

Local Residents, the Anacostia River and “Community”

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The Environmental Anthropology Project (EAP)

The Environmental Anthropology Project is sponsored by a cooperative agreement between the Society for Applied Anthropology (SfAA) and the U.S. Environmental Protection Agency (EPA) -- Office of Sustainable Ecosystems and Communities (OSEC). The goal of the cooperative agreement is to increase the access of communities and policy makers to anthropological and other social science expertise in the solution of environmental problems. The Environmental Anthropology Project, now completing its inaugural summer, provides a valuable opportunity for students with an environmental anthropology focus to do fieldwork relevant to their interests, to local communities, and to the SfAA and the EPA. Interns and Fellows work in cooperation with an EPA regional office. They are supported by an EPA Mentor from the regional office and by a faculty member from their academic institution.

For more information about the Society for Applied Anthropology and the Environmental Anthropology Project visit the EAP website at: <http://www.telepath.com/sfaa/eap/abouteap.html> or contact:

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EXECUTIVE SUMMARY

This study provides a step toward better understanding the diverse communities located within the Anacostia River watershed. Although each of the neighborhoods selected for this study differ from each other, interview responses of individual residents and observed community events illustrate the existence of a shared community culture that is based on similar lived experiences. This culture structures the way in which local residents relate to the Anacostia River and how they perceive their communities. It also structures their perceptions of their surroundings. Efforts to involve “the community” must understand and respect this common culture if they truly expect to elicit the support of local residents in restoring the Anacostia River.

This study presents the perspective of local residents living east of the tidal Anacostia River. It provides individuals and organizations hoping to involve local residents in restoring the Anacostia with a greater understanding of how residents relate to the river in their daily lives. This understanding will lead to more effective partnerships and to collective ownership of the goal to restore the Anacostia River between concerned groups and local residents. This study is based on the assumption that, due to different experiences and local conditions, the Anacostia River, the “environment” and “community” hold different meanings among residents living east of the river. Along the same vein, this study also assumes that those meanings held by residents differ from those of individuals living outside the community whose experiences are different. Specifically, the goals of this project are to:

1. support ongoing efforts by government agencies and non-governmental organizations to involve local residents in efforts to restore and protect the environmental quality of the Anacostia River; and
2. demonstrate the value and the relevancy of an anthropological perspective to environmental issues.

To accomplish these goals, this study:

- provides anthropological analysis of the social and cultural relations of residents living east of the Anacostia River to the river and to their natural surroundings; and
- documents the different perceptions of “community” among residents living east of the Anacostia River.

BACKGROUND:

The tidal Anacostia is 8.75 miles long and stretches from where the northeast and northwest branches meet, just north of the District of Columbia in the state of Maryland, to where the river meets the larger Potomac River at Hains Point in the District of Columbia. The tidal Anacostia is the most polluted body of water in the National Capital area. The major environmental problems are low levels of dissolved oxygen (DO), sedimentation, and high fecal coliform counts. The District’s combined sewer overflows (CSOs) are believed to be the primary causes of the low DO and the high fecal coliform counts. Contemporary urban development, human behavior and historical agricultural practices are responsible for the high levels of sediment and non-point source pollution in the river.

The Anacostia River has been suffering from the effects of human actions since Europeans settled the watershed in the seventeenth century. In the 1700s, erosion, caused by tobacco farming, led to high sediment levels in the river. This run-off, combined with over-fishing, destroyed the local fishing industry by the early 1800s. By 1880, the District of Columbia’s

population growth following the Civil War pushed the city's antiquated, combined sewer system over its capacity, causing millions of gallons of raw sewage to flow into the Anacostia a day.

In the 1900s, suburban development, urban renewal and public housing changed the social and the physical landscape of the Anacostia River watershed. The population explosions that followed World Wars I and II continued to exceed the capacity of the city's sewer system, flushing as much as 21 million gallons of sewage into the Anacostia a day. Legislation passed by Congress and the physical expansion of the federal government, forced low income families into public housing communities constructed east of the Anacostia. Suburban development of the watershed east of the river dramatically increased the percentage of land in the watershed impervious to water, thereby making non-point source pollution the largest single cause of the Anacostia River's pollution.

Today the Anacostia is battling back thanks to the energies and activism of concerned individuals and environmental organizations at the local level and political will in the ranks of the local and the federal government. In 1993, the environmental organization *American Rivers* classified the Anacostia River as the fourth most endangered river in the country. Thanks to efforts by concerned parties at the local, District/state and federal government levels, *American Rivers* removed the Anacostia from the list by 1995. A number of parties involved in these efforts have called for increased community involvement in the restoration of the river.

This project assists calls for community involvement by presenting the perspectives of local residents of three different neighborhoods located east of the tidal Anacostia River: River Terrace, Barry Farm and Congress Heights. The results of this study are based on demographic data collection, geographic research, participant observation and semi-structured interviews with local residents from each neighborhood. As one might assume, River Terrace, Barry Farm, and Congress Heights are similar in general ways. Each is located within the District of Columbia, each has a super majority of African-American residents, and each is located east of the tidal Anacostia River within the natural boundaries of the watershed. However, the neighborhoods also have their differences. Such differences include their spatial relationships to the Anacostia and the degree to which they are bound by natural areas or physical (human-made) development. The neighborhoods differ in their visual appearance, such as by type of dwellings, landscape and nearby natural features. River Terrace, Barry Farm and Congress Heights also differ demographically, including by level of income, population size, level of educational attainment, and percent of occupied households owned in comparison to those rented.

RELATIONS TO THE RIVER:

One way to understand how local residents relate to the Anacostia River and the surrounding natural environment of its watershed is to understand the different ways they value the natural environment. Local residents' environmental values structure the way they relate to the environment. Individual environmental values are created the same way as other types of values -- through a variety of processes that occur during the lived experiences of a given individual. In some cases, individuals may share similar lived experiences based on their upbringing, age, race, ethnicity, occupation, or place of living (i.e., their community) and thereby possess similar values.

Based on a typology of basic environmental values (Kellert 1996) the responses of interview participants suggest that residents socially and culturally relate to the Anacostia River in primarily, three ways: negatively, naturalistically and aesthetically. Their responses to a variety of interview questions also suggest that residents subscribe to these multiple values simultaneously and negotiate among them to structure their everyday relationship to the Anacostia River and their surrounding natural environment.

Interview participants in all three neighborhoods indicated that they harbor negative sentiments toward the Anacostia River and to other elements of their surrounding natural environment. Negative sentiments toward the Anacostia River cannot be separated from the social environment that local residents perceive to exist in their urban neighborhoods, or from the current real and perceived human health threats related to the Anacostia River. Participants in each neighborhood associated the natural areas within their neighborhoods, such as overgrown lots, high grass, trees and underbrush, with criminal activity, such as drug dealing, and threats to their, and to their children's, personal safety. Every participant was also aware of the pollution and the human health threats associated with the Anacostia River. As such, participants reported that they no longer used the river as they had in the past. The negative relation of residents toward the Anacostia River and the natural environment is, therefore, not due to ethnicity or other theory. Rather, it is related to the surrounding social conditions of the area and the common lived experiences that structure residents' cultural relation to the Anacostia River.

Interview participants in all three neighborhoods also indicated that they harbor a naturalistic relation to the Anacostia River and their surrounding natural environment. Residents in all three neighborhoods commonly felt relaxed, calm and soothed upon visiting or observing the river. Although most participants reported that they no longer use the river as they had in earlier times when they perceived it to be cleaner, the naturalistic relation still exists among local residents. This relation is now most commonly expressed in feelings of disappointment, sadness and anger about the decline of the Anacostia to its current condition. Participants indicated a naturalistic relation most often when referring to the Anacostia River and its role in their lives during an earlier time when they did not perceive it to be polluted and when they perceived their surrounding social environment to be safer.

To a lesser extent, interview participants in all three neighborhoods also harbored an aesthetic relation toward the Anacostia River and the natural environment. An aesthetic relation refers to the strong, positive emotions that the natural environment arouses within people. Residents occasionally referred to the visual aspects of the Anacostia and their surrounding natural environment. Such references included the way the light reflects off the water and its contrast to the industrial aspects of the city.

Regarding efforts and strategies to involve local residents in restoring the health of the Anacostia River, community-based environmental groups must recognize the prominence of the negative relation between local residents and the natural environment. This value may directly conflict with the environmental values of members or volunteers involved with local environmental groups and possibly frustrate their efforts. The manifestation of the negative relation to the natural environment among local residents should not be considered an indication that local residents do not care about the natural environment. Rather, the negative relation is a reflection of their local realities and lived experiences related to their local environment. On the positive side, many participants indicating a negative relation to the Anacostia River also harbor a naturalistic and/or an aesthetic relationship as well. These indications are often couched in past experiences when participants perceived their social and natural environments to be safer. Strategies to involve local residents in community-based restoration of the Anacostia River must account for the present negativity related to the current condition of the Anacostia and seek to involve residents by drawing upon their more positive, underlying naturalistic and aesthetic relations to the river.

PERCEPTIONS OF COMMUNITY:

Local residents' perceptions of their communities construct their reality. Therefore, it is also the definition others must acknowledge whenever they engage residents in a conversation about "community", including, specifically, their calls to involve the "community" in efforts to restore the Anacostia River. Even though the participants in this study are from three different

neighborhoods each of which differ in their geographic location, the degree to which they are bound by natural and physical features, their demographics and their visual appearance, each participant subscribes to a similar definition of “community”. Although participants did not word their definitions exactly the same, each particular definition included three elements: **people** living in a common **place** who are bound together by the **social bonds** they create amongst themselves. Many participants expressed that simply living together in a common place is not enough to form a community.

The size of these three neighborhoods and the degree to which each is bound by natural and physical boundaries appeared to influence the perceptions participants held of the spatial boundaries of their own communities. Although participants from the River Terrace and Barry Farm neighborhoods referred to their community by the same name as the neighborhood, not a single participant from the Congress Heights neighborhood referred to their community as “Congress Heights”. This difference may be a function of the larger physical area encompassed by Congress Heights, its larger population, and the absence of prominent boundaries around the neighborhood. However, participants from the Congress Heights neighborhood did define community similar to those from River Terrace and Barry Farm. This data suggest that residents apply the criteria they mentioned in their definition of “community” to structure their everyday perceptions of their own community, regardless of neighborhood labels.

Results also suggest that the presence of a “sense of community” is influenced by natural, physical or other types of boundaries that accentuate a common place by delineating it and separating it from other places. These boundaries help to define areas of interest for community members. Issues and events occurring within these close boundaries should receive more attention than those encompassed by more distant boundaries, such as a watershed.

The results of this study also suggest that when the common place is not well delineated or accentuated by natural or physical boundaries, the social component of “community” plays a prominent role in how residents perceive their community. Participants in all three neighborhoods commonly chose to describe their community by its social characteristics, such as in terms of the types of people who lived there and degree of personal safety. Participants also commonly chose to refer to social changes in their communities. These data suggest that the sense of togetherness, or the “sense of community”, that participants refer to in their definitions of “community” is a prominent element of the criteria residents use to form their perceptions of the health of their own community and of an ideal community to which they aspire.

The apparent value participants place on the social aspects of their communities provides a potentially powerful resource for the restoration of the Anacostia. Participants tended to be most proud of, and commonly reported that they would take visitors to, the areas where their personal involvement and efforts had improved their community. Observations of community events also suggest that local residents are more likely to attend events that celebrate an improvement to their community in which they were personally involved. Elevating the Anacostia River to this level will require that local residents feel a sense of ownership over the improvements made in the river. This most likely will require that they become involved as full partners in such efforts, rather than simply as a corps of volunteers. It may also not be enough to simply interact at the level of community leadership. The true momentum and energy will come from widespread community groundswell to restore the Anacostia River.

It is this element of involvement and the apparent social and psychological sense of pride and accomplishment which accompanies it that needs to be considered with any community-based environmental protection effort. Social science research can identify the different values and relationships of individual communities to the Anacostia so that outreach strategies can be tailored

to each and thus made more effective.

Even though those participants in the study live in different areas of the District and have different demographics there are commonalities between each community that suggest that such common attributes may exist among the other communities within the neighborhoods within the Anacostia watershed. Common characteristics include a recognizable “center” of the community, events that bring residents together, a common ideal of what a community is and can accomplish, and similar perceptions of, and feelings toward, the Anacostia River and the natural environment. Participants in all three neighborhoods also expressed an interest in learning more about the Anacostia River and the natural environment. Outreach efforts could emphasize individual actions that can reduce non-point source pollution, such as using less fertilizer on lawns, keeping automobiles tuned to prevent excessive exhaust from entering the air, cleaning up after pets and monitoring run-off control at local construction sites. The reported personal behaviors of participants from these neighborhoods suggest the existence in these communities of a conservation ethic and a strong naturalistic value that underlies their negativistic relationship to the river.

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Chapter 1: INTRODUCTION

1.10 Purpose:

The purpose of this paper is to document the process and present the results of the research I conducted as an Environmental Anthropology Project (EAP) intern from June through October, 1997 in the Anacostia Watershed of Washington, DC. My research seeks to provide the Environmental Protection Agency and other groups and organizations interested in protecting and restoring the Anacostia River with an understanding of how local residents relate to the Anacostia and their differential perceptions of the communities in which they live. My research attempts to provide an on-the-ground perspective by bringing out the actual voices of local residents. The scope of this project is limited to the portion of the watershed situated east of the Anacostia river within the boundaries of the District of Columbia. This portion of the river is technically referred to as the “tidal Anacostia River” (ICPRB 1988:14).

1.20 Scope of Involvement

1.21 Scope of Environmental Protection Agency Involvement at the Local Level

Within the Environmental Protection Agency (EPA) the District of Columbia is under the jurisdiction of EPA Region III, headquartered in Philadelphia, PA. EPA Region III is attempting to approach some of the issues facing the Anacostia, particularly non-point source pollution, with a holistic and voluntary community-based approach.

The community-based approach is a relatively recent departure for EPA which for the past twenty-five years has approached environmental protection by enforcing legal regulations based on the three environmental mediums of air, land and water. However, certain environmental problems fall between these regulatory statutes. While the Anacostia River is polluted by a variety of different sources, **non-point source pollution** is the leading causes of the Anacostia’s poor environmental quality (WMCOG and DCERA 1997). Non-point source pollution means that there is no single source (point source), such as a factory, emitting these types of pollutants. Instead, non-point source pollutants enter the Anacostia through a variety of different and diffuse activities which take place within the larger watershed, such as toxins from cars that wash off area roads into the river. Because non-point source pollution comes from a wide array of sources, it is impossible to control with specific regulations. The causes of non-point source pollution are embedded in the ways in which people live, work, produce and consume in their daily lives (EPA-100-R-97-003).

Community-Based Environmental Protection (CBEP) approaches these problems by treating all the natural (air, water, land) and human resources of a place as interconnected parts of the same ecosystem (EPA-100-R-97-003). Through the CBEP approach, EPA seeks to achieve the following objectives:

- to help *communities* solve environmental problems in ways that integrate environmental, economic and *social* objectives;
- to access and manage the quality of air, water, land and *living resources* as a whole;
- to better reflect regional and *local* conditions; and
- to work more effectively with . . . both public and private partners to achieve environmental results (EPA-100-R-97-003, emphasis added).

Other studies and action plans (EPA# 903-F-97-001, Davies and Darnall 1996, AWRC 1996, AAEA 1994) of the problems facing the Anacostia also call for the involvement of local residents in

restoration efforts.

1.22 Scope of Environmental Anthropology Intern Involvement

The specific goals I created for my internship were: (1) to support ongoing efforts by EPA and non-governmental organizations to involve local community residents in efforts to restore and protect the environmental quality of the Anacostia River; and (2) to demonstrate the value and the relevancy of an anthropological perspective to environmental issues to federal and local government, to non-governmental and community-based groups, and to local residents.

In order to assist restoration efforts pertaining specifically to the Anacostia River, I designed a research study to accomplish the following objectives: (a) provide anthropological analysis of the social and cultural relations of nearby communities to the Anacostia River and to their natural surroundings in general; and (b) document the different perceptions of “community” among District of Columbia residents living east of the Anacostia River.

A basic assumption of my study is that based on different experiences and local conditions, the Anacostia River, the “environment” and “community” hold different meanings among local residents. Along the same vein, the meanings held by local residents differ from those of individuals from outside the community whose experiences are different. The focus of this project is to present the perspective of local residents, so that individuals and organizations hoping to involve local residents in restoring the Anacostia can gain a greater understanding of how residents relate to the Anacostia River in their daily lives. I hope that gaining such an understanding will lead to effective partnerships and collective ownership of the goal to restore the Anacostia River between concerned groups and local residents.

1.30 Intended Audience for Report

I intend for this report to reach five different audiences. One audience is composed of the employees of federal agencies, such as the EPA and the National Park Service, who are directly involved in the efforts to restore the Anacostia. Another audience is the local District government at all levels that represents the needs and concerns of local residents. The third audience includes academics, “practicing” anthropologists, and students of the discipline who are interested in the results of the Environmental Anthropology Project. The fourth audience includes non-governmental organizations who work at the local level to restore the Anacostia River and to assist the communities who live alongside it. Finally, the fifth and most important audience of this report are the local residents themselves, particularly those who personally participated in the project. This report provides them with information about the Anacostia River itself, about efforts at different levels of government to improve its environmental health, and about how other residents, within their own, and in other neighborhoods, relate to and feel about the Anacostia River.

1.40 Tone and Language of Report

Anthropologists who conduct research outside of purely academic settings lose a degree of control over how the information they gain from their studies is used by those who hire them. To protect those who participate in anthropological studies, professional societies, such as the Society for Applied Anthropology (SfAA) have developed ethical guidelines (See Appendix A) to protect the rights of those people who share their knowledge and experiences with anthropologists. Anthropologists who deliver the results of their research to clients and potential agents of change, such as government agencies, are sensitive to the need to involve research participants as knowledgeable partners in the research process (See Warry 1992). In the past, anthropologists tended to simply extract information from a community or a cultural group without sharing the

results or the underlying theoretical principles behind their approach with those they studied. This one-way knowledge transfer, from the community to the anthropologist, created an underlying power structure in which the anthropologist held “all the cards” and left the community they studied “in the dark” about the research. The anthropologist, while not on purpose, was often guilty of treating his or her “subjects” as social actors, never allowing them to participate as informed partners in the research process. Furthermore, in this tradition, these “subjects” rarely had an opportunity to review the results and the conclusions of the anthropologist before the anthropologist extracted the information about them from their community and delivered it to outsiders.

In order to respect these ethical standards this report makes it a point to clearly explain and define any terms and guiding principles that may be unfamiliar to its readers, thereby seeking to foster a two-way transfer of knowledge and to deconstruct the power structure. For this reason, I devote an entire chapter of this report to explaining the methodology behind this study. I also provide a glossary of important environmental terms in Appendix B. Those terms included in the glossary are placed in **bold** where they are first mentioned in the text of the report. While conducting the research presented in this report, I also followed these ethical guidelines by clearly explaining the purpose of my study to those who participated. Furthermore, I provided project participants with an earlier draft of this report for their review and comments, which I have incorporated. In doing so, I provided participants with an opportunity to become my research partners. To respect the privacy of those participating in my project, their identities shall remain anonymous.

Chapter 2: BACKGROUND: The History, Problems and the Restoration of the Anacostia River

The **tidal Anacostia** is 8.75 miles long and stretches from where the northeast and northwest branches meet, just north of the District of Columbia in the state of Maryland, to where the river meets the larger Potomac River at Hains Point in the District of Columbia. The tidal Anacostia is the most polluted body of water in the National Capital area (ICPRB 88-1:6). The major environmental problems are low levels of **dissolved oxygen (DO)**, **sedimentation**, and high **fecal coliform counts** (ICPRB 1988:14). The District's **combined sewer overflows (CSOs)** are believed to be the primary causes of the low DO and high fecal coliform counts. Contemporary urban development, human behavior and historical agricultural practices are responsible for the high levels of **sediment** and **non-point source pollution** in the river.

2.10 A Brief History of the Anacostia River:

We must look back to move forward.

- Slogan of Freebie Hope Community Day, Washington Highlands, DC (7/19/97)

To understand the present condition of the Anacostia River and the communities that lie within its **watershed**, it is important to understand the history of the river and the development of the communities within the watershed. This historical information provides readers who are unfamiliar with the Anacostia River with a better understanding of its current condition. More importantly, the brief history addresses the requests of some local residents who expressed a desire to learn more about the history of the river, the area in which they live, the river's problems and the ongoing efforts to resolve them.

2.11 The 1600s: The Early Years

English explorer Captain John Smith first visited the Anacostia River in 1608. Upon his arrival he found a tribe of Native Americans who called themselves the Nacotchtanks; also known as the Nascotines and the Anacostines. The Nacotchtanks were actually a sub-tribe of Algonquian linguistic stock. They were related, like other sub-tribes, to the larger Algonquian nation, by their language and the way they spoke. The Nacotchtanks lived in permanent villages along the eastern bank of the river where they grew their own food, fished in the river and traded with other tribes. According to an early account, the fish in the Anacostia were so plentiful that members of Captain Smith's crew actually tried to catch them in frying pans (ICPRB 1993:3). The position of the Nacotchtank village on the eastern shore of the Anacostia made it a convenient trading post for distant tribes traveling by canoe (ICPRB 1994:4). This area would later serve as a trading port for European settlers.

2.12 The 1700s: European Settlement and Tobacco

Later in the 1600s, European settlers moved into the area. As they settled the area, these early settlers cleared the land of forest for fields in which to plant food and tobacco. By the 1630s, tobacco began to dominate the local economy (ICPRB 1992:2). By 1732, the economy of the region placed such importance on tobacco, that settlers treated it as legal tender in the port of Bladensburg, Maryland, just north of what is today the District of Columbia. Large ocean going boats sailed up the Anacostia, at the time 40 feet deep, to Bladensburg to fill their holds with tobacco before setting sail across the Atlantic Ocean to Europe (ICPRB 1992:2). During this period, colonists referred to the Anacostia as the Eastern Branch due to its relation to the Potomac. In 1793, Thomas Jefferson suggested that future maps refer to the river by its Nacotchtank name. "Anacostia" has appeared on maps of the region ever since (ICPRB 1994:4).

As early as the 1700s, the European and the colonial demand for tobacco encouraged farmers to convert large areas of forest into fields. The continual cultivation of tobacco by farmers used up the soil's nutrients faster than the soil could regenerate them. The continual cultivation also absorbed the moisture in the soil making it dry and crumbly and vulnerable to **erosion** caused by rain and snow melt. The rainwater and snow melting would eventually erode the land and carry sediment into the Anacostia (ICPRB 1992:2). In the 1790s, plans for the federal city included a canal to connect the Potomac River with the Anacostia River to improve commerce. However, sediment run-off, caused by human activity, would continue to plague the Anacostia from this point on. In 1831, Congress refused to continue funding for the canal because silt build-up in the Anacostia continually forced the canal to close (Halnon 1997: Screen 4).

2.13 The 1800s: The Anacostia in Danger

During the 1800s farmers continued to use the Anacostia watershed to grow food and tobacco. These activities increased the rate of soil erosion and the level of sediment flowing into the Anacostia. Since the Anacostia is a slow flowing tidal river, it can not flush the sediment out of its channel like a larger river after a heavy rainfall. For this reason, the sediment flowing into the Anacostia during this period sank to the river's bottom and has remained there ever since with new sediment piling up on earlier deposits. In the 1820s, over-fishing and sediment build-up depleted the fish supply in the Anacostia, signaling the decline of the local fishing industry (ICPRB 1993:3). By 1830, sediment **run-off** caused by agricultural practices made the stretch of the river leading to the port at Bladensburg too shallow for navigation by large vessels. By the middle of the century, sediment run-off reduced the depth of the river along this stretch from forty (40) feet to only about eight (8) feet at high tide. After 1875, the sediment levels in the river increased even faster, as advances in cultivation technologies allowed farmers to push the land in the watershed further beyond its natural ability to support crops (ICPRB 1992:2).

The population increase of the District of Columbia, especially following the Civil War, contributed to the problem of sediment build-up in the Anacostia. The city's growing population also increased the amount of raw sewage flowing into the Anacostia. Until the 1890s, the District of Columbia's sewer system removed both rainwater and sewage (through the same system of pipes, known as **combined sewers**) to the nearest watercourse. To keep pace with the growing numbers of people, the city constructed more combined sewers. By 1880, these sewers were dumping ten million gallons of raw sewage a day into the Anacostia River. During this period, the Anacostia's marshes and **wetlands**, its natural pollution fighters, absorbed so much waste that they became a health hazard to those people living in the vicinity. This situation attracted the attention of then President Benjamin Harrison and Congress who began to lay the groundwork for a more systematic approach to wastewater treatment. They eventually re-routed sewer outflows to areas away from human settlement areas (ICPRB 1992:2).

The drop-off in the productivity of tobacco farming, the depletion of the local fishing industry and the failure of the proposed canal through the city that would connect the Potomac and the Anaostia rivers led to social and economic changes east of the Anacostia River. With advances in technology and a reduction in the productivity of their land, farmers began to subdivide and sell their farmland. They also sold or freed their slaves. Some slaves were able to purchase their own freedom through manumission. During this time period, Congress sub-divided the different sections of the District of Columbia into smaller parcels. The area east of the Anacostia River was called Washington County. Congress let each section of the city follow the manumission laws of its original state. Slaves living in Washington County were fortunate because Maryland's manumission laws were much more flexible than those of Virginia (Halnon 1997, Screen 5). Free blacks from other parts of the city moved east of the Anacostia because the Maryland court system was also much more liberal in its interpretation of the 1808 Black Codes. The Black Codes

regulated free blacks through curfews, employment limitations, and public conduct (Halnon 1997: Screen 5).

By the 1820s the free black population living in the District of Columbia was becoming a growing concern to the city's white residents. This concern and the resulting tensions between blacks and whites increased in 1835 with Nat Turner's Rebellion. As a result, Congress passed a gag rule on all anti-slavery literature in the District of Columbia and enforced the Black Codes more strictly. East of the Anacostia River free blacks were slightly better off, although tensions did exist between them and white Navy Yard workers. In 1854, white workers established Uniontown, an exclusively white settlement east of the river. Ironically, a slow-down in production at the Navy Yard in the 1870s forced one of the founders of Uniontown to sell his sizable home to none other than Frederick Douglas (Halnon 1997: Screen 5). At about this time, the Freedman's Bureau completed its purchase of land from the Barry family. The bureau sold, rented and leased this land to provide a place for freed blacks to go and build homes rather than continue living in the alleys of the worst quarters of the city. The Freedman's Bureau used the money it raised from sales and rentals to build the first black public school east of the Anacostia River (Halnon 1997: Screen 7). At the turn of the century, the District of Columbia had the largest black population of any city in the country (Halnon 1997: Screen 8).

2.14 The 1900s: Suburban Development and Urban Renewal

By the 1900s, population growth in the District of Columbia made the Anacostia Watershed an area ripe for real estate and economic development. From 1912 to 1942, the U.S. Army Corps of Engineers began draining the marshes and wetlands bordering the Anacostia to build roads and shoreline. These efforts created Kingman Lake, Children's Island and the park land stretching along the eastern bank of the river. The accelerated growth of the District of Columbia after World War I and the population explosion following World War II, the physical expansion of the federal government and urban renewal projects in areas west of the Anacostia, led to quick and poorly designed suburban development and the creation of public housing communities in the areas east of the Anacostia River (Halnon 1997: Screen 10).

Suburban development increased sediment flow into the Anacostia by tearing up farmland in the construction process and replacing it with surfaces, such as roads, that do not absorb rainwater or snow melt. These **impervious surfaces** prevent rainwater from being absorbed by the land and slowly released and filtered through the ground into the Anacostia. Instead, rainwater washes over impervious surfaces and eventually carries oil and grease, gasoline, toxic chemicals and chlorides, resulting from lawn fertilizers, automobile exhaust, litter and other materials found in an urban setting into the streams which transport them into the river (AAEA 1994:17). Stream water quality is "impaired" when urban development covers ten percent of a watershed. Normally a stream "dies" when twenty-five percent of the land cover in its watershed is impervious. As of 1993, the two major tributaries delivering water to the Anacostia, Hickey Run and Watts Branch, were respectively, forty and forty-five percent impervious. By 1981, the Anacostia watershed reached its current imperviousness of close to fifty percent (ICPRB 1992:1). Impervious surfaces are a characteristic of all developed areas and, as for the Anacostia watershed, are a major contributor to the non-point source pollution of the country's urban waterways.

Although the District of Columbia had redesigned its sewer system in the late 1800s, the system was unable to effectively handle the rapid population growth in the city. The population growth spurt quickly pushed the Bladensburg sewage **treatment** plant, constructed in the 1930s, over its sewage handling capacity by 1940. During this time, the city's sewer system discharged 21 million gallons of sewage into the Anacostia a day. Most of this discharge came, and continues to come, from parts of the city west of the Anacostia. In 1956, the District of Columbia sought to

address this problem by constructing a larger sewer treatment plant called the Blue Plains Sewage Treatment Plant. However, this investment has proven to be only a temporary solution.

In recent years, Blue Plains has been unable to effectively treat all the sewage carried to the plant by the District's combined sewer system. When the amount of water flowing into the plant exceeds its carrying capacity, the plant discharges the excess untreated water directly into the river. A 1994 study estimated that as little as one-half inch of rain results in an overflow (AAEA 1994:20):

When an overflow occurs, not only do the substances carried by the water run-off from impervious surfaces enter waterways, but so do the substances intended to reach the sewage treatment plant facility Combined sewers serve about 35% of the District. Approximately sixty combined sewer drains end on major waterways in the city. Sixty percent of all combined sewer drains enter the Anacostia River. . . .The average overflow per occurrence is 40 million gallons or approximately 2,400 million gallons per year (AAEA 1994:20).

Due to the slow, tidal current and the width of the Anacostia, this untreated water can slosh back and forth in the river for over a month. Water tests from a study conducted by the Metropolitan Washington Council of Governments (MWCOG) revealed that from the year 1987 to 1990 the mean fecal coliform count in the Anacostia at a point just north of the Pennsylvania Avenue bridge was 50,000. This measure indicates the presence of infectious diseases such as dysentery, hepatitis and typhoid. Swimming is considered safe at counts below 200 (Cited in Loeb 1996).

In 1988, the District of Columbia, assisted by federal funding, constructed a swirl concentrator treatment facility to capture up to 400 million gallons of overflow from the Blue Plains plant a day. The swirl concentrator uses centrifugal force to separate the sewage from the rainwater based on differences in weight. Large solids are screened out and the water is treated by a chlorine process before being sent to Blue Plains. However, the swirl concentrator has not performed up to the expectations of the MWCOG, who helped fund a small portion the facility (AAEA 1994:21).

The physical expansion of the federal government and urban renewal in the areas southwest of the Capitol during the mid to late 1900s continue to have far reaching changes on the areas east of the Anacostia River. By 1967, the racial composition of areas east of the Anacostia River would go from 82% white to only 6% white as blacks moved into the formerly white neighborhoods (Halnon 1997: Screen 8). By the 1970s, land use in Anacostia would go from the most rural, highest percentage of home ownership, and most balanced use of land for residential, commercial and industrial uses, to having 75% of all its land zoned for apartments. D.C. laws prescribed at least 80% single family occupancy in other parts of the city. By the 1970s, Anacostia schools would be 83% over capacity, compared to other DC schools which were only 16% over capacity. Legislation passed, and funding provided by the federal government led local authorities to create "racialized ghettos" east of the Anacostia River (Halnon 1997: Screen 8).

In the early 1900s, Washington's poorest citizens lived in tenement housing in the alleys of the city. Blacks comprised two-thirds of the alley population. Acts passed by Congress sought to eradicate the alley populations by razing the tenement buildings and placing the occupants in vacant street dwellings elsewhere in the city. However, few alley dwellers could afford the slightly higher rents and there were not enough low rent dwellings to house all the alley dwellers (Halnon 1997: Screen 10).

During this same time, the federal government re-emphasized the centralization of its bureaucracy and planned redevelopment for the area southwest of the Capitol. Urban renewal in this area also displaced poor families and removed some of the worst slums in the city. All combined, the actions of the federal government to remove alley dwellers, expand its physical presence in the city and to redevelop the southwest quadrant of the city displaced a high number of low income residents, resulting in public housing (Halnon 1997: Screen 9). From 1963 to 1966 families displaced by federal expansion and urban renewal accounted for only 23% of all public housing recipients. However, 100% of the new tenants in the larger public housing developments were displaced families. This caused a net decrease in available public housing for the poorest residents of the city, the former alley dwellers. By 1967, as the housing authority focused on how to house these populations within the District's borders, the land east of the Anacostia river caught its eye (Halnon 1997: Screen 10). By 1970, apartment zoning accounted for 75% of the total area east of the river and highly concentrated, poorly constructed public housing developments forever changed the social landscape and the reputation of the neighborhoods east of the river.

2.20 A River on the Rebound: Restoring the Environmental Health of the Anacostia

As history demonstrates, the Anacostia River has been suffering from the effects of human actions since it was first discovered by Europeans back in the seventeenth century. However, today the Anacostia is battling back thanks to the energies and activism of concerned individuals and environmental organizations at the local level and political will in the ranks of the local and the federal government.

2.21 Restoration Efforts at the Local Level:

Efforts to restore the Anacostia River at the local level have increased dramatically as the poor environmental health of the Anacostia River has been documented and publicized. These local efforts demonstrate, on a daily basis, the commitment among local residents and among members of local environmental organizations to the restoration of the Anacostia River. These groups and individuals organize and conduct restoration activities that involve local volunteers and that partner with government agencies. These local groups also diligently serve as the river's first line of defense. They act as the river's "eyes and ears" and often its mouth, by calling attention to its problems and expressing concerns about policies and decisions that may negatively affect the watershed. These groups are represented in the government efforts through the Anacostia Watershed Citizens' Advisory Committee. The Committee is composed of three local group leaders, appointed from each of the three political jurisdictions in the Anacostia watershed, Montgomery and Prince Georges counties in Maryland, and the District of Columbia. The Advisory Committee provides advice from the "on-the-ground" perspective to the Anacostia Watershed Restoration Committee (AWRC).

Collaborative efforts by environmental and neighborhood groups have been galvanized by proposed development projects that threatened to have a negative impact on the river and the communities located in its watershed. Specific efforts include the public outcry mobilized by local groups against the construction of the Barney Circle Freeway, Jack Kent Cooke Stadium, and Children's Island Amusement Park. The Barney Circle Freeway was a proposed freeway intended to connect two interstates that slice through the watershed. Local opponents were concerned that the new freeway would bring more traffic and air and water pollution to the southeast sections of the city. They were also concerned about the negative environmental impacts associated with the construction of the freeway (AAEA 1994:61). The freeway would have destroyed 20 acres of public parkland. Local efforts eventually led to the defeat of the proposal (AWS 1996:1).

Another challenge to the health of the Anacostia watershed was the proposed site of Jack Kent Cooke Stadium, a new home for the Washington Redskins, the city's professional football team. The proposed site was the parking lot of the former stadium located directly on the west bank of the Anacostia River. Local efforts mounted opposition to the proposed site because of its proximity to the river, and the presence of high levels of lead in the soil of the site. Thanks in part to local activism, the stadium has since been constructed in suburban Maryland.

Local groups such as the Anacostia Watershed Society, and the Earth Conservation Corps, have also focused their energies on involving local residents and volunteers from outside the watershed in small scale restoration efforts, such as riverside and stream clean-ups. These groups also educate residents and local officials about the need to protect the Anacostia River. Educational activities include canoe rides along the tidal Anacostia that illustrate the contrast between the scenic beauty of the river with the everyday trash, bottles, cans and plastic grocery bags, floating in the river, and the tires and the shopping carts washed up along its banks. Local environmental and civic groups also pressured local and federal government agencies to post fish advisory signs along the banks of the Anacostia River to alert local residents about the health hazards of swimming, drinking and eating fish from the Anacostia.

These local efforts have been relatively successful at protecting the Anacostia River. However, their successes are simply small wins in the larger war between the economic development interests of the city, and the natural environment and quality of life of those who live in the watershed. Take for example, the proposed Children's Island Amusement Park. Children's Island is an island created by the Army Corps of Engineers dredging operations. After years of local opposition to the development of the Island, the District of Columbia City Council recently and narrowly approved a 99 year lease to a London development company to transform the Island into a children's theme park (Williams 1997). Although the congressionally -appointed D.C. Control Board, that essentially now runs the city by decree, recently overruled the decision by the city council, the battle for the future of the Anacostia River is far from over at the local level.

2.22 Restoration Efforts at the District/State Government Level

In 1984, restoration of the Anacostia River officially began when the District of Columbia, and Montgomery and Prince George Counties and the State of Maryland formed a cooperative partnership to restore the Anacostia River and its tributaries by signing the Anacostia Watershed Restoration Agreement (ICPRB 1994:3). The Agreement called for the formation of the Anacostia Watershed Restoration Committee (ARWC) to develop a restoration plan and to coordinate the different local, state and federal agencies involved (ARWC 1996). In 1991, the ARWC developed a plan entitled *A Commitment to Our Home River: A Six Point Action Plan to Restore the Anacostia River*. The six goals identified in the plan included:

- Dramatically reduce pollutant loads delivered to the tidal river to improve the water quality conditions by the turn of the century
- Protect and restore the ecological integrity of urban Anacostia streams to enhance aquatic diversity and provide for a quality urban fishery.
- Restore the spawning range of **anadromous fish** to historical limits.
- Increase the natural filtering capacity of the watershed by sharply increasing the acreage and the quality of tidal and non-tidal wetlands.
- Expand forest cover throughout the watershed and create an [uninterrupted] corridor of forests along the margins of its streams and rivers.
- Make the public aware of its key role in the cleanup of the river, and increase volunteer

participation in watershed restoration activities (AWRC 1996).

Over the last nine years, the AWRC has developed a broad base of public and private organizations who are working to restore the health of the river. By 1996, 450 individual restoration projects were implemented or planned for the watershed. Over 110 projects had been completed or were in the final stages of design (ARWC 1996).

2.23 Restoration Efforts at the Federal Government Level:

In 1990, the US Army Corps of Engineers released a report in which it cited two main causes of the environmental decline of the Anacostia River. One cause was the lack of environmental controls during the suburban development of the watershed. The other cause was the past activities of the Corps itself that destroyed wetlands, aquatic habitat, and bottomland forests in the Anacostia watershed for purposes of flood control, navigation, debris removal and aquatic vegetation control (EPA #903-F-97-001). Based on the report by the Corps of Engineers, the Environmental Protection Agency (EPA) delivered a report to Congress in 1992 which highlighted the consequences of neglecting the Anacostia River -- to the District of Columbia's image as the nation's capital, to the water quality of the Potomac River and the Chesapeake Bay, and to the quality of life of the communities alongside the river's banks. Based on this report, President Clinton designated the Anacostia watershed as one of seven ecosystems in the entire nation requiring priority restorative action (EPA #903-F-97-001).

Two examples of efforts by the federal government to restore the Anacostia River are the Environmental Protection Agency's Anacostia Ecosystem Initiative and the Army Corps of Engineers restoration of Kenilworth Marsh.

In July 1994, twenty-three federal agencies and departments signed the Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay which included their full support of a federal workplan (published in April 1997) to clean up the Anacostia in cooperation with the AWRC. In September 1994, EPA Region III introduced its *Anacostia Ecosystem Initiative*, making EPA a full partner in restoration efforts (EPA #903-F-97-001). The four goals of the Initiative are:

- **Watershed Restoration**
to identify and target compliance and enforcement activities at federal facilities in the Watershed
- **Multi-media Risk Reduction**
to seek greater controls over combined sewer and storm water discharges.
- **Environmental Justice**
to ensure the protection from environmental hazards of the watershed community, regardless of race, ethnicity, or economic status.
- **Public Education/Involvement**
to provide a full-time liaison to the Anacostia community to seek out and report local concerns and interests. The liaison has regular contact with citizens, community leaders and interest groups to maintain the two-way flow of information and ideas related to the restoration process. The liaison also assists in delivering environmental science education to the District of Columbia's school children.

In implementing the public education/involvement component of the Anacostia Ecosystem Initiative, EPA Region III, through its community liaison, has fostered relationships with local activists and environmental organizations. Through these relationships, EPA Region III has

channeled over \$1 million to projects designed to generate community involvement and awareness of issues associated with the Anacostia's pollution and restoration. Examples include support for the Toxics Action Plan and the Biennial Federal Workplan in which the public participated. Other examples include providing funding for fish advisory signs along the river, educational canoe trips for school children, science fairs and festivals, such as an Earth Day celebration, and an Urban Watershed Education Fair (EPA #903-F-97-001).

Kenilworth Marsh is the last remnant of the vast marshland on which the District of Columbia is built. Although marshes are not inviting places for humans to live, they are crucial to maintaining a river's health by filtering toxins and other pollutants out of the water flowing off the land and into the river. However, due to the historical efforts of the Army Corps of Engineers to control flooding by constructing cement walls along the banks of the Anacostia, and dredging the navigation channel of the river, these natural pollution filters were filled with dirt to create what is now the shoreline and the parks along the river. A lack of funds during World War II ceased these operations and temporarily spared Kenilworth marsh.

In 1989, Kenilworth Marsh was again in danger due to restarted dredging efforts by the Corps. These efforts severely degraded the marsh and its vegetation by altering the naturally shallow water levels in the marsh that support aquatic vegetation. Working together, MWCOG and the Corps reached a compromise where the Corps would deposit the sediment it removed from the navigation channel of the river into the marsh to help stabilize water levels. Since its formation, this partnership has doubled the area of restored marsh in the watershed. Re-planted marsh vegetation is attracting wildlife back to the area by providing natural habitat (ICPRB 1993:4-5).

In 1993, the environmental organization *American Rivers* classified the Anacostia River as the fourth most endangered river in the country. According to the group, the Anacostia "typified the appalling condition of America's urban waterways. . . (ICPRB 1993:8)." Thanks to efforts by concerned parties at the local, District/state and federal government levels, *American Rivers* removed the Anacostia from the list by 1995. However, much work remains for the environmental health of the Anacostia is to be fully restored.

Chapter 3: RESEARCH STUDY METHODOLOGY

In this chapter I describe the sampling techniques and the methods I used to collect information for this study. I began my investigation by purposefully selecting three different neighborhoods based on the labels of a common street map: River Terrace, Barry Farm, and Congress Heights. In this study I used four different methods to gain an understanding of the social and cultural relations between local residents of these three neighborhoods and the Anacostia River and their perceptions of “community”. These methods included: geographic data collection, demographic data collection, participant observation and semi-structured interviews. Combining these methods revealed a number of differences and similarities between each neighborhood and its residents, their relations to the Anacostia and their perceptions of “community”.

3.10 Neighborhood Selection

A sample is a selection of a portion of the overall number of people (or other element) the researcher wishes to study. Sampling a portion of the larger population is faster, cheaper and more accurate than sampling every person. Two general types of sampling techniques are probability and non-probability samples. Probability samples are based on the principles of probability theory and are considered to be representative of the larger population because each person has an equal chance of being selected for the study. Probability samples allow a researcher to make general conclusions about the entire population, even though he or she only studied a portion of the population.

Non-probability sampling techniques return highly credible data because they allow the researcher to target a specific portion of the population. One of the drawbacks of non-probability sampling is that the results of the findings of the research cannot be generalized beyond the population which actually participated in the study. This is so because the entire population does not have an equal chance of being selected to participate. Since I used a non-probability sampling technique, the results of my study do not represent all residents within the natural boundaries of the Anacostia Watershed; only those residents who participated in the study.

To select specific neighborhoods in which to conduct my study I used a non-probability sampling technique known as judgment sampling. In my study, I wanted the neighborhoods to be located east of the tidal Anacostia within the District of Columbia. I wanted the neighborhoods to be located relatively close to the banks of the river, but spatially apart from each other. I also wanted the neighborhoods to have different social and economic characteristics. These different dimensions suggest possible differences within the greater Anacostia watershed.

While this is not a representative sample, judgement sampling is an appropriate technique to use when selecting a few cases for intensive studies (Bernard 1995:96).

Using an ordinary road map, I selected neighborhoods situated at different points along the tidal Anacostia inside the District of Columbia. I purposefully selected two neighborhoods located relatively close to the eastern bank of the Anacostia in hopes that the residents of these neighborhoods would have the strongest personal relation to the river and therefore be more inclined to participate in my study. In the cases of River Terrace and Barry Farm, the neighborhoods are, geographically, the closest neighborhood to the Anacostia’s banks at the point where it flows past each neighborhood. In the case of Congress Heights, the neighborhood is relatively distant from the banks of the river and even further from access to the river due to the location of Bolling Air Force Base. The distance and the separation of Congress Heights from the river allowed me to test my assumption that the closest neighborhoods would have a stronger relation to the river.

3.20 Interview Design

I gathered qualitative information about residents' relations to the river and their perceptions of community through open-ended, semi-structured interviews with residents of the three neighborhoods. Qualitative information is information expressed in words, not numbers. Open-ended interviews are composed of questions that do not provide participants with multiple choice answers from which to choose. Instead, participants answer the questions in their own words. Open-ended questions help the researcher to understand the natural organizing categories and viewpoints of each participant rather than implicitly imposing one in the design of the interview questions. Open-ended interviews also allow the researcher to get precise information from participants by asking probing and clarifying questions (Andranovich and Howell 1995:9).

A semi-structured interview is a method in which the researcher asks participants to answer a series of questions. This type of interview is called "semi-structured" because the partners in the process (the person asking and the person answering the questions) are both aware that they are participating in a purposeful interview. They both know that their conversation is more than just casual "chit-chat". Semi-structured interviews are based on a clear plan, or a list of questions, that the researcher develops and writes down. During the interview, the interviewer asks the questions in a particular order (Bernard 1995:209). Semi-structured interviews differ from more formal, structured interviews which expose every participant to the exact same questions. Instead, semi-structured interviews are more flexible. They allow the researcher to ask the participant clarifying and probing questions about their responses. To a certain degree, semi-structured interviews allow the participant to lead the interview. The researcher balances this freedom with the prepared list of questions. Semi-structured interviews also treat the participant as a partner in the interview process, rather than as a faceless respondent. This feeling of partnership can increase the level of comfort between the participant and the researcher and increase the participant's interest in the results of the study.

I designed the interview questions to collect information about the following three categories:

- Internal states;
- Reported behaviors; and
- Perceived social, physical and natural environment.

I intermingled the questions reflecting these different categories throughout the interview. I began the interviews by asking questions relating to the environment in general and then more specifically, to the Anacostia River. Following this line of questioning, I asked participants questions about their community.

I organized the questions in this order for three reasons. First, I was primarily interested in learning how participants related to the Anacostia River. Since I conducted the interviews over the telephone, I wanted to ensure that I covered these questions before a potential interruption occurred, such as a visitor to the home of the participant, or an important phone call on the other telephone line, that would jeopardize the continuation of the interview. Secondly, because I used open-ended questions, some interviews lasted as long as an hour. An hour is an extremely long time to hold participant interest. Therefore, I wanted to ask the questions I was most interested in first, before participants grew tired of the interview. Third, I assumed that the questions asking participants about their community were a little more personal. By asking these questions later in the interview the participant and I had an opportunity to build rapport, thereby increasing their comfort with answering my questions.

I asked each participant thirty (30) questions. I began each interview by identifying myself, explaining the study and assuring the participants of the confidentiality of their identity should they accept my invitation to participate. I asked participants sixteen (16) questions to attempt to understand their internal states, including their perceptions, meanings, attitudes, opinions, and knowledge, regarding the Anacostia River and their community. Eleven (11) questions pertained specifically to the river and five (5) to the community. Examples of these types of questions are:

- “What are the first things you think about when you hear word ‘environment’?”
- “How do you feel when you see the river?”
- “What are you most proud of in your community?”

I asked participants seven (7) questions about their personal behaviors. I refer to this variable as *reported* behaviors because they are solely based on the responses of participants and are not supported by actual observation of such behaviors. Four (4) questions pertained to the environment, and three (3) pertained to participants’ communities. Examples of these types of questions are:

- “How do you use the Anacostia?”
- “Is there anything you have done to protect or restore the Anacostia?”
- “Where would you take a visitor to show them your community?”

I asked participants eight (8) questions about how they perceived their surrounding social, physical and natural environment. Although responses to these questions reflect the subjective, internal perceptions of participants, I choose to summarize them separately from those questions I categorize as internal state questions. In this case, two (2) questions of this type related specifically to the Anacostia River, the other six (6) related to the community. Examples of these types of questions are:

- “How would you describe the Anacostia to someone who has never seen it?”
- “How have you seen your community change?”
- “Is your community beautiful?”

My experiences observing neighborhood events informed the questions I asked in the interviews and provided me with knowledge of each neighborhood’s physical layout. My awareness of the physical layout of these communities was an advantage during the actual interviews because I had a better understanding of particular places participants referred to. This understanding also reduced the extent to which participants considered me an outsider and a stranger. Please see Appendix C for the actual list of interview questions.

3.30 Interview Participant Selection

Just as time, money, and the size of my research team (myself) made me purposively select particular neighborhoods located east of the Anacostia, I also had to purposefully select a portion of each neighborhood’s residents to interview. In order to select neighborhood residents, I used another non-probability sampling technique called snowball sampling. Like judgement sampling, snowball sampling is commonly used in neighborhood studies (Bernard 1995:97). In a snowball sample, the researcher contacts one or more key individuals in the neighborhood and asks them to

name other residents who the key resident thinks would be likely to participate in the study (Bernard 1995:97). In a snowball sample, people who are better known in the neighborhood have a better chance of having their names mentioned. Therefore, since not every resident has an equal chance of being selected, snowball sampling is not a representative sample. As such, the results of my interviews do not represent all the residents of a particular neighborhood.

The selection technique provided a better indication of general resident relations to the Anacostia River rather than sampling through the membership of local environmental organizations. My concern with using the latter approach was that it could skew interview responses. I assumed that an individual's involvement with an environmental group predisposed them to have a greater awareness and concern for the environment. Selecting participants from the community perspective allowed for the inclusion of environmental activists, but did not exclude residents who were not necessarily members of such organizations.

3.40 Gaining Access to Selected Participants

To select residents to participate in these interviews I sought to present my project and its purpose to local level leaders, such as the presidents of the local community organizations in the selected neighborhoods. In order to identify and gain access to these leaders, I networked through my EPA mentor and my SFAA faculty mentor, both of whom had experience working or conducting research in neighborhoods east of the Anacostia. After identifying the local leaders and their telephone numbers, I contacted them by telephone and requested some time at an upcoming meeting to present my project in person, meet local residents and arrange to conduct person to person interviews. In some cases these leaders suggested I attend an upcoming community-wide event which would provide me with the opportunity to meet local residents. Through my snowball sampling I received a number of names and telephone numbers of local residents. However, this did not guarantee that those I contacted agreed to participate in the interview.

Due to reasons which I discuss in Appendix E, I eventually resorted to interviewing residents referred to me by community leaders by telephone. Although using the telephone increased the convenience of contacting local residents, it also increased the difficulty of gaining their participation in the study. I think this difficulty was due to their suspicion of answering the questions of a total stranger, even though I referred to the community leader who gave me their name when I introduced my project. Besides this drawback, telephone interviews do have advantages.

- Telephone interviews have the impersonal quality of self-administered questionnaires (they are not intimidating) and the personal quality of face-to-face interviews (they allow the researcher to ask probing questions and to clarify unclear questions).
- Telephone interviewing is inexpensive and convenient.
- The respondent does not react to the appearance of the interviewer, although respondents do react to accents and patterns of speech (Bernard 1995:262).

3.50 Potential Biases of Research Design

Bias is the inadvertent influence of the researcher on the research design, the information collected, and on the manner results are analyzed. Bias is present in any research study performed outside of a laboratory where the researcher can virtually control all aspects of a study, such as a chemical experiment. However, studies involving living people take total control out of the researcher's hands, opening the study to potential bias. Bias affects the validity, the accuracy and the trustworthiness, of the results of a study. One way to address potential biases is to openly

point them out so that readers are aware of them as they interpret the results.

Bias may be present in a study in a variety of ways. These include the presence of the researcher him/herself during data collection, the design of the questions used to collect the data and the sampling procedures. The personal characteristics of the researcher, such as personal opinions, attitudes, experiences, perceptions and his or her race, sex and age can inadvertently influence the results of a study. One potential bias in the data I collected for this study may be the fact that I am a young Caucasian male conducting interviews with, primarily, older female African-American residents. These different personal characteristics may have influenced their responses to my questions. One way a researcher can overcome this bias is to build trust and rapport by maintaining frequent contact with those participating in a study.

Another potential source of bias in a research study is in the design of the research process. Examples of process bias may be implicit in the way the researcher designs an interview, words the questions and selects participants. Testing interview questions on others before actually using them to collect information for a study is one way to remove such bias and ensure that the questions are clear and not confusing or too personal. Unfortunately, due to the time constraints of my project I did not field test my interview questions with local residents. The questions were reviewed by my EPA and SfAA mentors. Process bias may also be present in selection techniques. Random samples are designed to remove selection bias by providing each individual with an equal chance of being selected to participate in the study. However, I used non-probability samples that are intrinsically not random. One potential bias in how I selected participants is that community leaders may have referred me to individuals who they considered to be involved in community activities and/or concerned about the community. A second potential bias is that I targeted leaders of community associations whose memberships may only represent the sentiments of a minority of the community. A third potential bias is that most of the participants I interviewed were female. Although I received the names of males through the snowball sampling technique, most males chose not to participate in the interviews.

Chapter 4: RESULTS

4.10 Neighborhood Diversity

River Terrace, Barry Farm, and Congress Heights are similar in general ways. Each is located within the District of Columbia, each has a super majority of African-American residents, and each is located east of the Anacostia River within the natural boundaries of the watershed. The neighborhoods also have their differences. Such differences include their spatial relationships to the Anacostia and the degree to which they are bound by natural areas or physical (human-made) development. The neighborhoods differ in their visual appearance, such as by type of dwellings, landscape and nearby natural features. River Terrace, Barry Farm and Congress Heights also differ demographically, including by level of income, population, level of educational attainment, and percent of occupied households owned in comparison to those rented.

4.11 Spatial Diversity of River Terrace, Barry Farm and Congress Heights:

I used geographic data from a common road map to design the research study and to analyze the spatial differences between each neighborhood and between each neighborhood and the Anacostia River. Using the map to guide my judgment sampling, I identified three geographic dimensions of difference between the three neighborhoods.

First, I recognized that one of the geographic differences between these neighborhoods is their closeness to the eastern bank of the river. I approximated the distance of each neighborhood from the river by measuring on the map from roughly the center of the neighborhood to the eastern bank of the Anacostia, “as the bird flies”.

River Terrace is located directly on the Anacostia’s banks. It is separated by a narrow strip of parkland called River Terrace Park that is managed by the National Park Service. According to my measurement technique, River Terrace is less than 1,500 feet (less than a 1/4 mile) from the banks of the Anacostia, although portions of it are within twenty feet of the river.

Barry Farm is also the easternmost neighborhood in relation to the stretch of the Anacostia which flows past it. Unlike River Terrace, Barry Farm is separated by a wide stretch of park land called Anacostia Park (also managed by the National Park Service), Interstate 295, and the tracks and the fence surrounding the Firth Sterling Railroad. The highway and the railroad reduce residents’ direct access to Anacostia Park and to the river. According to my measurement method, Barry Farm is less than 4,000 feet (less than 3/4 of a mile) from the

Anacostia. However, residents must travel north or south along the railroad and the highway to gain access to the park and to the river.

Congress Heights is the furthest neighborhood from the banks of the Anacostia. It is located southeast of the Anacostia, close to the border between the District and Maryland. The distance of Congress Heights to the river is one barrier between residents and the river. The other barrier to local access is Bolling Air Force Base situated along the southernmost section of the Anacostia. Disregarding the base for reasons of comparison to the other neighborhoods, the distance between Congress Heights and the Anacostia is less than two miles. Although each of these neighborhoods differ in their spatial relation to the Anacostia all are included within the river’s watershed.

Geographic information also illustrated the geographic and political differences between each community. River Terrace is the northernmost neighborhood of the three. It is located in the

Northeast quadrant of the District of Columbia and is part of Ward 7. Barry Farm is located a little over three (3) miles south of River Terrace. It is in the Southeast quadrant of the District and part of Ward 8, Advisory Neighborhood Commission (ANC) 8A. Congress Heights is located approximately two (2) miles south and east of Barry Farm, also in the Southeast quadrant of the District. This area is locally referred to as “Far Southeast”. Congress Heights is part of Ward 8, ANC 8E.

Geographic information also illustrated differences in the degree to which each neighborhood is bound by natural areas, such as the river, and planned developments, such as major transportation corridors. River Terrace is bound on all sides by both natural and planned boundaries. The Anacostia River creates the neighborhood’s northwestern boundary. The Potomac Electric Company (PEPCO) plant bounds the neighborhood to its northeast. A major transportation corridor, Kenilworth Avenue, forms the southeastern boundary of the neighborhood. River Terrace’s southwestern side is bordered by East Capitol Street, another major transportation corridor.

Barry Farm is also a tightly bound neighborhood primarily due to the planned development of major transportation corridors and St. Elizabeth’s Hospital. Barry Farm is bound along its northern boarder by Interstate 295 and the Firth Sterling Railroad and Suitland Parkway. Interstate 295 then turns south to also form the western boarder of the neighborhood. The contours of Suitland Parkway, a major transportation corridor to speed suburban Marylanders in and out of the District, bound the eastern side of Barry Farm. The campus of St. Elizabeth’s Hospital bounds the neighborhood to the south.

Unlike River Terrace and Barry Farm, Congress Heights is not bound by major transportation corridors that make entering or leaving the neighborhood difficult, nor natural boundaries that make passage impossible. Congress Heights is larger and more spread out than either River Terrace or Barry Farm.

4.12 Visual Diversity of River Terrace, Barry Farm and Congress Heights

In order to support the apparent geographic and spatial differences between these three neighborhoods I visited each neighborhood by car to gather visual data about their appearance. This method is of course biased by my own perceptions, but it is an effective and convenient way to make relative comparisons between the appearance of different neighborhoods. These visual trips also familiarized me with the landscape, street names, and the general appearance (e.g., cleanliness, types of dwellings, mixture of commercial, industrial and residential land use) of each neighborhood.

Based on my initial observations, River Terrace consists predominantly of single-family dwellings. The neighborhood gave me the impression that it was quiet and that many of its residents took pride in the appearance of their homes. Many dwellings showed signs that their owners had made investments of both time and money to keep them in good repair and to enhance their appearance. On the porches of some of the dwellings facing the Anacostia River residents had placed professionally printed signs which read, “No Theme Park on the Anacostia River.” The trip to River Terrace also supported the geographic data which suggested that River Terrace is a bound by natural and physical features. Even with a street map in hand, it took me a couple of wrong turns before I actually found an entrance into the neighborhood.

Based on my observations, Barry Farm differed visually from River Terrace in the type of dwellings which appeared most common in the neighborhood. The common Barry Farm dwelling is a slender, two-story, single-family, attached dwelling. Each attached dwelling is identical in

design and color. Some dwellings appeared to be in better upkeep than others. There is a recreation center with a swimming pool located in the neighborhood and an elementary school. On my initial trip to Barry Farm, I noticed a number of residents had made efforts to enhance the appearance of their property by planting flowers and customizing their backyards with patio furniture, such as chairs, tables and umbrellas.

My initial visits to the Congress Heights neighborhood were to observe community efforts to cover gang graffiti on the retaining wall of a local elementary school with a 300 foot long mural portraying positive African-American role models. These initial visits formed my visual observations of a small portion of the Congress Heights neighborhood. The most apparent types of dwellings in Congress Heights are multi-family dwellings, in the form of low-rise apartments. The buildings and the grounds surrounding these dwellings appeared to be well trimmed and clean. Unlike River Terrace and Barry Farm, which are relatively flat, a number of large, steep hills dominate the landscape of Congress Heights. My observations during these visits also supported the geographic data which showed the role of Bolling Air Force Base in physically separating the Congress Heights neighborhood from the Anacostia River.

4.13 Demographic Diversity of River Terrace, Barry Farm and Congress Heights

In order to support my initial impressions of these three different neighborhoods I also collected demographic data on each neighborhood. This dimension of difference among the three neighborhoods is based on demographic data from the 1990 Census Report. The geographic units, or blocks, for which the Census Bureau gathers and organizes demographic data, match the boundaries of the neighborhoods suggested by my road map.

The following table compares selected demographic data of two political wards and the entire District of Columbia. As the following table (Figure 4.13B) illustrates, the wards in which I conducted this study, Ward 7 (River Terrace) and Ward 8 (Barry Farm, Congress Heights), are among the most disadvantaged areas within the District, even though they are home to the largest percentage of native Washingtonians. The physical layout of the different wards is illustrated in Figure 4.13A, the 1990 Census map for the District.

Figure 4.13B: Comparison of Selected Demographic Characteristics between Wards 7 & 8 and the entire District of Columbia

Characteristic	Entire District	Ward 7	Ward 8
Percent of native population born in District	43.6	58.9	58.1
Percent high school graduate or higher	73.1	64.3	61.3
Percent college graduates	33.3	11.7	8.0
Median household income (1989)	\$30,727	\$25,556	\$21,312
Median family income (1989)	\$36,256	\$29,408	\$21,881
Per capita income (1989)	\$18,881	\$12,324	\$ 8,967
Percent of population below poverty status (all persons)	16.9	20.2	28.1
Percent of males in labor force	71.3	65.6	68.2
Percent of females in labor force	62.1	60.2	59.6
Percentage of teenagers (16-19 years) not enrolled in high school and not high school graduates	13.9	19.7	21.6
**Percent of housing units built between 1980 and March 1990	4.2	2.2	9.1
^Percent of housing units built before 1940	37.7	15.2	8.7

(Source: Data Management Division, Office of Planning, Government of the District of Columbia 1992)

** The large percentage of housing units in Ward may suggest that suburban development continues, or that previously built structures were replaced with new ones.

^ The small percentage of housing units built before 1940 supports the historical information of hasty suburban development in the past fifty years in areas east of the Anacostia River.

The following table (Figure 4.13C) compares River Terrace, Barry Farm and Congress Heights based on selected demographic characteristics. These characteristics show the demographic diversity among neighborhoods east of the Anacostia. For example, the median family income in River Terrace is twice the mean family income in Barry Farm. Differences in the percentage of residents who own their homes rather than rent them and the percentage of families below the poverty line also stand out as noticeable differences.

Figure 4.13C: Comparison of Selected Demographic Characteristics between Study Sites

Characteristic	River Terrace	Barry Farm	Congress Heights
Population (all persons)	2,264	2,683	4,475
Race (Black/White, Other, Hispanic Origin combined)	2,241/33	2,666/217	4,392/91
Total Housing Units~	1034	1047	1684
Occupied Housing Units	1008	813	1434
Owner Occupied Housing Units (% of occupied units)	748 (74.2)	75 (9.2)	286 (19.9)
Renter Occupied Housing Units (% of occupied units)	260 (25.8)	738 (90.8)	1148 (80.1)
Educational Attainment: High School Diploma*	65.5%	42.3%	60.2%
Educational Attainment: Bachelors Degree**	8.2%	4.3%	7.1%
Children to 1,000 Women, 15-24 years	314	577	701
Number of Families#	606	611	1096
Median Family Income	\$31, 992	\$13,594	\$25,205
Percent of Families w/ Income below Poverty Level	6.1%	42.9%	31.3%
Number of Families w/ Income below Poverty Level	37	262	343
Number of Households^	1,042	786	1,451
Number of Households Receiving Public Assistance Income (% of households)	36 (3.5)	272 (34.6)	409 (28.3)
Number of Female Householders§, no Husband Present with Income below Poverty Level	32	230	310
Number of Female Householders§, no Husband present with Income below Poverty Level and Children (<18 years)	20	221	273

(Source: United States Census 1990)

~ According to the U.S. Census a “housing unit” is a house, apartment, mobile home, group of rooms, or single room occupied as a separate living quarter.

* Denotes Educational Attainment of a High School Diploma and up, but not a college degree.

** Denotes Educational Attainment of a Bachelors of Arts degree and up, but not a Masters degree.

The U.S. Census defines “families” as the householder and one or more person(s) related by birth, marriage, or adoption.

§ The U.S. Census defines “householder” as the person or one of the persons in whose name the home is owned, being purchased, or rented.

^ The U.S. Census defines “household” as all persons occupying a housing unit.

4.20 Observations of Community Events

Participant observation is a common technique used by anthropologists to gather information while actually participating in a particular event or situation. Participant observation means that the researcher is collecting visual data about how people behave in a given social situation. By also participating in the activity, the researcher can gain a better understanding of why participants act the way they do and the meaning they attribute to the activity.

Observations I made during four site visits to community events in the Barry Farm and the Congress Heights neighborhoods suggest the nuance between efforts where community members are personally involved in community-based efforts and where they are simply the targets of efforts of groups entering the community from the outside. All four events were held outdoors. Each event appeared to have been organized, to a degree, through partnership between the particular service group and the community leadership. I did not collect information about how each event was publicized.

Attending two events organized by public health and service oriented groups revealed rather low attendance of local adult residents. One event occurred on the outskirts of Congress Heights, the other, across the street from Barry Farm. Both events occurred outdoors on the weekends with cooperative weather. Both events also included free food for participants. One event had scheduled city politicians to speak, most of whom failed to appear. Most of the attendees at these events appeared to be the volunteers and the community leaders who helped organize the events. Other than them, most participants were children. Additionally, the actual community affiliation of those attending could not be confirmed by mere observation. In one case, the event was primarily attended by participants who were transported by the sponsoring group from another part of the city.

Informal interviews with the organizers of both events revealed that they were disappointed with the low level of attendance by residents of the neighborhoods in which the event occurred. However, they also indicated that the fact that residents showed up at all was enough to consider the event a relative success. As both of these events occurred in different neighborhoods during July, the rather low attendance may also be due the tendency of residents to take vacations during the summer while their children are on school vacation.

Of the two other site visits, one occurred in Barry Farm toward the end of August, the other occurred in Congress Heights in early September. Both of these events occurred, outdoors, during the week, with cooperative weather. Food was provided at only one of the events. In comparison to the previous two site visits, these two community events had a higher degree of resident participation. Both events celebrated the efforts of local residents.

The event in Barry Farm celebrated the efforts of local residents who planted, weeded and watered their own plots in a community garden over a period of months. The organizer of the event (and the garden) kept an office at the community center. The service organization sponsoring the event also sold organically grown vegetables to participants.

The event in Congress Heights also celebrated the efforts of the community. This event occurred in early September, when school children would have been back in school had not the opening of the District's schools been delayed three weeks for repairs to some school buildings. The event dedicated the transformation of a retaining wall at a local elementary school that was once covered by gang related graffiti into a colorful mural depicting positive African-American role models and activists, such as Frederick Douglas. This particular project originated among community members who were concerned about the degree of violence in their community and its

effects on their children. The community group eventually partnered with a community service group to help with funding and organizing the project. A committee formed of community leaders, community members, the school principal, a representative of the community service organization, and representatives from Metro, the National Park Service, and the District's Department of Public Works made decisions related to the project.

Informal interviews with the two artists of the mural demonstrated the involvement and the dedication of local residents. According to the artists, local residents visited the wall to assist in its painting, donated supplies, provided lunch and refreshments during the hot summer, and even provided security for the artists after they were robbed of their paints and brushes. This event had the highest local attendance of the four I observed. Speakers at the event included the committee members, as well as local politicians and city council members. A surprise appearance was even made by the Superintendent of District of Columbia public schools.

4.30 SUMMARY of INTERVIEW RESULTS

The following sections summarize the responses of local residents who participated in the open-ended, semi-structured interviews I conducted from August through September, 1997. Those residents who agreed to participate in the interview comprise a small, non-representative sample of the larger neighborhood. As such, I choose to summarize the results qualitatively, in words rather than numbers. Due to the small size of the sample, percentiles would deny the richness and the color of participants' actual responses. In order to protect the privacy of participants and to encourage them to respond openly and honestly to my interview questions, their identities shall remain anonymous.

To summarize the interview results I analyzed the interview responses for their latent content and grouped similar responses together. Latent content refers to the underlying meaning of the responses. I choose to report the most common types of responses to each question. I also include actual comments of participants to flavor the summary and to give them an opportunity to have their voice heard by a larger audience. In some cases, I have also included certain comments that I considered particularly interesting, even though they may have been mentioned only once. The following sections are grouped first by neighborhood and then subdivided by the following categories: internal states, reported behaviors, and perceived social, physical and natural environment.

4.31 Barry Farm

Ten (10) residents from the Barry Farm neighborhood volunteered to participate in the interview. Every participant is female, whose age ranges from early thirties to middle sixties. Participants lived in the neighborhood from as recently as three years ago to as long as 36 years.

4.311 Barry Farm: Internal States

Participants most commonly agreed on about five components necessary to have a decent quality of life. These included having "good" jobs, defined as good working conditions and a secure income that can provide a decent standard of living. According to participants, two other common components of a decent quality of life are surroundings that are free from crime and that provide a good environment for children, including safe play areas, and mechanical (basic motor skills) and spiritual developmental programs to complement their formal education. Two other components of a decent quality of life included a good physical and social neighborhood, particularly well kept buildings, homes and streets, and participation by residents in the social life of the neighborhood.

Most residents considered their community and its surrounding physical and social aspects when they heard the term “environment”. Particular aspects included the upkeep and cleanliness of neighborhood yards and homes. According to one resident, this included keeping the “flowers and the grass cut and keeping everything clean of trash to prevent rats.” Barry Farm participants also commonly thought of crime when they thought about their “environment”. According to one participant, the term “environment” evoked thoughts about, “drug use, lack of police, [and] protecting the safety of the kids -- when it’s dark, we’re inside.” A few participants mentioned aspects of the natural environment, such as air, water, trees and pollution. In commenting on resident efforts to keep the community clean, one participant combines the social and the natural meanings of the term “environment”:

Sometimes Public Works comes and works all around the area and some things can’t be done by us alone, like [cutting] the tall grass in the open spaces where rape victims and drugs are stashed.

Almost every Barry Farm participant was aware of the human health risks involved in consuming fish caught in the Anacostia River. Almost every participant considered the Anacostia to be polluted. Of those who considered the Anacostia polluted, most considered the people who dump trash into the river to be the primary cause of the pollution. A few participants also considered the Navy Yard to be a contributor to the river’s pollution. According to one participant, the cause of the Anacostia’s pollution is:

A lot of dumping So many things -- cars and their oil, gas[oline]. The Navy Yard -- they have a factory over there and a lot of their waste goes into the river, like Blue Plains. A lot of feces is dumped in there. Hospitals at one time were dumping, but the ANCs got together and that ceased. We need to [get together] more often.

Most Barry Farm participants received information about the Anacostia and the natural environment from television and newspapers. A few participants also received information by attending meetings and seminars organized by environmental groups.

Participants expressed interest in learning more about a variety of topics related to the Anacostia and the natural environment, including: the history of the river and surrounding areas, ongoing efforts to make the river safer and cleaner, and the drinking water purification process. In the words of one participant:

Info sheets about the history of the Anacostia and the area east of the river would be good because they will make people care more.

Participants most commonly agreed on three different parties they considered responsible for cleaning the Anacostia. These included local people themselves, the federal government, and the District of Columbia government, specifically the Department of Public Works. According to one participant:

The government can’t do everything, people are also responsible for the pollution The government needs to do something to get people involved because right now people don’t care. Lots of people don’t do anything about it because if they don’t see it, they don’t care.

Participants cited a variety of feelings they have when they see the Anacostia. For some participants the river sparked memories of earlier periods of their lives, such as when their children

were still young, and of past family reunions held in the park along the river. Other participants also felt feelings of sadness and of frustration about the current condition of the river. Other feelings included a sense of calm and relaxation, personal contentment, and spiritual requests for the river's improvement.

Most participants were not aware that the acronym "EPA" stands for the Environmental Protection Agency. Similarly, most participants were not familiar with the term, nor the meaning of "Environmental Justice". A few participants commented that this term sounded familiar, but were unclear about its meaning.

Most participants considered the term "community" to be composed of three components: people, a common place, and a sense of caring and togetherness that binds the people together. Other participants included caring about the common place, as well. The following participant responses demonstrate how participants combine these three components:

We all stand together and help each other to make our community a better place

A gathering of neighbors, businesses and organizations getting together and caring about each other, kids, property and the environment -- about everything -- beliefs, religion, and needs.

Most participants referred to their community as "Barry Farm" the same name as the neighborhood.

Participants considered a variety of things, both physical and social, to lie at the proverbial center of their community. Participants most commonly considered the Barry Farm Community Center to lie at the center of the community. Other "centers" included the children and the senior residents of the community, as well as the neighborhood's families and certain issues, such as crime and drugs.

Just as participants considered the community center to lie at the center of their community they also considered it to be that which they are most proud of in their community. Other sources of Barry Farm community pride included the residents who maintain their homes and yards, the children, and participants' personal impacts on the community.

Most participants considered the Anacostia River to be a part of their community rather than a boundary between their community and others. One participant, however, had a slightly different perspective:

It's both a part [of the community] and a boundary. It's part boundary because on the other side of the river things get done, but east of the river people don't band. When we have meetings to discuss issues, people don't come out. Until you participate you won't get anything done.

4.312 Barry Farm: Reported Behaviors

Almost all Barry Farm participants considered the Anacostia to be a part of their life. They reported that they used the river in a variety of ways. One of the more common uses was that the park alongside the river provides participants a safe place to take their children to play. Participants also reported that they used the river in the sense that they had to cross over it to get to the other part of the District of Columbia. Participants also reported that used the river as a source of relaxation and meditation. Other, less common uses, included family reunions and picnics. According to one participant:

I walk to Anacostia Park. I sit by the river and meditate . . . I take my kids there to ride their bikes because I think it's safer.

Most Barry Farm participants do not presently use the river to boat, fish or to swim. A few participants did, however, report that they and their children used to fish and rent boats in the Anacostia. One participant did respond that she continues to use the Anacostia to fish and swim in. Some participants also indicated that some Barry Farm residents continue to consume fish caught in the Anacostia. According to one participant:

My neighbor fishes every day. He keeps the fish and gives them to neighbors. I think he catches perch and catfish.

Participants are primarily involved indirectly in efforts to protect and restore the Anacostia. Most participants reported their personal efforts to properly dispose of their trash, rather than to leave it in the street or to dump it directly into the river. According to one participant:

I put my trash in the trash-can to keep it out of the river. I also separate it and recycle. I tell the kids to keep their trash off of the street.

Some participants also attended meetings organized by local environmental groups and Advisory Neighborhood Commissions (ANC) about issues facing the Anacostia. Only one participant reported direct involvement in a riverside clean-up. Those participants reporting no involvement did mention that they were aware of efforts to restore the river but chose not to participate.

Every Barry Farm participant has children, and in some cases grand-children as well. Almost all participants reported that their children had opportunities to experience nature. Participants reported that the Anacostia River and the park were the most common natural areas in which their children experienced nature. Other areas and opportunities included field trips

organized by the Barry Farm community and recreation centers and family trips to Maryland and West Virginia and Colorado.

The most popular places participants reported they would take a visitor to show them their community were the recreation center, the community center, and the well-kept yards and homes of Barry Farm residents. Other places included the Anacostia Museum and the home of Frederick Douglas. Only one participant mentioned the Anacostia River.

Participant responses varied about where they would not take a visitor to their community. Some participants reported that there were no parts of their community they would avoid. Other participants held reservations about certain places, including the Anacostia River, the woods, the alleys and a particular street within the community that some participants associated with criminal activity. A number of participants also qualified their statements by reporting that they would not take a visitor any where after nightfall. According to one participant, "I would not take them out after dark. I don't go out myself because of the crime."

Participants mentioned a variety of events that bring their community together. These events included holidays, community center-sponsored activities and trips, local sporting events sponsored by the recreation center and Barry Farm Day. According to one participant:

Last 4th of July was nice. The recreation department brought stuff for the kids . . . people all came out together, it was like the whole crew came back, everybody felt safe -

- it could really be like that all the time.

Other participants felt that there were no events that bring the community together. According to one participant:

The community and the rec[reation] centers do things, but people aren't interested in participating. I wish I knew why, I'd think we'd solve a lot of these problems.

Most participants reported regularly attending religious worship services. Less than half of these participants attended worship services at places of worship within the community.

4.313 Barry Farm: Perceived Social, Physical and Natural Environment

Barry Farm participants described the Anacostia River in a variety of ways. Participants most commonly described the river by referring to how it was in the past in comparison to their perception of its present condition. In some cases they described the river both positively and negatively. For example:

It used to be a beautiful sight, now it's dirty and polluted. In this area it is very displeasing to the eye, but some parts are beautiful.

Some participants only described the positive aspects of the river, such as the park, the river's historical value and the soothing feelings it can foster. In the words of one participant, "It's a pretty river during the day and at night when the boats light up." Other participants described the river in a negative way:

"It has trash, clothes and bottles in it";

"People are using the river to dump needles and hazardous stuff."

Of those participants who perceived changes in the river, most reported that they perceive negative changes. These changes include that it is now dirtier, that fish can no longer be safely consumed, and that its odor has worsened. A few residents did perceive positive changes in the river. These included an increase in the number of volunteers at riverside clean-ups and the "trash boat" operated by the Department of Public Works.

The two most common attributes participants mentioned when describing their community were that it is composed of warm people and that the degree of crime and trouble within the community is bad. According to some participants:

It's warm in many ways, quiet most of the time, and has nice scenery -- trees, gardens, children playing and laughing.

There's an open-air drug market down the street. You can't go outside at night because you don't know what will happen.

I used to go to the [Anacostia] park with my daughter when I lived in [another part of the District], but now I stay at home because I feel unsafe to go anywhere.

Participants perceived the negative effects of the entrance of new residents into the community as the most common change in their community. In the words of one participant:

Older parents are moving on and younger parents are not giving guidance to their children, they're not as understanding. At one time, when a child got hurt, everybody's

child was hurt . . . I remember when neighbors would sit and talk with one another . . . now it's unsafe, kids are disrespectful. They have a "no care" attitude. At one time you could tell a child something was not right and they would listen. Now, you put yourself with a few and you have to be afraid how they will come back at you.

A few participants reported the exact opposite. They perceived positive changes in the community, such as reduced crime and more community unity.

Most participants perceived that the well-kept homes, yards and gardens of residents to be the beautiful things in the Barry Farm community. Others mentioned that seeing people "get along" was another beautiful aspect of their community. A few participants did not perceive anything about their community to be beautiful.

4.32 River Terrace

Six (6) residents of River Terrace volunteered to participate in the interview. Of these six, five are female and one is male. Participant ages range between early thirties and seventy-four years old. Interview participants reported having lived in the neighborhood for as little as less than one year, to as long as thirty-five.

4.321 River Terrace: Internal States

River Terrace participants most commonly considered financial security and personal safety as the necessary components of a decent quality of life. Other components included a good education and material items, such as a car.

Most participants thought of the three environmental mediums, air, water and land when they heard the term "environment". A few participants referred to the condition of the surrounding built, or physical, environment such as the cleanliness and the decency of the neighborhood.

Every participant was aware of the risks of eating fish caught in the Anacostia River. They also unanimously agreed that the Anacostia is polluted.

Participants identified a variety of causes of the river's pollution, including the general misuse of the river by people and the discharging of sewage into the river. Participants also mentioned sediment build-up and emissions by the Navy Yard and by the PEPCO (Potomac Electric Power Company) facility located next to the neighborhood on the banks of the Anacostia. According to one participant, the cause of the Anacostia's pollution is:

Overpopulation and industrialization of the area. Run-off from parking lots because cars emit gas and oil in the parking lots and the rain washes it into the river.

Most participants received their information about the environment by newspapers and television. Other sources of information included workshops and seminars, informal discussion with friends and neighbors, and their own eyes. Once participant received information from a canoe ride along the Anacostia:

I learned that wildlife is reappearing on the water in the past ten years. I saw types of birds and moths which had not been seen in the past ten years. This was a sign that the ecosystem was recovering and the role of ecosystem balance and the role of wetlands were being improved. This canoe trip increased my awareness. I also learned about high cancer and death rates in Ward 7 were linked to pollution from the river.

River Terrace participants most commonly expressed an interest about learning what their community could do to make and keep the Anacostia healthy. In the words of one participant:

I also want to learn how we are going to clean up the environment. How are we going to live with the factories we need to have? Most of the things we use, we need. How are we to continue to use things and protect the environment here, around the country and around the world?

Other topics included learning more about the wildlife of the river, particularly the different types of birds, and about the reasons for the Anacostia's pollution and about efforts to restore it.

Participants considered a variety of parties responsible for cleaning and restoring the river, including the general public, the federal government, specifically the Environmental Protection Agency (EPA), and the District of Columbia government.

Participants experienced different feelings when they saw the Anacostia. These feelings ranged from sadness and concern, to anger. According to one participant:

I feel sad to see the ducks walking versus swimming and the slime against the brick wall along the river.

Other participants said the river makes them feel relaxed and wishful that the community could do more to help. One participant, noting the river's poor current condition in earlier statements, had very little feeling for the river:

I can't say I appreciate the river -- it is just some water flowing past my door. The river might enhance the beauty of the park for some people, but not for me.

Almost every participant knew that the acronym "EPA" stands for Environmental Protection Agency. A few participants were also familiar with the term "environmental justice".

According to one participant, environmental justice means that, "we can go see things done to protect the environment for all of us."

All participants considered "community" to be composed of people sharing a common place connected by a sense of togetherness, including concern for others. According to one participant:

"Community" is a place where a group of people live and raise their families. [It's a place] where people get together and are concerned about where they live and work together to make it as good as they can, safe and nice to be around.

Every participant referred to their community as River Terrace, the same name as the neighborhood. One participant, however, has changed the way she refers to the community:

I used to say "River Terrace" with more enthusiasm because [now] it is slowly being smothered by outside influences.

Participants considered a couple of different places to lie at the center of their community. The most common "centers" included River Terrace elementary school and River Terrace Park along the river. Other "centers" mentioned included the local church and the civic association. According to one participant who grew up in the community:

The civic association [lies at the center of the community]. They prevented a Metro [the District's subway system] stop from coming to River Terrace, but they are mainly older people who have cars. [Preventing the Metro] was not good for the younger people who don't.

Participants were most proud of the well-kept homes of the community and the "sense of community" that they consider to exist in their community. One participant was proud:

That the community has remained the same as long as I can remember. Basically the same as when I was younger. People know each other, parents are still here and kids come back to visit and we run into each other.

Other sources of pride included the local church and the children of the community.

Every participant considered the Anacostia River to be a part of their community.

4.322 River Terrace: Reported Behaviors

Almost every participant reported that the Anacostia is a part of their life. Participants reported using the Anacostia in the sense that they live near it. For some participants, it lies directly across from their doorsteps. Other participants considered the river to be aesthetically pleasing. A few participants reported that the river was a part of their life in a negative fashion, including as a toilet for the city's sewage. According to one participant:

I've lived in [the Northwest United States] for a long time and my son loves to canoe, but he can't do it in the Anacostia because it's too dirty and polluted over here. He [has to] canoe at my girlfriend's who lives in Montgomery County on the northern part of the river.

Not a single participant reported that they currently swim or fish in the Anacostia.

Participants reported direct and indirect involvement in efforts to restore the Anacostia. Participant involvement included: signing up for riverside clean-ups; painting "do not dump" on storm sewers in the neighborhood, writing letters and making phone calls in opposition to the development of an amusement park on Children's Island. Other participants reported that they have never personally thrown any garbage into the river.

Almost every participant has children who have, or had during their youth, opportunities to experience nature. These experiences commonly took place alongside the Anacostia at River Terrace Park.

Participants reported that they would take visitors to their community to a variety of different places, including River Terrace Elementary School, the Anacostia River, River Terrace Park and the park's small flower garden.

Participants reported they would not take a visitor to places like the liquor store in the nearby strip mall and a small playground that participants considered to be frequented by loiterers and customers of the liquor store. One participant reported that she would not take a visitor to the Anacostia River because she considered it "embarrassing".

Participants also reported a variety of events that bring the River Terrace community

together. These events included civic meetings, events centered around the children of the community, River Terrace Day, and block parties.

Every participant reported that they regularly attend religious worship services. Most attended churches located outside the neighborhood. Only one participant reported attending the church inside the neighborhood.

4.323 River Terrace: Perceived Social, Physical and Natural Environment

Participants primarily described the Anacostia River as polluted or dirty. One participant described the river as a “toilet”, another as, “dark and murky”. A few participants did perceive the Anacostia to have the potential to be a beautiful river. Participants also described the Anacostia by its size and its shallowness.

Although some participants remarked that the river looked cleaner, others perceived negative changes, such as an increase in the river’s sediment level and a decrease in its wildlife populations. According to one participant:

The smell has gotten stronger, the silt has gotten higher and the ducks can walk across. We judge how high the silt is by where the ducks have to stop walking and start swimming. . . . It was nice. You would see the ducks walking along with their little families, now you see hypodermic needles and broken bottles along the park.

I used to be able to skip rocks and see fish when they came to the top -- and see the bottom through the water.

According to another participant:

When you’ve lived in this world as long as I have, there was not so much pollution in the air and the water, so now you notice it. Young folks don’t notice it because for them, it’s always been that way.

Participants described their community is a variety of ways, such as “working class”, “Black” “quiet”, and “strictly residential”. Some participants perceived the community to be stable, while others perceived changes.

Participants commonly perceived negative changes in their community. These changes included a decreased quality of life, worsening PEPCO emissions, an increase in crime, and growing indifference among members of the community. According to two participants:

People used to care, they’re indifferent now. Now you can get mugged and people won’t say a thing. Cars are getting stolen. My car has been stolen three times in the past year

and it has anti-theft devices. That type of activity didn’t use to happen. People used to watch out for one another.

About twenty years ago, we had affairs in the park We used to have bands and music in the park and people would go to listen and dance. It was like a little family area. Now you hastily depart when it gets dark.

Participants considered the well-kept homes and property around the neighborhood, the park and the park’s flower garden as the beautiful things in their community. None of the

participants included the river in their responses. According to one participant, “the river is probably the eyesore.” Nonetheless, every participant did consider the river to be a part of their community.

4.33 Congress Heights

Six (6) residents of the Congress Heights neighborhood volunteered to participate in the interview. Of these, five were female and one was male. The ages of the participants ranged from thirty-three to over fifty. Participants reported having lived in the neighborhood from as recently as ten years to as long as thirty-three -- a lifetime for one participant.

4.331 Congress Heights: Internal States

Congress Heights participants considered a variety of elements to be necessary for a decent quality of life. These ranged from elements such as food and employment, to freedom from crime, God, home ownership, education, and recreational opportunities. According to one participant:

We don't have swimming pools, no parks, no nothing. All of those we had, have gone to rot -- the benches done rotted down What I would like to see are recreation areas like they have in Northwest [DC], we don't have them.

Most participants associated the area in which they live with the term “environment”. They specifically thought of the aesthetics and the natural elements, such as air, water, and pollution.

Most participants were also aware of the risks of consuming fish caught in the waters of the Anacostia. Most participants also considered the river to be polluted. There were a few participants who were not familiar enough with the river to know if it was, or was not polluted.

Those participants who perceived the Anacostia to be polluted, considered the primary cause of the Anacostia's pollution to be the people who dump their trash into the river. According to one participant:

You can see the rubbish from the Pennsylvania Avenue Freeway -- cars, tires, everything. And when the tide goes out, you can see all those tires on the shore. That's the cause. And then there are the cars! You've got millions of cars running in and out every day. We can walk out here every day and see the smog.

Most participants received information about the environment from newspapers, television, and their personal observations. Less common sources of information included networking with particular people and reading fliers and bulletins posted throughout the neighborhood.

Participants commonly expressed an interest in learning more about the Anacostia River in particular, and the environment, in general. According to one participant:

This is where I live and someone should know about where they live.

One participant expressed a specific interest:

It's just like they have patrol boats on the Bay, but nobody patrols the Anacostia That's what I want to know. They don't feel bad because we have to live with it. Everybody don't live on the Anacostia -- we do.

Participants commonly perceived the District Government, particularly the Department of Public Works and the Mayor, and the federal government to be responsible for cleaning the Anacostia River.

Congress Heights participants expressed positive and negative feelings upon seeing or thinking about the Anacostia River. For some, the river made them feel relaxed, for others it made them feel bad because of its polluted condition. A few participants had no feelings about the river because they did not consider it a part of their life.

Only one participant knew that the acronym EPA stands for Environmental Protection Agency. None of the participants were familiar with the term “Environmental Justice”.

Congress Heights participants commonly defined the term community by three common attributes, people, the place one lives, and people working together. According to one participant, a community is:

The area in which I live [and] people coming together to make it better.

Not a single participant referred to their community as “Congress Heights”. Most participants referred to their community as Trenton Terrace, the apartment complex in which they lived. Another participant referred to her community as “10th Place” and another as “Mississippi Avenue”:

I think the city calls it Congress Heights, but I call it Mississippi Avenue

Participants considered a variety of things to lie at the “center” of their community. These included the Georgette Washington Activity Center, the recently painted mural along Mississippi Avenue, Oxen Hill park, and the Trenton Terrace Tenants Association.

Participants expressed pride in the social changes in their community. Such changes included a reduction in the level of violence in the community, successful efforts to save the local elementary school from being closed by the District government, and the cadre of dedicated people working together to improve the community. Participants also commonly expressed pride in the recently painted mural located on the retaining wall that forms the property boundary of the local elementary school. According to one participant:

[I’m proud of] the mural because it says, “Yes to Education, Yes to Dedication.” Because they think all Blacks stand on the corner selling dope. There are little people who will see the wall and it will give them self-esteem.

Most participants considered the Anacostia to be too distant to be either a part of their community or a boundary between their community and others.

4.312 Congress Heights: Reported Behaviors

Only a few participants reported that the Anacostia was a part of their life, primarily as something they passed over to get to the rest of the city. Those who did not consider the river to be a part of their life did comment that it had been in the past:

I didn’t visit it that often this year . . . I used to go about a year ago. Sometimes me and my cousin would sit and chill out. [There is] no particular reason why I haven’t gone much this year.

None of the participants currently use the river to fish, swim, or boat in the Anacostia. One participant did report that her relatives fished in the river in past times.

Most of the participants reported that they have not been personally involved in efforts to restore the Anacostia. One participant reported indirect involvement through educating neighborhood children to “love their environment and not to throw their trash on the ground.”

Most interview participants had children and of those, each reported that their children have, or had when they were younger, opportunities to experience nature. These experiences occurred during school field trips, at Bolling Air Force Base, and at parks. One participant preferred not to divulge the “special place” she and her children visit.

Almost every participant reported that they would take a visitor to their community to the recently painted mural. Participants also reported that they would take a visitor to local historical sites, such as the Anacostia Museum and the home of Frederick Douglas. According to one participant:

[I’d take a visitor to] my front window because I have the best view on the street . . . I’d really like them to come in the winter because it looks like a winter wonderland . . . I’d definitely take them to see the mural.

Every participant reported that they would avoid taking a visitor to their community to particular streets in the neighborhood that they considered to be dangerous areas of criminal activity. According to one participant:

I wouldn’t take them out on my street because it’s not a nice environment. It’s a highly drug infested area.

According to participants, there are many activities that bring their community together. Participants commonly agreed that these activities are block parties, church services, and events focused around the neighborhood children, such as holiday parties and school related events.

Of those participants reporting that they regularly attended religious worship services, most attended such services at places of worship located outside of the community.

4.333 Congress Heights: Perceived Social, Physical and Natural Environment

Participants described the Anacostia positively and negatively. According to one participant:

I would describe it as pretty when the sun shines on it and it reflects on the river. It seems calm.

Negative descriptions referred to the river as dirty and polluted. A few participants reported that they were unable to describe the river because they rarely visited it, or did not notice it when they crossed or passed by it.

Most participants were not familiar with the river to the extent that they were able to perceive any changes in it. One participant did perceive the river to be, “cleaner than it used to be.”

Participants chose to describe their community rather vaguely, such as “nice” or “not bad”. According to one participant:

It's really not that bad, but the street is very busy and a lot of negativity has been placed on Southeast.

Another participant described the community as:

Excellent! Except for one thing -- crime. If you could stop the crime this would be the most beautiful place in the world to live.

Most of the changes participants perceived within their community related to their perceptions of its level of violence. Some participants perceived a reduction in the level of violence, others perceived an increase. According to one participant:

When I first moved here you could sit outside and do things with children. You wouldn't have to worry about drive-bys and people walking up and down the street doing drugs . . . My family used to go to Anacostia park, but not since times have gotten bad.

Another participant had the opposite perception of her community's level of violence:

The community has changed from bad to better to good. It used to be rough, you couldn't go out the door. We had people who used drugs living in the building and lots of drug traffic. You couldn't even go down the hall to get your mail. It's a lot quieter now . . . and there's not a lot of people standing around selling drugs.

Most participants perceived their community to be beautiful. Specific beautiful aspects included the mural and the surrounding natural landscape, such as the trees. However, some participants perceived the natural areas in a negative light. According to one participant:

They need to get behind the buildings and weed and cut these trees because of snakes and rats and health reasons like poison ivy. Then you can see when someone is in trouble. You could throw a body back there and you would never know until it starts stinking.

Chapter 5: ANALYSIS OF RESULTS & RECOMMENDATIONS

5.10 Relations to the Anacostia River and the Natural Environment

One way to understand how local residents relate to the Anacostia River and the surrounding natural environment of its watershed is to understand the different ways they value the natural environment. Local residents' environmental values structure the way residents relate to the environment. Individual environmental values are created the same way as other types of values -- through a variety of processes that occur during the lived experiences of a given individual. In some cases, individuals may share similar lived experiences based on their upbringing, age, race, ethnicity, occupation, or place of living (i.e., their community) and thereby possess similar values. According to Kellert (1996:9) environmental values are, "rooted in human biology and shaped by . . . the influence of experience, learning and culture." Kellert (1996) proposes nine different "basic" environmental values. Each value can be used to categorize particular human behaviors and attitudes as they relate to nature. Table 5.1 provides a brief summary of these nine values.

The interview responses of participants from River Terrace, Barry Farm and Congress Heights indicate that participants commonly subscribe to three environmental values, a Negativistic, Naturalistic, and, to a lesser extent, an Aesthetic value (Kellert 1996). Participant responses also suggest that individuals subscribe to these multiple values simultaneously and negotiate among them to structure their everyday relationship to the Anacostia River and their surrounding natural environment.

A Negativistic environmental value is one that evokes threatening and antagonistic sentiments, such as fear, dislike and discomfort with certain aspects of nature in those individuals who relate to the environment in such a way (Kellert 1996:24). Interview participants in all three neighborhoods indicated that they harbor such sentiments toward the Anacostia and to other elements of their surrounding natural environment.

Participant responses support the existence of a Negativistic relation in that participants did not consider the Anacostia River a positive element of their communities. The interview data suggest a positive relation between the sources of community pride and the places where participants reported that they would take a visitor to their community. However, very few participants included the Anacostia River among their list of places that they would take a visitor. Similarly, not a single participant considered the river to be an element of their community of which they were proud. In a very few instances, participants did report that they would take a visitor to the Anacostia. However, these instances were counterbalanced by an equally small number of participants who reported that they would purposefully avoid taking a visitor to the Anacostia River. Participants from each neighborhood reported they would avoid taking a visitor to places they associated with criminal activity and with threats to their personal safety.

Table 5.1

A Typology of Basic Environmental Values		
<u>Value</u>	<u>Definition</u>	<u>Function</u>
Utilitarian	Practical and material exploitation of nature	Physical sustenance/security
Naturalistic	Direct experience and exploration of nature	Curiosity, discovery, recreation
Ecologistic-Scientific	Systematic study of structure, function, and relationship in nature	Knowledge, understanding, observational skills
Aesthetic	Physical appeal and beauty of nature	Inspiration, harmony, security
Symbolic	Use of nature for language and thought	Communication, mental development
Humanistic	Strong emotional attachment and “love” for aspects of nature	Bonding, sharing, cooperation, companionship
Moralistic	Spiritual reverence and ethical concern for nature	Order, meaning, kinship and altruism
Dominionistic	Mastery, physical control, dominance of nature	Mechanical skills, physical prowess, ability to subdue
Negativistic	Fear, aversion, alienation from nature	Security, protection, safety, awe

(Source: Kellert 1996:38)

Not a single participant considered the Anacostia River, in particular, to be a beautiful element of their community. Participants of all three neighborhoods rarely considered elements of the natural environment, in general, to be a source of beauty or pride in their communities. Although participants commonly considered local parks, flowers, gardens and well-kept yards to be both beautiful and sources of pride, these elements of the natural environment are not truly “natural”.

The parks in the neighborhoods and those alongside the river are human-made. The parks alongside the river are actually the sites of the wetlands and marshes that historically lined the Anacostia, but have since been filled by the Army Corps of Engineers. The flower gardens, trees and the yards within the communities are created and/or controlled by human activities, such as weeding, pruning and mowing. Therefore, these elements, although associated with the natural environment, are actually maintained by human activities and subtly symbolize human domination of nature. The interview data suggest that participants are more comfortable with those natural elements that show evidence of human control and domination. On the other hand, those elements left in their natural state are considered in a negative light and elicit sentiments that suggest the presence of a Negativistic relation to the natural environment.

Indications and evidence of a Negativistic sentiment among participants cannot be separated from the social environment that local residents perceive to exist in their urban neighborhoods, or

from the current real and perceived human health threats related to the Anacostia River. Participants in each neighborhood associated the natural areas within their neighborhoods, such as overgrown lots, high grass, trees and underbrush, with criminal activity, such as drug dealing, and threats to their and to their children's personal safety.

Every participant was also aware of the pollution and the human health threats associated with the Anacostia River. As such, participants reported that they no longer used the river as they had in the past. Furthermore, changing social conditions have caused them to reduce their visitation and social and recreational activities in the parks along the river.

Areas left in a natural state in an urban landscape tend not to be frequented by human activity. As such, there is little need to control or manipulate these areas to make them more attractive to human activities, nor is anyone responsible for protecting them from human misuse. Since these areas are not frequented by community members, they may invite human misuse and harbor criminal activities by shielding unlawful activities from the public. The persistent problem of illegal dumping in unoccupied natural areas east of the Anacostia supports this point (Pan 1995).

Personal safety is a common point of concern among all participants and acts as a powerful influence on how residents perceive their local realities and structure their daily behaviors, including their relations to the natural environment. Participants commonly considered personal safety to be a necessary component for a decent quality of life. The perceived level of personal safety was also the most commonly noted change participants noticed within their communities. These data suggest that the degree of personal safety of an area strongly influences the lens through which local residents perceive their surroundings. This suggestion is further supported by the influence of this concern on the daily temporal cycle of some participants who return to the security of their homes by nightfall. The Negativistic value is, therefore, not *a priori*, or universal, due to ethnicity or other theory. Rather, it is related to the surrounding social conditions of the area and the common lived experiences that structure residents' cultural relation to the Anacostia River.

The second common environmental value participants indicated in their interview responses is a Naturalistic value. A Naturalistic environmental value is one that "emphasizes the many satisfactions people obtain from direct experience with nature and wildlife (Kellert 1996:11)." These experiences may occur through organized recreation, such as bird watching trips, fishing, or picnicking, or simply during a casual walk along a path or a riverside. A number of other studies have documented the rewards of a Naturalistic relationship with nature, including relaxation and peace of mind:

Summarizing this research, Roger Ulrich concludes: "A consistent finding in well over 100 studies of recreation and experience in wilderness and urban nature areas has been that stress mitigation is one of the most important verbally expressed and perceived benefits" (Ulrich 1989:203; quoted from Kellert 1996:12).

These experiences and rewards agree with the reported behaviors and the feelings of participants when they visit, use or simply observe the river. Some participants from River Terrace, Barry Farm and Congress Heights commonly felt relaxed, calm and soothed upon visiting or observing the river. Although most participants reported that they no longer use the river as they had in earlier times when they perceived it to be cleaner, the Naturalistic relation still exists among local residents. This relation is now expressed in feelings of disappointment, sadness and anger about the decline of the Anacostia to its current condition. Participants indicated a Naturalistic relation most often when referring to the Anacostia River and its role in their lives during an earlier time when they did not perceive it to be polluted.

The Aesthetic value is another value, evident to a lesser extent, indicated by participants. The Aesthetic environmental value refers to the strong, positive emotions that the natural environment arouses within people (Kellert 1996:14). These emotions are often associated with certain aspects of nature, including view, color, light, contrast and movement. These elements may be considered to be associated with feelings of harmony and order (Kellert 1996:15). Although this value is not as prominent among interview participants as the Negativistic and Naturalistic values, participants did occasionally refer to the visual aspects of the Anacostia and their surrounding natural environment. Such references included the way the light reflects off the water and its contrast to the industrial aspects of the city. Some participants responded that in the winter, snowfall makes the wooded areas in Congress Heights and on Children's Island across from River Terrace look like "winter wonderlands".

Regarding efforts and strategies to involve local residents in restoring the health of the Anacostia River, community-based environmental groups must recognize the prominence of the Negativistic value among local residents. This value may directly conflict with the environmental values of members or volunteers involved with local environmental groups and possibly frustrate their efforts. The manifestation of the negativistic relation to the natural environment among local residents should not be considered an indication that local residents do not care about the natural environment. Rather, the negativistic relation is a reflection of their local realities and lived experiences. On the positive side, many participants indicating a negativistic relation to the Anacostia River also harbor a naturalistic and/or an aesthetic relationship as well. These indications are often couched in past experiences when participants perceived their social and natural environments to be safer. Strategies to involve local residents in community-based restoration of the Anacostia River must account for the present negativity related to the current condition of the Anacostia and seek to involve residents by drawing upon their more positive, underlying naturalistic and aesthetic relations to the river.

5.20 Perceptions of "Community"

Stoneall (1983:1) defines "community" in general as "people interacting in a specific time and place." However, she proceeds to argue that a single definition of "community" is inadequate and therefore a need exists for the development of theories of community. Since this study is only concerned with the greater Anacostia community, I have chosen to use the definition of "community" created and subscribed to by local residents themselves. The perceptions local residents have of "community" is their reality. Therefore, it is also the definition others must acknowledge whenever they engage residents in a conversation about "community", including, specifically, their calls to involve the "community" in efforts to restore the Anacostia River.

Even though the participants in this study are from three different neighborhoods each of which differ in their geographic location, the degree to which they are bound by natural and physical features, their demographics and their visual appearance, each participant subscribes to a similar definition of "community". Although participants did not define "community" in exactly the same words, each particular definition included three elements: **people** living in a common **place** who are bound together by the **social bonds** they create amongst themselves. These bonds, also known as "social capital", can be considered the "glue" that forms a community. Many participants expressed that simply living together in a common place is not enough to form a community.

The size of these three neighborhoods and the degree to which each is bound by natural and physical boundaries appeared to influence the perceptions participants held of the spatial boundaries of their own communities. Although participants from the River Terrace and Barry Farm neighborhoods referred to their community by the same name as the neighborhood, not a

single participant from the Congress Heights neighborhood referred to their community as “Congress Heights”. This difference may be a function of the larger physical area encompassed by Congress Heights, its larger population, and the absence of prominent boundaries around the neighborhood. However, participants from the Congress Heights neighborhood did define community similar to River Terrace and Barry Farm. This data suggest that participants apply the criteria they mentioned in their definition of “community” to structure their everyday perceptions of their own community, regardless of neighborhood labels.

Results also suggest that the presence of a “sense of community” is influenced by natural, physical or other types of boundaries that accentuate a common place by delineating it and separating it from other places. These boundaries help to define areas of interest for community members. Issues and events occurring within these close boundaries should receive more attention than those encompassed by more distant boundaries, such as a watershed. A comparison of the responses regarding the Anacostia River between participants from River Terrace and Congress Heights illustrates this point. In River Terrace the Anacostia is included within the close boundaries of the community. Participants also considered the river to be a part of their community. On the other hand, in Congress Heights the Anacostia is included within a more distant boundary (i.e., the southeast quadrant of the District and the natural boundaries of the watershed).

The results of this study also suggest that when the common place is not well delineated or accentuated by natural or physical boundaries, the social component of a community plays a prominent role in how residents perceive their community. Participants in all three neighborhoods commonly chose to describe their community by its social characteristics rather than by its size, types of housing, income level, geographic location or other physical description. Instead, participants chose to describe their communities in terms of the types of people who lived there and in terms of social characteristics, such as the degree of personal safety. These data suggest that the sense of togetherness, or the “sense of community”, that residents refer to in their definitions of “community” is a prominent element of the criteria residents use to form their perceptions of the health of their own community and of an ideal community to which they aspire.

Not only did participants choose to describe their community primarily by its social elements, but they also commonly referred to social changes that they noticed in their community. In each neighborhood, participants most often perceived changes related to the level of crime and violence in their community. In River Terrace and Barry Farm the river was not included in the description of the community even though participants considered it to be a part of their community. The omission of the river in community descriptions of River Terrace participants is quite interesting since the river actually forms a boundary around the community.

5.30 How to Use the Results of this Study

Analysis of the results of this study suggest that local residents from three different neighborhoods have little regard for the Anacostia River *in its current condition*. The fact that the environmental quality of the Anacostia River has actually improved over the past five years, but is still described negatively by participants, still not considered to be a source of community pride, and perceived to have worsened rather than improved, illustrates a disconnect between restoration efforts and the perceptions of residents of the watershed. Were these residents to have more substantive involvement, in the sense that they are empowered with responsibilities and informed about efforts and successes, the Anacostia River could too become a source of community pride. Once this connection is established *and sustained* the energies that can emanate from the human capacities of any given community will be directed toward the restoration of the Anacostia River.

The apparent value participants place on the social aspects of their communities provides a potentially powerful resource for the restoration of the Anacostia. As already noted, participants tended to be most proud of, and commonly reported that they would take visitors to, the areas where their personal involvement and efforts had improved their community. Observations of community events also suggest that local residents are more likely to attend events that celebrate an improvement to their community in which they were personally involved. Elevating the Anacostia River to this level will require that community residents feel a sense of ownership over the improvements made in the river. This most likely will require that they become involved as full partners in such efforts, rather than simply as a corps of volunteers. On this point, it may also not be enough to simply interact at the level of community leadership. The true momentum and energy will come from widespread community groundswell to restore the Anacostia River.

Local residents appeared to have greater regard for improvements in their community in which they were, to some degree, personally involved. For example, participants from Congress Heights unanimously considered the mural at the local elementary school to be a source of community pride. There is a parallel between well-kept yards and homes, sources of pride in River Terrace and Barry Farm, and the painting of such a mural. Residents devote time and effort to keeping their yards and homes in good condition, just as did those residents who assisted the artists painting the mural and those who created and organized the project. Both types of activities require personal involvement and effort. It is this element of involvement and the apparent social and psychological sense of pride and accomplishment which accompanies it that needs to be considered with any community-based environmental protection effort.

Both the need and the effectiveness of local outreach and involvement efforts can be seen by comparing the responses of participants from the different neighborhoods. Perceptions of who is responsible for restoring the river appear to relate to the perceived causes of the river's pollution. Participants from both River Terrace and Barry Farm appear to be aware that their personal behaviors affect the health of the Anacostia. However, their reported behaviors are related to their perceptions of the cause of the river's pollution. Barry Farm participants commonly cited dumping as the primary cause. As such, they report their involvement in efforts to restore the river to consist of disposing of their garbage properly, rather than leaving it in the street where it can be washed into the river. Barry Farm participants and Congress Heights participants, both of whom consider dumping to be the primary cause of the Anacostia's pollution, considered the District of Columbia Department of Public Works (DPW) to be responsible for cleaning the river. DPW is the same District agency responsible for garbage removal and street cleaning. These participants did not mention the environmental agency of the District government, the Anacostia Watershed Restoration Committee, the Metropolitan Washington Council of Governments Department of Environmental Programs nor the federal government.

Participants from River Terrace, on the other hand, did not consider dumping to be the primary cause of the Anacostia's pollution. As such, they did not specifically consider the Department of Public Works to be responsible for restoring the river. Unlike participants from the other neighborhoods, River Terrace participants did specifically mention the Environmental Protection Agency and considered it particularly responsible for restoring the river. The mention of EPA is most likely related to the awareness of River Terrace participants of the more sophisticated, non-visible, causes of the river's pollution.

Since participants from all three neighborhoods receive their information about the environment from the newspapers and television news programs, one potential way of educating residents is through these mediums. However, participants from River Terrace demonstrate the benefits of seminars and outreach efforts conducted by environmental groups, including the Environmental Protection Agency (EPA). While Barry Farm and Congress Heights participants

perceive the primary cause of the Anacostia's pollution to be dumping of trash in its waters, participants of River Terrace also understand the non-visible, and the most responsible causes of the Anacostia's pollution, such as sediment flow, sewage discharge and toxic run-off from impervious surfaces. If all participants received information about the environment through the same sources, than the previous efforts to provide outreach specifically in the River Terrace neighborhood appear to have a much stronger impact and emit a more effective message than simply relying on printed and televised sources of information.

To only involve those communities living in the immediate vicinity of the Anacostia River defeats the purpose and denies the value of the community-based approach. Instead, social science research can identify the different values and relationships of individual communities to the Anacostia so that outreach strategies can be tailored to each and thus made more effective. For example, this study illustrates the different relations between participants from the River Terrace and the Congress Heights neighborhoods and the Anacostia River. River Terrace participants possessed an awareness, a concern, and an interest in restoring the river, while a good portion of the Congress Heights participants were too unfamiliar with the river to be able to describe it. Nonetheless, residents of the Congress Heights neighborhood live within the natural boundaries of the Anacostia River watershed. As such, their behaviors and actions do affect the environmental quality of the river and the watershed upon which its environmental health depends.

The apparent role of seminars, meetings and workshops occurring directly with-in a particular community in creating a relatively high level of environmental awareness supports the replication of such efforts in other communities in the watershed. Even though those participants in the study live in different areas of the District and have different demographics there are commonalities between each community that suggest that such common attributes may exist among the other communities within the neighborhoods within the Anacostia watershed. Common characteristics include a recognizable "center" of the community, events that bring residents together, a common ideal of what a community is and can accomplish, and similar perceptions of, and feelings toward, the Anacostia River and the natural environment. Participants in all three neighborhoods also expressed an interest in learning more about the Anacostia River and the natural environment. This is evidence that a demand exists for information about, and opportunities to be involved in, efforts to restore the river. Participants from River Terrace and Barry Farm expressed particular interest in learning how local residents themselves can be involved. Outreach efforts could emphasize individual actions that can reduce non-point source pollution, such as using less fertilizer on lawns, keeping automobiles tuned to prevent excessive exhaust from entering the air, cleaning up after pets and monitoring run-off control at local construction sites. The reported personal behaviors of participants from these neighborhoods suggest the existence in these communities of a conservation ethic and a strong naturalistic value that underlies their negativistic relationship to the river. Effective efforts in more distant neighborhoods such as Congress Heights could also foster this type of ethic.

These commonalities between communities may better inform the effective design of outreach and involvement strategies. Conducted at the community level, these seminars can be conducted at those places which function as the center of individual communities and partner with community leaders to conduct the event. Social science methods, such as those used in this study, are well suited for identifying the informal meeting places, the types of events, and the language to be used when announcing a local effort. For example, while initiating this study I expected local places of worship to be community "centers". However, in this study, the local church was rarely considered by participants to lie at the center of their community. Furthermore, most of those who participated in the study attended religious worship services and belonged to congregations located outside of the community in which they lived. According to the common operative definition of a community, congregation members do not necessarily share the same place or sense of community

as those who actually live in the community where the church is located. Community-based environmental protection efforts must be sure that they involve or target the residents of the particular place of interest.

Chapter 6: CONCLUSION

The Anacostia watershed is not only a watershed in the environmental sense, it is also a human watershed. The Anacostia's natural health is directly affected by the human populations living, working within and traveling through the natural boundaries of the watershed. Resolutions to the environmental problems of the Anacostia will not last if the human communities are not involved in restoration efforts, educated about the effects of their behavior on the river, nor gain a sense of ownership of the river.

This study provides a step toward better understanding the diverse communities located within the Anacostia watershed. Although each of the neighborhoods selected for this study differed from each other, interview responses and observed events of individual residents illustrate the existence of a shared community culture that is based on similar lived experiences. This culture structures the way in which local residents relate to the Anacostia River and how they perceive their communities. It also structures their perceptions of their surroundings. Efforts to involve the community must understand and respect this common culture if they truly expect to elicit the support of local residents in restoring the Anacostia River.

APPENDIX A: Society for Applied Anthropology Statement of Professional and Ethical Responsibilities

This statement is a guide to professional behavior for the members of the Society for Applied Anthropology. As members or fellows of the society, we shall act in ways consistent with the responsibilities stated below irrespective of the specific circumstances of our employment.

1. To the peoples we study we owe disclosure of our research goals, methods, and sponsorship. The participation of people in our research activities shall only be on a voluntary basis. We shall provide a means through our research activities and in subsequent publications to maintain the confidentiality of those we study. The people we study must be made aware of the likely limits of confidentiality and must not be promised a greater degree of confidentiality than can be realistically expected under current legal circumstances in our respective nations. We shall, within the limits of our knowledge, disclose any significant risks to those we study that may result from our activities.
2. To the communities ultimately affected by our activities we owe respect for their dignity, integrity, and worth. We recognize that human survival is contingent upon the continued existence of a diversity of human communities, and guide our professional activities accordingly. We will avoid taking or recommending action on behalf of a sponsor which is harmful to the interests of the community.
3. To our social colleagues we have the responsibility to not engage in actions that impede their reasonable professional activities. Among other things, this means that, while respecting the needs, responsibilities, and legitimate proprietary interests of our sponsors we should not impede the flow of information about research outcomes and professional practice techniques. We shall accurately report the contributions of colleagues to our work. We shall not condone falsification or distortion by others. We should not prejudice communities or agencies against a colleague for reasons of personal gain.
4. To our students, interns, or trainees, we owe nondiscriminatory access to our training services. We shall provide training which is informed, accurate, and relevant to the needs of the larger society. We recognize the need for continuing education so as to maintain our skill and knowledge at a high level. Our training should inform students as to their ethical responsibilities. Student contributions to our professional activities, including both research and publication, should be adequately recognized.
5. To our employers and other sponsors we owe accurate reporting of our qualifications and competent, efficient, and timely performance of the work we undertake for them. We shall establish a clear understanding with each employer or other sponsor as to the nature of our professional responsibilities. We shall report our research and other activities accurately. We have the obligation to attempt to prevent distortion or suppression of research results or policy recommendations by concerned agencies.
6. To society as a whole we owe the benefit of our special knowledge and skills in interpreting sociocultural systems. We should communicate our understanding of human life to the society at large.

APPENDIX B: GLOSSARY OF IMPORTANT TERMS

Below I provide a short, working definition of the terms highlighted in **bold** throughout the text of this report.

anadromous fish - fish who swim up rivers from the sea to deposit their eggs.

combined sewer overflows (CSOs) - the District of Columbia's sewer system combines storm and sewer drainage and directs the combined drainage to water treatment facilities.

However, during rain fall the water treatment facilities on the Anacostia River are unable to adequately handle the combined volume of the rainfall and the sewage drainage. As such, raw sewage overflows directly into the Anacostia River before it can be properly treated. CSOs are the primary cause of low dissolved oxygen and high fecal coliform levels in the tidal Anacostia.

dissolved oxygen (DO) - extent to which oxygen occurs dissolved in water or wastewater. DO is an important measure of water quality. If levels of DO fall too low fish and other aquatic organisms can become stressed and even die (ICPRB 1992:5).

effluent - wastewater - treated or untreated - that flows out of a treatment plant, sewer, or industrial outfall. Generally refers to wastewater from a sewage treatment or industrial plant (Miller 1979:A9).

environmental justice - equal protection from environmental hazards for individuals, groups, or communities regardless of race, ethnicity, or economic status. This applies to the development, implementation and enforcement of environmental laws, regulations, and policies and implies that no population of people should be forced to shoulder a disproportionate share of negative environmental impacts of pollution or environmental hazard due to a lack of political or economic strength levels (EPA 175-B-97-001).

erosion - The wearing away of land surface by wind or water, intensified by land clearing practices such as farming, residential or industrial development, or road building (EPA 175-B-97-001). The process by which unstable soil is carried away by rain water and snow melt into the Anacostia River.

Environmental Protection Agency (EPA) - The federal agency responsible for federal efforts to control air and water pollution, radiation and pesticide hazards, ecological research and solid wastes disposal (Miller 1979:A10).

fertilizer - substance that makes the land or soil capable of producing more vegetation and crops.

fecal coliform bacteria- bacteria which normally live in intestines of mammals and are pollution indicators. Fecal coliform bacteria can cause infectious diseases, such as dysentery, typhoid, hepatitis and polio. Swimming is safe in waterways with a fecal coliform count below 200. The fecal coliform count of the tidal Anacostia is 50,000.

(human) ecosystem - An ecosystem is an interactive system that includes the organisms of a natural community together with their physical, chemical and biological environment (ICPRB 1988:2). The human ecosystem refers specifically to how human behaviors affect and alter the interactive system.

impervious surfaces - surfaces, such as paved roads, which do not absorb water.

non-point source pollution - pollution which comes from a variety of sources and not from one point, such as a pipe from a factory. Sources of non-point pollution are farm and urban run-off (ICPRB).

nutrients - are essential to plant growth and include nitrogen and phosphorous. Present in low amounts they cause no problems. However, excessive nutrients, such as from run-off of fertilizer, can cause the growth of undesirable algae and lead to reduced levels of dissolved oxygen.

pollution - undesirable changes in the physical, chemical or biological characteristics of the air, water, or land that can harmfully affect the health, survival, or activities of humans or other living organisms (Miller 1979: A15).

point source - source of pollution that involves discharges of wastes from an identifiable point, such as a smokestack or sewage treatment plant (Miller 1979:A15).

retrofitting - repairing a developed watershed that has impaired the natural functioning of a watershed. Retrofitting strategies include creating storm water retrofit ponds, marshes and filtering systems to reduce the amount of pollution generated in urban areas that reaches the Anacostia and its tributaries.

run-off - that part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface-water. It can carry pollutants from the air and land into receiving waters (EPA 175-B-97-001). May include lawn fertilizers and automobile toxins deposited on impervious surfaces.

sediment/sedimentation - Soil particles, sand, and minerals washed from the land into aquatic systems as a result of natural and human activities (Miller 1979:A17). Sediment not only blocks the sunlight needed by microscopic organisms which live in the water (which are at the base of the aquatic food chain) but it also damages underwater vegetation and clogs fish gills. The sediment also functions like a wetland or a marsh by absorbing excess nutrients and toxic materials which run-off into the river from agricultural practices and industrial materials. The sediment absorbs these toxins and then sinks to the bottom of the river where they can be taken up by bottom feeding organisms which fish, in turn, feed on. These toxins can also be released from the sediment back into the water column if the sediment is disturbed. Either way, toxins are absorbed by sediment run-off can be transported through the food chain and threaten both aquatic and human life (ICPRB 1994:7).

storm water - in urban watersheds storm water delivers pollutants into waterways. Storm water run-off from urbanized lands picks up literally everything it finds on the ground in its path: oil and grease, spilled chemicals, pesticides, fecal material, litter and dirt into the areas waterways (ICPRB 1992:2).

tidal river - characteristics of a lake, shallow and with limited flushing - most of the sediment which arrives stays there (ICPRB 1992:2).

treated wastewater - wastewater that has been subjected to one or more physical, chemical and biological processes to reduce its potential of being a health hazard (EPA 175-B-97-001).

treatment - any method, technique or process designed to remove solids and/or pollutants from solid waste, waste streams, effluents and air emissions (EPA 175-B-97-001).

water pollution - degradation of a body of water by some substance or condition to such a degree that the water does not meet specified standards or cannot be used for a specific purpose (Miller 1979:A19).

water treatment - the process by which sewage is treated and cleaned with chemicals before being discharged into the Anacostia River.

watershed - a land area in which all the water that falls drains toward a common point or body of water such as a lake or a stream. Wherever you live, you live in a watershed. Watersheds come in different sizes, such as that of the Mississippi River (1,243,000 sq. mi.), or the Potomac River (14,670 sq. mi.) or the Anacostia River (170 sq. mi.). A large watershed is made up of smaller watersheds. The Anacostia watershed is made up of nine major sub-watersheds (ICPRB 1988).

wetlands - areas where water dominates soil development and plant and animal communities. The combination of these plants and animals help to filter pollutants out of water that drains through the wetlands into the larger waterway.

APPENDIX C: Anacostia River Environmental Anthropology Project Interview Protocol

Objective #1: What are the social and cultural relations of communities to the Anacostia river and to their natural environment?

What are the top things you need to have a decent quality of life?
What are the first things you think about when you hear the word “environment”?
Is the Anacostia River a part of your life? How do you use it?
How would you describe the Anacostia to someone who has never seen it?
Have you noticed any changes in the river? What are they?
Have you learned anything new about the river?
Do you fish in the Anacostia? Are you aware of the health risks of eating the fish?
Is the Anacostia polluted?
What do think is the major cause of the Anacostia’s pollution?
Where do you get information about the environment (health, pollution, the Anacostia River)?
Is there anything you can do/have done to protect or restore the Anacostia?
Who do you think is responsible for cleaning the river?
How do you feel when you see the river?
Do you have children? Do they have opportunities to experience nature? Where?
What does E.P.A. stand for?
Are you familiar with the term “Environmental Justice”? What does it mean to you?

Objective #2: Document the different perceptions of “community” among local residents.

Where would you take a visitor to show them your community? Where would you not go?
Why?
What does the term “community” mean to you?
How would you describe your community?
How do you refer to your community? As “us”, or does it have a name?
What lies at the center of your community (church, community center, school, an individual, a park, an historical monument, a building/store, a street corner, a housing development)?
What events or activities bring your community together? Where do they occur?
What are you most proud of in your community?
How long have you lived in your community? How have you seen it change?
Is you community “beautiful”? What parts? If not, why?
Is the Anacostia River part of your community or a boundary between your community and others?

General Characteristics

What is your age?
How many years have you lived in your community?
Do you regularly attend religious worship services? Where?

APPENDIX D: COMMUNITY-BASED GROUPS AND EFFORTS

The following is a list of the organizations I have encountered as I have conducted this project. I have included their names, contact information and a brief description of their mission and activities and how they can help local communities improve their natural and social surroundings. This list represents only a small portion of the many, hard-working and dedicated organizations and groups that exist to serve local communities. I hope that this resource can serve as a reference to community groups and individual residents as they seek to make positive changes in their communities.

For organizational purposes, I have categorized organizations and groups by the topics or issues in which they specialize. Where no source of information is cited, the description following each entry is adapted directly from the literature of the particular group or organization.

The Natural Environment

African American Environmentalist Association

122 C St., NW, Suite 701
Washington, DC 20001

The African American Environmentalist Association (AAEA) is the membership arm of the Center for Environment, Commerce and Energy (CECE) which is the Nation's oldest African-American led, Washington, DC-based environmental organization.

American Rivers

1025 Vermont Ave., NW
Suite 720
Washington, DC 20005
202-547-6900

American Rivers is a national conservation organization dedicated to protecting and restoring America's river systems and to fostering a river stewardship ethic. Along with its conservation efforts, American Rivers promotes public awareness about the importance of healthy rivers and the threats that face them.

Anacostia Ecosystem Initiative

U.S. Environmental Protection Agency - Region 3
Chesapeake Bay Program
410 Severn Avenue, Suite 109
Annapolis, MD 21403
1-800-YOUR-BAY, ext. 772

The Anacostia Ecosystem Initiative allows the Environmental Protection Agency to sign on as a full partner in the local restoration of the Anacostia watershed. The four main features of the Initiative are: watershed restoration; multi-media risk reduction; environmental justice; and public education and involvement.

Anacostia Garden Club

1395 Morris Rd., SE
Washington, DC 20020
301-794-7050
202-678-6396

The Anacostia Garden Club promotes beautification through maintenance of community parks, gardens and green spaces. The Club sponsors seminars, educational programs, publications and special projects and seeks to increase and improve public awareness and appreciation for ecosystems large and small. The Club also serves as a policy making body for community beautification. The mission of the Garden Club's Frederick Douglas Memorial Garden Project is to serve as a model for other urban areas to restore and protect wetlands in a natural setting; to complement ongoing clean-up, reclamation and restoration efforts along the Anacostia River; to enhance communities along the lower Anacostia; and to heighten the awareness of citizens to the need to promote and safeguard a clean environment.

Anacostia Watershed Society

The George Washington House
4302 Baltimore Avenue
Bladensburg, MD 20710
Phone: 301-699-6204

The vision of the Anacostia Watershed Society (AWS) is to make the Anacostia and its tributaries swimmable and fishable by the year 2000, to restore and protect the local environment for the health and enjoyment of everyone in the community, and to bring people together across all walks of life to achieve this vision. A self-described, "no-frills, stay-focused organization" AWS mobilizes volunteers for tree planting and clean-ups, persuades local governments to change their priorities to save the environment, and pressures polluters to clean-up their acts. The work of AWS in restoration, preservation and pollution prevention won it the prestigious United Nations Achievement Award, Sierra Club Outstanding Achievement Award, and the President's Volunteer Action Award.

Audubon Naturalist Society

8940 Jones Mill Rd.
Chevy Chase, MD 20815
301-652-9188

The Audubon Naturalist Society's (ANS) goal is to increase public understanding of natural history and the basic importance of preserving and renewing natural resources. ANS emphasizes environmental education, offers Natural History Field Studies courses, and provides a wealth of educational literature at its book store.

Chesapeake Bay Foundation

162 Prince George St., "The Church"
Annapolis, MD 21401
410-268-8816

The Chesapeake Foundation (CBF) is billed as the largest nonprofit conservation organization working to save the Bay. CBF has three major programs: environmental education, environmental defense and land management. In 1991, the foundation began an environmental education program on the tidal Anacostia in which it reached more than 1,600 District of Columbia students (Source: ICPRB 1996).

D.C. Coalition on Environmental Justice

1722 Eye Street, NW
Washington, DC 20006

The D.C. Coalition on Environmental Justice envisions clean, healthy, safe and productive neighborhoods for all D.C. residents. The Coalition is a partnership of community activists, attorneys, medical and public health professionals and academics working together to effect change. The Coalition has four goals for improving the quality of life in the District: 1) to listen to the voices of the city's most neglected neighborhoods and, in partnership with them, develop strategies rooted in on-the-ground knowledge; 2) to focus public attention on environmental health and safety hazards and, through education, reduce the impact on the city's population; 3) to act to assure full recognition of community voices in environmental decision-making; and 4) to enable the coalition to respond consistently and creatively to the challenge.

Earth Conservation Corps

1st. and Potomac Ave., SE
Washington, DC 20003
202-554-1960

The Earth Conservation Corps (ECC) is a non-profit organization whose mission is to restore two of the country's most threatened resources: the environment and disadvantaged young people. The Corps gives young adults with limited opportunities the chance to make something of themselves in the face of uncertain futures. ECC volunteers devote time and energy to cleaning up the environment. In addition to volunteer efforts, Corps members benefit from weekly education and training days that teach them about subjects like nature, science, art and history and expose them to environmental mentors.

Earth Justice Legal Defense Fund, Inc.

1625 Massachusetts Avenue, NW
Suite 702
Washington, DC 20036
202-667-4500

The Earth Justice Legal Defense Fund is a non-profit environmental law firm that provides free representation to other non-profit organizations and to individuals. The purpose of the Earth Justice Legal Defense Fund is to ensure that existing environmental laws are vigorously enforced by government entities and obeyed by private companies. In March of 1996, the Earth Justice Legal Defense Fund teamed with the Anacostia Watershed Society and the Kingman Park Civic Association and received funding for the *Justice for the Anacostia Project*. The goal of this project is to protect the District of Columbia's public lands and watershed resources, and the long-term health and stability of the Anacostia's neighborhoods. During the first year of the project the partners set out to meet the following objectives: 1) educate local residents, particularly the Kingman Park community, about the threats posed by current projects being planned for the Anacostia; 2) introduce Kingman Park high school and junior high school students to the environmental issues facing their community along the Anacostia through hands-on experience and train them to teach others about these issues; 3) ensure that citizens are well represented and fully able to participate in federal and local regulations and judicial settings in which decisions are to be made regarding the future disposition of the Anacostia's lands; and 4) inform District and Anacostia River watershed residents about the environmental, health and community impacts of these projects on their city.

The Interstate Commission on the Potomac River Basin

Suite 300, 6110 Executive Blvd.
Rockville, MD 20852-3903
301-984-1908

The Interstate Commission on the Potomac River Basin (ICPRB) was established by an Act of Congress in 1940. In 1970, Congress expanded ICPRB's mission to include all water and land resources in the Potomac River Basin, as well as water quality, including the Anacostia River. The Commission assumes the following roles and functions: 1) interstate and basin-wide coordination; 2) stimulation of federal and state action; 3) basin-wide water quality monitoring; 4) meaningful liaison with community and government groups; 5) dissemination of information about the Potomac; and 6) provision of unique services and technical support to compact members. ICPRB also carries out an Anacostia public education and participation program on behalf of the Anacostia Watershed Restoration Committee.

Izaak Walton League of America

1401 Wilson Blvd., Level B
Arlington, VA 22209
703-528-1818

The Izaak Walton League (IWLA) is a national grassroots organization that lobbies for national water-quality and acid rain legislation. Several hundred groups have joined its Save Our Streams (SOS) program, which is designed to educate thousands of activists to fight water pollution by monitoring the water quality of their local streams (Source: ICPRB 1996). For more information about SOS publications, workshops or technical assistance call 1-800-BUG-IWLA.

Metropolitan Council of Governments (MWCOCG)

Department of Environmental Programs
777 North Capitol Street, Suite 300
Washington, DC 20002-4201
202-962-3200

Urban Forest Council of Washington, DC

P.O. Box 77089
Washington, DC 20013
202-452-7416

The Urban Forest Council of Washington (UFC) is a non-profit corporation composed of DC residents and organizations concerned about natural resources and environmental conservation in Washington, DC. UFC is a partnership of community, volunteer and non-profit groups; local and federal government; urban ecology professionals; the private sector; and concerned individuals working collectively to preserve and develop the urban forest of Washington, DC. The 4-point program of UFC includes: partnerships; community resource management; education and outreach; and information resource management. UFC funds community projects throughout Washington, DC. UFC projects include: environmental education; field trips; demonstration sites; training in tree planting and care; mulching; and the development of environmental information, literature and promotional material. Through grants, UFC assists communities in tree planting projects in all eight (8) wards of the city.

The Urban Resource Initiative in the District of Columbia

United States Department of Agriculture (USDA), Forest Service
4200 Connecticut Ave, NW
Building 32, Room B06A
Washington, DC 20002
202-274-6905

The Urban Resource Initiative is a multi-year strategy designed to manage and plan the natural

resources of the District of Columbia and to establish partnerships that link social, economic and ecological resources to create an enhanced quality of life. The ten major themes of the program are: career opportunities, conservation education, economic development, environmental justice, health and the environment, information resource management, natural resources management, partnerships and intergovernmental coordination, volunteerism, and special events.

Women Like Us

3008 24th Place, SE
Washington, DC 20020
202-678-1978

Women Like Us is a local consulting firm that is closely involved in efforts to improve the environmental conditions of local communities and the Anacostia River. The firm is presently working on the following projects:

- Environmental Justice Collaborative - a group that meets monthly to discuss critical environmental issues that impact urban neighborhoods.
- Anacostia Brownfield Consortium - The Consortium is in the process of converting a brownfield into a telecommuting center for TANF recipients to help them move from welfare to work. The group has a steering committee that meets monthly.
- The Valley Green Environmental Project - EPA awarded Valley Green an Environmental Justice Grant to develop an environmental justice curriculum to educate the public housing community on environmental issues. The project also produces a monthly newsletter to educate the community.

Building Community Capacity

Anacostia/Congress Heights Partnership

2041 Martin L. King, Jr., Avenue, SE
Suite 302
Washington, DC 20020
202-889-2102

The Anacostia/Congress Heights Partnership (ACHP) provides support and leadership to organizations working to improve the quality of life in the Anacostia/Congress Heights communities. ACHP's mission is "comprehensive, neighborhood-based community building . . . community building that entails bringing people, resources, and organizations together to work toward the common goal of improving the quality of life in the Anacostia community." Current initiatives include: youth violence prevention, youth leadership activities, youth environmental involvement, capacity building for small organizations, strengthening families and stabilization of housing situations for at-risk families.

Community Action International Alliance

2008 10th St., NW
Washington, DC 20001
202-986-0206

Community Action International Alliance (CAIA *pronounced "kaya"*) is a non-profit organization that creates model *Community Action Tours* to activate local people to work for positive social change in their communities. Community Action Tours are community-based tours designed to analyze social problems, strengthen organizations, educate the public, and empower students. CAIA's tours emphasize active learning through neighborhood visits, participatory presentations,

hands-on experience, such as water quality testing in the Anacostia River, and skill-building workshops, such as “how to fight” with non-violence. Two types of tours include alternatives to violence and environmental justice. CAIA specializes in tours for DC public high school students but can also adapt these tours for adult members of community organizations.

Center for Community Change

1000 Wisconsin Avenue, NW
Washington, DC 20007
202-342-0519

The Center of Community Change works with hundreds of local organizations run by low income people. It provides hands-on assistance to help these groups get started, develop effective boards and leaders, raise money, organize their community, plan their work, win issue campaigns, build affordable housing and confront their communities’ economic problems, such as lack of jobs.

Community Educational Economic Development

645 Taylor St., NE
Washington, DC 20017
202-526-5344

Community Educational Economic Development (CEED) works primarily with DC high school students living in homeless shelters and housing projects. CEED empowers low-income communities by teaching at-risk teenagers skills and strategies necessary to improve their communities. CEED educates communities on nutritional, environmental and food security issues; involves young adults in decisions that affect their lives; provides career training and summer jobs to at-risk youth; and forges links between teens and adults of different cultural and economic backgrounds.

The Community Foundation for the National Capital Region

1112 16th Street, NW
Suite 340
Washington, DC 20036
202-955-5890

A community foundation is a collection of individual funds and resources given by local citizens to enhance and support the quality of life in their community. The mission of FNCR is threefold: 1) to provide a simple and effective vehicle for many individuals, families and companies to give to the greater Washington region; 2) to strengthen the region’s non-profit organizations; and 3) to fund projects and experiments offering new solutions to community needs.

Community Harvest

John Friedrich, Director
c/o Barry Farm Resident Council
1326 Stevens Road, SE
Washington, DC 20020
202-645-3854

Community Harvest is a non-profit group that works to empower individuals living in low-income communities to confront their most urgent challenges by building stronger, healthier, greener, opportunity-laden communities. Community Harvest works to help communities become increasingly self-reliant and liveable by growing and selling healthy food in the community and creating job opportunities which feed people and help restore the community’s natural environment. Community Harvest employs low-income youth and enlists adult mentors and

volunteers to transform under-utilized land in project communities, such as vacant lots and backyards, into vegetable and flower gardens.

Empowering Neighborhood People

The Johns Hopkins University -- SAIS
1619 Massachusetts Ave., NW
Room 510
Washington, DC 20036
202-663-5652

Empowering Neighborhood People (ENP) is a program of Social Change and Development Department at Johns Hopkins University, School of Advanced International Studies (SAIS) partnered with the Heartland Center for Leadership Development. ENP provides a free leadership training program to groups of up to twenty people from neighborhoods in Washington, DC. Participants are selected from a competitive process to attend a series of three weekend workshops. The ENP workshops cover such topics as: creating community security patrols; strengthening civic associations; rebuilding recreational facilities; and resolving conflict within community groups. Interested communities should contact Kimberly Collins at the address and phone number listed above.

D.C. Healthy Start

District of Columbia Government
Department of Human Services
Commission of Public Health
Office of Maternal and Child Health
1-800-MOM-BABY

D.C. Healthy Start is dedicated to helping pregnant women get the care they need to have healthy babies. D.C. Healthy Start is a program which involves the community in finding ways to reduce infant deaths in the District of Columbia. Healthy Start is particularly committed to serving the needs of women and their families in Wards 7 and 8.

Fund for the Community's Future (FCF)

1133 15th St., NW
Suite 605
Washington, DC 20005
202-331-0592

Funds for the Community's Future (FCF) envisions that children grow up with the confidence that their own community believes in them and has united to invest in their future. FCF's mission is to mobilize a critical mass of local residents dedicated to strengthening community and developing youth through neighborhood leadership and investment strategies. FCF works with underserved neighborhoods and schools in Washington, DC to help residents implement their own ideas for community-building projects and initiatives. FCF supports projects and initiatives that meet the "Three I Test": (1) *involves* youth and adult residents as leaders and decision makers; (2) contributes to neighborhood *investment* funds; and (3) results in tangible neighborhood *improvements*.

Garden Resources of Washington

1419 V Street, NW
Washington, DC 20009
202-234-0591

Garden Resources of Washington (GROW) is a non-profit organization founded in 1982. Its mission is to help people help themselves by providing opportunities for individuals and communities to produce food, beautify neighborhoods, and to become environmental stewards through the development and maintenance of community gardens and green spaces. Community gardens are powerful means for city residents to do “for themselves” on many levels -- as individuals enjoying healthful recreation and the personal satisfaction of gardening, as family members lowering food costs and improving nutrition by growing organic food close to home, and as community members sharing both the labor and rewards of a garden with their neighbors. A community garden can also be a catalyst to bring people together to work toward a common community goal and learn organizing skills they can apply to other community needs. GROW serves the District of Columbia with a focus on lower income neighborhoods.

Institute for Local Self-Reliance

2425 18th Street, NW
Washington, DC 20009
202-232-4108

Since 1974, the Institute for Local Self-Reliance (ILSR) has been dedicated to helping a broad range of citizens -- including grassroots community groups, government leaders, and business entrepreneurs -- develop and implement environmentally sound economic development strategies. Through research, policy initiatives, coalition building, and technical assistance, ILSR lays the groundwork for developing humanly-scaled, sustainable economic systems. ILSR believes that democracy works best when those who make the decisions are also those most affected by such decisions.

APPENDIX E: Lessons Learned

Despite all the myths of how research is done, it's actually a very messy process that is cleaned up in the reporting of results In fact, all kinds of practical issues get in the way. In the end, research papers are written so that the chaotic aspects of research are not emphasized, and the orderly inputs and outcomes are It would be a monumental waste of precious space in books and journals to describe the real research process of every project that is reported (Bernard 1995:102-103).

The following section describes the three primary lesson I learned as an intern in the inaugural summer of the Society for Applied Anthropology's Environmental Anthropology Project (EAP). My purpose for presenting these lessons is to inform the organizers of the EAP of my experience, and future EAP interns and fellows as they embark on their own projects.

1) Have a clear and structured understanding of the scope of your internship between yourself and your EPA mentor before the actual internship period begins.

I expected my internship to be related to an already ongoing program or initiative involving the community-based approach being taken by EPA Region III in the Anacostia watershed. However, I soon realized that this was not to be the case. Even though I identified a focus for my work in my letter of application, upon being accepted into the program and first meeting with my EPA mentor, I realized that I did not have a full grasp of the breadth of the area in which I was interested in directing my work. Ultimately, I spent a month struggling to identify my role as an EAP intern and to identify a unique contribution that I could make to Region III efforts. This period without a specific focus eventually had severe time constraint consequences on my study.

This difficulty could be overcome by asking future EAP interns and fellows to submit a clear proposal to the cooperating regional office before beginning the actual internship. Or, if the regional office has a specific need, the office could submit a scope of work for the intern or fellow and then EAP organizers could match applications/vitae with scopes of work. Either way, or both, asking potential interns and fellows and regional host offices to do some preliminary thinking about the role of the EAP intern or fellow establishes a preliminary dialogue related to the structure of the internship. This dialogue would permit the intern or fellow, and the office he or she is placed to swiftly begin substantive work and thus get the maximum benefit out of the short three month period.

2) Know who you are and be able to explain it concisely to others

This may sound like an obvious lesson, but I found that early in my internship I had difficulty deciding how to present myself and the sponsor of my project. Was I to refer to the sponsorship by the Environmental Protection Agency, the Society for Applied Anthropology, or both? This difficulty was undoubtedly associated with my simultaneous internship at EPA Headquarters, so it was partly a problem of switching roles between internships. When speaking or introducing myself to local residents who were unfamiliar with the discipline of anthropology it was sometimes easier to refer to the association with the Environmental Protection Agency upon making a concise introduction. Telling somebody you are conducting a study as part of the "Society for Applied Anthropology's Environmental Anthropology Project" is quite a mouthful. In some cases, a potential participant might not have an understanding of "anthropology", a scientific and academic sounding word.

During a few interactions with some local environmental groups, the internship's association with the Environmental Protection Agency had the opposite affect. The association

seemed to form a barrier to open and candid information exchange. In one case I had called a group to request a copy of a report conducted among local residents of the watershed only to be told that a number of copies had already been distributed free of charge to the EPA, which had not contributed funding to the production costs. In this case, it would have been better to play up the SfAA sponsorship of the project. Apparently some of the local groups were less than enamored by the progress, speed of action, or the amount of funding EPA was committing to the Anacostia's restoration. This sentiment appeared to create a sense of tension in general between the local groups and the governmental agencies at the District and federal level that I had not expected to encounter. This tension seemed to make some members of local environmental groups suspicious of my motives.

I strongly recommend printing some inexpensive business, or calling, cards that you can leave with the people you meet. The business cards will serve as a reminder of your name, organizational association and the purpose behind your involvement when you call later. They will also provide a certain sense of legitimacy to your involvement. Business, or calling cards may not be appropriate for every situation in which an EAP intern or fellow is involved. I know that in my case they would have been very helpful.

3) When developing your work plan, if you plan on using interactive data collection methods, think about how much time you will need, and then double it.

Having finally settled on conducting this study in early July, I initially designed my methodology to snowball sample the three neighborhoods by attending community meetings and events and constructing networks through local leaders. I envisioned this face to face interaction to assist the building of rapport with local leaders, thereby making them comfortable with referring me to other residents. While a permutation of this approach eventually occurred in two neighborhoods, it did not go as smoothly as I had expected. These difficulties placed my internship further behind schedule.

Due the summer season, many community organizations suspended their monthly meetings because local residents were taking vacations or because the weather was too hot and humid for people to leave their air conditioned homes. In some cases where community meetings were planned, I showed up only to find out that the event had been canceled. These unfavorable circumstances placed me further behind in my research schedule. These delays prevented me from interviewing as many local residents as I had intended.

I planned to interview ten (10) residents of each neighborhood. Only in Barry Farm did I gain the participation of this number. In each neighborhood I received an adequate number of names through the snowball sampling process. However, not every one of these individuals agreed to participate in the interview upon my introductory phone call. I believe that had I been able to attend community meetings during the period I conducted this study, I would have had the opportunity to personally introduce my project to members of the community. I assume that this introduction would have spread informally through the social networks of the community with the result that residents would have been more comfortable and more receptive to participating in the telephone interviews. Due to the time constraints I eventually had to abandon attempts to interview additional residents.

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