progress communities along the Gulf have made in rediscovering and reengaging with their various heritages - cultural and ecological. The planning process for the Turkey Creek Oral History project, now expanded to include the history of entire watershed, is moving forward. After ten years of planning in October of 2015 The Pascagoula River Audubon Center moved from its 1,000 square foot wood frame house to a 5,000 square-foot center located on 10 acres of trees and coastal marsh. The new location was created with the engagement of the community every step of the way and the additional space will allow the center to expand its educational programming. The Gulf Coast for the Mississippi Coastal Plain under the leadership of Judy Steckler continues its work toward the creation of a green and blue way in Turkey Creek.

With the passing of the 10th anniversary of Katrina, Gulf residents took time to quietly remember the people lost and how the coast has changed. Definitions of “recovery” differ, “resilience” is a term often used but some caution against its use- seeing it as a way of ignoring the plight of those who are still suffering from the impacts of Katrina and later BP, a way of maintaining the status-quo without addressing the real issues of environmental, social, and economic injustice. In terms of lessons learned, residents and those working in the various organizations along the coast, realization that civic and ecological responsibility are key in the creation of sustainable communities for those working in the various organizations along the Gulf, residents understand what is at stake. At the level of decision makers, change has been slower to come.
Prior to Katrina the Vietnamese fishing community faced the pressures of concerns over maintaining a steady livelihood due to the recession and the influx of casinos near the docks and processing centers.

Mississippi Foundation for Vietnamese-American Fisher Folk and Families, Thao Vu, East Biloxi
Katrina Lashley

Moving east to west south of the I-10 one encounters a culture described by Derrick Evans, community activist and director of the Turkey Creek Community Initiative, as the Red Beans and Rice South...from Jacksonville, Florida, Pensacola straight across Mississippi, Alabama, into Louisiana and over to east Texas. It’s the Gulf Coast, a collection of communities linked by shared cultural, historical, and ecological experiences whose residents have a deep connection to the water. Not surprisingly it was this connection to the water which attracted thousands of Vietnamese refugees in the seventies and eighties, many of whom had come from similar communities and had been fishermen for generations and settled in coastal communities in order to provide a livelihood for their families.

Community advocate Thao Vu grew up in three Gulf states Louisiana, Texas, and finally Mississippi, in communities very similar to the one her family had left behind in Vietnam. She describes the Vietnamese communities along the coast as hardworking, with parents working in a fishing industry that had for decades been the seafood capital of the world, focused on saving up to buy their own boats and laying the foundations for their children to achieve the “American Dream”. Communities tended to be insular, made up of mom & pop businesses, churches and temples where families knew each other.

Prior to Katrina the Vietnamese fishing community faced the pressures of concerns over maintaining a steady livelihood due to the recession and the influx of casinos near the docks and processing centers. Another issue of concern was a lack of civic engagement with the larger Biloxi community. Community residents were often focused on maintaining their businesses and providing strong foundations needed for their families to thrive. A persistent issue was an ongoing language barrier, in the case of the older generation, and the unwillingness of government agencies to address diversity in East Biloxi and issues surrounding the lack of language access.

When Hurricane Katrina hit in 2005, Vu who had evacuated the day before, returned the day after to what she describes as utter devastation. “It looked like a bomb had dropped.” Many East Biloxi residents had lacked the means and transportation to evacuate prior to the storm and the community had never experienced anything of that magnitude. Thousands of homes had been damaged or destroyed and one of the pressing issues facing the community was finding shelter for the displaced. In her three years working as a case-manager, Thao served over 100 clients and their families. The lingering issue of limited language access made it difficult for many in the Vietnamese community to navigate the bureaucracy of disaster relief. How does one get a trailer? Where is our next meal coming from? My boat sank, where do I find a job? How do I make sense of this paperwork?
Vu has also been active in The Gulf Coast Fund which was founded to ensure that communities and organizations serving traditionally overlooked populations have access to funding to support their work around social and environmental justice.

The realization that the dissemination of funds had to be monitored closely to ensure that those who were the most vulnerable were being helped and that accurate information about the issues facing communities along the Gulf was available to various media outlets, led Vu and other concerned community leaders active in pre-existing and new organizations which were founded in direct response to Katrina to join forces under the STEPS Coalition (front steps were often the only things remaining of people’s homes). Vu has also been active in The Gulf Coast Fund which was founded to ensure that communities and organizations serving traditionally overlooked populations have access to funding to support their work around social and environmental justice. Much of the fund’s work has been focused on housing, equitable recovery, and other social issues which were worsened by the impacts of Hurricane Katrina.

Five years later, the fishing community was tested by the DeepWater Horizon rig explosion which occurred right before the active shrimping season and saw the closure of part of the Gulf Coast. Once again a lack of language access and a disconnection on the part of government agencies from the communities they were meant to serve. The claims process for those who had been impacted by the explosion required proper documentation and staff who were familiar with the nature of the fishing industry. Many residents fell victim to disaster profiteering and were pressured into signing documents that were not properly translated. Medical issues started to occur among fishermen who had taken part in clean-up efforts and residents who were impacted by the use of dispersants.

In response to the crisis, the Mississippi Foundation for Vietnamese-American Fisher Folk and Families was founded in 2010 in a direct response to the DeepWater Horizon disaster. Its mission is to help educate and mobilize fisherman on issues impacting their communities with a particular focus on engagement in the Natural Resource Damage Assessment and the Coastal Restoration Process in Mississippi.
While acknowledging that disasters have made it difficult for the younger generation of the Vietnamese community to return home, Thao also counsels them on the importance of giving back to their community and respecting the traditional and ecological knowledge of their elders and the contributions they have made to the local, regional, and national economies. Many of Thao’s clients from the aftermath of Katrina were also impacted by the BP oil disaster and much of her work is based on a level of trust and the relationships that she has developed over time. For her, this involves going beyond email blasts to the posting of important documents and personal phone calls to ensure that residents are empowered in playing a role in what happens in their communities.

While her work over the last ten years has helped put her on the path to recovery, put things in perspective and helped her to focus not on her on losses but to think of those who are less fortunate, Thao is skeptical of the overuse of the word “resilience” as a means of maintaining the status quo and minimizing the resources sent to underserved communities. For her the real challenge is to ensure that policies and criteria are fair. There is a continued lack of secure housing and threats to people’s livelihoods and many face health issues. While acknowledging that disasters have made it difficult for the younger generation of the Vietnamese community to return home, Thao also counsels them on the importance of giving back to their community and respecting the traditional and ecological knowledge of their elders and the contributions they have made to the local, regional, and national economies.

The Biloxi Small Craft Harbor where local shrimpers dock their boats on the Biloxi coast. Here, shrimper Duc Nguyen sells shrimp to customers directly from his boat.

Photo by Susana Raab/Anacostia Community Museum/Smithsonian Institution
**Community Forums**

**Women of Color and Environmental Justice**

On Saturday March 12th, moderator Vernice Miller-Travis led panelists Jennifer Chavez of *Earth Justice*, Kari Fulton of *Empower DC*, and Kerene Tayloe of *WE ACT For Environmental Justice* in a discussion which explored the experiences of women of color in the fight for Environmental Justice. The discussion started with each panelist providing a working definition of environmental justice and continued on to explore the traditional role of women in communities of color and how such power can be of use in the Environmental Justice efforts. The panel also explored the role of women of color in organizations at the national and international levels and provided specific examples of how women can become involved in efforts at the local levels.

**Near the River**

April 16th marked a departure from the usual forum format. The forum was based on *Eco Hermanas’ Near the River* a documentary which explores the cultural and environmental heritage of the Anacostia River and its impact on East of the River residents by focusing on the stories of women eco-leaders and their relationships to the river after years of pollution and environmental neglect. The documentary is based on a DC-WE project by Eco Hermanas sponsored through a DC Community Heritage Project Grant by the Humanities Council of Washington, DC. After a screening of the film, moderator Kari Fulton of Empower DC led panelists Ada Vilageliu Diaz of *Eco Hermanas*, Autumn Saxton-Ross of Outdoor Afros, Gail Taylor of *Three Part Harmony Farms*, and environmental activist Akiima Price in a discussion of the origins of the project and their individual paths to environmental advocacy. See article: [http://www.capitalcommunitynews.com/content/eight-lessons-women-anacostia](http://www.capitalcommunitynews.com/content/eight-lessons-women-anacostia)

**Next community forum- Saturday June 11th**

**Summer Along the Anacostia**

Join us as representatives from organizations working in communities along the Anacostia River provide information for summer programming geared toward residents of all ages.
Contributors

Hokulani K. Aikau (Kanaka ʻŌiwi) is Associate Professor of Native Hawaiian and Indigenous Politics in the Department of Political Science at the University of Hawai‘i at Mānoa. She is currently the Director of the General Education Office at UHM.

Paul Brickell is the Executive Director of Regeneration and Community Partnerships. A trained molecular biologist, he set up and led a research group studying embryonic development and leukemia and was Professor of Molecular Hematology at the Institute of Child Health, Great Ormond Street Hospital, University College London. In 2002 he changed career in order to contribute to the gathering regeneration of his “home town” of east London, first as Director of Regeneration and Chief Executive of the Bromley by Bow Centre and then as Chief Executive of Leaside Regeneration. He contributed to the early visioning of the Lower Lea Valley and to the delivery of new homes; physical infrastructure; business support; parks and green spaces; and new facilities for primary health and social care. Paul joined the London Legacy Development Corporation (LLDC) in October 2011.

Donna Kamehaʻikū Camvel (Kanaka ʻŌiwi) is working on a PhD in the Department of Political Science with a specialization in Indigenous Politics at the University of Hawai‘i at Mānoa. Her dissertation research focuses on historical and contemporary land and water use practices in the He‘e‘ia ahupua‘a.

Ariel Collins is the Assistant Director at The City Project. Ariel received her Master of Justice Studies from Arizona State University’s School of Social Transformation. As a graduate student, Ariel worked with low-income residents, an elementary school district, and the City of Phoenix to promote community outreach and collaboration, and to build support for a neighborhood park in an underserved area of southwest Phoenix. Prior to graduate school, Ariel worked in outreach and education at a no cost dental clinic for the homeless. She served two terms as an AmeriCorps member, most recently in Santa Ana, California. She graduated from Appalachian State University in North Carolina. Ariel has worked with The City Project since 2013.

Robert Garcia is an attorney who engages, educates, and empowers communities to achieve equal access to public resources. He is the Executive Director, Counsel, and founder of The City Project, a non-profit legal and policy advocacy organization based in Los Angeles, California. He received the President’s Award from the American Public Health Association in 2010. Hispanic Business Magazine recognized him as one of the 100 most influential Latinos in the United States in 2008, “men and women who are changing the nation.” He has extensive experience in public policy and legal advocacy, mediation, and litigation involving complex social justice, civil rights, human health, environmental, education, and criminal justice matters. He has influenced the investment of over $41 billion in underserved communities, working at the intersection of equal justice, public health and the built environment. He graduated from Stanford University and Stanford Law School, where he served on the Board of Editors of the Stanford Law Review.
Contributors

Katrina Lashley is Project Coordinator of Urban Waterways at the Anacostia Community Museum. She received her B.A. in English Literature and Italian at Rutgers University. In 2011 she completed a Master's History (Public History track) at American University with a focus on the British Caribbean. Katrina has worked on projects for the National Museum of American History and Arlington House. In addition to her public history work, Lashley was a teacher of English Literature and Language for twelve years.

Noel Lopez is a social scientist currently completing his PhD in Cultural Studies at George Mason University. A former Baltimore City public school teacher, he is now a cultural anthropologist with the National Park Service (NPS), National Capital Regional Office. Noel’s current ethnographic research project with NPS is on issues of subsistence/supplemental fishing in the waterways of Washington, DC. His dissertation topic is on the formation of a political coalition between Appalachians, Puerto Ricans and the Black Panthers in 1960s Chicago. A DC native, Noel lives in Arlington with his wife and 3 kids.

Louisville Waterfront Development (WDC) was established in 1986. It plans, coordinates, and implements strategies to revitalize Louisville’s Waterfront. WDC was created by an interlocal agreement between Jefferson County, the City of Louisville (now Louisville Metro), and the Commonwealth of Kentucky to oversee redevelopment of Louisville’s waterfront from a blighted and underutilized area into a vibrant, active area. The result is Waterfront Park, which has improved the quality of life of Louisville residents and has also been a catalyst for business and residential redevelopment in the Waterfront District and connecting areas of downtown Louisville.

Nancy Negrete is the Program Manager at The City Project. Nancy graduated from Wellesley College with a Bachelor of Arts in Political Science and Latin American Studies. During her undergraduate years, she worked in various organizations such as the United Nations Development Program and the Office of Community Development in Southeast Los Angeles to ensure low-income youth have access to public spaces. After Wellesley, she worked as a Legal Assistant providing legal services to undocumented crime victims in Los Angeles. As a native to Los Angeles, she is excited about working closely with her community to ensure everyone has equal access to healthy and just environments.

Hyon Rah is a hybrid designer-engineer who has worked around the world, specializing in sustainable architectural and urban design, and water resource management projects. Hyon received her Master of Architecture degree from the University of Michigan in Ann Arbor, and a Master of Science in Water Management and Hydroinformatics through the European Commission’s EuroAquae Programme, a consortium of five EU-based universities. Hyon is part of the team that launched the non-profit organization, Anchor Coalition, which focuses on securing water and energy for communities around the world, starting at the local level then scaling up. As of May 2016, she serves as Director of Integrated Planning. She will also be leading the soft launch of the organization by speaking at the Smart Cities India conference this May, prior to the official launch in the summer.
Contributors

Paul J. Travers was born near the Patapsco River in Baltimore, and first explored the rough and tough Fells Point waterfront as a truant schoolboy. His work as a park ranger with the Maryland Park Service fostered his interest in the river's history. For the past three decades he has hiked, biked, and boated along the river's shoreline to witness the transformation of the “River of History” into the “River of Hope.” He has been involved with various historical and environmental groups to promote its preservation and conservation. He strongly believes in our birthright of clean air and water, and hopes to fish and swim in a fully restored and sustainable Patapsco River in the not too distant future. In addition to being a self-taught “river rat,” Paul holds degrees from the University of Maryland and Pepperdine University. His book The Patapsco: Baltimore’s River of History is available at Schiffer Publishing (www.schifferbooks.com). For more information about Paul, please visit his website at www.paultravers.com.

Major Joe Womack (USMCR) ret. is an Africatown native. Joe graduated from the historic Mobile County Training School in 1968 and earned a business degree from Saint Paul’s College in Virginia in 1972. He served two years in the Marine Corps and nineteen years in the reserve before retiring with the rank of Major. Joe was the first African American professional to be promoted at the Shell/Dupont Chemical Plant in Axis, Alabama. He is a founder and was the first president of the African American Summit of Mobile County, one of the founders and original members of The Mobile Chapter of the Montford Point Marines and one of the founders and first president of The Black Military Workers Of America, Inc. Mr. Womack has dedicated himself to advocating for the health of the Africatown community through his work with the Mobile Environmental Justice coalition.