

# Property Values Property Values

- ❖ Clean Rivers Increase Property Values
- ❖ Healthy Environments Protect Our Communities
- ❖ Businesses Benefit from Attractive Waterfronts

## ❖ Clean Rivers Increase Property Values

***A healthy River, free flowing and free from pollution, enhances the economic value of homes, businesses and communities by and through which it flows. An injured system does the opposite. It creates damage and decreases values. River communities need to grow and thrive in a way that protects and maintains healthy river systems to ensure maximum economic and personal benefit.***

From the late 16th century throughout the early 20th century, decades of industrial and residential waste dumped directly into the Delaware River began taking its toll on the population. Water pollution in the Delaware River caused outbreaks of dangerous and deadly diseases including cholera and yellow fever.<sup>1</sup> The pollution became unsightly causing pungent and sickening odors. The many cities and towns lining the Delaware misused the River by using it as their personal and commercial sewer line.<sup>2</sup>

Because of this River abuse, people who could afford it began building country estates and vacationing spots outside of populated cities. Communities such as Washington Crossing, Pennsylvania and Riverton, New Jersey began as summer retreat villages founded by city dwellers from Philadelphia, Trenton, Camden, and New York who wanted to have a Delaware River summer home partially to avoid the risk of waterborne illness which was at its highest in the summer months.<sup>3</sup> Some of the oldest and more glamorous 19<sup>th</sup> century homes along the Delaware River have become privately owned Inns and restaurants that are still used today.<sup>4</sup>

In recent years, as the pollution in the Delaware has declined, communities are starting to turn back to the River for its beauty, recognizing that life by a clean river is not only desirable but can be economically valuable. Maintaining natural areas, trees, wildlife, and a healthy streamside helps to increase property values by reducing pollution, lessening the threats and impacts of flooding and by increasing property and community aesthetics.



**RIVERTON, NJ HISTORIC MANSIONS WERE BUILT FACING THE RIVER RATHER THAN THE STREET. MOST OF THESE STATELY HOMES ARE STILL INHABITED OR HAVE BECOME INNS AND RESTAURANTS TAKING ADVANTAGE OF THE RIVER VIEW.**

While the property value of a home or business is dependent upon several factors, it is largely influenced by the features either on or nearby the site. A *Money* magazine survey found that clean water and clean air are two of the most important factors Americans consider in choosing a place to live.<sup>5</sup> Living near a stream, creek or river increases property value. "Ocean, lake, and riverfront properties often sell or rent for several times the value of similar properties located inland."<sup>6</sup> A case study from the Maine Agricultural and Forest Experiment Station compared property values for homes facing clean water versus water

considered dirty or unclean. The study shows that property located near a high quality water body has a higher market value than if the water body has lower water quality and that in some cases the entire market value premium (increase) resulting from the waterfront location can be lost as the result of declining water quality.<sup>7</sup>

Many waterfront properties have benefited from measures to clean up the Delaware River and its tributaries including the tidal stretch. For example, the Residences at Dockside in Philadelphia and Christiana Landing in Wilmington are selling condominiums featuring a waterfront view for up to \$1.5 million.<sup>8</sup> In downtown Wilmington, the waterfront has been completely modernized with new town homes, restaurants, museums, and shopping in an effort to stimulate a city renaissance providing access to the River.<sup>9</sup> These are big changes in cities where only a few decades ago the River was blocked off and primarily used by industries and port operations. Aesthetically appealing and clean rivers are an asset to property values along the Delaware.

## ❖ Healthy Environments Protect Our Communities

***Trees, shrubs and naturalized lands, whether along a water body or inland, provide a number of benefits in addition to increased market value and marketability of properties. They provide critical protections to the health of our streams and rivers as well as to our communities through pollution filtering, flooding and natural disaster protection, and erosion prevention.***

### **Healthy Environments are Pollution Filters**

Vegetation such as trees, shrubs, and deep rooted plants, filter pollution out of water runoff, protecting our streams from potential contamination and our communities from the cost of cleanup. Sediment and pollutants are trapped by the structure of a forest floor and by plant communities. The natural vegetation slows the flow of runoff, allowing a greater opportunity for sediment and pollutants to settle and/or be absorbed by plants and soils, before the runoff enters a stream, wetlands or other waterway. At the same time, plants via their root systems take up pollutants.<sup>10</sup> Nitrogen, phosphorous, pesticides, sediment, sulfates, calcium, magnesium, and herbicides are among the many contaminants that healthy plant communities can remove from runoff before it is allowed to pollute our streams and water supplies.<sup>11</sup> Trees absorb air pollution and help maintain air quality. The shade provided by trees reduces heat, which reduces cooling costs for property owners and protects aquatic life.



**BUFFER. VEGETATED STREAMS PROVIDE POLLUTION FILTERS, FLOOD PROTECTION, AND EROSION PROTECTION TO MAINTAIN STABLE BANKS**

#### **VEGETATED BUFFER**

Vegetated buffers are the banks and adjacent lands of waterways and wetlands with trees, shrubs, and deep rooted plants that act to prevent erosion and trap sediment, while providing habitat, food, and shade for aquatic life and animals, acting as natural filters for pollutants, absorbing floodwaters and providing distance needed to protect communities from flooding

Whether you live along a body of water or inland, naturalizing your property to receive all of these benefits also increases the value of your home and property. In a survey conducted by the National Association of Home Builders, 43% of home buyers paid a premium of up to \$3,000, 30% paid premiums of \$3,000 to \$5,000, and 27% paid premiums of over \$5,000 for homes with trees.<sup>12</sup> "Two regional economic surveys documented that conserving forests on residential and commercial sites enhanced property values by an average of 6 to 15% and increased the rate at which units were sold or leased."<sup>13</sup>

Living nearby healthy plant ecosystems also increases property values. One study found that homes within 1,500 feet of a park sold for \$1,600 more than properties further away from naturalized areas.<sup>14</sup> Similarly, the study found that property values go up for homes within 1,500 feet of a wetland by an average of \$37 per acre.<sup>15</sup> "Pennypack Park in Philadelphia is credited with a 38% increase in the value of a nearby property."<sup>16</sup>

Not only are homeowners economically benefitted when they plant trees on their properties, but the host communities are too. "It has been conservatively estimated that over \$1.5 billion per year is generated in tax revenue for communities in the U.S. due to the value of privately-owned trees on residential property."<sup>17</sup>

## **Healthy Environments Protect Us from Natural Disasters**

Flooding in the watershed causes significant damage to public property, private property, and measurable economic injury for towns and cities. Hurricanes, severe thunderstorms, heavy rains, and snowstorms affect the Delaware River watershed and its residents. In areas lacking proper floodplain protection and riparian buffers, high water levels can create dangerous situations that are devastating emotionally, physically and financially, while resulting in damage to residents, communities, the River and all who rely upon it.

Vegetated areas encourage the infiltration of rainfall, protecting the region from the impacts of flooding and drought. The infiltrated water replenishes groundwater, which in turn provides healthy base flow to streams and the River, and feeds drinking water aquifers. Soaking this water into the ground also means it does not turn into non-natural stormwater runoff that contributes to flooding. Using manmade structures to try to prevent stormwater runoff and flooding is costly and much less effective than supporting the same action by nature.



**NEW HOPE, PA CONDOMINIUMS INUNDATED DURING THE JUNE 2006 FLOOD. THESE RESIDENCES WERE BUILT BETWEEN THE DELAWARE CANAL AND RIVER, IN A FRAGILE ENVIRONMENT SURROUNDED BY WATER WITH NO RIPARIAN BUFFERS OR PROTECTION FROM OR FOR THE RIVER.**

***"Floods have been, and continue to be, the most destructive natural hazard in terms of economic loss to the nation, as well as the cause of hundreds of deaths in communities across the nation"***

***..... testimony from William O. Jenkins, Director of Homeland Security and Justice, 2004***

Flood response and emergency services costs are of increasing concern to our region and nation. In its long history, Delaware River flooding has not only cost homeowners and municipalities millions of dollars, but the taxpayers of the entire state and nation pay the price. Responding to a flood requires a variety of emergency service operations and personnel including police and fire departments, local and county municipal services, and cleanup efforts. After a flood, communities must be provided temporary housing, food, and water. There must also be an investment of time and resources in providing ongoing information and assistance to flooded communities. Clean up after a flood often requires "hundreds of workers to renovate and repair, or tear down and dispose of, damaged or destroyed structures and materials."<sup>18</sup> Flooding destroys public and private utilities. Repairing damaged power lines, roads and bridges, gas pipelines, water treatment and storage facilities, and heating and cooling systems can make the cost of clean-up insupportable.



NOT ONLY DOES PROPERTY SUFFER DURING FLOOD EVENTS, BUT THE RIVER SUFFERS AS WELL. ALTHOUGH FLOODS ARE A NATURALLY OCCURRING PROCESS FOR RIVERS, NON NATURAL STRUCTURES, LITTER, AND ANYTHING THAT FLOOD WATERS COME IN CONTACT WITH IS CARRIED INTO THE RIVER, POLLUTING IT.

Other often unrealized expenses include health threats, and the cost of lost food and polluted drinking water. Repair, renovation and demolition operations that must occur in the wake of a flood often generate airborne asbestos mineral fiber that can cause chronic lung diseases or cancer.<sup>19</sup> Inhalation of asbestos can cause lung disease that can be fatal.<sup>20</sup> Lead is another dangerous toxin that can be released during repair, renovation or demolition operations. If inhaled or ingested, lead can cause damage to the nervous system, to the kidneys, to blood forming organs and to the reproductive system.<sup>21</sup>

After a flood, it is recommended that foods that came into contact with flood waters be discarded, and that all water should be considered unsafe until communities have been notified otherwise. These can be costly hardships for communities recovering from a flood.<sup>22</sup> Flooding can result in the growth and

transmission of fungi such as mildew, mold, rusts and yeasts which can cause illnesses.<sup>23</sup> Some forms of the fungi can cause skin, respiratory and other disorders.<sup>24</sup> Waterborne illnesses caused by bacteria, viruses and protozoa in drinking water are additional concerns in the wake of a flood.<sup>25</sup>

Flooding pollutes rivers with accumulated chemicals and debris from roadways and cities. Thunderstorms and hurricanes often lead to “Boil Water Advisories” as the result of sewage overflows at water treatment facilities. It is recommended that people boil all water for at least three minutes before consuming, making ice, feeding pets, washing dishes, brushing teeth, or rinsing food. These advisories can be expensive, as well as the added cost of having to buy treated/filtered water. When flooding occurs, recreation is halted and ecotourism harmed. The loss of business to a community or region can be significant.

In developed areas, rainwater rushes off impervious surfaces such as parking lots, roads, rooftops, hard-packed and chemically treated turf lawns, playing fields, golf courses and unstable farm fields into detention basins and storm systems that dump it, generally untreated, directly into streams, wetlands, lakes, and rivers and onto downstream communities. As development increases, the volume of stormwater increases and flooding worsens.

In natural forests and meadows, rainwater is absorbed into vegetated soils, feeding plant life, recharging aquifers and wetlands and maintaining stream base flow and waterway health. The volume of stormwater runoff is reduced. Naturally vegetated areas protect communities from increasing flood damages, the need for flood response services, and the need for flood damage payouts.

### HIDDEN COSTS OF FLOODING

Floods bring serious emotional harm to affected homeowners and communities in crisis. Following a flood disaster, people are engaged in the response and helping one another to cope. Later, feelings of panic, anger, anxiety, disorientation, and despair emerge. The full force of emotions often hit after the flood waters have receded. Exhaustion, grief, desperation and depression can then set in.

The prolonged stress caused in the wake of a flood can lead to difficulty sleeping, irritability and outbursts of anger, difficulty concentrating, painful emotions, or post traumatic stress disorder.

Children can be more deeply affected than adults, experiencing nightmares, fear, anxiety, increased physical pain such as headaches and stomach aches, a decline in their academic performance, difficulty sleeping, even suicidal tendencies.

*Accessed June 9, 2008 West Virginia Division of Homeland Security and Emergency Management [www.wvdhsem.gov](http://www.wvdhsem.gov)*



TINICUM, PA DRN RECEIVED FUNDING TO DEVELOP RESTORATION AND MANAGEMENT PLANS FOR 2 MILES OF TINICUM AND RAPP CREEK. THE PLANS WILL ADDRESS INCREASES IN STORMWATER RUNOFF, FLOODING, STREAM BANK EROSION AND THE LOSS OF RIPARIAN BUFFERS. TREES AND WOODY SHRUBS NATURALLY PROVIDE FLOOD FLOW REDUCTION.

A loss of tree cover over a 15 year period (1985 to 2000) in Bucks, Montgomery, Delaware, and Chester Counties, Pennsylvania and Mercer, Burlington, Camden and Gloucester Counties, New Jersey, reduced the ability of the Delaware watershed region's urban forests to "detain almost 53 million cubic feet of stormwater, a service valued at \$105 million."<sup>26</sup> Despite that diminishment, this same region "stored 2.9 billion cubic feet of stormwater in 2000, valued at \$5.9 billion."<sup>27</sup>

Existing tree cover was found to prevent 65 million cubic feet of stormwater runoff in the Big Timber Creek watershed (New Jersey) saving the community \$3.3 billion in stormwater infrastructure. In the Cobbs Creek watershed (Pennsylvania) existing tree cover prevented 20 billion cubic feet of stormwater runoff saving the community \$1 billion in stormwater infrastructure.<sup>28</sup>

In the Mill Creek watershed (New Jersey) existing tree cover prevented 6.7 billion cubic feet of stormwater runoff saving the community \$350 million in stormwater infrastructure. And in the Frankford-Tacony watershed (Pennsylvania) existing tree cover prevented 38 billion cubic feet of stormwater runoff saving the community \$2 billion in stormwater infrastructure. This tremendous savings translates into \$176,052,455 per year of benefit/savings for this part of the Delaware River watershed community.<sup>29</sup>



VALLEY CREEK, CHESTER COUNTY, DRN ASSISTED OPEN LAND CONSERVANCY AND RESTORED THIS STREAM REACH WHICH HAD BEEN DEVASTATED BY EROSION.

## FLOODPLAIN

The floodplain is the low, flat, periodically flooded area adjacent to rivers, lakes, and oceans. Natural floodplains absorb water, filter it, and help it to infiltrate the soil rejuvenating groundwater aquifers for drinking water.

Calculating the benefits of trees on a site-by-site basis further demonstrates that healthy, vegetated watersheds can provide dramatic cost savings for communities. A 3.41 acre commercial site in the Tacony watershed (Pennsylvania) with 2% tree cover and 97% impervious cover provides no stormwater benefits. By comparison, a single family site, 3.19 acres, with a 30% tree cover “provides \$5,454 in stormwater savings”.<sup>30</sup> In communities serviced by combined sewer and stormwater systems, where the cost to build additional stormwater infrastructure storage costs approximately \$52 per cubic foot (as compared to areas served by separate stormwater systems where the cost ranges at \$2 per cubic foot for stormwater construction), a 30% tree canopy on a 5 acre residential development site can save over \$308,000.<sup>31</sup>

To reap the benefits of living near a water way, it is important not to encroach on it. While locating homes and certain businesses (such as restaurants, hotels, etc.) with a water view enhances their value, placing them too close to the water does the opposite. Buildings and other structures located too close to our waterways are at risk of flooding and resulting flood damages.

Houses located within the floodplain have lower market values than equivalent houses located outside the floodplain.<sup>32</sup> The reduction in value between the two can be as much as 4 to 12% with an average 5.8% reduction in value.<sup>33</sup> Recent flooding creates an even greater reduction in property values.<sup>34</sup>

A location in the floodplain reduces the value of the home for the seller, and also increases the costs for the buyer. Homeowners located in the floodplain are required to purchase flood insurance. They are also responsible for uncovered expenses associated with cleanup after a flood, and the costs of having to relocate after a flood, temporarily or long term.

Homes and businesses located in the floodplain increase polluted runoff because of this proximity to the waterway. The removal of native vegetation and the creation of impervious surfaces increases runoff that carries into the water every contaminant found there. For instance, homes that meet the minimum standards for floodplain construction can still place an unoccupied garage, driveway, and parking lot in the floodplain. Every time it rains, grease, oil, and any chemicals stored or used in a garage are washed into the river. And in floods, motor vehicles, lawn mowers, and other typical equipment kept in a garage or shed are swept in the floodwaters, sometimes taking the shed along as well.

Infringement on the floodplain reduces river values. Downstream and neighboring communities and businesses lose the enjoyment of beautiful, healthy and clean streams and their risk of flood damage is increased.

While avoiding construction in the floodplain will reduce flood damages and while reducing development impact through effective stormwater management and less impervious surface will reduce the volume of runoff, rivers and streams will always flood their floodplains. As part of the river system natural flood plains provide immense value by allowing river flooding to occur as part of the normal life cycle of a waterway.



BUCKS COUNTY, PA. BANK EROSION FROM EXCESSIVE RUNOFF IN TINICUM CREEK. THE SEDIMENT FROM THIS BANK RUNS DOWNSTREAM MUDDYING THE WATER, SMOTHERING STREAM BOTTOM HABITAT, AND SUFFOCATING FISH, MUSSELS AND OTHER AQUATIC LIFE.

## **Flood damage claims for three major flood events in the Delaware River Watershed**

September 2004: 1,313 claims totaling \$46 million

April 2005: 1,977 claims totaling \$73 million

June 2006: 3,045 claims totaling \$107 million

[http://www.state.nj.us/drbc/Flood\\_Website/floodclaims\\_home.htm](http://www.state.nj.us/drbc/Flood_Website/floodclaims_home.htm)

### **Healthy Environments Prevent Erosion**

Naturalized areas along a water body help prevent the erosion of public and private lands, including the undermining of bridges and roadways. Protection of our streams is much more cost effective than having to restore them once damage is done.

Streams are formed over time by the forces of nature. A stream's physical structure shifts naturally over time but often is forced to change more dramatically or unnaturally due to human intrusion such as increased water runoff, roads, dams, levees, or floodplain disturbance. A vegetated buffer along a waterway protects and supports the banks and other critical parts of a stream's make-up, allowing it to resist erosive forces and remain stable. Forested buffers are the glue that holds together nature's design. The roots hold the riparian lands in place, maintaining the hydraulic roughness of the bank, slowing flow velocities in the stream near the bank.<sup>35</sup> Also, the absorption ability of a vegetated buffer, especially when it contains a mix of woody shrubs and trees, slows down the water in high stream flows and soaks up water, reducing in-stream channel velocity and volume during storm events thereby reducing damage to the stream and preventing non-natural erosion.<sup>36</sup>

In Ohio, the Department of Transportation found that on average it costs between \$3-\$10 per linear foot to preserve a stream, while it costs almost \$300 per linear foot to restore it.<sup>37</sup> Protecting our floodplains and buffer areas keeps people from building in the floodplain where they are vulnerable to floods and flood damages while at the same time protecting our public and private lands from being literally washed away.



WETLANDS ARE FILTERS AND BUFFERS FOR RISING WATER LEVELS. THIS AREA IS ALONG BEAVER CREEK, A TRIBUTARY OF OLDMANS CREEK, A NEW JERSEY TRIBUTARY OF THE DELAWARE RIVER.

### **Protection from the Effects of Global Climate Change**

Global climate change is a major threat to our region, nation, and earth. A recent report entitled "Confronting Climate Change in the U.S. Northeast" and an associated New Jersey specific *Executive Summary* found that under one conservative emissions scenario, by the end of the century New Jersey is expected to lose virtually all of its snow cover; that "the frequency and severity of heavy rainfall events is expected to rise"; and that the frequency of short term drought (one to three months) is projected to increase.<sup>38</sup> In addition, global climate change is expected to dramatically increase the number of days over 100 degrees communities in our region experience. In the coming decades, communities nearby Philadelphia will begin to experience in the range of 10 days to 30 days that are over 100°.<sup>39</sup>

Scientists have determined that carbon dioxide, a major greenhouse gas, contributes significantly to global climate change.<sup>40</sup> Trees are an important part of the solution. Trees store carbon in their leaves, stems, branches, and roots.<sup>41</sup> Other plants, dead plant material, and the organic matter found on the forest floor and in forest soils also store carbon.<sup>42</sup> Protecting our forests to protect our rivers also helps protect us from global climate change.

A forest which has not been previously logged and has a closed canopy, stores about 250 tons of carbon per hectare in its vegetation and soil.<sup>43</sup> Rather than acting as a sink for carbon, this same area if converted to agriculture becomes a source of carbon, releasing about 200 tons of carbon per hectare.<sup>44</sup> Forests with an open canopy store about 115 tons of carbon per hectare. The same forests release about 29 to 39 tons per hectare if converted to agriculture.<sup>45</sup> The social costs of emitting carbon (calculated as damage avoided) is about \$34 per ton.<sup>46</sup> The US Forest Service Northeastern Research Station estimated that forest carbon storage in New Jersey at approximately 38.3 tons per hectare. This means that the 126,606 hectares of NJ State Parks and Forests store 4,849,009 tons of carbon<sup>47</sup> which would, at the \$34 per ton figure, provide over \$164 million in damage avoidance.

Restoring our floodplains by creating forested buffers along our rivers and streams protects communities from the expected increase in flooding that will accompany changing weather patterns and increased rise of sea level that will result from global climate change. At the same time it provides the quality of vegetation that can be part of the solution for reducing the advance of global climate change by sequestering carbon and filtering air pollution.



**NATIVE RIPARIAN PLANTS, GRASSES, AND TREES HELP TO RESTORE DAMAGED STREAMS STRENGTHENING THE BANKS AND CREATING ROOT SYSTEMS.**



## ❖ Businesses Benefit from Attractive Waterfronts

*A clean and healthy Delaware River increases the appeal of commercial properties and businesses that benefit from the River as an attraction. On a nice day, people are drawn to the River; riverfront businesses gain an increase in customers and foot traffic based on their location. Riverfront restaurants, art galleries, inns, Bed and Breakfasts, charter fishing boats, coffee shops, and retail shops all benefit from a proximity to the River and parks when they are clean and attractive.*

### **Restaurants**

At the riverfront in downtown Philadelphia, Moshulu has transformed a historic four-mastered sailing ship from the early 20<sup>th</sup> century into a fine dining restaurant docked at Penn's Landing. The restaurant is one of many fine dining experiences that may be enjoyed along the Delaware River. The Spirit of Philadelphia is a riverboat cruise that combines the beauty of the River, the spirit of the City, and a buffet dinner and a show for around \$65 per person. River cruises like this one are not uncommon to the Delaware River.<sup>48</sup> The Liberty Belle docked in the Navy Yard offers a similar experience and can be rented out for weddings or other large events for up to 600 people; people pay more than \$6,000 for this Mississippi style riverboat to enjoy their evening on the River.<sup>49</sup>



NEW HOPE, PA THE LANDING RESTAURANT FEATURES RIVERSIDE DINING WITH VIEWS OF LAMBERTVILLE, N.J AND THE DELAWARE RIVER.



NEW HOPE-LAMBERTVILLE BRIDGE. PEDESTRIANS CAN WALK OVER THE DELAWARE RIVER FOR SHOPPING AND DINING ON EITHER SIDE OF THE RIVER. GOURMET RESTAURANTS, ANTIQUE SHOPS, CRAFT GALLERIES, SALON BOUTIQUES, AND UNIQUE JEWELRY STORES BENEFIT FROM A STEADY FLOW OF CUSTOMERS.

Along the lower Delaware the Bucks Bounty, Bridge Café, Landing Restaurant, Indian Rock Inn, and Center Bridge Inn are all restaurants that people drive to from miles away to enjoy the views of the River, the sounds of the water, and the aesthetics of nature and history.<sup>50</sup> Restaurants along the Delaware River in Lambertville and New Hope are able to attract visitors throughout the region for the scenic river views, walkable bridge, and historic towns.

Rojo's Roastery in Lambertville brews organic and fair trade coffee for pedestrians that stroll in from walking along the River and through town. The River Horse Brewery in Lambertville uses water directly from the Lambertville Reservoir of Swan Creek, a tributary of the Delaware River. The microbrewery has been located along the banks of the Delaware River since 1996 and distributes all natural beer throughout the northeast, Delaware, and Maryland.<sup>51</sup>



### Case Study: The Delaware River Art Gallery Yardley, PA

The Delaware River Art Gallery holds exclusive and historic pieces of artwork that focus on the life and beauty of the Delaware River, mostly by local artists. Located in historic Yardley, Pennsylvania the Gallery celebrates life on the Delaware as well as the beauty of the River itself.

Dale Woodward, owner of the Delaware River Art Gallery says that although much of the business comes from people strolling along the River through Yardley who decide they want to

remember the view of the Delaware through art, even more business comes from the people who actually live in the area. Residents of Yardley enjoy daily views of the Delaware, a River many of them have grown up on, and artwork of the River is a prized possession.

## **Inns and Hotels**

The Black Bass Inn was one of the first taverns in Bucks County. It is located in the river town of Lumberville.<sup>52</sup> Currently, the Black Bass resides as an upscale restaurant and inn.<sup>53</sup> Situated close to the Delaware, people come to the restaurant for the views of the River below. The Lumberville footbridge connects the town to Bulls Island State Park for an after dinner stroll or as a take out for kayakers and canoeists wanting a good meal.<sup>54</sup>

Chestnut Hill Inn on the Delaware consists of two romantic Victorian houses overlooking the scenic river in Milford, Hunterdon County, NJ.<sup>55</sup> The guest rooms exude a sense of warmth and romance no matter what season you visit. All rooms have access to the beautiful riverfront terraced gardens, deck, and dock. River access is nearby so guests can bring their boat, canoe, kayak or tube. Many guests enjoy bringing their lunch or dinner back to the Inn to dine along the River's edge.

The Bucks County Bed and Breakfast Association of Pennsylvania is supported by many Delaware River bed and breakfasts throughout Bucks County. Most of the inns and restaurants are restored homes built in the 19<sup>th</sup> century and contain the river charm people seek for getaways, retreats, and important events.<sup>56</sup>

The Lambertville Station Inn located along the Delaware River in Lambertville, New Jersey offers waterfront lodging, dining, activities, and a ballroom ideal for weddings and receptions.<sup>57</sup> Every room located at the Inn has a scenic waterfront view. The ballroom is made of three glass walls offering river observation from every angle, giving the inside an impression of the outdoors.



CHESTNUT HILL INN ALONG THE DELAWARE RIVER IN MILFORD, NJ INNS LIKE CHESTNUT HILL ARE APPEALING BECAUSE OF THEIR PROXIMITY TO THE RIVER AND THE BEAUTY AND ACTIVITIES THE RIVER PROVIDE. PHOTO

Among the many hotels, lodges, and inns throughout the watershed, accommodations along the River with a waterfront view are priced higher than hotels without. (see figure: 1)



Figure 1: Hotel Room Prices With and Without a River View

**Figure 1** shows a range of hotels along the Delaware River that offer both views of the riverfront and rooms without views of the riverfront. The range between the two demonstrates that people are willing to pay more for a view of the River. At the Cape May Grand Hotel located near the mouth of the Delaware Bay, a room with a waterfront view costs \$227 per night, while a view on the opposite side of the same hotel costs only \$192 for the same night.<sup>58</sup> The Hyatt Regency in Philadelphia also increases the price on rooms with a view, charging \$247 for a king size bedroom without a River view as compared to \$282 for a king size bedroom on the waterfront.<sup>59</sup> Up river at the Bridgeton House in Upper Black Eddy, prices can be found for nearly \$100 more with a Delaware River view.<sup>60</sup> And the historic Penn's View hotel in Philadelphia charges \$289 for its rooms with a Delaware River view, which are also suite style rooms; the lower level rooms can be purchased for as low as \$145 per night; a difference of \$144.<sup>61</sup>

# Importance of Clean Water

## Importance of Clean Water



***“When we best protect and restore the Delaware River is when we best protect and restore ourselves.....”***

***Maya K. van Rossum, the Delaware Riverkeeper***

The Delaware River watershed is home to 8 million people and provides drinking water for approximately 15 million. It is a revered recreational resource to boaters, fishers, birdwatchers, nature hikers, swimmers, and sight-seers of all kinds. It is a means of transportation for port industry, and a steady reliable source of water for commercial and industrial operations. The riverbanks serve as

habitats for rare and endangered species. The River is an ecosystem to thousands of plant and animal species that have called it home for millions of years. When the River is healthy it helps to protect us from floods, droughts and illness.

A clean Delaware River reduces the cost of water treatment and increases property values for homes and businesses. By protecting and restoring our River we earn tremendous economic and ecological benefits while the quality of life for residents throughout the Delaware River watershed increases.

Once damage has been done to the natural ecosystems of the Delaware River it can be difficult and costly to undo. It has been estimated that restoring the ecosystems necessary to replace the billions of fish and aquatic organisms killed by the Pilgrim Nuclear Generating Station located in Massachusetts would cost at least \$140 million.<sup>349</sup>



It is often the case that the cost of the restoration is far less than the value of the natural resource to the community.<sup>350</sup> While the investment may be worth it, it would still have cost far less both in the direct cost of restoration and the opportunity costs during the period of harm, had the resource simply been protected in the first place.

The River is a resource and a member of our community which needs to be preserved for the children and grandchildren of the watershed. It is critical that the Delaware River remain valued so that the entire watershed may benefit ecologically, economically, culturally, and spiritually for decades to come.

One of the most important ways to protect all of the values of the streams and River discussed in this report is to protect the watershed in as natural a condition as possible. This includes protecting and restoring its floodplains in a forested state, protecting its upland forests and terrain, as well as its wetlands and soils. When we protect the watershed to protect the River we see the tremendous community-wide benefits that are received.

This report ends where it began. The most important take away from this report is that the Delaware River is a living ecosystem rich in beauty, culture, and community that needs to be protected and restored in order to continue to be the respected and contributing member of our community we all need and enjoy.

