

MASTER PLAN RECREATIONAL IMPROVEMENTS TO CANONSBURG LAKE

MASTER SITE PLAN STEERING COMMITTEE
CHARTIERS CREEK WATERSHED ALLIANCE
WASHINGTON COUNTY CONSERVATION DISTRICT
PENNSYLVANIA FISH AND BOAT COMMISSION



MARCH 2007



CANONSBURG LAKE MASTER SITE DEVELOPMENT PLAN

Located in

**PETERS TOWNSHIP AND NORTH STRABANE TOWNSHIP
WASHINGTON COUNTY, PENNSYLVANIA**

Prepared for

**MASTER SITE DEVELOPMENT PLAN STEERING COMMITTEE
WASHINGTON COUNTY WATERSHED ALLIANCE
CHARTIERS CREEK WATER SHED ALLIANCE
WASHINGTON COUNTY CONSERVATION DISTRICT
PENNSYLVANIA FISH and BOAT COMMISSION**

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GROWING GREENER FUND

Administered by the

**BUREAU OF RECREATION AND CONSERVATION
PENNSYLVANIA DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES
PENNSYLVANIA COMMUNITY CONSERVATION PARTNERSHIP PROGRAM**

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A scenic photograph of Canonsburg Lake. The foreground shows the calm water reflecting the sky and the surrounding greenery. In the middle ground, there is a sandy or rocky shoreline with some sparse vegetation. The background is a dense, lush forest covering a hillside. The sky is overcast and grey. The text 'CANONSBURG LAKE' is overlaid on the image in two styles: a large, white, serif font and a smaller, green, outlined font below it.

CANONSBURG LAKE

CANONSBURG LAKE

CANONSBURG LAKE MASTER PLAN

WASHINGTON COUNTY WATERSHED ALLIANCE
WASHINGTON COUNTY CONSERVATION DISTRICT
with financial assistance from
PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL
RESOURCES
Bureau of Recreation and Conservation
Community Conservation Partnership Program

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Preface

The Master Plan for Recreational Improvements to Canonsburg Lake was developed through numerous Steering Committee meetings, public input meetings, surveys, and questionnaires. All the information gathered through these various meetings and events, along with an analysis of existing site factors and regional demographics has been synthesized into this comprehensive Master Plan.

It should be noted that Canonsburg Lake as an entity has many significant factors that may effect the future existence of the lake. These factors include the status and stability of the existing dam, the continuing influx of sediment deposits into the lake, residual damage from the flooding caused by hurricane Ivan, general pressure from surrounding land development, and the potential crossing of the upper portion of the lake with the proposed Southern Beltway.

Each one of these factors are critical to the longevity of the lake, and if not addressed, the very future of Canonsburg Lake is in serious doubt. It is clear that the following recommendations for recreational improvements made to a lake which has a dam in need of considerable renovations, sediment deposits continuing to eliminate the deep water portions of the lake, and the potential of a major highway impact may seem a bit illogical.

However, most of these important factors to the overall health of the lake are currently under investigation with recommendations and funding sources being explored. This Master Plan has been developed with the assumption that these serious issues will be addressed and ultimately resolved. It is indeed the hope of the Steering Committee, concerned citizen groups, individuals, and all governmental agencies involved that this Master Plan may bring the existing condition of Canonsburg Lake to the forefront, and that this renewed public awareness will motivate all interested parties into action.

Therefore, the recommendations for recreational uses of Canonsburg Lake that can be found as part of this Master Plan are described herein as though these issues surrounding the lake will be addressed. It should also be noted that this plan should be considered flexible, with recommendations that may change over time. For example, should changes in the sediment deposit areas occur, the Master Plan should be revised to reflect any future changes or improvements to the lake.

EXECUTIVE SUMMARY

Canonsburg Lake Master Plan

This Canonsburg Master Plan, as a final product, is a compilation of numerous public and steering committee meetings, on-site evaluations, and environmental and population research and studies. All of this data has been collected, evaluated and synthesized into this comprehensive Master Plan. Every decision regarding the ultimate recommendations offered for Canonsburg Lake has been carefully evaluated for appropriateness based on all data collected. These recommendations as found in this Master Plan are therefore the most appropriate decisions for Canonsburg Lake in its present condition. Environmental and existing land-use conditions, as well as public desire for specific recreational uses, and funding availability have been blended together to obtain these recreational recommendations. During the planning process, public input was not only welcomed but ideas promoted were incorporated into the ultimate plan.

The Master Plan divides Canonsburg Lake into three (3) separate and distinct areas. These areas have been defined not only by geographic location, but also by current land use, public access and environmental factors as well. These zones have been defined as the Upper, Middle and Lower Zones, and the Master Plan bases many of its recommendations on the particular site analysis and environmental factors that are represented by each zone.

Upper Zone

The Upper Zone, or the southern portion of the lake between the Route 19 crossing and the area near the Waterdam Plaza Office Park, contains approximately one third of the lake and property and remains the most isolated portion of the lake, primarily due to the lack of any direct vehicular access to the lake. This Upper Zone is not surprisingly the most pristine portion of the property, with numerous species of flora, fauna, birds and waterfowl. Recommendations for this Upper Zone reflect the pristine nature of this area and also incorporate methods of allowing limited vehicular access to the lake. Pedestrian trails along with a system of boardwalks or elevated walking surfaces will allow pedestrians access to and throughout the existing wetlands found in this area. Several small bridges will be required to cross the lake at key locations. The lake in this area is actually quite narrow; the width similar to the original channel width of Little Chartiers Creek which was dammed originally to create Canonsburg Lake. In order for vehicular access to be made available, a proposed roadway from McDowell Road will be required. This roadway will lead to a small parking area that will be the starting point for pedestrian excursions throughout the Upper Zone. A small craft boat launch for canoes and kayaks will also be developed along with signage, picnic areas, and a restroom facility (a simple structure due to lack of potable water in this area) and fishing access. The access road may impact exiting wetlands. If so, it will be necessary to mitigate other wetland areas throughout the property to compensate. In addition, right-of way will need to be purchased in order to facilitate the proposed roadway.

Middle Zone

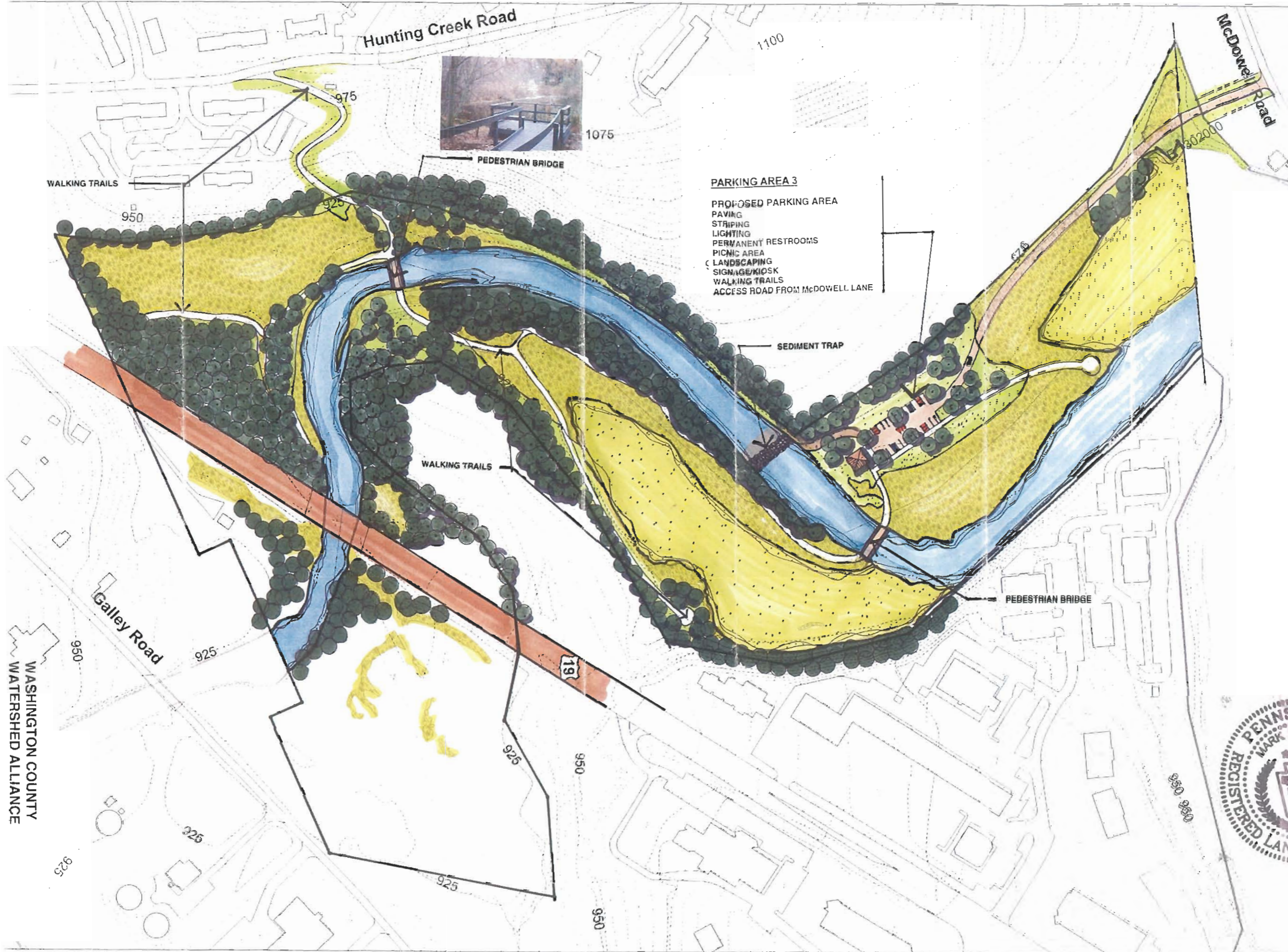
The Middle Zone of Canonsburg Lake is the area from the Water Dam Office Plaza, northeast to the existing causeway at McDowell Lane. This Middle Zone becomes more accessible for pedestrians as well as vehicles as we move north toward the existing dam. Residential and commercial land uses on either side of the lake become apparent, and the environmental condition of the lake begins to deteriorate. This portion of the lake contains the largest areas of sediment deposits; in many areas severely limiting the depth of the water.

Recommendations for this portion of the lake include access trails and a small pedestrian bridge that will gain access to this portion of the lake. Since this is the area of the greatest concentration of sediment, which over time has begun to transform the sediment into actual landmasses, a Wetland Interpretation Center is proposed to take full advantage of the existing conditions. The general public as well as school districts and scout troupes will utilize this Interpretive Center. Placards, signage and informational kiosks will provide visitors with information regarding the existing wetland flora, waterfowl and songbirds. Areas will be access, where feasible, by a system of proposed trails that will include seating areas, areas for bird watching, and increased fishing opportunities. The overall land use of this zone begins to have more direct impact from existing residential and commercial development.

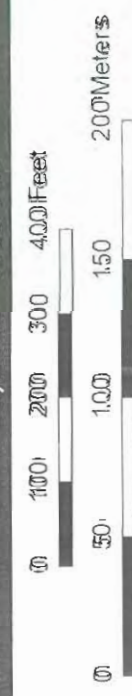
Lower Zone

The Lower Zone is that portion of the lake that lies between the existing causeway at McDowell Lane and the existing dam. In many ways, this portion of the lake receives the greatest impact from surrounding land uses, both residential and commercial. This portion of the lake also provides the deepest water available for use by small watercraft primarily for the purposes of fishing. Therefore, recommendations for this zone are to continue its primary function as the “deep” water fishing area. Existing parking lots and boat launch will be improved through lighting, picnic areas, restroom facilities, etc. In addition, an extension of the existing causeway to allow pedestrian access safely across the lake will permit the extension of an existing trails system.

The following Master Plan will discuss all of the above features in more detail and will also indicate the process by which these recreational improvement recommendations were made.



**Pennsylvania Fish and Boat Commission's
Canonsburg Lake - Upper Zone
Recreational Master Plan
Public Meeting #3
June 20, 2006 7:00 PM**



WASHINGTON COUNTY
WATERSHED ALLIANCE



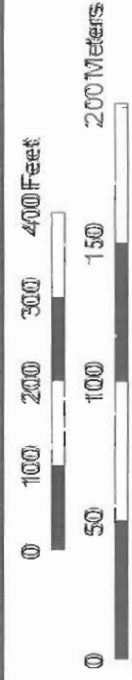
- Stream
- Wetland
- Open Water
- Canonsburg Lake Property
- Municipal Boundary



- Stream
- Wetland
- Open Water
- Canonsburg Lake Property
- Municipal Boundary



Pennsylvania Fish and Boat Commission's
Canonsburg Lake - Middle Zone
Recreational Master Plan
Public Meeting #3
June 20, 2006 7:00 PM





Pennsylvania Fish and Boat Commission's
 Canonsburg Lake - Lower Zone
 Recreational Master Plan
 Public Meeting #3
 June 20, 2006 7:00 PM



PARKING AREA 2
 IMPROVE EXISTING PARKING AREA
 RE-PAVING
 STRIPING TO INCLUDE SPACES FOR TRAILERS
 LIGHTING
 PERMANENT RESTROOMS
 PICNIC AREA
 LANDSCAPING
 SIGNAGE/KIOSK
 WALKING TRAILS

PARKING AREA 1
 IMPROVE EXISTING PARKING AREA
 PAVING
 STRIPING
 LIGHTING
 PERMANENT RESTROOMS
 PICNIC AREA
 LANDSCAPING
 SIGNAGE/KIOSK
 WALKING TRAILS

- Stream
- Wetland
- Open Water
- Canonsburg Lake Property
- Municipal Boundary

I. INTRODUCTION

INTRODUCTION

Goals and Objectives

The Canonsburg Lake Master Site Plan is a long – range plan for the development of future potential recreational uses of Canonsburg Lake. Future development of the property for public recreational use as well as conservation and environmental education will be the main goals of this Master Plan. Canonsburg Lake is a unique recreational area due to its proximity to significant residential and commercial areas, major transportation systems, and ever- encroaching pressures of land development. Utilizing this Master Plan as a guide for future development and improvements to the lake and its surrounding property should include proper planning for recreational uses, environmental conservation, and environmental education. The long-term intent of this Master Plan is to encourage those recreational uses determined by this Plan, which will serve to enhance the site's natural features as well as the residential / commercial properties which surround a significant portion of the portion of the lake. By utilizing the natural features of Canonsburg Lake in concert with the proposed recreational and educational potential, this area can serve the surrounding communities well into the future while recognizing the regulatory and financial limitations which will also be addressed in the Master Plan.

The major goals for this Master Plan are as follows:

- Conserve the integrity of the Canonsburg Lake and surrounding property.
- Enhance the recreational opportunities of the lake for area residents and visitors.
- Reduce the amount of silt and sediment entering Canonsburg Lake from Little Chartiers Creek.
- Develop conservation and educational opportunities for the lake and surrounding property.
- Develop public awareness and support for Canonsburg Lake as a community and regional resource.

This Master Site Development Plan for Canonsburg Lake is an effort to develop a long-range plan for future recreational use of the lake, as well as environmental education, due to the diverse natural features currently found at the lake. By collecting data on existing conditions of the lake and surrounding property and by an in-depth analysis of the surrounding municipalities who currently utilize the lake, thoughtful decisions can be made in the future to better improve this regional resource known as Canonsburg Lake.

Process

The process involving the planning and development of the Master Plan required a partnership of local residents, community organizations and local agencies with an interest in the future integrity of Canonsburg Lake and the improvement of the existing facility for future recreational uses. The Washington County Watershed Alliance developed informational brochures, collected surveys, organized public meetings, met with local law- makers and generated an overall public awareness of the existing condition of Canonsburg Lake and surrounding property. These organizations participated in the planning process, presented their concerns and ideas, and aided in developing a plan for the future of Canonsburg Lake, as well as for future public recreational opportunities. The Steering Committee played an active role in developing public awareness for the project. In addition, the Committee as solicited input, information and assistance from various agencies including the Washington County Conservation District, the Washington County Department of Recreation, the Pennsylvania Fish and Boat Commission, Pennsylvania Department of Natural Resources, the Pennsylvania Turnpike Commission, and the U.S. Army Corps of Engineers.

Public Participation

The consultants and Steering Committee assembled data and developed alternatives for future recreational planning for Canonsburg Lake. Public participation was encouraged in the process as an important aspect in the final decision making process. Surveys and questionnaires were developed and distributed at various public events throughout the year. A series of press releases concerning the project were issued providing details of the public process to the general public. A series of three (3) public meetings were conducted to solicit further input from those interested residents of the area as well as to give the Steering Committee an opportunity to keep the public involved in the Master Planning process. These public meetings also provided an opportunity to present the plan and receive comments regarding the proposed alternatives from interested parties. These public meetings were held at the Little Lake Theater, which is a small regional theater located directly on the west bank of Canonsburg Lake directly off of McDowell Lane in North Strabane Township.

The Steering Committee members and the Consultant presented the draft Master Plan to the members of the Washington County Board of Commissioners, and the Township Supervisors of Peters and North Strabane Townships. In addition, officials from the Pennsylvania Fish and Boat Commission, the U.S. Army Corps of Engineers, and consultants for the Pennsylvania Turnpike Commission were kept informed as to the progress of the Master Plan and the recommendations associated with it.

Public Participation (continued)

The input of the various local governments, governmental agencies as well as general public input and awareness was determined as vital to the successful development of the Canonsburg Lake Master Site Plan.

The ultimate conclusions and recommendations for the Canonsburg Lake Master Site Plan will be implemented over time, with particular phases completed based on availability of funds and the ultimate determination of priorities. The full realization of the Master Plan will require a commitment from the Steering Committee as well as public and private cooperation. Ultimately, available funding will determine the development of many of the recommendations. In the stage of the process, building public awareness, support and concern has been the main priority of the Steering Committee. In this regard, the public awareness of the plight of Canonsburg Lake has been expanded from those residents and fisherman most familiar with the lake and its history, to the general public, and policy makers throughout the region and the Commonwealth.

Master Plan Accomplishment

Accomplishing the Master Plan will be phased over a number of years, although several small steps have already begun including existing trail renovations, bench placements and kiosks. The realization of this Master Plan will require both public and private cooperation and commitment. Certainly, the more ambitious elements of this Master Plan will take considerable time, effort and funding to realize the completion of the Master Plan recommendations. In addition, the Master Plan may, over time, require changes to meet changing conditions of the surrounding areas depending on actual future development, as well as the changing conditions and level of public expectations and support.

Canonsburg Lake Master Plan Steering Committee

Debra Valentino, Project Manager	Southside Lake Corporation Homeowners Association
Gary Stokum, President	Washington County Watershed Alliance
Susan Carmichael	Washington County Conservation District
Jeff Donahue	Washington County Parks and Recreation
Vira Doughton	Cranmoor Townhomes Condominium
Joan Jessen	Chartiers Creek Watershed Association
Wallace J. Klein	Peters Township Planning Commission
Eric Large, Land Development Coord.	Washington County Planning Commission
Carole Milas	Waters Edge homeowners Association
Paulette Moyer, Assistant Twp. Mgr.	North Strabane Township
Tracy Stack	Pa Dept. of Conservation and Natural Resources
Mike Piaskowski	Pa Dept. of Conservation and Natural Resources
Tom Ford	Pennsylvania Fish and Boat Commission
Mark Fickley	Consultant

Section I – Introduction

Washington County Watershed Alliance

Gary Stokum, President
Kitty Gardner, Vice-President
Sheila Burcin, Secretary
Joan R. Jessen, Treasurer
Dan Derber
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Robert East, PhD
Tim Schumann
Ted Flickinger
Attilia Shumaker
Vicki Michaels

Board of Directors

Washington County Conservation District
Cross Creek Watershed Association
Penn State Cooperative extension
Chartiers Creek Watershed Association
Ten Mile Creek Watershed Conservancy
Pike/Pigeon/Maple Watershed Association
Washington and Jefferson College
Peters Creek Watershed Association
Buffalo Creek Watershed Association
Wheeling Creek Watershed Conservancy
Raccoon Creek Watershed Association

Washington County Watershed Alliance

The Alliance is an I.R.S. – approved 501 (c) (3) organization, Fed. ID # 25-1815293; it is an umbrella organization for watershed associations in Washington County, Pennsylvania. The Alliance maintains a mission to enhance, protect, and develop the natural resources of watersheds with their headwaters in Washington County. This mission will be accomplished through scientific investigations, research, education and outreach and by supporting activities, encouraging sustainable land use and providing assistance to local watershed associations.

The Alliance is governed by a board of directors that includes representatives for Buffalo Creek, Cross Creek, Chartiers Creek, Mingo Creek, Peter Creek, Pike Run, Pigeon Creek, Maple Creek, Raccoon Creek, Ten Mile Creek, Wheeling Watersheds, Penn State Cooperative Extension, Washington County Conservation District and Washington and Jefferson College. The Alliance is membership-based, all-volunteer and open to any individual that resides within the boundaries of Washington County.

Activities of the Alliance include educational programs for schools and community groups, outreach to the community through WATERSHED CONNECTIONS, a quarterly newsletter, programs on topics of general public interest, and displays at the Washington County Fair, Washington County's Ag Days and occasionally at other festivals and community days, assistance and support for watershed groups that belong to the alliance and maintenance of a resource library, including information about federal and state programs and sources of funds for watershed projects. One of the Alliance's most significant projects to date is the Washington County Children's Groundwater Festival. Currently in its eleventh year, the festival is a project of the Alliance's Groundwater Coalition Education Committee and provides groundwater education to participating sixth graders. The Alliance also regularly conducts monthly meetings, water quality monitoring, public education programs and training workshops for volunteer groups. Washington County has also been a Groundwater Guardian Community since 1995.

**II. COMMUNITY SETTING AND
BACKGROUND INFORMATION**

**CANONSBURG LAKE
MASTER PLAN
WASHINGTON COUNTY
WATERSHED ALLIANCE**

**MARK FICKLEY
LANDSCAPE ARCHITECT**

**EXISTING
CONTIDITIONS**



COMMUNITY SETTING AND BACKGROUND INFORMATION

Regional Location and Setting

The 76-acre Canonsburg Lake surface area, as well as the surrounding 62-acre property combines to create the 138-acre parcel known as Canonsburg Lake. The lake is owned by the Commonwealth of Pennsylvania and operated by the Pennsylvania Fish and Boat Commission, and is one of the few publicly owned lakes in Washington County which is regularly stocked with trout by the Pennsylvania Fish and Boat Commission. The township boundary line between Peters Township and North Strabane Township bisects the lake on an axis from north to south, with Peters Township to the east and North Strabane Township to the west. The property is located in Washington County, several miles north of the Borough of Canonsburg.

Peters Township is primarily residential in character, single and multi-family developments occurring to the north and east of the lake. The Route 19 corridor that passes directly to the east of Canonsburg Lake has been developed commercially and currently enjoys a thriving business and retail activity. This commercial core of Peters Township serves as a regional destination for shopping, restaurants, professional and medical services as well as banking. The western and southern portions of the Lake are primarily undeveloped, except for a portion of the southeastern shoreline where a multi-building office park has been developed. Significant portions of the western shoreline have been developed with single – family and cottage style homes that are part of North Strabane Township. Further west are large undeveloped parcels of land that is currently zoned commercial, but are under increasing pressure to be developed as prime, multi-family residential property which will place further development impact on the lake. A community of townhouses known as Waters Edge and Green has been developed on portions of the eastern shoreline.

The southwest portion of the lake remains undisturbed, and due to topographic and other environmental constraints, should remain in a natural state for some time in the future. The remainder of the lake shoreline has been previously developed either in a commercially or residentially. Both types of land use could conceivably benefit from overall improvements to the lake as well as specific recreational improvements that this Master Plan seeks to identify.

The Canonsburg Lake property is within easy access from the northern portions of Washington County as well as southern Allegheny County due to the close proximity of several major transportation arteries. Interstate 79 passes several miles to the west of the lake, while State Route 19 provide direct access to the lake as it passes directly to the east of the lake.



Regional Location and Setting (continued)

The anticipated future development of the Southern Beltway, known as the I-79 - Mon/Fayette Expressway may directly impact Canonsburg Lake due to the proposed direct highway impact as well as the proposed location of a major interchange less than a mile to the south of the lake. (See appendix)

Peters Township has experienced significant growth in the past twenty years, and continues to grow as farmland is converted into new residential developments. The direct impact on Canonsburg Lake from the Peters Township side is essentially completed, except for several small parcels of property that are currently on the market. Development of these parcels can be expected within the next several years. Beyond that, the majority of the Peters Township impact on the lake can be accurately measured by current developed land uses.

Much of North Strabane Township, particularly large parcels to the west and adjacent to the lake remains undeveloped, with agricultural and forest land the predominant elements of the rural landscape. However, housing pressures on these areas of North Strabane Township, particularly west of Canonsburg Lake appear likely in the future. Although the vacant property to the west of the lake is currently zoned Commercial, the revisions to the North Strabane Township Zoning Ordinance may re-zone this area to multi-family residential, which will require further needs for recreational development in and around Canonsburg Lake.

Population and Housing Trends

Population

According to *US Census Bureau, American Fact Finder*, the population of Washington County is recovering from a decrease in overall population from 1990 to 2000, to an overall population in 2005 greater than any previous period.

Between 1990 and 2000, the overall population of Washington County decreased slightly from 204,584 to 202,897. However, since 2000, the population has rebounded to a population of 206,406, which is a net increase of almost 2%. The local municipality population trends indicate a greater increase in population during the same period. Peters Township has enjoyed an increase in population of 33%, while North Strabane Township has shown an increase of nearly 40%. This discrepancy in population growth between the local municipalities and the overall county population growth indicates the strong residential growth patterns in Peters Township and North Strabane Township, which will place increasing demand on Canonsburg Lake, as well as put further environmental pressure (sediment) on the lake.

Population Projections

As indicated on the *Population Projections, Pennsylvania Counties: 2000 to 2020 By 5 Year Increments*, the population of Washington County is projected to continue to decrease, due to a steady erosion of the manufacturing base. However, as previously noted, the population of Peters Township and North Strabane Township are projected to continue to increase due in large part to relative proximity to the Greater Pittsburgh region and overall real estate tax attractiveness. The surrounding municipalities of Peters Township and North Strabane Township will continue to grow primarily as residential development. The adjacent commercial core along US Route 19 will also continue to put development pressure on Canonsburg Lake.

Housing

Between 1990 and 2000, the number of housing units in Washington County increased by 8,768, reaching a total of 87,267. Currently, Peters Township contains 6,221 housing units while North Strabane Township has 4,156 housing units. The two (2) municipalities combined contain approximately 12% of all housing units in Washington County. The eastern portion of Peters Township still contains farmland and forested areas that are prime for development. The western portion of the Township (adjacent to Canonsburg Lake) has been developed extensively since 1970. North Strabane Township still has significant farmland and forested areas ripe for development, particularly those properties to the immediate west and south of Canonsburg Lake. The surrounding areas are by no means fully developed. Given the housing trends over the past thirty years, additional housing development can be expected in the Peters and North Strabane Townships. This increase in population will place an even greater demand on Canonsburg Lake as a recreational destination.

Need for Facilities and Services

The increasing population demands on the region will translate into increased demand for public facilities and services, including outdoor recreation and environmental education. However, increased development results in the loss of open land and magnifies the importance of public land and outdoor recreation. Canonsburg Lake is a unique recreational opportunity within an existing thriving commercial and residential corridor. The proximity of Canonsburg Lake to an ever-increasing population in northern Washington County makes the development of a Master Plan critical to the future demands on the lake. Canonsburg Lake is an element of the area's public land available for outdoor recreation. The future uses of Canonsburg Lake must be considered in terms of population growth and availability of other recreational destinations.

Section II – Community Setting and Background Information

**Population Projections, Pennsylvania Counties: 2000
To 2020 By 5 Year Increments**

	1990						
	Census	Estimate	2000	2005	2010	2015	2020
Pennsylvania	11,881,643	11,905,197	12,241,488	12,328,348	12,407,523	12,490,248	12,569,01
Venango	59,381	59,256	55,943	54,389	53,140	51,992	50,85
Warren	45,050	44,843	42,486	41,295	40,278	39,333	38,30
Washington	204,584	204,147	201,414	199,129	196,872	194,225	191,08
Wayne	39,944	40,523	46,392	48,341	49,748	50,703	51,33
Westmoreland	370,321	370,314	368,354	364,999	361,495	357,681	353,57
Wyoming	28,076	28,349	32,210	33,836	35,187	36,286	37,20
York	339,574	340,948	382,047	394,330	403,133	410,204	415,93

(1) Percent change was calculated using the 1990 Estimated population

Source: U.S. Department of Commerce, Bureau of the Census, 1990 Census of Population and Housing.
Prepared by the Pennsylvania State Data Center

Year Structure Built, Pennsylvania Counties: 2000

	Total Housing Units	1999 to March 2000	1995 to 1998	1990 to 1994	1980 to 1989	1970 to 1979	1960 to 1969	1940 to 1959
Pennsylvania	5,249,750	66,916	212,916	266,445	531,986	709,768	595,897	1,275,149
Venango	26,904	205	898	815	2,429	4,098	2,588	5,375
Warren	23,058	309	741	989	2,162	3,379	2,573	4,596
Washington	87,267	1,243	3,452	4,073	7,254	11,922	9,702	21,514
Wayne	30,593	536	1,973	3,653	6,805	5,212	2,482	3,505
Westmoreland	161,058	1,901	5,933	7,313	14,304	25,115	22,073	41,769

U.S. Department of Commerce, Bureau of the Census, 2000 Census of Population and Housing
Prepared by the Pennsylvania State Data Center

Section II – Community Setting and Background Information

GCT-T1-R. Population Estimates (geographies ranked by estimate)

Data Set: 2005 Population Estimates

Geographic Area: **Pennsylvania -- County**

Rank	Geographic area	Population Estimates						Estimates Base	Census 2000
		July 1, 2005	July 1, 2004	July 1, 2003	July 1, 2002	July 1, 2001	July 1, 2000	April 1, 2000	April 1, 2000
	Pennsylvania	12,429,616	12,394,471	12,364,930	12,324,415	12,296,063	12,286,314	12,281,054	12,281,054
COUNTY									
1	Philadelphia County	1,463,281	1,471,255	1,477,055	1,486,594	1,498,501	1,513,701	1,517,550	1,517,550
2	Allegheny County	1,235,841	1,247,512	1,258,476	1,265,773	1,272,568	1,279,817	1,281,666	1,281,666
3	Montgomery County	775,883	773,375	770,538	764,146	758,276	750,943	748,987	750,097
4	Bucks County	621,342	617,214	612,853	609,076	604,122	599,490	597,632	597,635
5	Delaware County	555,648	554,426	554,263	553,356	553,049	552,206	551,974	550,864
6	Lancaster County	490,562	486,361	482,605	478,360	474,552	471,743	470,658	470,658
7	Chester County	474,027	466,043	457,728	449,863	442,309	435,824	433,501	433,501
8	York County	408,801	401,063	395,208	389,583	385,655	382,749	381,751	381,751
9	Berks County	396,314	391,447	386,339	381,657	377,699	374,561	373,638	373,638
10	Westmoreland County	367,635	367,937	368,534	368,271	369,109	369,820	369,993	369,993
11	Lehigh County	330,433	325,570	321,434	317,203	314,894	312,673	312,090	312,090
12	Luzerne County	312,861	313,088	313,973	314,618	315,961	318,606	319,250	319,250
13	Northampton County	287,767	283,333	278,229	273,685	269,639	267,488	267,069	267,066
14	Erie County	280,446	280,844	282,996	282,409	281,674	280,716	280,843	280,843
15	Dauphin County	253,995	253,060	253,192	252,623	251,623	251,827	251,798	251,798
16	Cumberland County	223,089	221,135	219,486	217,478	215,158	213,970	213,674	213,674
17	Lackawanna County	209,525	209,950	210,300	210,996	212,185	212,924	213,295	213,295
18	Washington County	206,406	205,319	204,814	203,756	203,532	203,040	202,897	202,897

The 2004 population estimate for North Strabane township, Washington County, Pennsylvania is 11,394.

View population trends...

	2004	2000	1990
Population	11,394	10,057	8,157

The 2004 population estimate for Peters township, Washington County, Pennsylvania is 19,249.

View population trends...

	2004	2000	1990
Population	19,249	17,566	14,467

Source: U.S. Census Bureau, 2004 Population Estimates, Census 2000, 1990 Census

Source: U.S. Census Bureau, Population Estimates Program
 More Tables and Information: [Population Estimates Program](#)

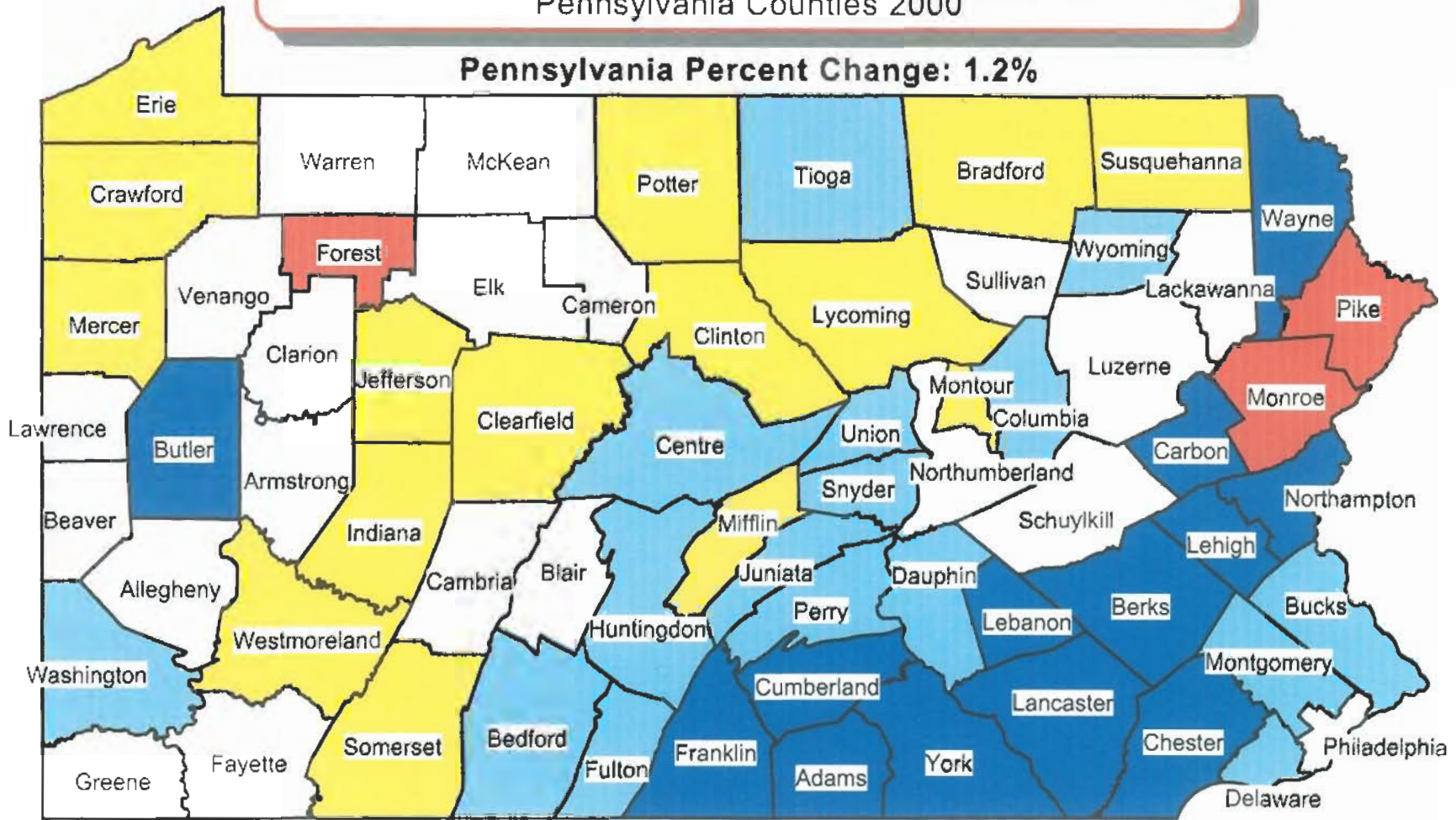
NOTE: The April 1, 2000 Estimates Base reflects modifications to the Census 2000 population as documented in the Count Question Resolution program, updates from the Boundary and Annexation Survey, and geographic program revisions. An "(X)" for the Census 2000 value indicates a locality that was formed or incorporated after Census 2000 or was erroneously omitted from Census 2000. See [Geographic Change Notes](#) for additional information on these localities.

Estimated Population Percent Change

April 1, 2000 Estimate Base to July 1, 2005

Pennsylvania Counties 2000

Pennsylvania Percent Change: 1.2%



Percent Change

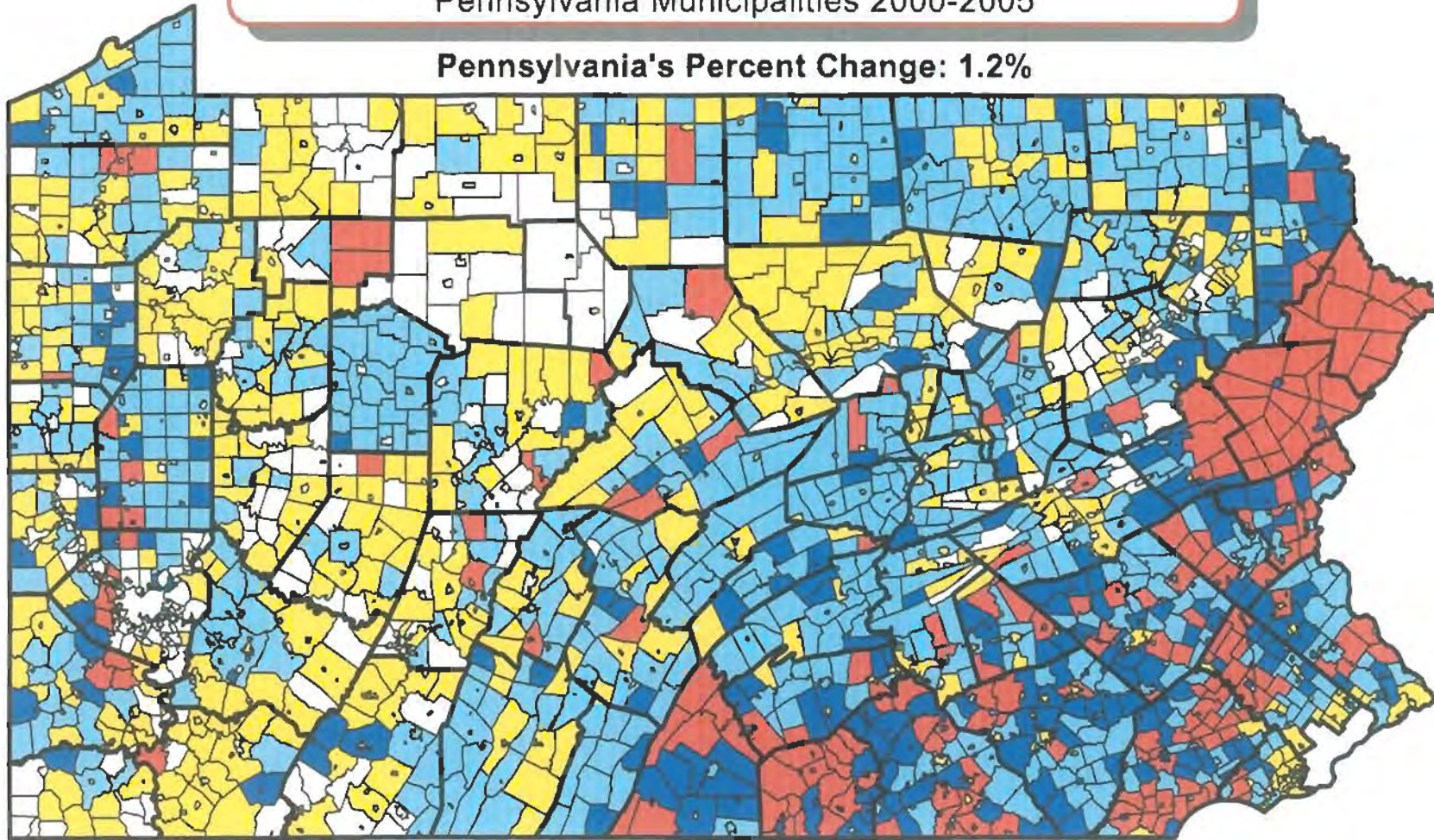
- Less than -1.5%
- 1.5% to -0.1%
- 0.0% to 4.0%
- 4.1% to 15.0%
- Greater than 15.0%

Estimated Population Percent Change

April 1, 2000 Estimate Base to July 1, 2005

Pennsylvania Municipalities 2000-2005

Pennsylvania's Percent Change: 1.2%



Percent Change

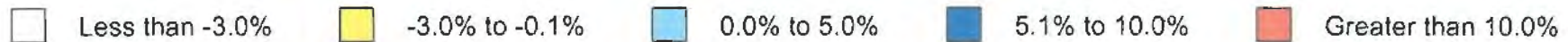


Figure 2

Population Change Map – Municipalities

Community Plans and Land Use Controls

The local municipalities, Peters Township and North Strabane Township, as well as Washington County and the Commonwealth of Pennsylvania plan and manage land use under the terms of the Pennsylvania Municipalities Planning Code. This code authorizes the adoption of comprehensive plans on both the county and municipal level. This code also determines sub-division and land development ordinances, as well as zoning ordinances with govern land use in the area.

Washington County Comprehensive Plan

The Washington County Comprehensive Plan was adopted in November 2005. Included in this Comprehensive Plan are detailed strategies for future Housing Development, Land Use and Parks and Recreation, among other topics. According to the Washington County Comprehensive Plan, Chapter C – Land Use, the following recommendations have been adopted regarding the two municipalities adjacent to Canonsburg Lake and potential future impacts of the surrounding area.

North Strabane Township, Adopted 2003

- *Improve community's attractiveness and quality of life by creating a distinct township identity*
- *Protect and utilize the community's natural, cultural and historic resources for the benefit of current and future generations while accommodating planned growth*
- *Accommodate the existing and future development needs by strategically expanding and financing sewer improvements through public-private cooperative partnerships*
- *Optimize the physical and economic benefits of the proposed Southern Beltway and other potential transportation improvements*
- *Provide a range of housing choices in targeted areas while encouraging single-family ownership*
- *Maintain high quality public services, civic programs and educational opportunities by optimizing available resources*
- *Provide a framework for strategic decision-making regarding the evaluation and implementation of proposed development and construction within targeted growth areas*
- *Establish zoning and land development regulations that balance development densities within infrastructure capabilities*

Washington County Comprehensive Plan (continued)

Peters Township (adopted 2001)

- *Complete a comprehensive update of the existing zoning and subdivision ordinances*
- *Seek builder/developer and agricultural/residential community input into the formation of specific zoning subdivision ordinance amendments*
- *Develop an overlay district along Route 19, which identifies design guidelines for new developments, reuse project, and building expansions*
- *Create McMurray Town Center District*
- *Consider rezoning the East Valley Brook Road Corridor as a mixed use zone, between Route 19 and Nottingham Township, which would permit offices, limited light industrial and multi-family residential*

Recreation

Land currently used for passive or active recreation purposes. These activities include trails, parks, tot lots, ball fields, and playgrounds. The Washington County Department of Parks and Recreation is responsible for 5,400 acres of parkland in Washington County offering picnic shelters, nature trails, bicycle trails, and hunting and fishing areas. Washington County has over 70 miles of trails available for recreational and alternative transportation purposes. Approximately 1,600 acres of municipal recreational lands were identified during the planning process.

The Washington County Comprehensive Plan identifies Canonsburg Lake as one of three significant bodies of water within the county (excluding the Monongahela River). The other water bodies include Cross Creek Lake and Dutch Fork Lake, which was drained in 2005)

Land Use Controls

The sub-division and land use ordinances and zoning ordinances are the two-principal land use controls authorized by the Pennsylvania Municipalities Planning Code, through North Strabane and Peters Township.

Land Use Controls (continued)

The eastern side of Canonsburg Lake is within the municipality of Peters Township. Land use controls in this portion of the Township are C-3 Business District, C-2 General Commercial District, R-2 Multi-family Residential District, and R-1 Residential District. The Peters Township side of Canonsburg Lake is almost completely developed, aside from a C-2 Commercial District portion along Route 19 at the southern end of the lake, and an R-1 Residential District portion, located on the northern portion of the lake, near the existing dam.

By contrast, little of the North Strabane Township side of the lake has been developed, except for the cottages along the western shoreline of the lake. Significant sections of undeveloped land occur in this area. These areas have been recently re-zoned as a R-3 Multi-family Residential District. Due to the amount of undeveloped land to the west of the lake, significant development pressure should be anticipated in these areas. Absence of a public sanitary sewer on McDowell Lane has limited development thus far, however ever increasing pressure to develop this area is continuing and should be anticipated as further demand on Canonsburg Lake and it's resources.

III. SITE INFORMATION & ANALYSIS

SITE INFORMATION AND ANALYSIS

Purpose

A thorough understanding of the existing physical features of the Canonsburg Lake and surrounding property is necessary to develop environmentally sensitive recreational alternatives. Surrounding land uses, neighborhood compatibility, regulatory limitations, zoning, soil conditions, wetlands, vegetative cover, wildlife habitat, and urban development pressures have been studied and these analysis have been made part of the Canonsburg Lake Master Plan.

History

The dam at Canonsburg Lake, originally known as the Alcoa Dam was originally constructed in 1941. As World War II progressed, the Alcoa Aluminum Company (ALCOA) Plant in nearby Canonsburg was constructed to aid in manufacturing for the war effort. The dam was built originally to provide power for this local manufacturing plant. In 1958, the Commonwealth of Pennsylvania acquired the lake, surrounding property, and the dam, a total of 138 acres, which includes the 76-acre lake. Since 1958, Canonsburg Lake has been used for limited recreational purposes, almost exclusively for fishing and boating. Over time, the lake has been filling with sediment and silt to the point where the navigability of the lake has been significantly affected. Water depths at the upper end of the lake have measured at 1 – 2 feet or less, with the maximum depth near the dam at 18 feet.

Over the years, significant residential development has occurred around the lake, as well as the development of several business establishments. In particular, the Little Lake Theater has been in operation along the western shore of Canonsburg Lake since 1949. The theater operates in the old McDowell Farm barn that has been renovated into a small local theater. This theater served as the meeting place for all public meetings relative to fact finding and presentation of the Master Plan to interested citizens. Near the lake can also be found several restaurants, a golf driving range facility, and new commercial center.

History (continued)

Canonsburg Lake is located in Peters and North Strabane Townships, Washington County, Pennsylvania. The lake is formed by a concrete gravity dam, which impounds Little Chartiers Creek, which is adjacent to Donaldson's Crossroads and State Route 19. The dam is approximately 525 feet long and 45 feet high. It impounds a lake with a surface area of approximately 76 acres with an original maximum depth at normal pool of 34 feet. The drainage area for the lake is comprised of approximately 46 square miles, which makes up a significant portion of north central Washington County.

The Commonwealth of Pennsylvania acting by and through the Pennsylvania Fish and Boat Commission owns and controls approximately 138 acres at this site, which includes the 76 - acre lake, dam, shoreline and adjacent property.

Like many aging impounded lakes, Canonsburg Lake is gradually filling with silt. At some point in the life of any impoundment, dredging is required to maintain the pool at desirable depths. The depths of the upper end of the lake have lowered to the point that, in some circumstances, boating is difficult or impossible. The Pennsylvania Fish and Boat Commission has had the silted material tested and found that it does not contain contaminants.

General Description and Current Use

Canonsburg Lake is known primarily as a fishing lake, owned and operated by the Pennsylvania Fish and Boat Commission. The lake is part of the Commission's annual trout stocking program. Fisherman from throughout the area fish Canonsburg Lake by boat (electric motor limitation) or from shore throughout the year. Shallow sections of the lake (southern end) are known to freeze over during the winter months providing opportunities for ice hockey and skating. Bird watching, in particular, the ongoing documentation of the resident great blue heron, provides additional interest in Canonsburg Lake. Finally, the surrounding residential properties benefit from the lake's tranquility and charm.

Recreation Areas in the Region

As previously discussed, there are two additional lakes in Washington County providing recreational amenities. Cross Creek Lake can be found in the western portion of Washington County. Dutch fork Lake, another popular fishing destination, was drained in 2004 due to dam instability. In addition, there is a lake within several miles of Canonsburg Lake, owned and maintained by Peters Township. Waterdam Lake (the former Boone Reservoir) is also nearby and is currently privately owned.

Surrounding Land Use

The area immediately surrounding the lake consists of primarily residential and commercial mixed uses. The North Strabane side of the lake contains cottages along the shoreline, as well as the Little Lake Theater and a restaurant. The Peters Township side of the lake boasts primarily multi-family housing along with an office park and neighboring restaurant. The southwestern portion of the lake has remained undeveloped due to topographic obstacles and lack of public sewerage. This area has remained relatively pristine, with significant areas of wetlands and woodlands.

These diverse surrounding land use patterns create a very unique situation relative to potential recreational improvements to Canonsburg Lake. The fact that this lake coexists with a significant commercial and residential core along Route 19 is one of the attractive features of the lake. Within a very short distance, traffic lights and vehicular traffic give way to an undisturbed natural setting. This dichotomy of land uses around Canonsburg Lake make it a very unique situation and extremely valuable for the lake's recreational potential, which has yet to be fully realized.

Access and Parking

The main access to Canonsburg Lake is from McDowell Road, on the eastern shore of the lake. McDowell Road provides direct access to the existing parking lot and boat launch area. McDowell Road continues across the lake forming the causeway and bridge that carry vehicles across the lake to residences on the western shore of the lake. McDowell Road is a paved township road, maintained by Peters Township and North Strabane Township respectively. The existing bridge over a portion of the lake is owned and maintained by Washington County. As McDowell Lane crosses the lake, it leads to a smaller parking area directly south and west of the causeway. This area is paved but offers no boat launch facility or defined parking spaces.

The second primary access to the lake is from the north. An un-named, aggregate road connects the lake to West McMurray Road in Peters Township. This existing aggregate roadway connects West McMurray Road and an existing aggregate parking area, located to the northeast of the existing dam. This area provides access to the lake primarily for fishermen who choose to fish from shore, as there is no boat launch capability from the parking area.

Buildings and Structures

The property owned and operated by the Pennsylvania Fish and Boat Commission contains one small concrete block building, adjacent to the dam. The only other structure within the Canonsburg Lake property is the Canonsburg Dam. Built in 1943, Canonsburg Dam is a concrete gravity structure 525 feet long and 45 feet high at its maximum section. An assessment of the Canonsburg Dam was conducted by the Fishing and Boating Facilities Design Section of the Pennsylvania Fish and Boat Commission in 1996. According to this assessment, in order to maintain this resource, the dam requires rehabilitation to address the following identified deficiencies:

- *The concrete exhibited minor surface deterioration*
- *The foundation exhibited significant water loss during the water pressure tests*
- *The spillway has insufficient capacity to pass the design flood (PMF) without overtopping the non-overflow sections of the dam.*
- *Both the spillway and non-overflow sections of the dam fail to meet the required sliding factors of safety for several loading conditions.*
- *There is no low level outlet for the reservoir.*

The recommended remedial measures include patching and sealing the exposed surfaces of the non-overflow sections, installation of post tensioned rock anchors to strengthen the dam and allow overtopping of the non-overflow section (safe passage of the SDF), foundation grouting in association with the post tensioning (to be coordinated with the anchor drilling and installation), and conversion of the existing 14 inch suction line to a low level outlet.

As an alternative, a shear block can be installed to strengthen the dam in lieu of the post-tensioned rock anchors. This option could be constructed using PFBC personnel.

Historic Resources

There are no known historical or archeological resources found at the site. A Pennsylvania Historical and Museum Notification will be required prior to any future site disturbance.

CANONSBURG LAKE BRIDGE

LOOKING WEST

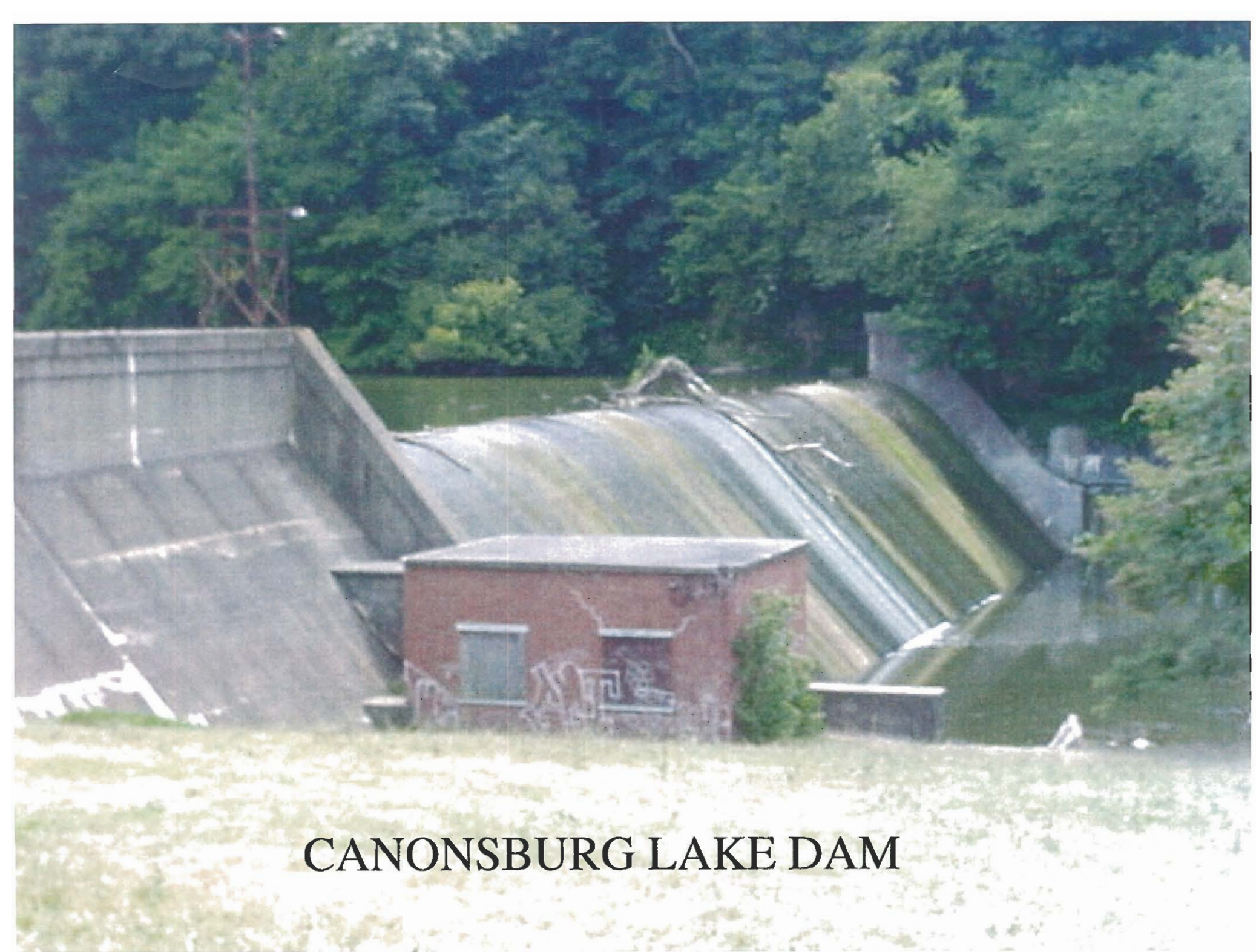


BOAT LAUNCH AREA





McDowell Lane



CANONSBURG LAKE DAM

Soils

There are several distinct soil types surrounding Canonsburg Lake. These soil types are quite common in this portion of Washington County, indeed the entire southwestern Pennsylvania region. A description of the soil types including characteristics will be described in this section of the Master Plan, excerpted from the Soil Survey of Washington County.

GdB – Glenford silt loam 3 to 8 percent

This soil type is deep and moderately well drained. Slopes range from 200 to 600 feet long. The areas are on terraces and range from about 2 to 70 acres.

Typically, the surface layer is brown silt loam about 9 inches thick. The subsoil is yellowish brown silt loam and lightly silty clay loam and is 38 inches thick. The substratum is yellowish brown gravelly silt loam to a depth of 60 inches.

The permeability of Glenford soils is moderately slow, and the available water capacity is high. Runoff is medium in GdB. Reaction in un-limed areas is very strongly acid or strongly acidic to a depth of about 25 inches. A seasonal high water table is at a depth of 24 to 36 inches. The hazard of erosion is moderate. The soils are well suited to trees, and the potential for woodland is very high. The seasonal high water table and moderately slow permeability of the soils are the main limitations for community development, especially for onsite sewerage disposal.

These soils are located in the southeast portion and a majority of the western shore of Canonsburg Lake

Py – Purdy silt loam

This soil is nearly level, deep, and poorly drained to very poorly drained. It is on terraces. Slopes are 100 to 500 feet long. The areas range from about 2 to 100 acres.

Typically, the surface layer is grayish brown silt loam about 8 inches thick. The subsoil is grayish brown and is 34 inches thick. It is silty clay loam in the upper 25 inches and silty clay in the lower 9 inches. The substratum is gray silty clay to a depth of 60 inches.

The permeability of this Purdy soil is slow or very slow, and the available water capacity is high. Runoff is slow. Reaction in un-limed areas is strongly acid or medium acid to a depth of about 20 inches and medium acid to slightly acid at a depth of more than 20 inches. A seasonal high water table is between the surface and a depth of 6 inches. The hazard for erosion is light.

Soils (continued)

Py – Purdy

The soil is well suited to water-tolerant trees, and the potential for woodland is very high. The high water table and slow permeability of the soil are the main limitations for community development, especially for onsite waste disposal. The low strength of the soil is a hazard for roads and foundations.

This soil type is located on the southwestern side of Canonsburg Lake.

DtF – Dormont-Culleoka silt loams, 25 to 50 percent slopes

This unit consists of steep and very steep, deep and moderately deep, well - drained and moderately well drained soils on uplands. Slopes are 100 to 800 feet long. Dormont slopes make up about 55 percent of this unit, Culleoka soils about 40 percent, and other soils about 5 percent. The areas range from about 5 to 800 acres. The soils are so intermingled that it was not practical to map them separately.

Dormont soils are dark brown silt loam and have a combined thickness of about 12 inches. The subsoil is 42 inches thick. The upper 15 inches is yellowish brown silt loam and silty clay loam. The lower 27 inches is mottled, yellowish brown silty loam and channery silty clay loam. The substratum is mottled, brown silty clay to a depth of 78 inches.

Typically, the surface layer of the Culleoka soils is dark brown silt loam about 11 inches thick. The subsoil is yellowish brown and is about 14 inches thick. The upper 10 inches is light silty clay loam, and the lower 4 inches is shaly heavy silt loam. The substratum is yellowish brown, very shaly silt loam, about 3 inches thick. Shale bedrock is at a depth of 28 inches.

Dormont soils have moderately slow permeability and high available water capacity. Runoff is rapid, and the hazard of erosion is very severe. Reaction in un-limed areas of the Dormont soils is strongly acid to medium acid to a depth of about 25 inches and strongly acid medium acid at a depth of more that 25 inches. A seasonal high water table is a depth of 18 to 36 inches.

The Culleoka soils have moderately rapid permeability and moderate available water capacity. Runoff is rapid, and the hazard of erosion is very severe. Reaction in un-limed areas of the Culleoka soils is medium acid or strongly acid to a depth of about 25 inches.

Soils (continued)

Dtf – Dormont-Culleoka silt loams, 25 to 50 percent slopes

These soils are well suited to trees, and the potential for woodland is high.

Slope, the seasonal high water table in the Dormont soils, and the depth to bedrock in the Culleoka soils are the main limitations for community development, especially for on-site waste disposal. Low strength in the Dormont soils is a hazard for roads and foundations.

These soils are located primarily on the eastern shoreline of Canonsburg Lake.

Topography and Slope

In general, the topography surrounding Canonsburg Lake property is gently sloping to hilly. Several steep slopes occur on the southwest and southeast portions of the lake.

Elevations surrounding the lake generally range between 950 and 975. These elevations are based on U.S.G.S. contours, describing the surrounding landforms as feet above mean sea level.

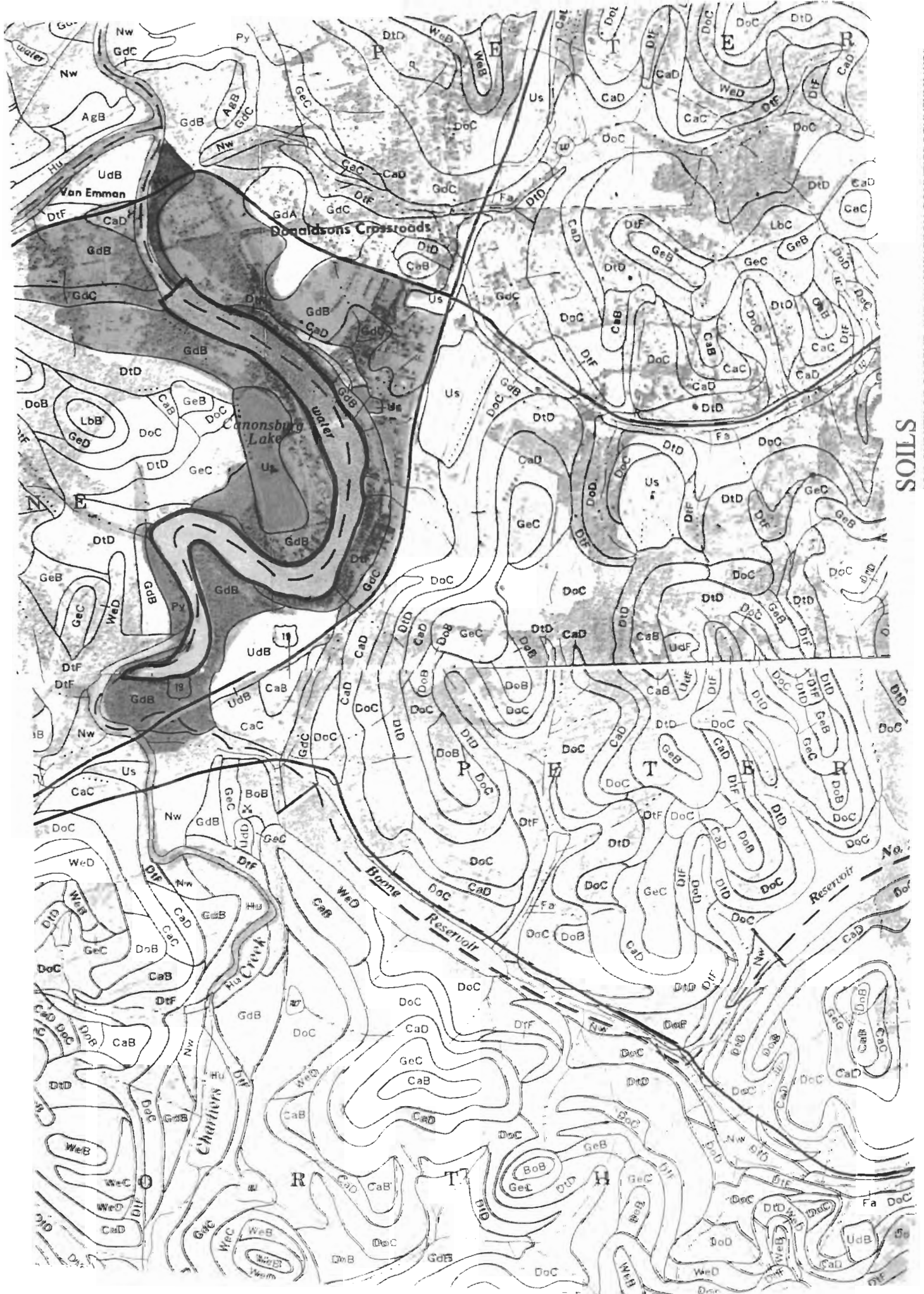
Although the elevations surrounding the lake are fairly consistent, there are variations in terms of steepness of slopes immediately adjacent to the lake. Steep slopes leading into the lake can be found along the eastern shore between the two existing parking areas, along the western shoreline near the existing dam, and an area along the southeast portion of the lake property, south of the Water Edge Condominiums.

Watershed and Hydrology

The property is within the Little Chartiers Creek Watershed. The lake itself was created by the impoundment of Little Chartiers Creek. Ultimately, the Little Chartiers Creek is part of the larger Ohio River drainage basin.

Canonsburg Lake has a drainage area of 29,405 acres or 46 square miles. As Little Chartiers Creek leaves Canonsburg Lake it flows into Chartiers Creek, and ultimately into the Ohio River near Pittsburgh.








Ninety – eight percent of the shoreline is within 1,600 feet of a public road. Canonsburg Lake is accessible from SR 0019 and T – 717 as a causeway midway through the impoundment.

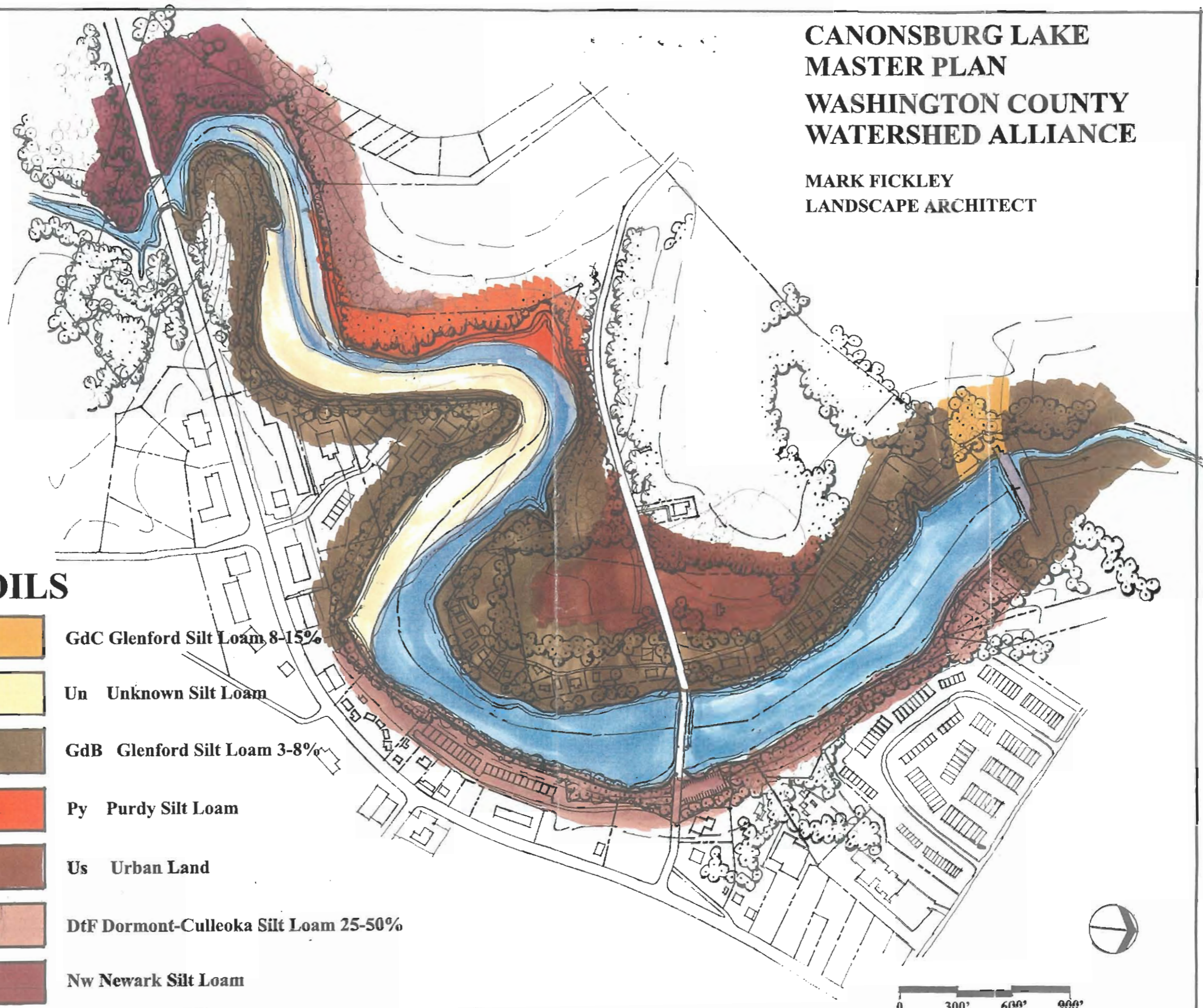


CANONSBURG LAKE MASTER PLAN WASHINGTON COUNTY WATERSHED ALLIANCE

MARK FICKLEY
LANDSCAPE ARCHITECT

SOILS

-  GdC Glenford Silt Loam 8-15%
-  Un Unknown Silt Loam
-  GdB Glenford Silt Loam 3-8%
-  Py Purdy Silt Loam
-  Us Urban Land
-  DtF Dormont-Culleoka Silt Loam 25-50%
-  Nw Newark Silt Loam



Forest Class and Age

The Canonsburg Lake property contains areas that are described as Woodlands, that is areas having trees with average height greater than 15 ft. with 20% - 60% canopy cover. These woodlands are fairly typical for the southwestern Pennsylvania region. Those areas that were cultivated many years ago are now covered with a mixed woodland vegetative cover containing wild cherry, ash, red maple and sassafras. Other portions of the property contain more mature woodlands containing a mixture of maples, oaks, hickory, and beech species.

Most of the woodland cover over previously farmed areas (formerly McDowell Farm on the western side of Canonsburg Lake) are approximately 30 to 40 year growth. More mature areas containing maples, oaks and beech species are more likely to be in the 70 to 100 year bracket. Most of this type of woodlands occurs on steep slopes around the perimeter of the lake, and in the southern portions of the lake property.

Farming History

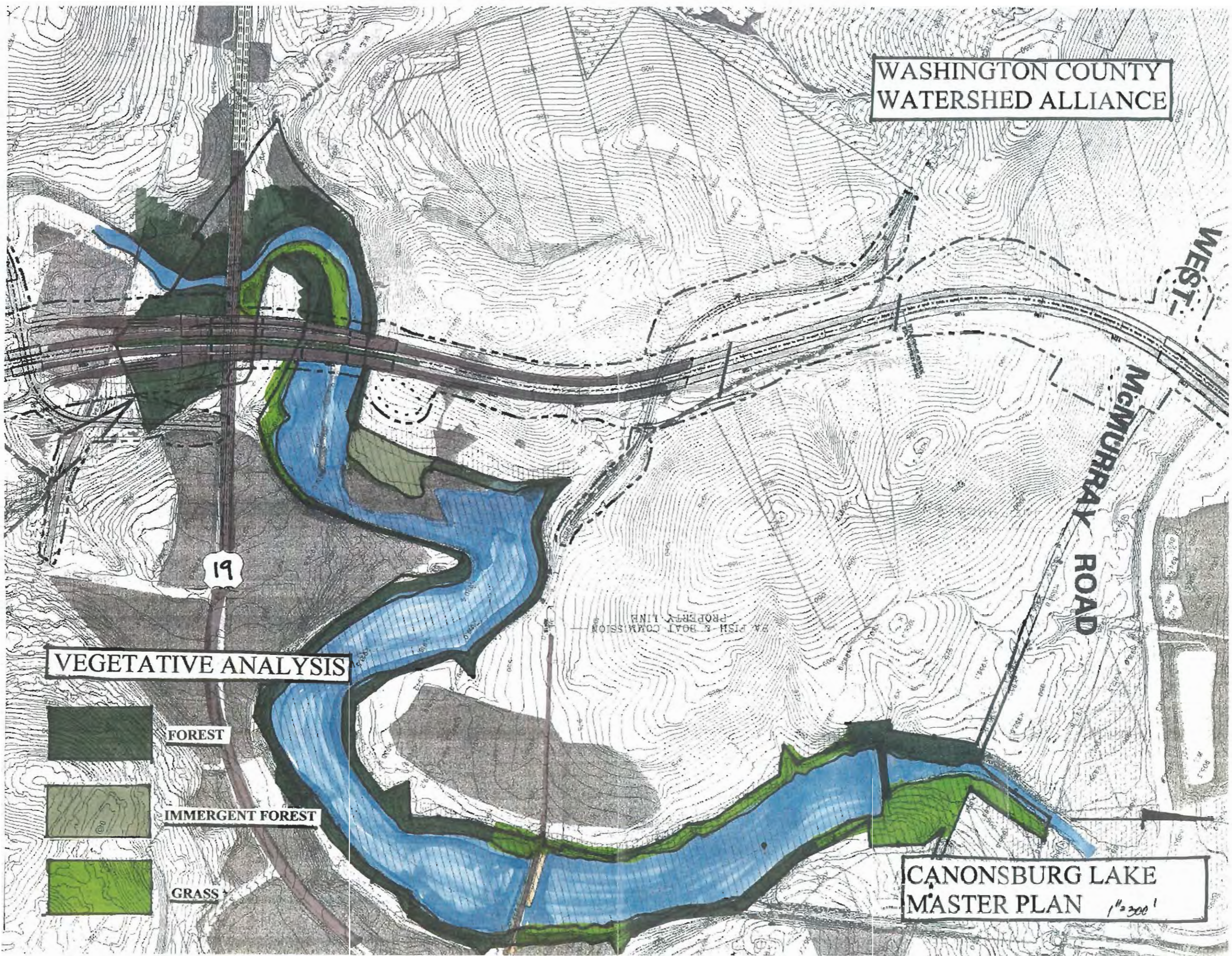
There is evidence that the western portion of the property has a farming history. The original McDowell Farm barn structure remains immediately to the west of the lake near McDowell Road. It is possible that the McDowell Farm extended to Little Chartiers Creek, prior to the impoundment of the lake. There are also areas on the western side of the lake that have large bushy trees, twenty inches or more in diameter, indicating that it was a wooded pasture years ago. Between these trees is the 8 to 14 inch diameter class forest that regenerated after the pastures were abandoned. This type of woodland can be classified as a 2-age forest, because, as the name infers, of the distinct difference in age.

Forest Species

The most common tree species near Canonsburg Lake are red maple, white ash, and black cherry.




These species make up an estimated 65% to 75% of the existing tree cover. Of the three species, red maple is the most common. Sugar maple is next most common species, making up 10 to 15% of the tree cover. Slippery elm and white ash are also present, but uncommon. The under-story tree species consist of hawthorn, and hornbeam. All species are native to southwestern Pennsylvania.

The under-story shrubs consist of highbush cranberry, arrowwood, witch hazel, small patches of blackberry, black raspberry, gooseberry, Tartarian and Morrow's honeysuckle and multi-flora rose. The multi-flora rose is not native and should be considered invasive. The greatest concentration of shrubs is found near the wetland areas.



WASHINGTON COUNTY
WATERSHED ALLIANCE

VEGETATIVE ANALYSIS

-  FOREST
-  EMERGENT FOREST
-  GRASS

CANONSBURG LAKE
MASTER PLAN 1"=300"

Forest Species (continued)

The groundcover is sparse to normal, the result of a dense canopy hardwood forest and high deer population. The species observed included fern species, woodfern, winterberry, ground cedar, and mosses.

Wetlands Importance

Wetlands have historically been considered wastelands and therefore it is estimated that more than 50% of the wetlands within the continental United States have been lost to development. Recently, the protection of wetlands has surfaced as a key environmental issue. In the Commonwealth of Pennsylvania, three types of wetlands have been identified. These are known as emergent, scrub-shrub, and forested. Each type is classified according to vegetation type. Vegetation in emergent wetlands includes freestanding, non-woody plants such as cattails, reed canary grass, and rushes. Scrub-shrub wetlands are characterized by woody plants less than twenty feet high. The presence of trees such as red maple, hemlock, yellow and river birch, pin oak and ash over twenty feet tall, indicate a forested woodland. Standing water, or even saturated soil, need not be present to qualify an area as a wetland. A wetland, as defined by the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* is any area that supports hydrophytic plants (adapted to growth in saturated soil) or where water is present at or near the surface of the soil at some time during the growing season.

Canonsburg Lake Wetlands

Wetland field investigations were conducted as part of the larger wetland study for the Southern Beltway project between Summer 2000 and Spring 2006. Wetland delineations were conducted by utilizing Routine On-site Determination Method as described in the 1987 U.S. Army Corps of Engineers Wetland Delineation Method (Technical Report Y-87-1). The project area wetland habitats were classified according to the USFWS Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et. al., 1979).

Information collected during the wetland delineations consisted of dominant and non-dominant vegetation, soil color and characteristics, hydrology indicators and sources, functional assessment data, and any other pertinent noted. There are three criteria of a wetland: wetland hydrology, hydric soils and hydrophytic plants. A Routine On-site Determination Data Form and a Corps Descriptive Methodology (CDM) Functional Assessment were completed for each jurisdictional wetland identified within the project area.

PALUSTRINE

FORESTED
BROAD LEAF DECIDUOUS
TEMPORARILY FLOODED

PALUSTRINE

EMERGENCY
FORESTED
BROAD LEAF DECIDUOUS
SEASONALLY-FLOODED

PALUSTRINE

EMERGENCY PERSISTANT
SATURATED
SEASONLY FLOOD
DIKED - IMPOUNDED

LACUSTRINE

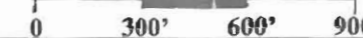
LIMNETIC
UNCONSOLIDATED BOTTOM
PERMANENTLY FLOODED
DIKED - IMPOUNDED

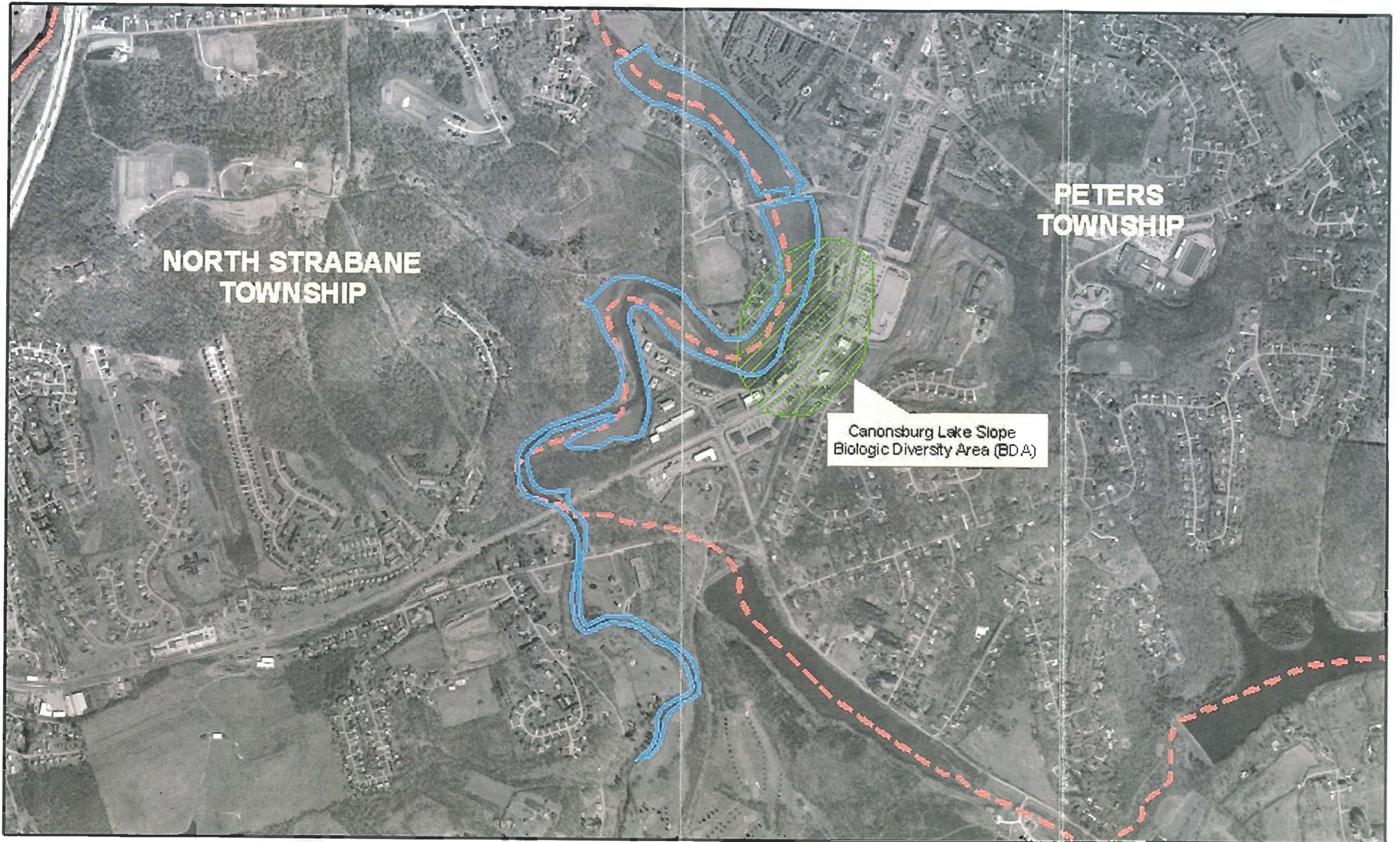
WETLANDS



**CANONSBURG LAKE
MASTER PLAN
WASHINGTON COUNTY
WATERSHED ALLIANCE**

MARK FICKLEY
LANDSCAPE ARCHITECT





Canonsburg Lake Wetlands (continued)

Wildlife habitat and groundwater recharge/discharge are the two principal functions most frequently displayed by wetlands. Flood flow alteration, nutrient removal/retention/transformation, sediment/toxicant retention, and stream bank/shoreline stabilization were less frequent in occurrence; production export and aquatic habitat were the least common principal function displayed in the project area wetlands.

There are four distinct type of wetlands occurring at Canonsburg Lake, and are listed as follows:

- Lacustrine / Limnetic
Unconsolidated bottom, frequently flooded, diked or impounded.
- Palustrine / Emergent
Seasonally flooded – saturated, diked or impounded.
- Palustrine / Emergent / Forested, broad-leaf deciduous, seasonally flooded.
- Palustrine / Forested, broad –leaf evergreen, temporarily flooded.

A majority of the wetlands identified at Canonsburg Lake were created and/or expanded by the deposits of silt and sediment into the lake over time. Several of these wetland areas have extended beyond wetland criteria to become actual “sand bars”, that is, sediment deposits in such amounts as to create a new land mass.

Wildlife – Wetland

The wetlands within the Canonsburg Lake property are typical of the southwest portion of Pennsylvania. Such wetlands are extremely valuable to waterfowl and other wetland wildlife by providing a diversity of interconnected wetland habitat types including bogs, emergent marshes, forested and swamps. Canonsburg Lake is an example of the human – created open water areas that help to create these wetland complexes.

Mallards, wood ducks, and resident Canada geese consistently use Canonsburg Lake. Other species observed during breeding season in some years included mergansers and other varieties of waterfowl.

Wildlife – Wetland (continued)

Without question, the most interesting species of waterfowl found at Canonsburg Lake is an individual species of heron /egret. This particular bird has been identified as a possible hybrid between a blue heron and a great egret. This bird has been observed at Canonsburg Lake for several years, and has created a stir among bird watchers. The bird features characteristics and coloration from each species, prompting most birders to date to conclude that it's a hybrid. Such a creature would be rare. No such hybrid has ever before been documented in birding literature.

Wildlife – Upland Forest

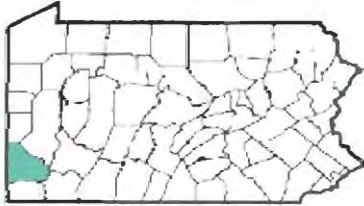
The surrounding woodlands around Canonsburg Lake provides habitat for a variety of woodland birds and mammals. Among species likely to occur on this portion of the site are white-tailed deer, raccoon, beaver, muskrat, opossum, gray squirrel, eastern chipmunk, wild turkey, blue jay, chickadee, sparrow, cardinal, white-breasted nuthatch, and wood thrush. Several valuable habitat components including den trees with hollow trunks, wild grape, and barberry are present in various locations within the Canonsburg Lake property. In addition, tree cavities likely provide nesting sites for wood ducks and mergansers.

Fish Population and Diversity

The Pennsylvania Fish and Boat Commission staff most recently surveyed Canonsburg Lake in late May 2001. At the time, the lake was found to contain an excellent population of largemouth bass. Quality-size bass were present in high numbers with 27% of the bass over 15 inches. Most of the bass were collected in the lower end of the lake between the bridge and the dam breast. This impoundment appears to be an excellent location to target largemouth bass. Channel catfish were collected in good numbers and sizes. The Fish and Boat Commission stocks channel catfish, muskellunge, and tiger muskellunge fingerlings along with trout. Muskies and tiger muskies were not collected during the survey. These species may have been in deeper water due to the warm water temperatures or their populations may be low. Crappies were collected in good numbers but quality size fish were lacking. Overall, panfish populations were well below average. This is probably a result of competition with gizzard chad. The majority of trout were collected in the shallow upper-end of the lake.



Figure -1



CANONSBURG LAKE

Washington County

Location: Three miles east of Canonsburg on PA Route 19, in Peters and North Stabane Townships, Washington County. Choose # 117 on Washington County map.

PRIMARY FISH

Fish are listed in alphabetical order. Click on the picture of a fish for a larger image, or the text for species information



bass, largemouth



bluegill



bullhead, brown



carp, common



catfish, channel



crappie, black



crappie, white



Canonsburg Lake is a 76 acre impoundment owned by the Commonwealth of PA and managed by the Fish and Boat Commission. The lake is formed by a concrete dam impounding Little Chartiers Creek, adjacent to Donaldsons Crossroads. The dam is about 525 feet long and 45 feet high. It impounds a lake with a surface area of 76 acres with a maximum depth at normal pool of 18 feet (estimated). The drainage basin for the lake is comprised of 46 square miles.

The Commonwealth of Pennsylvania, acting by and through the Pennsylvania Fish and Boat Commission, owns and controls about 138 acres at this site, which include the lake, dam, shoreline and associated lands. The Commonwealth acquired the land in 1957. The dam, known locally as the Alcoa Dam, was built in 1943.

The lake is part of the Select Trout-Stocked Lake program.

Boating at Canonsburg Lake is limited to boats powered by electric motors and outboard motors. The primary type of boats used on the lake are shallow-draft, lightweight boats, canoes and inflatables. A surfaced launch ramp is available along with a parking area that can accommodate at least 10 vehicles. Shore fishing is permitted.

Canonsburg Lake is under Commission property regulations. Un-powered boats are not to be moored at the lake in accordance with these regulations. All boats must be registered and have a PFBC or DCNR launch permit.



pumpkinseed



shiner, golden



sunfish, green



trout, rainbow



shad, gizzard



sucker, white



trout, brown

Water Quality

The streams in the vicinity of Canonsburg Lake, particularly Little Chartiers Creek, which is the primary water source for Canonsburg Lake are classified as water use protected, and identified as WWF (Warm Water Fishes), according to the Pennsylvania Department of Environmental Protection's Chapter 93 – Water Quality Standards. According to a report by the Pennsylvania Fish and Boat Commission, 2001, a water quality test was conducted in 2000. The water quality measured at Canonsburg Lake identified a pH of 8.4 and an alkalinity of 173 mg/l. Agriculture, development, sewerage, a golf course, and non-point sources in the watershed all contribute to a culturally eutrophied state for Canonsburg Lake. This Lake may be approaching the boundary of being between nutrient enrichment and destruction. Maintaining warm water fish populations, stocking catchable trout, and the provision of large quantity and quality angling days at Canonsburg Lake are desired management objectives at this lake. The ongoing accelerated state of nutrient loading may jeopardize these objectives.

In conclusion, the overall water quality of Canonsburg Lake is slowly degrading due to continual influx of sediment from a variety of sources, including agriculture, new development, and stream bank erosion. Sediment control measures are critical for the future viability of Canonsburg Lake and should be made an important part of the future development plans for the lake.

In addition to halting the inflow of sediment into the lake, measures also need to be taken to address the existing silt deposits in the lake that are the major factor in the deterioration of the lake.

National Heritage Inventory Areas

The Washington County National Heritage Inventory is a record of the native biological diversity within the political boundaries of Washington County. The major purpose of this inventory is to provide county and local governments and community groups with a valuable tool to assist them in their planning efforts. Not only can this inventory guide local development, it can also give suggestions for protecting significant natural heritage resources in Washington County.

The Natural Heritage Inventory has not only located areas of significance, it has also ranked them according to amount, degree, and rate of protection (Exceptional, High, and Notable). This Inventory utilizes five classifications of National Heritage Areas and suggested development restraints.

National Heritage Inventory Areas (continued)

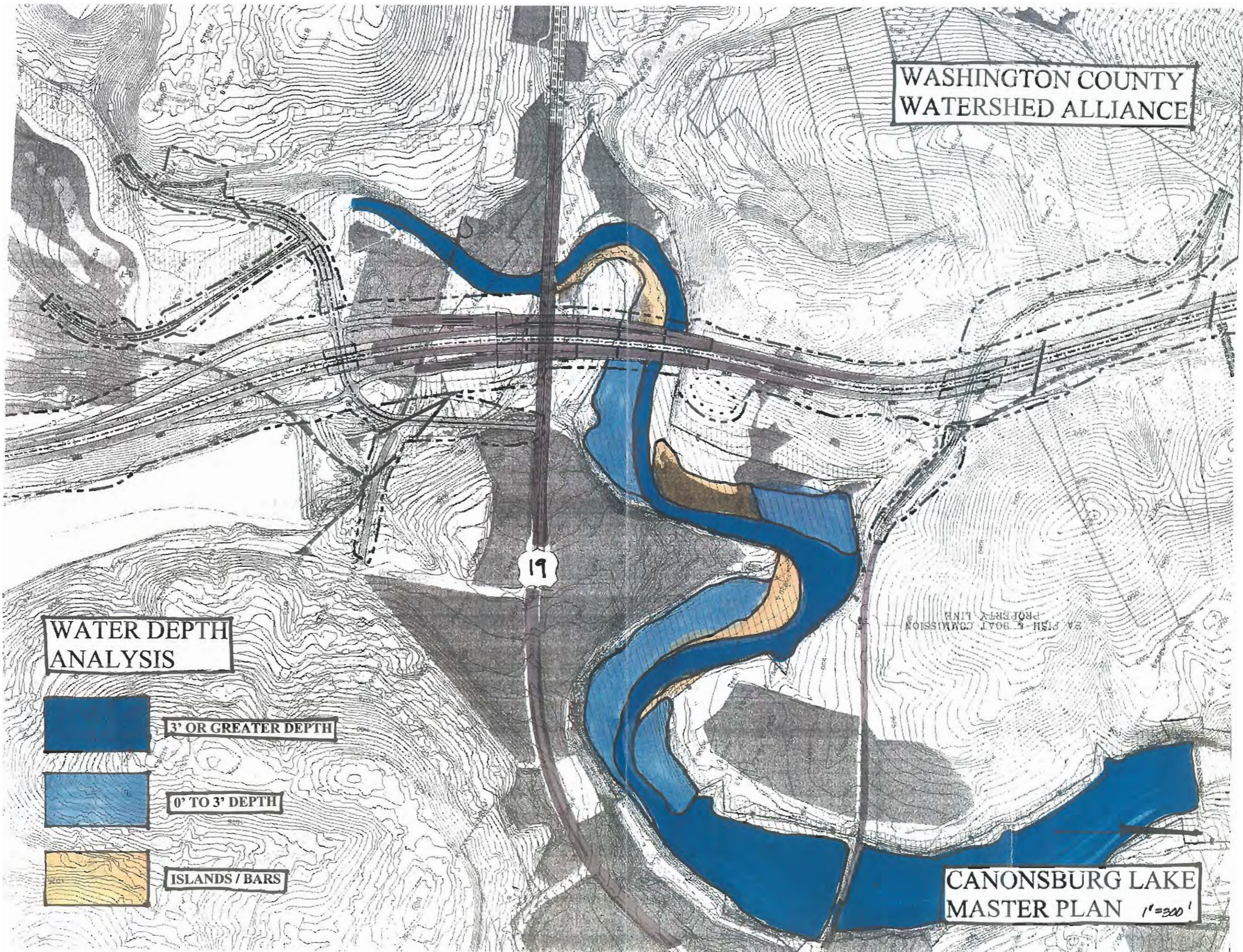
One area within the Canonsburg Lake property has been identified in the Inventory. The area along the southeast shoreline of the lake has been identified as a Biological Diversity Area.

Biological Diversity Areas (BDA)

- Special Species Habitat – An area that includes natural or human influenced habitat that harbors one or more occurrences of plants or animals recognized as state or national species of special concern
- High Diversity Area – An area found to possess a high diversity of species of plants and animals native to the county.
- Community / Ecosystem Conservation Area – An area that supports a rare or exemplary natural community (assemblage of plants and animals), including the highest quality and least disturbed examples of relatively common community types.

This portion of Canonsburg Lake has been noted and will not be disturbed in any way with the future development of the proposed recreational improvements for the lake and surrounding property.

WASHINGTON COUNTY
WATERSHED ALLIANCE



IV. POTENTIAL RECREATIONAL USES

POTENTIAL RECREATIONAL USES FOR CANONSBURG LAKE AND SURROUNDING PROPERTY

Range of Potential Uses

The Canonsburg Lake Steering Committee met numerous times and discussed a wide range of potential uses for Canonsburg Lake and the surrounding property. The uses ranged from the continuation of the existing fishing opportunities, to more extensive development such as hiking trails, boardwalks, restroom facilities, picnic areas and a wetland interpretive or environmental education center. The ability to plan, fund, construct, operate and maintain these potential improvements is dependent on a variety of interrelated factors. These factors will be discussed in more detail later, but certainly all related environmental considerations, community participation, available funding, and long term ownership with land use permitting are all critical to the successful development of the recreational improvements to Canonsburg Lake.

Master Plan Recommendations

The Master Plan for Canonsburg Lake is based on information gleaned from numerous Steering Committee meetings, three public meetings, surveys, and questionnaires. In addition, careful analysis of the existing environmental conditions of the lake and surrounding property has been taken into consideration. Finally, evaluation of community and regional demographics has been studied. These three overarching factors; existing environmental condition, local demographics, and public opinion, were all carefully evaluated, and upon completion of this analysis, recreational recommendations for Canonsburg Lake can be made. Each contributing factor has been evaluated, weighted, and the potential impact of the proposed recommendations determined, so that the recreational improvements described here are based on a logical progression of thought and acceptable planning procedures and techniques.

For the purposes of the Master Plan recommendations, Canonsburg Lake and surrounding property has been divided into three geographic sections; Lower Zone, middle zone, and Upper Zone.

Section IV Potential Uses

Lower Zone

The area of the lake defined as the Lower Zone stretches from West McMurray Road on the northern portion of the property to the causeway, also known as McDowell Road. This Lower Zone also includes the existing dam, aggregate parking area and main parking lot with boat launch. Conceptually, this portion of the lake will remain geared toward “deep” water fishing, with improvements proposed for improved access around the lake.

Recommendations

Parking Area 1 (existing aggregate parking lot)

- Improve existing parking area by paving, striping, and storm water management, as required.
- New parking lot lighting for security and to aid in night fishing access to the lake.
- Permanent Restrooms – Access to existing sanitary sewer along the eastern shore of the lake in Peters Township is possible. This would permit a restroom with flushing toilets and running water.
- Picnic Area
- Signage / Kiosk for public information such as fishing regulations, competitions, etc.
- Walking trails – A system of walking trails around the northern portion of the lake from the parking area near the dam to the main parking area near McDowell Road. In addition, a new walking trail along the western shore of the lake from the causeway toward the dam, as far as existing topographic features allow. Improvements by volunteer groups, including the Girl Scouts have begun to make improvements to the existing trail between parking areas.
- Benches – Scattered along the walking trails and other notable locations.

Parking Area 2 (existing main parking lot and boat launch)

- General improvements to the existing parking lot including paving improvements, drainage, striping including improved definition of boat trailer parking.
- New parking lot lighting for security and to aid in night fishing access to the lake.
- Permanent Restrooms – Access to existing sanitary sewer along the eastern shore of the lake in Peters Township is possible. This would permit a restroom with flushing toilets and running water.
- Picnic Area
- Signage / Kiosk for public information such as fishing regulations, competitions, etc.

Lower Zone (continued)

- Causeway extension – An extension of the existing causeway to provide safe pedestrian crossing of the lake to connect the proposed walking trails on the eastern and western shores of the lake. In addition, fishing platforms can be created to provide access to the deeper portions of the lake for shore fisherman. This causeway extension will also include accommodations for ADA access.

Middle Zone

The area of the lake as defined for purposes of this Master Plan from the existing causeway at McDowell Road to a point midway between the causeway and the Route 19 crossing over Little Chartiers Creek, at the mouth of the lake.

Recommendations

- New walking trails – A new trail system from the existing causeway south along the western shore to a point where the existing lake has been narrowed by sediment deposits. At this point, the first of several crossings, or bridges will extend the trail system to the southern portion of the lake.
- Wetland Interpretive Center – Among the existing wetlands and sediment deposits an amphitheater will provide educational opportunities for Wetland Interpretation. In addition to the amphitheater, numerous post-mounted placards will identify specific flora and fauna found within the wetland area. Additional trails and boardwalks will lead pedestrians throughout the wetland area, to a point along the southern shore line where topographic conditions and the identified Biological Diversity Area is found.

Upper Zone

Recommendations

New Access Road – A new access road is proposed from McDowell road to the location of a new parking area on the western side of the lake. This new access road would require right-of-way procurement from the existing landowner in order to gain access to Pennsylvania Fish and Boat Commission property.

Upper Zone (continued)

Parking Area 3 (proposed parking area on western shore including small craft boat launch, such as canoe and kayak)

- New parking lot lighting for security and to aid in night fishing access to the lake.
- Permanent Restrooms – Access to sanitary sewers in this area is unlikely, therefore the restrooms would need to be a more primitive type.
- Picnic Area
- Signage / Kiosk for public information such as fishing regulations, competitions, etc.
- Walking trails – A system of walking trails throughout the upper portion of the lake. This area of the lake is the most pristine and most inaccessible at the present time. Two additional crossings or bridges will connect the eastern and western shore lines of the lake, while providing pedestrian access to the uppermost reaches of the lake, where Little Chartiers Creek can be found. An additional trail can be extended from the existing Glen Cannon neighborhood to provide direct pedestrian access to the lake.
- Sediment Trap – It is in the upper portion of the lake that a sediment trap be constructed across the width of Little Chartiers Creek to limit the amount of new sediment emptying into the lake. An access or maintenance road would extend from Parking Area No. 3 to the sediment storage device in order to provide annual or bi-annual maintenance to the structure. The construction of this sediment device is critical to the future life of the lake, and must be considered a significant factor in determining a priority for improvements to the lake.

Trail System and Boardwalks

The core of the recreational improvements to Canonsburg Lake is the proposed system of trails, bridges and boardwalks, which will provide much needed access to the entire lake and surrounding property. This proposed trail system will serve as the “backbone” of the recreation system, allowing walkers, bicyclists, bird watchers, and nature enthusiasts access to some of the more pristine areas around the lake, while at the same time controlling this movement through environmentally sensitive areas via defined trails and boardwalks.

Bridges, Boardwalks and Wetland Crossings

Significant portions of the proposed trail system at Canonsburg Lake will require crossing portions of the lake, as well as marshes and other wetland areas. Since people seeking safer, indeed drier, recreational pursuits will utilize most trails, natural trail crossings left un-bridged and undeveloped will not be utilized. Instead of primitive crossings, a system of crossing structures will be used, thereby increasing the likelihood that the trail system will be used while protecting the water and wetland environments. Trails through wet meadows and marshes are prone to a common pattern of breakdown in the local soil and vegetation. As trail use in these areas increases, trails will become soggy and muddy. Hikers will then tend to walk on the edge of the trail in pursuit of drier ground, thereby widening the trail while larger muddy holes develop.

All water crossings will have several common requirements. Trail crossings will occur at the narrowest, most stable locations around the lake. Straight sections of the waterway, away from curves where the stream and lake tend to erode, are the most stable areas where crossings will be located. In addition, slopes leading to the crossings on both sides of the stream or lake must be stable and well vegetated. The location of crossings will be carefully evaluated due to the high maintenance and construction costs of the crossings.

Boardwalks will provide interesting access routes into wetland areas, and should be designed for aesthetic as well as recreational purposes. In other areas, boardwalks may be used to avoid poorly drained spots along the trail system. Otherwise, relocation of the trail around these wet areas is recommended.

All crossings should represent limitations to certain trail users, such as horses, bikes and motorized vehicles. Constraints should include weight limitations and the overall dimensions of the crossing. Potential users must be considered in the design of all crossings structures, and weight limits should be well in excess of maximum expected loading.

General Construction Concerns

Crossing structures must be well anchored to stream banks and lakeshore via dry spots or into the underlying soil in the case of boardwalks. Footings should be perpendicular to the crossing logs or planks, and anchored into the streambed or shoreline with large rocks or concrete if the site is accessible.

Railings should be used on all crossings that are more than two (2) feet above the ground or water, but may be advisable on many lower crossings as well. The railings should be 36" high and firmly attached to the crossing structure. The trail tread on any crossing should be at least 12" inches wide.

Simple Footbridges and Narrow Crossings

Although a variety of structures could be used for crossing distances up to 15 feet, the three most common are log crossings, short bridges and various rock structures.

Log crossings are simply one or more log stringers laid side by side, with the flattened side up for use as a tread way. Stringers are usually at least 8 to 10 ft. long. In "topped log" bridges, one side of the logs 6" in diameter should be removed to provide a flat surface. Up to 1/3 of the diameter of the log is removed in this process. In "split log" crossings, larger logs are split in half to produce a flat surface. For both types, the end stringers are supported by mudsills that are short logs (3 to 4 ft. long, 8 to 10 in. diameter) or squared timbers. The sills should be notched to hold the round lower surface of the logs, and the logs are attached to the sills with pins or spikes with at least 4-in. penetration into the sill.

Small log cribs (logs sacked in a square pattern) can replace one or both sills if additional height is needed at on or both ends of the bridge. For better traction, tread surfaces should be roughened with pieces of wood nailed to log surfaces.

Short bridges, or catwalks, may be as simple as two logs laid across the water, 2 to 4 feet apart. They should be anchored directly to the crossing banks at both ends, or may be attached to mud sills. Planks or smaller logs would then be attached perpendicularly to the logs to form the walking surface. Large planks or beams can be used in place of the logs, and handrails may be added for safety or convenience.

Simple Footbridges and Narrow Crossings (continued)

Rock structures can be used for shallow stream and gully crossings. At stream crossings, a barrier of large rock should be placed on the downstream side of the crossing, level with the trailhead. This barrier will slow water flow over the crossing immediately upstream from it. Small rock, gravel, or flat stepping stones spaced no more than 2 feet apart, serve as the crossing tread. The rock barrier should be extended at least 12 inches into the banks on both sides to prevent water flowing around the ends and undercutting the crossing. A peeled log, extending 4 feet into each bank, could also be used to anchor the gravel tread. Large native rock, placed on the downstream side of the log will help hold it in place. For shallow crossings, rock barriers may not be needed and stepping-stones or a bed of gravel or rock may suffice.

Boardwalks and other wetland crossings

The most common uses of boardwalks are for nature trails through marshes and wetlands. Permanent boardwalks require pressure-treated posts, poles or piers be sunk into underlying soils or rock for stability.

Cross braces or beams connect pairs of posts. Planks laid perpendicular, and connected, to the cross braces may serve as the walkway. In addition, short planking laid perpendicular to the long planks would provide the walkway, and side rails added for safety. Size of posts, timbers and planks used in boardwalk construction will depend on the intended use of, and numbers of hikers using the boardwalk.

Boardwalks are especially useful where trails traverse large areas with year round standing water. Elsewhere, trails may cross small areas that are only intermittently wet or have saturated soils without deep standing water. If a small wet area cannot or should not, be drained, and trail relocation would be impractical, various types of rock trails will help stabilize the trail surface. Flat rocks set into mud no more than 2 feet apart provide dry and stable stepping stones. If a trail is to receive heavy traffic, a more intensive use of rocks may be necessary. Rock tread ways are created with large flat rocks laid side by side.

Maintenance

As with other parts of the trail system, all bridges and crossings should be checked at least annually; more frequently evaluation of bridges is recommended. Many of these structures represent the greatest safety hazard on a trail, and careful inspection and maintenance is essential. All connections should be checked for tightness. Lumber, planks and logs should be monitored for cracking or rot and must be replaced if there is any likelihood of the structural component failing in the near future. Periodic treatment of wood components with paint or preservatives every three to five years should substantially prolong the life of the structure. Steel beams, cables, or other hardware should be treated with rust-resistant paint.

Canonsburg Lake Master Plan Summary of Potential Uses

Manage Existing Wetland

- improve wetland diversity
- increase plant diversity
- improve waterfowl habitat
- increase wildlife species diversity

Primitive Hiking

- encourage use of entire property
- do not encourage ATV use
- limited long term maintenance

Walking Trails

- encourage use of entire property
- easily combined with other uses

Reconstruct Dam

- improve fishing opportunities
- potential for flood control is limited to type of existing structure (lack of sufficient free-board)
- provide waterfowl habitat
- provide boating opportunities
- create additional open water habitat
- increase fish species diversity
- increase wildlife species diversity

Picnic Area

- easily combined with other uses
- area available near existing parking lot

Environmental Education Center (without buildings)

- work with local school districts
- many other potential users
- meet local need – current lack of facilities
- improve wide area of environmental education

Section IV Proposed Uses and Recommended Actions

Canonsburg Lake Master Plan Summary of Potential Uses (continued)

Parking Areas

- improve existing parking areas
- provide additional parking in other areas around lake
- provide safety / parking lot lighting

Boat Launches

- provide additional boat launches
- provide small boat launch for canoes and kayaks

New Facilities

- provide public rest rooms
- determine whether public sewers are available for rest room locations
- lighting, running water, flush toilets
- maintenance issues

General Recreational Ideas

- continue fishing opportunities
- maintain natural settings
- maintenance concerns (trash pick-up, garbage receptacles)
- security concerns
- possibility of re-use of sediment

**Canonsburg Lake Master Plan
Peters Township and North Strabane Townships
Washington, County, Pennsylvania**

RECREATIONAL IMPROVEMENTS MASTER PLAN COST ESTIMATE

LOWER ZONE - PARKING AREA 1 (near dam)

ITEM	QUANTITY	UNIT COST	TOTAL COST
Roadway Paving	2,933 s.y.	\$23.00/s.y.	\$67,459.00
Parking Lot Paving	867 s.y.	\$23.00/s.y.	\$19,941.00
Parking Lot Lighting	2 ea.	\$900.00 ea.	\$1,800.00
Restroom Building		Lump Sum	\$30,000.00
Sanitary Sewer	150 l.f.	\$35.00/l.f.	\$5,250.00
Water Main	150 l.f.	\$35.00/l.f.	\$5,250.00
Paved Trail (10' wide)	890 s.y.	\$21.00/s.y.	\$18,690.00
Picnic Tables	4 ea.	\$450.00 ea.	\$1,800.00
Kiosk	1 ea.	\$750.00 ea.	\$750.00
Litter Containers	2 ea.	\$225.00 ea.	\$450.00
Benches	4 ea.	\$300.00 ea.	\$1,200.00
Landscaping		Lump sum	\$5,000.00
Contingency 15%			\$23,564.00
Sub-Total			\$181,154.00

LOWER ZONE - PARKING AREA 2 (existing parking lot and boat launch area)

ITEM	QUANTITY	UNIT COST	TOTAL COST
Parking Lot Striping		Lump sum	\$1,800.00
Parking Lot Lighting	2 ea.	\$900.00 ea.	\$1,800.00
Restroom Building		Lump Sum	\$30,000.00
Sanitary Sewer	150 l.f.	\$35.00/l.f.	\$5,250.00
Water Main	150 l.f.	\$35.00/l.f.	\$5,250.00
Paved Trail (10' wide)	3,888 s.y.	\$21.00/s.y.	\$81,648.00
Causeway Extension		Lump Sum	\$35,000.00
Picnic Tables	4 ea.	\$450.00 ea.	\$1,800.00
Kiosk	1 ea.	\$750.00 ea.	\$750.00
Litter Containers	2 ea.	\$225.00 ea.	\$450.00
Landscaping		Lump Sum	\$5,000.00
Benches	4 ea.	\$300.00 ea.	\$1,200.00
Contingency 15%			\$25,417.00
Sub-Total			\$195,365.00
			\$181,154.00
			\$376,519.00

MIDDLE ZONE – WETLAND INTERPRETIVE CENTER

ITEM	QUANTITY	UNIT COST	TOTAL COST
Amphitheater		Lump Sum	\$20,000.00
Paved Trail (10' wide)	5,222 s.y.	\$21.00/s.y.	\$109,662.00
Pedestrian Bridge		Lump Sum	\$12,000.00
Picnic Tables	4 ea.	\$450.00 ea.	\$1,800.00
Kiosk	1 ea.	\$750.00 ea.	\$750.00
Information Stations	8 ea.	\$400.00 ea.	\$3,200.00
Litter Containers	4 ea.	\$225.00 ea.	\$900.00
Landscaping		Lump Sum	\$5,000.00
Benches	4 ea.	\$300.00 ea.	\$1,200.00
Contingency 15%			\$23,102.00
Sub-Total			\$177,614.00

UPPER ZONE - PARKING AREA 3

ITEM	QUANTITY	UNIT COST	TOTAL COST
Roadway Paving	2,688 s.y.	\$23.00/s.y.	\$61,824.00
Parking Lot Paving	867 s.y.	\$23.00/s.y.	\$19,941.00
Boat Launch (Non-motorized)		Lump Sum	\$2,000.00
Parking Lot Lighting	2 ea.	\$900.00 ea.	\$1,800.00
Restroom Building (Compost style)		Lump Sum	\$25,000.00
Paved Trail (10' wide)	3,777 s.y.	\$21.00/s.y.	\$79,317.00
Pedestrian Bridge	2 ea.	\$12,000.00	\$24,000.00
Boardwalk (8' wide)	1,600 l.f.	\$25.00/l.f.	\$40,000.00
Picnic Tables	4 ea.	\$450.00 ea.	\$1,800.00
Kiosk	1 ea.	\$750.00 ea.	\$750.00
Litter Containers	2 ea.	\$225.00 ea.	\$450.00
Landscaping		Lump Sum	\$5,000.00
Sediment Control Structure		Lump Sum	\$10,000.00
Benches	4 ea.	\$300.00 ea.	\$1,200.00
Contingency 15%			\$40,887.00
Sub-Total			\$313,969.00

Grand Total \$868,102.00

Note:

Plans call for approximately 12,400 l.f. of paved trails at an estimated cost of \$289,317.00. However, if these trails were constructed with crushed limestone (no asphalt paving), the same trail system could be built for approximately \$25,000.00 - \$30,000.00, which would be a significant savings.

Legend

l.f. linear foot
ea. Each
s.y. square yard

**V. PUBLIC MEETINGS TO DISCUSS
POTENTIAL USES**

PUBLIC MEETINGS TO DISCUSS POTENTIAL USES

Public Meetings

Three- (3) public Meetings were conducted at the Little Lake Theater on the following dates:

1st. Public Meeting	August 1, 2005
2 nd . Public Meeting	October 24, 2005
3 rd . Public Meeting	June 20, 2006

In addition, surveys and questionnaires were distributed and collected during several public events, such as the Washington County Fair, Washington County AG Days, and North Strabane Township Festival, among others.

The Steering Committee conducted the public meetings to present and discuss a wide range of potential recreational uses for the property. All three meetings were held at the Little Lake Theater, which is located on the western side of Canonsburg Lake, in North Strabane Township. News releases were distributed to local media as well as to representatives of the Pennsylvania Fish and Boat Commission and other state agencies. Special invitations were extended to the Washington County Board of Commissioners, Peters Township and North Strabane Township Supervisors, as well as Pennsylvania State Senators and Representatives.

Overview

In addition to the Steering Committee members, approximately seventy-five individuals attended each meeting. The participants were largely from the immediate area surrounding Canonsburg Lake. Most expressed support for recreational improvements to the lake, but had reservations about the planning process when such serious issues as dam safety, sediment deposits and the proposed Southern Beltway location were on everyone's mind. The Steering Committee did discuss these issues in general terms, but continually reminded the participants that the purpose for the meetings were to solicit public support and input regarding recreational uses for the lake.

Generally, the group favored increased recreational uses for the lake and surrounding property favoring low impact uses rather than high intensity types of uses.

Section V Public Meetings to Discuss Potential Uses

Comment Forms, Survey and Questionnaire Results

Meeting participant and survey responses provided to the Steering Committee members are summarized below.

Canonsburg Lake Survey – Results of First Public Meeting

Master Site Plan for Canonsburg Lake & Dam Property – Results of Second Public Meeting

Canonsburg Lake Survey – Results of Washington County Fair

Results of AG Days and North Strabane Township Festival.

Canonsburg Lake Survey Results of First Public Meeting

1. Are you a resident of Washington County?

Yes 27 No 1

2. If recreational improvements could be made to Canonsburg Lake, which improvements would you be interested in?

[Dance pavilion, 1800's Recreational use, return investment], [low impact, passive- trails also permit sail boating], [dredge to some degree, repair dam], [fishing and small boating], [park like setting with picnic tables], hiking trails, bike path around the lake, a walk way, [as few as possible- keep it natural], passive activities, [garbage cans, Girl/Boy Scout Camp on hill by dam?, benches, trees]

3. Have you ever visited Canonsburg Lake?

Yes 27 No 1

Potential Improvements	Yes	No	Don't Know
Fishing Improvements	23	1	3
Improvements to/or additional Boat Launches	17	6	3
Handicap Access	23	1	2
Restroom Facilities	19	5	2

Other: Repair Dam; [Boat Improvements-modest, no additional, no motor boats, only non-motorized]; [Restrooms-porta johns, potential for vandalism and maintenance]

Potential Improvements	Yes	No	Don't Know
Dredging of Lake	26	0	1
Nature Trails	20	6	1
Picnic Areas	13	10	2
Nature Observation Areas	21	5	1
Improved Signage	14	8	4
Boardwalks for Bird Watching, etc.	15	10	1

Other: [Dredging-limit to channel]; [Picnic Areas-limited amount, only a few, too much trash]

6. Other Ideas?

[fishermen do not leave the shoreline clean or respect private property], [keep lake as natural as possible- swimming, deeper area only, No Highway], [put a new dam with bottom to allow flushing lake as needed], [picnics bring trash because of the wind], [most important is cleaning up the areas used so the lake is further improved], [save lake, keep natural, do not need recreation facilities, do not need picnic area], [keep lake as natural as possible], [dredge only, no capital improvements, no boardwalks, enforce existing sedimentation rules strictly], [keep it clean, fishermen leave it quite dirty], repair dam first, repair dam ASAP, [nature center for student studies, keep it natural and low maintenance, keep it as natural as possible, ask legislators to make it a state park], [concerned over rubble on lake and all along McDowel Road, mostly wine bottles and beer, concerned over folks drinking and driving, safety along McDowel Road],

[do not “overdevelop” with structures and preserve fishing, quiet, peaceful retreat areas for families}, [1800’s pavilion, dancing-1800’s use for income, ROI, reference park management Olgabay Park, park management, create the maintenance and sustainable issues], [church, school and scout involvement, day camp area, paddle boat rental, bait shop, ice cream, divide the lake into sections, have civic groups responsible for monthly checkup and cleanup of their section, much as the “Highway cleanup program,” erect a small nature center and picnic grove by the dam’s parking lot on the hill, start a school program for field trips to the center, plant shade trees on the hill by the dam], [improve conditions of lake without adding commercial or amusement park facilities, keep it natural], [1. please do not allow big boats or ski jets, keep it a quiet little lake 2. please do not put in an amusement park, I want to keep it natural 3. I would favor dredging the lake as our budget allows 4. keep as natural as possible 5. I live in Waters Edge Condos, please do not put a walking trail by my condo, I would be afraid to have strangers walking by my condo, we have already had some of our flowers and planting stolen 6. minimize the negative impact of the wildlife 7. save the lake, keep it natural, do it now].

(Resident of Washington County, but have never visited the lake? 1)

(Not a resident of Washington County, but have visited the lake? 1)

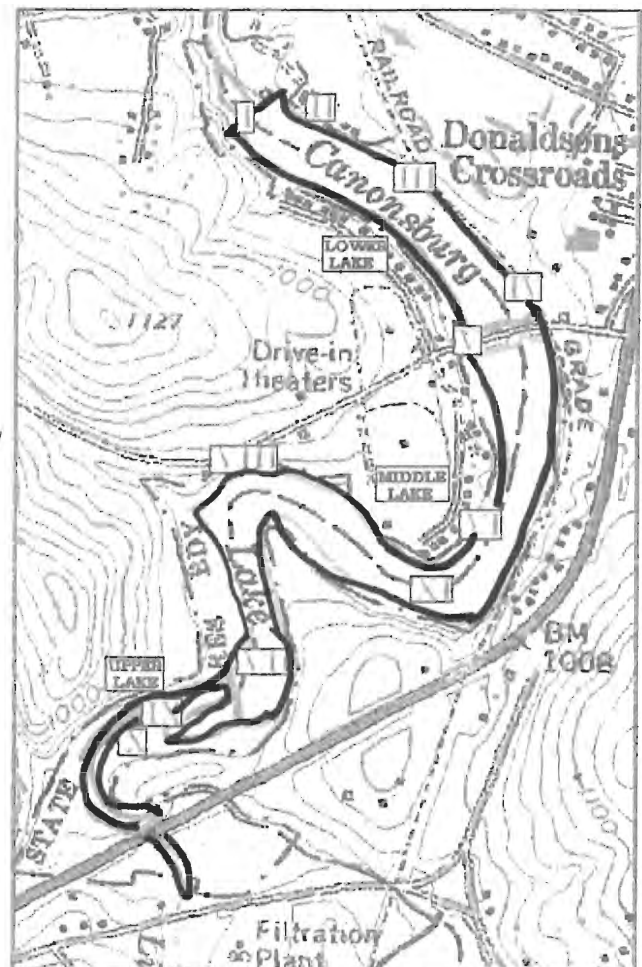
IDEAS FOR RECREATION AT CANONSBURG LAKE SHOWN AT PUBLIC MEETING #2—OCTOBER 24, 2005

The focus of the second of three public meetings for the Master Site Development Plan for Canonsburg Lake was on proposals for improving recreation at the Lake as consultants Mark Fickley and Pat Gavaghan outlined their preliminary recommendations. As before the meeting was held at the Little Lake Theater on McDowell Lane. on October 24, 2005.

The date of the third Public Comment Meeting, to be held in the spring, has not yet been set.

— The proposals:

	<u>Area</u>	<u>Recommended Improvements</u>
Lower Lake	I	Repair Dam Structure
	II	Improved signage, Information Kiosk, Lighting, Parking Lot Improvements, Picnic Area, Dumpsters
	III	Improve Existing Trail, Signage, Trail Delineation Structure(s)
	IV	Signage and Kiosk Improvements, Lighting Improvements, Composting Restroom Facilities, Boat Launch Improvements
	V	Pedestrian Crossing Structure along the side of causeway, Crosswalk, Lighting, Signage
Middle Lake	VI	Trail with signage and demarcation, Trash Cans, Benches
	VII	Parking Lot with vehicular access, Boardwalk System, Bridge across the channel, Lighting, Signage, Benches, Picnic Area, Dumpsters
	VIII	Access Road from McDowell Lane, Parking Lot, Lighting, Wetland Interpretive Center with signage, Information Boards, Boardwalk/Trail Development, Pedestrian Bridge across lake, Benches
Upper Lake	IX	Sediment Storage Facility, Vehicular Access for sediment removal
	X	Pedestrian Access via trail from Glen Cannon to proposed trail system, Wetland Interpretive Center
Other	XI	Dredging of existing lake in order for this portion to return to navigable status



Section V Public Meetings to Discuss Potential Uses

Master Site Plan for Canonsburg Lake & Dam Property
Results Summary of Comment Form

Introduction:

The comment form was sent to 61 individuals and/or couples who attended either the first or second public meetings or attended both public meetings. The form was mailed on November 7, 2005.

Out of those 61 comment forms, 21 forms have been received back, a 34.4 % response.

Comment form responses were compiled into a raw data sheet, which is available upon request. Those responses have been summarized here.

Question #1: Please provide your evaluation of the Canonsburg Lake Master Site Plan proposal thus far.

Blank Response	9.5 %	Of the comments received, 25.0 % provided a positive evaluation of the proposal thus far. 30.0 % of the comments provided a positive evaluation of the proposal but contained some concern, which included <i>needing political muscle, needing action soon to keep people's attention, more community asset and sediment removal, sad that the PA Fish and Boat Commission caved to PennDOT, main concern needs to be keeping the lake viable and funding concerns.</i>
Response	90.5 %	

Other comments stated that the proposal thus far was *way too ambitious, the priorities were wrong, the dam should be the primary issue, contained too much emphasis placed on the few residents whose property border the lake and that with limited funding, dredging of the lake and dam repair should be the top priorities and emphasis must be on I and XI otherwise all else is useless.*

Question #2: In your opinion has the proposal adequately addressed recreational amenities?

NO without Comment	0.0 %	Comments associated with NO responses included <i>too much development, clutter and maintenance costs, not as much recreation proposed as would have like and that the dam needs to repaired and the lake dredged first or there will be no lake at all.</i>
NO with Comment	14.3 %	
BLANK without Comment	9.5 %	Comments associated with BLANK responses included <i>too much emphasis on signs, interpretive center, etc. and that the lake needs to be dredged before any other action is taken.</i>
BLANK with Comment	9.5 %	
YES without Comment	66.7 %	
YES with Comment	0.0 %	

Section V Public Meetings to Discuss Potential Uses

Question #3: Were your expectations for the public meetings met?

Blank Response	9.5 %
Positive Response	66.7 %
In between Response	9.5 %
Negative Response	14.3 %

Positive comments included *that the meeting was open, informative, excellent, more than expected, went beyond expectations, a forum to voice concerns, brought citizens together, very explicit regarding problems and potential solutions and that the presenters took the time and effort to answer any and all questions.* Four responses commented on the date and time of

the second public meeting, which was a bad weather night, and attendance was considerable lower than the first public meeting.

In between comments included *“I guess” and okay.*

Negative comments included *that the first meeting should have not been held the same night as the southern beltway meeting, no PA Fish and Boat Commission representatives available, that dredging and dam repairs should be the primary focus and lobbying legislators to dredge the lake should be emphasized.*

Question #4: What are your expectations for the third and final public meeting?

Blank Response	19.0 %
Response	81.0 %

Comments included *more publicity, provide progress reports, provide a timetable, firm commitments, political muscle, a final, workable plan for action, provide the state agencies’ positions regarding the lake and approval of participation, the southern beltway location, more local level support, provide approximate dollar amounts for each proposed amenities, provide a listing of possible funding sources, township commitments for garbage pick-up, have PA Fish and Boat Commission representatives available, more public input, provide priorities based on funding and provide word on dredging and dam repair.*

Question #5: Please list any additional suggestions or comments regarding the public meetings or aspects of the master site plan.

Blank Response	47.6 %
Response	52.4 %

Additional comments included *keep up the good work, thank you, happy to help in any way, increase efforts to involve the media, better notification of meetings, fight the beltway crossing, develop realistic priorities, more emphasis on erosion and sedimentation controls, obtain commitments from the government agencies involved and obtain similar comparative financial investments in similar areas for public viewing.*

Master Site Plan for Canonsburg Lake & Dam Property
COMMENT FORM RESPONSES

- | | |
|-----------------------------|------------------------|
| 1. Kathy and John DeBlassio | 12. Nancy Huffner |
| 2. Gene and Carole Milas | 13. Jean Noll |
| 3. Jim Schafer | 14. Jim West |
| 4. Carol and Tom Smith | 15. Barbara Seels |
| 5. Bob Miske | 16. Judy McLaughlin |
| 6. Bridget Kirwan | 17. Peg and Ruth Burke |
| 7. Wes Lutz | 18. Mike Getto |
| 8. Bob Hall | 19. Robert Fitchett |
| 9. Jim Bohn | 20. Ron Valentino |
| 10. Jim and Diana Carr | 21. John Anglin |
| 11. Laura Matarese | |

Please provide your evaluation of the Canonsburg Lake Master Site Plan proposal thus far.

1. Plan seems to cover everything.
2. With Limited \$'s The Priorities: 1. Dam Structure 2. Dredge 3. Sediment Ponds
3. OK However, it's all for naught until we get enough political muscle to dredge!
4. Way too ambitious.
Prefer items I, IX and XI. Keep the rest as natural as possible.
5. Well Done!
Thank you for all you've accomplished so far.
6. Right on Target!
7. [blank]
8. Priorities are wrong.
Dam, dredge/clean up first
Trails, lights, signs, etc. after dredging and clean up
9. I am pleased with the plan.
The area around the lake has changed dramatically,
The lake and its' borders have changed also but not positively,
This plan will allow usage of the lake's educational and recreational potential.
10. More concerned with the dredging rather than anything else.
I live on the lake, and it appears the dam is the primary issue.
I think they are going to worry about the lower lake by the dam, which they should and let the middle lake go to seed.
Army Corp was discussed; first I heard that!
11. [blank]
12. So far the plans look good.
However words without action soon lose the people's attention.
13. Good.

14. Nicely done.
I agree with everything; however, I would like to have seen/heard more about sediment removal to help keep this a viable lake (and community asset).
15. I'm glad someone is doing some planning.
I'm sad the Fish and Boat Commission caved to PennDOT.
16. Please repair dam structure immediately, and also dredge the whole lake as soon as possible.
Because if these two things are not done, there will be no lake and no need for the other ideas.
Who wants to visit mud and bugs.
17. Sounds good.
Main concern is the lake itself – if not dredged – all other projects will be money ill-spent.
18. Too much emphasis has been placed on the few residents who's property border the lake, especially the upper sections (IV, V, VI)
19. It seems to be a realistic plan.
I hope there is funding to see this project thru.
20. Areas I and XI are the most important to fix first.
If these are not done the lake will disappear and be useless.
The other projects are less important and will only take funds form the Dam repair and lake dredging.
The lake should be restored for fishing and limited boat usage; this has been its main use for many years.
After, the lake is dredged and the dam is brought up to new standards, if any funds remain then put in some of the other suggestions.
I don't know how much land is around the lake to make a park.
Private property comes close to the lake bank.
21. In order to fulfill most of the recommendations the emphasis must be on I and XI otherwise all else is useless.

In your opinion has the proposal adequately addressed recreational amenities?

1. Yes
2. Yes
3. [blank], I guess I don't think we should [acquaint] what's being done now until the lake is dredged.
4. No, too much development, clutter and maintenance costs.
5. Yes
6. Yes
7. Yes
8. [blank]
9. Yes
10. Yes
11. Yes
12. No, not as much as I would like, as there is no real recreation on this side of the township.
13. Yes
14. Yes
15. Yes
16. No, see above
17. Yes
18. [blank], Too much emphasis on signs, interpretive center, etc.
Only proceed with aspects which require no maintenance or funding.
19. Yes
20. [blank]
21. Yes

Were your expectations for the public meetings met?

1. Yes. The meeting was a forum to voice concerns and to make a list of needs.
It also brought other interested citizens together.
2. Very open and informative
3. I guess.
4. Meeting one: excellent
Meeting two: missed and didn't know time and date
5. More than I expected
6. Beyond expectations.
Great job!
7. [blank]
8. No. Dredging and cleaning of lake should be #1, dam repairs #1A
No fish commission representatives were there.

Section V Public Meetings to Discuss Potential Uses

9. Yes
10. Once I figured out that the recreation aspect was primary, yes.
11. Yes
12. Yes
13. First meeting was very informative.
Was unable to attend second meeting.
14. Yes, very explicit info regarding the problems and potential solutions with the lake!
Unfortunately, I couldn't attend the October 24 meeting.
15. Should not have been held at same time as beltways meeting.
16. Okay
17. Yes
18. Yes
19. Second meeting was a bad weather night – would like to see better turn out for the next meeting.
I felt that the presenters took the time and effort to answer any and all questions.
20. [blank]
21. No. [see above] emphasize lobbying legislators to dredge lake;
Otherwise in 10-20 years it will be a swamp.

What are your expectations for the third and final public meeting?

1. I would like to see a plan for action.
Perhaps more should be done on a local level since the state seems to short-change our area.
2. Great results!
Knowing the direction that the state will travel on the road location choice
Know what amount of money available for lake activities
3. We can meet all we wish; however, nothing will happen until the state of PA comes up with funds.
We need political muscle!
4. [blank]
5. To set agenda and decide the most important issues for recovery of the lake
Funding!
6. Possibly township commitments for garbage pick-up
Without approval of participation from the fish commission this may be moot
7. [blank]
8. Fish commission representatives available, dredging and cleaning of the lake
What is the state's position? They control everything to do with the lake.
9. I would like to be presented with a final, workable plan.
10.
 1. Where is the turnpike going?
 2. What kind of funding and when from them.
 3. Is the middle lake even a concern?

Section V Public Meetings to Discuss Potential Uses

11. [blank]
12. More publicity.
Firm commitments.
13. Progress report on financing prospects.
14. Would like to hear more specifics about a timetable to start with various parts of the project (especially those parts dealing with sediment removal/dredging).
15. Update
16. Please dredge, and do the repair in the spring.
Thanks.
17. Word that dredging will occur.
18. Presentation of a final plan.
19. Again more people giving more input.
20. All attending should realize that funds for this project are limited and the restoration of the lake itself is most important.
21. [blank]

Please list any additional suggestions.

1. Increase efforts to involve the media.
Publish comparative financial investments in similar areas (such as Raystown Lake).
Maybe the funds generated in southwestern PA should stay here.
2. Need commitments from the government agencies involved
Carole and Gene Milas want to volunteer in any way to help this cause.
Thank you being our advocate to date.
3. [blank]
4. Please notify us of future meetings via email.
Thank you.
5. Place priorities on what should be fixed first.
6. [blank]
7. [blank]
8. If the lake isn't dredged and cleaned, why have trails, lights, etc. around a polluted mud hole?
9. [blank]
10. Deb Valentino does a terrific job – don't lose her!
11. I think you are doing a great job!
Thanks!
12. [blank]
13. [blank]
14. Would like clarity as to how much/which parts of the plan can realistically be accomplished and which parts are wishful thinking.

Section IV Public Meetings to Discuss Potential Uses

15. Fight beltway crossing.
16. [blank]
17. [blank]
18. There needs to be much more emphasis placed on E&S controls.
This needs done by the townships and WCCD.
The entire sedimentation issue can be proactively controlled by proper enforcement.
19. Keep up the good work!
Little Lake is happy to help in any way.
20. [blank]
21. [blank]

Additional materials:

8. "I sent questions to fish commission concerning the condition of the lake and what plans they had to clean it up, repair the dam, etc. This was the response I received."

The lake is on the PFBC top priority dam projects list to have work completed. It depends on when the money is approved for the work; 2007 would be the earliest.
[Denny Tubbs]

"After I sent the email, it took 7 months before I received this response. That tells you something!"

Canonsburg Lake Survey Results of Washington County Fair

1. Are you a resident of Washington County?

Yes 86 No 20

2. If recreational improvements could be made to Canonsburg Lake, which improvements would you be interested in?

clean water, paddle boats, walking paths, more stocking, fishing, keep lake and clean it, make it deeper and a bass lake, make deeper, dredge/repair dam, [It needs cleaned. Too much litter left from fishermen and from the big flood], nature trails, fishing and hiking, repair dam and dredge, remove silt and improve fishing, fishing

3. Have you ever visited Canonsburg Lake?

Yes 76 No 30

Potential Improvements	Yes	No	Don't Know
Fishing Improvements	82	6	16
Improvements to/or additional Boat Launches	59	11	29
Handicap Access	68	8	23
Restroom Facilities	84	4	15

Other: (none listed)

Potential Improvements	Yes	No	Don't Know
Dredging of Lake	72	7	21
Nature Trails	83	7	11
Picnic Areas	82	9	9
Nature Observation Areas	77	9	12
Improved Signage	59	14	22
Boardwalks for Bird Watching, etc.	66	15	18

6. Other Ideas?

Paddle boats, [offer children's classes about different nature topics, different age-specific classes], wildlife refuge, [Theresa Churley, 761 Boquet St., McKees Rocks, PA 15136-3301], just clean lake, more bass, not enough fishing area from shore, [dredge enough to restore lake's depth so fish can flourish but preserve a wetlands habitat, keep it natural], boat rental, swimming, children's activities, dog walking areas, [There is enough bike trails around-you need to have a trail for hiking only], maintain water quality, family-friendly things, [Don't need toll road], [Leave lake along]

(Resident of Washington County, but have never visited the lake? 18)

(Not a resident of Washington County, but have visited the lake? 8)

Canonsburg Lake Survey
Results of AG days and North Strabane Township

1. Are you a resident of Washington County?

Yes 269

No 40

2. If no, where do you reside?

Greene County (9), Allegheny County (6), Pittsburgh (6), Mt. Lebanon (3), West Virginia (3), Washington D.C. (1), Belmont County (1), Elizabeth Township (1), Clarksburg, WV (1), Cambria County (1), Crawford County (1), Tennessee (1), Bethel Park (1), Ohio (1), Fayette County (1), Monongalia County (1), Beaver County (1), no answer (1)

3. Have you ever visited Canonsburg Lake?

Yes 208

No 101

4. If yes, what types of recreational activities did you participate in?

Fishing 157

Boating 49

Nature Observation 74

Hiking 42

Picnicking 57

Other? Swimming (2), Visiting (1), Bird watching (1), Walking (1), Hunting (2), Photography (1), Ice skating (6), Ice skating/birding (1), Little Lake Theater (2), Drive-in camping (1), MH (1)

5. If improvements to Canonsburg Lake were made, what improvements would you like to see?

Fishing opportunities 170

Improved Access 79

Picnic Areas 196

Boat launching ramp 81

Restroom Facilities 235

Handicapped Fishing Pier 69

Remove sediment from the reservoir 123

Nature Observation Platforms 115

Hiking trails 173

Welcome Kiosk 35

Trash Cans & Dumpsters 149

Other? Bike trails (1), Chairs to sit on (1), Hotels, boat rentals, paddle boats (1), Canoe launch, signs "Take your trash with you" (1), Playground (2), More carp (1), More boating (1), RV parking (1), Recycling (1)



Canonsburg Lake Survey



1. Are you a resident of Washington County? Yes _____ No _____

2. If no, where do you reside? _____

3. Have you ever visited Canonsburg Lake? Yes _____ No _____

4. If yes, what types of recreational activities did you participate in?

_____ Fishing

_____ Boating

_____ Nature Observation

_____ Hiking

_____ Picnicking

Other _____

5. If improvements to Canonsburg Lake were made, what improvements would you like to see?

_____ Fishing opportunities

_____ Improved Access

_____ Picnic Areas

_____ Boat launching ramp

_____ Restroom Facilities

_____ Handicapped Fishing Pier

_____ Remove sediment from the reservoir

_____ Nature Observation Platforms

_____ Hiking trails

_____ Welcome Kiosk

_____ Trash Cans & Dumpsters

_____ Others

Potential Recreational Uses Analyzed and Coordinated

The Steering Committee analyzed, revised and reconsidered all potential uses presented in Section IV of this Master Plan in concert with the following issues surrounding the lake.

- Public, local official and county official comments received on the range of potential uses for the Canonsburg Lake property
- Limited availability for public funding
- Uncertainty of resources for operation and maintenance of any improvements
- Coordination with the current study commissioned by the U.S. Army Corps of Engineers with funding presented by U.S. Representative Tim Murphy
- Coordination with the Pennsylvania Fish and Boat Commission regarding the eventual repair and renovations the existing dam
- Coordination with the Turnpike Commission regarding the potential upper lake area crossing of the Southern Beltway

List of Interviews Conducted

Tim Murphy, Congressman	U.S. House of Representatives
John Pippy, Senator	Pennsylvania Senate 37 th . District
Barry Stout, Senator	Pennsylvania Senate 46 th . District
John Maher, Representative	Pennsylvania House of Representatives 40 th . District
Tim Solobay, Representative	Pennsylvania House of Representatives 48 th . District
Michael Silvestri	Peters Township Manager
Frank R. Siffrinn	North Strabane Manager
Edward T. Figas	Peters Township Director of Parks and Recreation
Seth Rodriguez, Consultant	Maguire Group, Inc.
John Geisler, Realtor	Coldwell Banker Real Estate
Brian Sterner, Consultant	Maguire Group, Inc.
Jim Helbling	Waterdam Farms, Inc.
Bridget Kirwan	Peters Township Resident
Larry Maggi	Washington County Commissioner
Kim Clark	North Strabane Resident
Laura Matarese	Peters Township Resident
John Anglin	Peters Township Resident
Kathy Anderson, Project Manager	U.S. Army Corps of Engineers
Tom Ford	Pennsylvania Fish and Boat Commission
Tracy Stack	Pennsylvania Department of Natural Resources

Key Interviews

Tim Murphy, Congressman, U.S. House of Representatives

Congressman Murphy is fully committed to providing any Federal Funding available for the environmental protection and longevity of the lake. Congressman Murphy was responsible for a \$250,000.00 grant to study the dredging question through the U.S Army Corps of Engineers, and remains a strong advocate of the lake's survival.

John Pippy, Senator, Pennsylvania Senate 37th. District

State Senator Pippy and his staff are very supportive of the lake and recognize its value to the community. Although no specific funding sources were discussed, Senator Pippy requested that his office be kept apprised of any developments in and around the lake, and reiterated his support for the project.

Barry Stout, Senator, Pennsylvania Senate 46th. District

Senator Stout was very supportive of the lake and its future success. Senator Stout discussed his past success in securing funding for local highway projects, and would be very interested in looking into various funding sources for Canonsburg Lake. The Senator looks at Canonsburg Lake as a very valuable resource for this portion of Washington County.

John Maher, Representative, Pennsylvania House of Representatives 40th. District

Representative Maher was extremely interested in the status of Canonsburg Lake and was very surprised at the deteriorating condition of the lake, particularly the amount sediment deposits that have accumulated over time. Representative Maher requested and received a copy of the Master Plan Site Plan for his review. Rep. Maher promised to support the project and believed the plan met the needs of the public very well.

Tim Solobay, Representative, Pennsylvania House of Representatives 48th. District

Representative Solobay is very interested in the status of Canonsburg Lake and attended the first of our scheduled public meetings. Representative Solobay pledged his support and discussed various funding sources which may be available for the project.

Michael Silvestri, Peters Township Manager

Mr. Silvestri is very interested in Canonsburg Lake, so much so that he attended several public meetings. Since ½ of the lake is in Peters Township, as Manager, Mike has a keen interest in the success of the lake. However, Peters Township has a park nearby that includes a small lake, and therefore, most if not all of the township's resources go to maintain that facility. Mr. Silvestri did state that in addition to police patrols, these may

be assistance from the township regarding trash pick-up. Also, the existing sanitary sewer line that passes along the lake on the northeast side could be accessed for two (2) proposed restrooms. (Costs were not discussed)

Frank R. Siffrinn, North Strabane Manager

Mr. Siffrin was interested in the condition of Canonsburg Lake, and discussed the possibility of extending a sanitary sewer down McDowell Lane to possible service the third proposed rest room facility. Costs were not discussed. Although he sees the lake as an important local resource, he could not provide any direct funding to aid in the improvements to the lake since the lake is owned by the Commonwealth of Pennsylvania and managed by the Pennsylvania Fish and Boat Commission.

Edward T. Figas, Peters Township Director of Parks and Recreation

Mr. Figas found the recreational recommendations to Canonsburg Lake very interesting and supported the improvements whole- heartedly. Since he is charge of parks and recreation within Peters Township, Mr. Figas was unable to provide funding but approved of the proposed improvements.

Seth Rodriguez, Consultant Maguire Group, Inc.

Mr. Rodriguez was very helpful in the development of this Master Plan and provided much of the base mapping used for the master plan. His interests were primarily in the Lower zone area where the potential crossing of the southern Beltway may occur. Discussions included the possibility of funding available from the Turnpike Commission as part of the right-of-way purchase required for the highway, although he was not speaking for Turnpike Commission directly.

John Geisler, Realtor Coldwell Banker Real Estate

John sees Canonsburg Lake a significant resource in the area and uses the lake as an amenity when selling properties in the area.

Brian Sterner, Consultant Maguire Group, Inc.

Mr. Sterner was very interested in the Master Plan and coordinating recreational improvements with the potential , particularly the crossing of the southern beltway and its' potential association and access for the proposed sediment trapping devices proposed for the Upper zone of the Lake.

Jim Helbling, Waterdam Farms, Inc.

Jim finds the lake a great local resource and finds many of the buyers at Waterdam Farms indicate that the lake is a unique feature that adds to the vitality of the area.

Larry Maggi, Washington County Commissioner

Commissioner Maggi is very supportive of any efforts in improving the lake and was very surprised at the amount of sediment and associated degradation to the lake that has occurred over the years. He discussed the possibility of Washington County working with the Fish and boat Commission in providing funding for the improvements or even the possibility of providing park/lake maintenance.

Kim Clark, North Strabane Resident

Kim finds the lake a very important feature in the area and is very interested in seeing the lake saved.

Laura Matarese, Peters Township Resident

Laura attended several public meetings and is very interested in keeping the improvements to the lake simple and park-like. Trails, picnic areas, etc.

John Anglin, Peters Township Resident

As a local resident, John finds the degradation of the lake alarming and is very interested in seeing the lake survive.

Kathy Anderson, Project Manager U.S. Army Corps of Engineers

Kathy Anderson finds the sediment accumulations at the lake a serious issue and through funding provided by Congressman Murphy, has begun a study to eliminate sediment in a cost effective manner.

Tom Ford , Pennsylvania Fish and Boat Commission

As part of the Steering Committee, tom has supported the improvements to the lake and is in favor of the recommendations. He has also reiterated the Commission's backing to the success of the lake.

Key Person Interviews
Questions

General:

- * Are you familiar with Canonsburg Lake?
- * How does Canonsburg Lake affect you or your business?
- * Have you or your business used Canonsburg Lake?
 - ^ If yes, for what purposes?
 - ^ If no, why not?
- * What enticements could be provided for you or your business to use Canonsburg Lake?
- * Currently do you feel that there are problems at Canonsburg Lake?
 - ^ If yes, what are they and to what degree?
- * In your opinion is Canonsburg Lake being used to its fullest potential?

Community:

- * What benefits does Canonsburg Lake provide to the community?
- * What degree of importance does Canonsburg Lake have in eco-tourism?
(Eco-tourism can be described as responsible travel to natural areas that conserves the environment and improves the well-being of local people).
- * In what other ways is Canonsburg Lake important?

Recreational Amenities:

- * What types of recreational amenities do you feel could enhance and improve Canonsburg Lake?
- * Do you foresee any problems or concerns with enhancing the recreational amenities at the lake?
- * Personally what recreational amenities would you like to see provided at the lake? What would you not like to see? Why?

Lake Management:

- * In your opinion who is responsible for the management of Canonsburg Lake?
- * In your opinion is Canonsburg Lake managed properly?
- * What are your suggestions or proposals for the long term maintenance of Canonsburg Lake?
- * What are your feelings concerning residents and businesses contributing monetarily to the restoration and maintenance of Canonsburg Lake? Would you or your business contribute?
- * Would you or your business support an up-front fee for developers to go towards repairs and maintenance of Canonsburg Lake?
- * Whose responsibility should it be to manage a maintenance fund if established for Canonsburg Lake?

In Closing:

- * Please share any personal or business experiences that you may have had about Canonsburg Lake?

Specific Questions:

Legislators:

- * Would you support endeavors to enhance and improve Canonsburg Lake?
- * Would you make a significant effort to secure financial backing?

Local Townships:

- * What role would your township have in endeavors to enhance and improve Canonsburg Lake?
- * Do you believe your residents would support improvements to Canonsburg Lake made by the township?
- * Would your township offer such services as police patrolling and trash and sewage waste disposal?

Section V Public Meetings to Discuss Potential Uses

PA Fish and Boat Commission:

- * What specifically would the Washington County Watershed Alliance be allowed to initiate and install in terms of recreational amenities and siltation traps on commission property before the dam is anchored?
- * Why is Canonsburg Lake so important towards recreation in PA, specifically western Pennsylvania?
- * What maintenance currently does the commission perform at Canonsburg Lake?

PA Turnpike Commission:

- * If the proposed Southern Beltway should cross Canonsburg Lake, what areas will and will not be usable for recreation?

Western PA Conservancy:

- * What is the conservancy's approach towards making conservation areas profitable and manageable?
- * What are your suggestions for Canonsburg Lake?
- * Would the conservancy partner with local organizations to complete beautification projects or other conservation projects at Canonsburg Lake?

Other Organizations or Clubs:

- * Would your organization hold functions at Canonsburg Lake?
- * Would your organization partner in projects at/for Canonsburg Lake?
- * Currently what is the importance of Canonsburg Lake in the region in terms of recreation and how will its' importance change as additional amenities are made?

Homeowner's Associations:

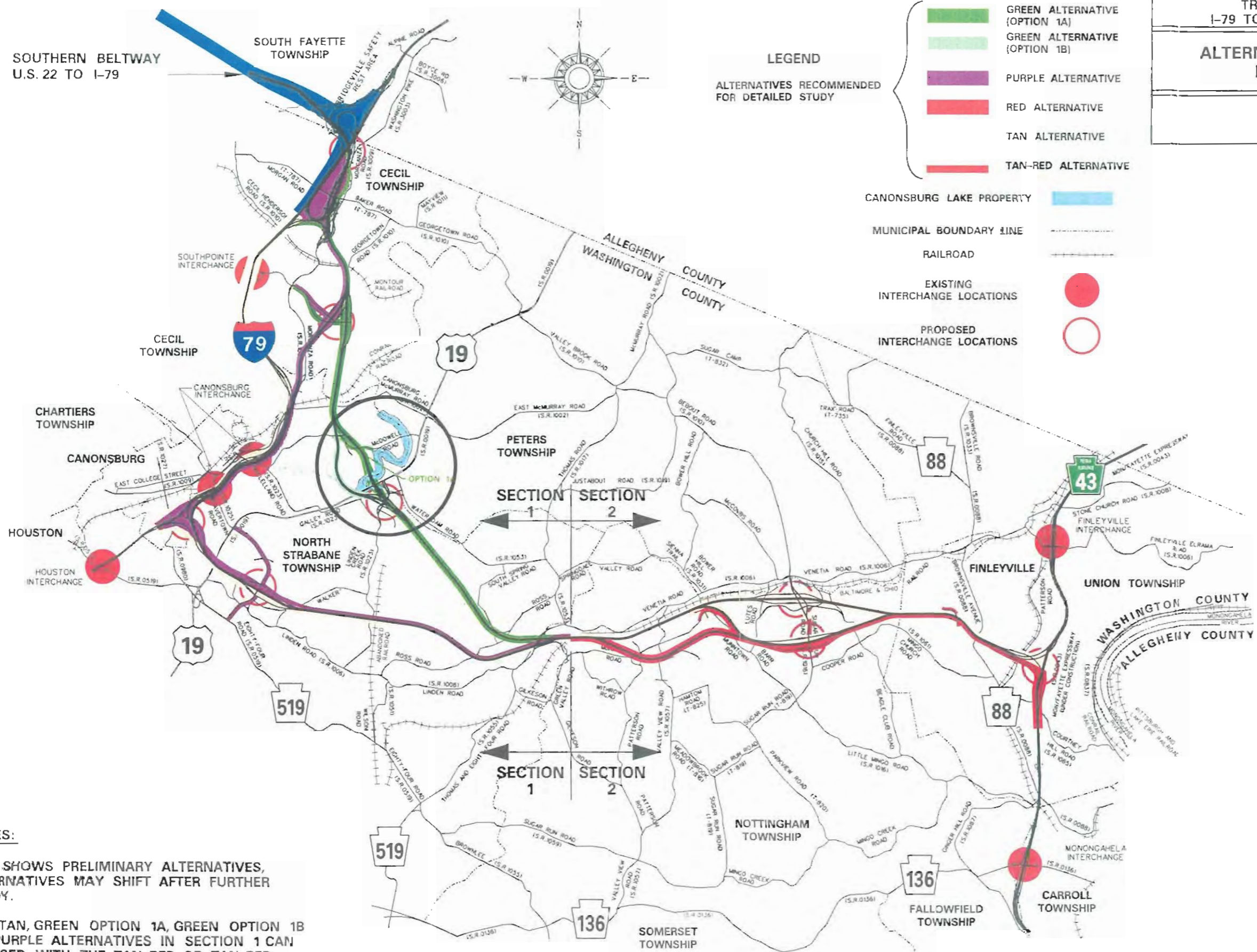
- * Do you believe Canonsburg Lake is a minor or major factor that attracts families to move into the area, specifically your association's area?
- * Does your association contribute anything towards the lake?
 - ^ If yes, please describe?
 - ^ If no, why not?
- * What are the pros and cons (from a homeowner's view) of enhancing Canonsburg Lake?

APPENDIX A
Southern Beltway Alternatives & Impact

SOUTHERN BELTWAY
TRANSPORTATION PROJECT
I-79 TO MONFAYETTE EXPRESSWAY

ALTERNATIVES TO BE STUDIED
IN DETAIL IN DEIS

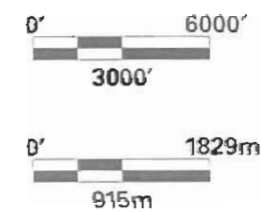
JULY 2005



NOTES:

MAP SHOWS PRELIMINARY ALTERNATIVES, ALTERNATIVES MAY SHIFT AFTER FURTHER STUDY.

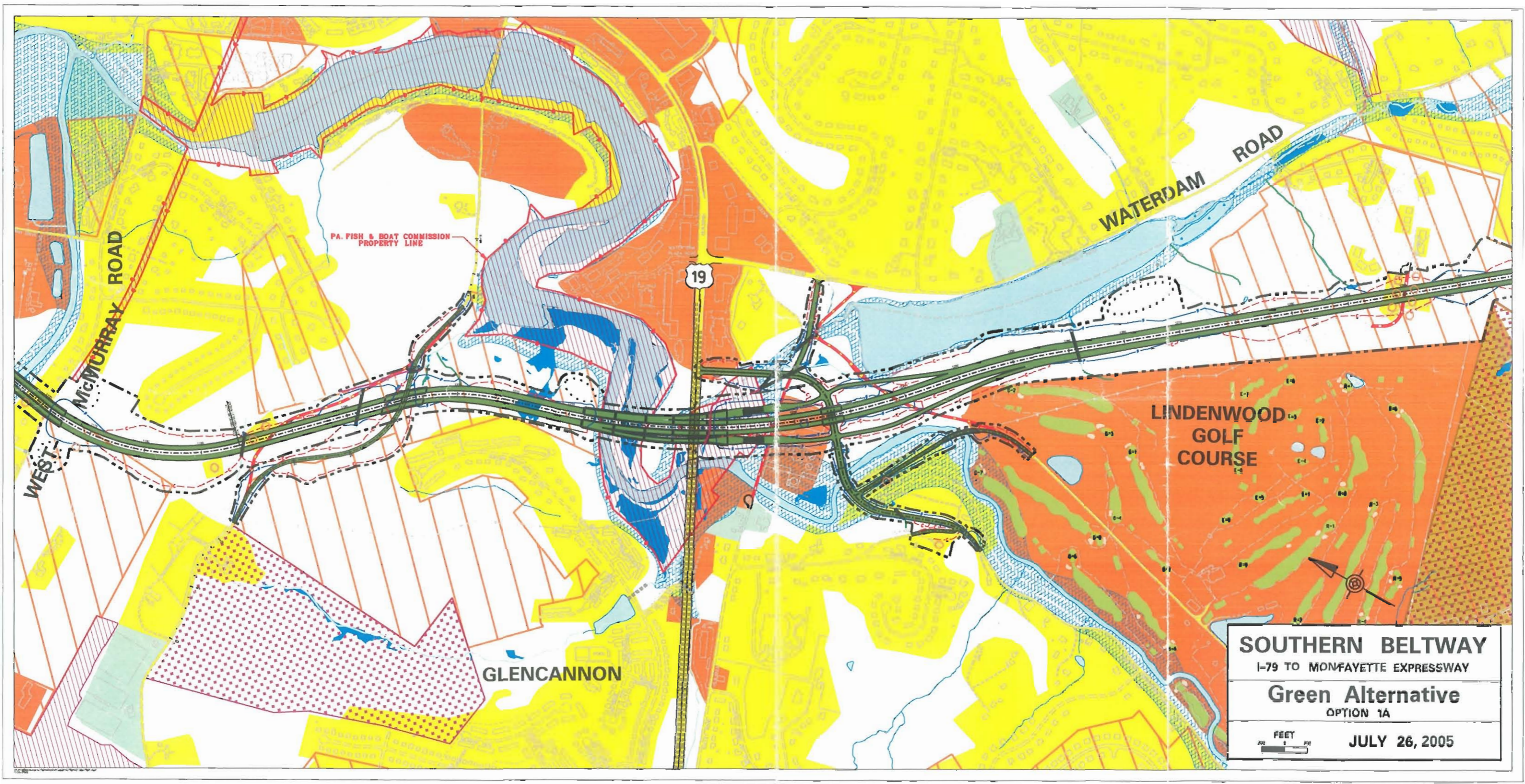
THE TAN, GREEN OPTION 1A, GREEN OPTION 1B OR PURPLE ALTERNATIVES IN SECTION 1 CAN BE USED WITH THE TAN, RED, OR TAN-RED ALTERNATIVE IN SECTION 2.



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Southern Beltway Alternatives

Map 12



I-79 to Mon/Fayette Expressway – Green Alternative – Section 1
Computer rendering of Green Alternative Option 1A over U.S. Route 19 with a new interchange southeast of U.S. Route 19.



Southern Beltway Proposed Crossing – Aerial View

APPENDIX B
U.S. Army Corps of Engineers
Restoration Plan

Section 206
PRELIMINARY RESTORATION PLAN

1. Project: Canonsburg Lake, Pennsylvania. Aquatic Ecosystem Restoration Project
2. Location: The proposed project area is **located in** South Strabane Township, Washington County, Pennsylvania. Canonsburg Lake is a **76 acre** impoundment on Chartiers Creek in Washington County, Pennsylvania. Chartiers Creek is a tributary of the Ohio River. Canonsburg Lake is located in the 18th Congressional District, Pennsylvania (Congressman Tim Murphy, PA-18 – R, ~~Senators Rick Santorum – R and Arlen Specter – R~~).
3. Description of the Proposed Aquatic Ecosystem Restoration Project:

(A) What is Being Proposed:

Proposed Actions

Outputs

Substrate And Water Quality

- ~~New benthic habitat~~
- ~~Improved water quality~~
- Restoration of approximately 1.2 miles of stream thalweg to reconnect the lacustrian and riverine ~~portions~~ of the creek.
- ~~Restoration~~ of some gravel and cobble substrate for lithotrophic benthic and fish species.
- ~~Creation of 11 acres of wetlands.~~

Detailed evaluation and discussion of project outputs are discussed later in Section 8, Cost and Benefits.

(B) Major Features of the Proposed Project: Canonsburg Lake ~~has a surface~~ area of about 76 acres and has a maximum depth at normal pool of about 34 feet. The drainage area for the lake is about 46 square miles. The Commonwealth of Pennsylvania, acting through the Pennsylvania Fish and Boat Commission (PFBC), owns and controls about 138 acres at this site including the dam, lake, and associated shoreline. Several opportunities for ecosystem restoration exist in the lake's area. Figure 1 shows a topographic map of the lake area. Several separable pieces of the total project are included for consideration. Each should be considered as an independent alternative. It is believed that all alternatives could be implemented with synergistic results.

Since its impoundment in 1941, water burdened with silt has been flowing into the lake. The silt is a result of agricultural runoff, urban development, and eroding streambanks. As the flowing creek water enters the impoundment, it comes to a virtual stop, dropping its load of silt. This problem is exacerbated by a combination of factors. The non-point source erosion has accelerated in recent years from increased development and highway construction. This was compounded by the heavy rains associated with Hurricane Ivan. The result is that the upper third of the impoundment is heavily silted in, with water levels ranging from a few inches to less than two feet.

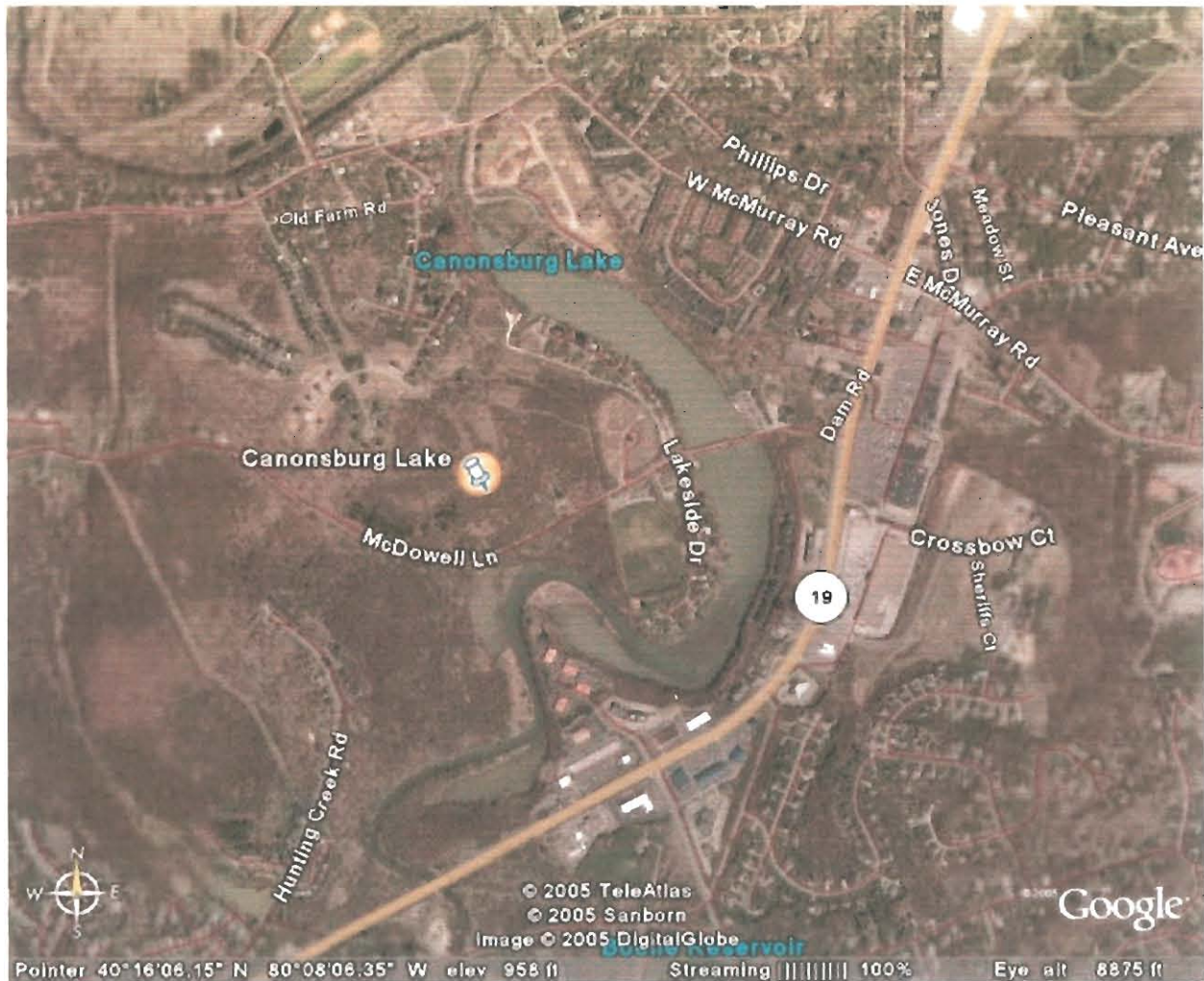


FIGURE 1 – Aerial Photo of Canonsburg Lake

Fisheries managers report there is an active seasonal trout fishery in this area. The trout fishery is being adversely impacted by degraded water quality conditions including high nutrient, suspended solids levels, and high algae populations. The sediments are suffocating benthic organisms and have ruined most of the fish nesting and spawning habitat. Oxygen demand is high as a result of decaying organic matter. In addition to the trout fishery, this area contains a wide flood plain interspersed with different types of

wetlands, which cumulatively provide habitat for numerous species of fish, reptiles, amphibians, and other flora and fauna.

The project proposes to dredge the impacted area of the lake to restore of some gravel and cobble substrate for lithotrophic benthic and fish species, restore the stream's thalweg to reconnect the lacustrine and riverine portions of the creek, improve water quality, and create 11 acres of wetlands.

In order to restore the aquatic environment and provide wetland diversity, the recommended plan calls for dredging along the original thalweg of the creek and placement of dredge material in geotubes to create impounded disposal areas along the shoreline. Dredged material would be placed in the disposal areas and filled to within a few inches of the normal lake elevation. Because of the permeability of the geotubes the excavated material would remain saturated and the disposal areas would rapidly convert to wetlands. Three areas have been identified through aerial photographs to serve as primary disposal sites (see Figure 2). The sites are already approximately three quarters surrounded by land and would require a minimum of geotubes to enclose. A variety of native herbaceous plant species would be planted to help jump start the system. Gravel and cobble beds would be installed as needed to provide necessary substrate to restore the fish and benthic communities. The shoreline, particularly the geotubes and wetland areas would be planted with hydrophytic tree species to provide additional habitat for terrestrial species and to provide shade for the water.

The proposed project would provide valuable wildlife refuge in what is essentially an urban and suburban setting. In addition to creating needed habitat, these low wetlands would have the incidental effect of maintaining flood storage capacity within the reservoir area and would maintain secondary flood damage reduction benefits. These restoration activities would result in significant site and systemic benefits to the ecology of Canonsburg Lake.

(C) Rationale for Proposed Restoration Project (Why is it Proposed?):

- (1) Ecosystem Degradation in the Area: As southwestern Pennsylvania continues to develop, increasing stress is being placed on the ecology of the associated watersheds. Since the implementation of the Clean Water Act in the 1970s there has been some natural replenishment of resources and the region is experiencing some recovery. However, as more and more of the area transitions from rural to urban/suburban, maintaining refugia for fish, wildlife, and plants is becoming increasingly important. Restoring this portion of Canonsburg Lake will help to maintain the trout fishery and will create wetlands in a region where many wetlands have already been permanently lost.
- (2) Existing Ecosystem: As noted above, the upper third of Canonsburg Lake is largely silted in and has had the natural substrate buried under silt deposits. The thalweg is largely choked, blocking fish movement between the lacustrine and riverine areas. The PFBC is making efforts to clean and improve the stream above the lake.

verge on the edge of the stream and wetland areas will provide additional habitat and help shade the water which will also help mitigate water temperatures.

(4) Other Alternatives. Dredged material could be disposed of off site and used for fill after dewatering; however this would limit the creation of wetlands. Efforts at maintaining the cold water trout fishery could be abandoned in favor of attempting to convert to a shallow warm water fishery; however, this would entail foregoing a valued recreational activity. Containment or disposal areas could be filled to a greater depth. After allowing these areas to dry they could then be converted to athletic fields, lawns, or some similar use. Such an action would provide fewer aquatic habitat benefits.

(D) Expected Ecosystem Restoration Outputs and How These Will Be Measured.

Benefits categories associated with restoration activities include: restoration of vegetative diversity and restoration of habitat suitable for dependent wildlife (including birds, amphibians and small mammals). The benefits would be measured by an accepted and standardized method such as the Wetland Evaluation Technique (WET), Habitat Evaluation Procedure (HEP), or another appropriate assessment procedure to be determined appropriate by the PDT.

(E) Importance of Proposed Outputs. Restoration of Canonsburg lake is locally significant because it will provide a refuge within an otherwise developing urban/suburban setting. Incrementally this and other actions are slowly restoring the Upper Ohio River Basin's ecological viability and providing recolonization points for previously extirpated species, such as river otter. The proposed restoration actions will increase aquatic habitat quality, enrich wildlife migration corridors, and create opportunities for improved regional wildlife habitat.

(F) Lands, Easements, Rights-of-Way, Relocations, and Disposal Areas (LERRD).

The non-Federal partners are aware that they would be responsible for all lands, easements, rights-of-way, relocations, and disposal areas for the project (LERRDs). Currently the non-Federal sponsor owns all of the necessary lands and waters. In the event that LERRD costs do not equal at least 35 percent of total project costs, the non-Federal partners are aware that they must contribute additional work-in-kind or cash to equal 35 percent.

(G) Relationship of the Proposed Action to Other Federal and Non-Federal Projects.

There are no existing U.S. Army Corps of Engineers projects within the immediate Canonsburg Lake area. As noted, the property is owned and managed by the PFBC. This Preliminary Restoration Plan is an outgrowth of a request for assistance by the PFBC and the Chartiers Creek Watershed Association.

(H) Alternatives. No action is always an alternative, albeit not a preferred one. The proposed alternative has been briefly described above, however, it would be possible to implement some but not all of the alternatives. For example, the thalweg could be restored but not the substrate. Disposal areas could be planted or not. Each additional

feature would be evaluated during the Feasibility phase to determine the appropriate level of action that would provide the greatest synergistic benefits.

The following planning objectives and constraints provide a framework for plan formulation and alternative development. As planning objectives for this investigation, it is in the Federal interest to contribute to National Ecosystem Restoration (NER) through restoration of degraded ecosystem structure, function, and dynamic processes to a less degraded, more natural condition.

The following planning constraints would be used to formulate alternative plans:

- Anticipated ecological benefits of restoration plans must be reasonable when compared to project costs;
- There must be a reasonable probability that identified ecosystem restoration projects would contribute substantially to improvement in the basin ecosystem;
- The projects must be technologically feasible and cost effective, using proven technology;
- The alternatives must contribute to the long-term sustainability of the environment;
- Identified alternatives are within the authority of the Corps of Engineers and the non-Federal sponsor to implement; and,
- There is a reasonable assurance that a public entity (i.e., state or local unit of government) is capable and willing to participate as a non-Federal partner in a cost-shared feasibility study.

(I) Study Methodologies. Expected outputs or benefits of the project would be measured through the implementation of various biological multi-metric assessment procedures that may include the results of the EPA rapid bio-assessment. The selection of specific techniques, models, and procedures to be used will be determined early in the Detailed Project Report (Feasibility) Phase in coordination with the local sponsor, and state and Federal resource agencies who will be invited to participate in the assessment and planning process.

These assessment procedures will also be used to formulate environmental restoration alternatives. Multi-metric assessment procedures such as WET evaluate existing physical conditions and biological and ecological communities. Multi-metric indices allow complex physical and biological ecosystems to be compressed, stratified, and ultimately compared with other similar resources within the same reference domain by extracting a single number to represent a targeted habitat or biological group. Expected project benefits would be optimized by incremental analysis using IWR's Ecoeasy or a similar program.

4. Consistency Statement for Section 1135 Projects. Not Applicable

5. Views of the Sponsor: The non-Federal sponsors are the Pennsylvania Fish and Boat Commission and the Chartiers Creek Watershed Association. A meeting was held at the

proposed site of the project with representatives of the non-Federal sponsors. They are committed to pursuing aquatic habitat restoration to improve the Canonsburg Lake ecosystem, and have provided a Letter of Intent. Under Section 206 of WRDA 1996, non-Federal sponsor must contribute 35% of total project implementation costs through a combination of cash and in-kind services. The sponsor is aware of this requirement and is able and willing to financially participate in the project. The sponsor is aware that they would be responsible for all operations, maintenance, repair, rehabilitation and replacement costs (OMRR&R). These costs should be minimal. In addition, the sponsor is aware that they would be responsible for all future O&M after construction of the project is completed.

6. Views of Federal, State, and Regional/Local Agencies. The project is supported by the Pennsylvania Fish and Boat Commission and the Pennsylvania Department of Conservation and Natural Resources and the U. S. Fish and Wildlife Service (FWS).

7. Environmental Compliance Requirements. The purpose of the proposed plan is to promote aquatic ecosystem restoration of the Chartiers Creek Basin. Consequently, environmental compliance is not expected to be problematic. An Environmental Assessment depicting both positive and adverse effects of each alternative would be prepared as prescribed by NEPA and included with the Detailed Project Report (DPR). Appropriate investigations, coordination and permitting would be conducted to comply with federal, state and local environmental requirements. Coordination with FWS and the Pennsylvania Department of Conservation and Natural Resources would occur in accordance with the Fish and Wildlife Coordination Act and the Endangered Species Act. Section 404 of the Clean Water Act as well as State of Pennsylvania Water Quality Certification would regulate any potential impacts to waters of the United States. Local construction permits including sedimentation and erosion control and stormwater management would also be required. Additional coordination will be undertaken with the Pennsylvania Department of Environmental Protection, Pennsylvania Fish and Boat Commission, and the Pennsylvania Game Commission the Pennsylvania Department of Transportation, and the Pennsylvania Turnpike Commission.

8. Costs and Benefits: To determine Federal interest in ecosystem restoration on Canonsburg Lake, costs and benefits of the alternative plans were estimated and are depicted below. The restoration site would produce the following ecological outputs:

- Restoration of 1.2 miles of stream channel and riparian corridor
- Increased aquatic habitat diversity including 11 acres of wetlands and improved substrate
- Increase native plant diversity
- Increased terrestrial habitat diversity
- Improved benthic and fishery populations

Table 1 below contains estimates of construction and operations and maintenance (O&M) costs for the restoration project described above. Long-term O&M costs for aquatic ecosystem restoration projects are typically low and would be the sponsors' responsibility. The risk associated with achieving the project outputs is anticipated to be very low for this project and would decrease significantly after the first growing season. Accordingly, O&M activities are

more intensive during the first few years of operation. During this time, periodic inspections and monitoring is conducted to ensure that the sites are functioning as designed. This would include monitoring for three years to evaluate the hydrology of the restored systems and inspection of vegetated communities to evaluate plant mortality, species density, species diversity and the presence of invasive species. Adaptive measures may be necessary to modify the site, replant species that do not survive initial installation, and for control or removal of invasive plants.

TABLE 1

Canonsburg Lake Section 206	DPR, P&S, & Construction Costs	Annual O&M	Total Average Annual Costs *
Totals (all costs in thousands)	\$2,326	\$2**	\$130

*50-year period

**Annual O&M will diminish over the first few years and should become negligible over time. It is, however, included in the Total Average Annual Costs.

The estimated benefits of the ecosystem restoration project presented below were based on best professional judgment supported by a site visit, conversations with the sponsor, contractors, and other agencies and organizations familiar with the area. The following observations and assumptions were made:

- Currently there is poor aquatic habitat mainly consisting of shallow water and mudflats associated with the upper third of Canonsburg Lake. Habitat units are rated as a 2 on a scale of zero to ten based on best professional judgment. Future without project units will continue to be 2 for a number of years until enough accretion occurs to develop wetlands naturally. Left to itself the project area would likely eventually become an emergent swamp or floodplain wetland. Changes and benefits would be slow to accrue.
- With a project most habitat improvements would occur within the first 15 years and over time as the resources matured they would continue to improve.
- The watershed will see continued growth and habitat will become increasingly important.

Between 0 and 15 years the with and without project trend lines would quickly diverge. After 15 years they would continue to diverge, but at a slower rate. It is estimated that these benefits could be achieved for a total project cost of \$\$2,326,000 and an annual O&M cost of \$2,000.

TABLE 2

With and Without Project Comparisons

	OUTPUT UNITS	CHANGE FROM BASELINE
Baseline	104	
Future w/o project 15 years	97	97 – 104 = -7 decrease
Future w/o project 50 years	184	184 – 104 = 80 increase
Future with project 15 years	529	529 – 104 = 425 increase
Future with project 50 years	584	584 – 104 = 480 increase

This action is regionally significant for improving water quality, and creating opportunities for improved wildlife habitat. This action would promote a positive contribution to the National Ecosystem Restoration (NER) account. With an average annual project cost of \$130,000 and average annual benefits of approximately 568 habitat units ecosystem output, it is estimated that over the 50-year project life it would cost less than \$230 per unit increase in ecological output.

It is recommended that the Canonsburg Lake Aquatic Ecosystem Restoration Project continue into the Detailed Project Report (Feasibility) Phase under the authority of Section 206 of the WRDA of 1996.

9. Schedule: A DPR of 12 months is anticipated. Below are milestones for the project.

Project Milestones	Date
Notice of Initiation of DPR Phase – Scoping	Mar 06
Field Investigations Complete	Sep 06
Alternative Designs Complete	Dec 06
Prepare Draft DPR and Draft EA (DEA)	Jan 07
Transmit Fact Sheet to Division and EA to public	Feb 07
Comment and Response Period	Mar 07
Complete Final DPR and Final EA	Jul 07
DPR and EA Approved by Division	NOV 07
Begin Preparation of Plans and Specifications	Feb 08
Execute Project Cooperation Agreement	Feb 08
Complete Plans and Specifications	Aug 08
Complete ITR/BCOE Review	Sep 08
Certify Real Estate	Jan 09
Advertise Contract	Mar 09
Award Contract	Apr 09
Start Construction	Jun 09
Finish Construction	Nov 09
Start Operation and Maintenance	Dec 09
Begin monitoring for 3 year period	Dec 09

10. Supplemental Information: It is expected that the model Project Cooperation Agreement (PCA) for section 206 projects will be used for this project.

11. Financial Data: (all costs in thousands of dollars)

a. Federal Funding Needs: (all costs in thousands of dollars)

Project Modification Costs				Federal Funding Needs			
	Phase Totals	Non-Federal	Federal	FY06	FY07	FY08	FY 09
DPR*	500	0*	500	250	250		
LERRDs	149	149**	0				
P&S	150	53	98			150	
Constr	1,912	844	1,068				1068
Totals	2,711	1046	1,667	250	250	150	1068

* Initially Federally funded. Cost reclaimed during construction. ** LERRDS credited during construction

b. Non-Federal Requirements: (all costs in thousands of dollars)

LERRDs: \$149
 Cash: \$897
 Work-in-Kind: TBD
 Annual OMRR&R \$2

12. Federal Allocations to Date: (all costs in thousands of dollars)

Preparation of Preliminary Restoration Plan \$12



Typical view of proposed project area.



View of trout stream above Canonsburg Lake



LITTLE CHARTIERS CREEK - LOOKING SOUTH



MANASSAS LAKE - LOOKING WEST FROM WATERDAM PLAZA



CANONSBURG LAKE, LOOKING WEST

Appendix A

Standardized Habitat Units

Baseline				
Habitat Type	Acres	Standardized Index (Scale 0-10)	Significance Factor (Scale 1-5)	Standardized Output Unit
Free Stream	2	4	3	24
Lake/Reservoir	20	2	2	80
Wetland	0	0	5	0
Totals	22			104

With project 15 Years				
Habitat Type	Acres	Standardized Index (Scale 0-10)	Significance Factor (Scale 1-5)	Standardized Output Unit
Free Stream	2	6	3	36
Lake/Reservoir	9	6	2	108
Wetland	11	7	5	385
Totals	22			529

With project 50 Years				
Habitat Type	Acres	Standardized Index (Scale 0-10)	Significance Factor (Scale 1-5)	Standardized Output Unit
Free Stream	2	6	3	36
Lake/Reservoir	9	6	2	108
Wetland	11	8	5	440
Totals	22			584

Without project 15 Years				
Habitat Type	Acres	Standardized Index (Scale 0-10)	Significance Factor (Scale 1-5)	Standardized Output Unit
Free Stream	2	3	3	18
Lake/Reservoir	17	1	2	34
Wetland	3	3	5	45
Totals	22			97

Without project 50 Years				
Habitat Type	Acres	Standardized Index (Scale 0-10)	Significance Factor (Scale 1-5)	Standardized Output Unit
Free Stream	2	3	3	18
Lake/Reservoir	13	1	2	26
Wetland	7	4	5	140
Totals	22			184

Observer-Reporter

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A. PARKER BURROUGHS *Editor*

LOUIS F. FLORIAN *Editorial Page Editor*

Is Canonsburg Lake doomed like others?

Drive past Canonsburg Lake on most days and you'll see folks camped along the banks, casting lines into the water and hoping for a catch.

Unfortunately, as outdoor editor F. Dale Lolley pointed out in his Sunday column, fishing spots in Washington and Greene counties are becoming few and far between. Two lakes, Dutch Fork in Donegal Township and Duke at Ryerson Station State Park in Greene County, have been drained since last fall, and Canonsburg may not be too far behind.

The six-decade-old lake has silted to the point where it's only a few feet deep in some places. Dredging looks to be a multimillion-dollar project, with no funding source readily forthcoming.

The dam that creates the lake also can use a facelift, a situation that couldn't help but make people who live downstream along Chartiers Creek more than a bit nervous. If the dam gives way, it will make the flooding that

struck their homes last September look like a minor inconvenience.

Canonsburg Lake, though, might have a better chance for rehabilitation than its drained brethren.

The lake, which straddles Peters and North Strabane townships, is in the midst of a dense residential area, and many of the people who live nearby are very happy with having a major recreational attraction so close at hand. Elected officials

would like to keep that portion of their constituency happy, as well.

One concern about the lake is that a proposed route of the Southern Beltway might pass over its waters. But that could work to the lake's advantage, as money might be diverted its way through the highway project.

A key at this point is for local residents to maintain their interest in saving the lake. Without their collective voice, the people who represent them tend to lose interest, at which point the lake becomes a lost cause.

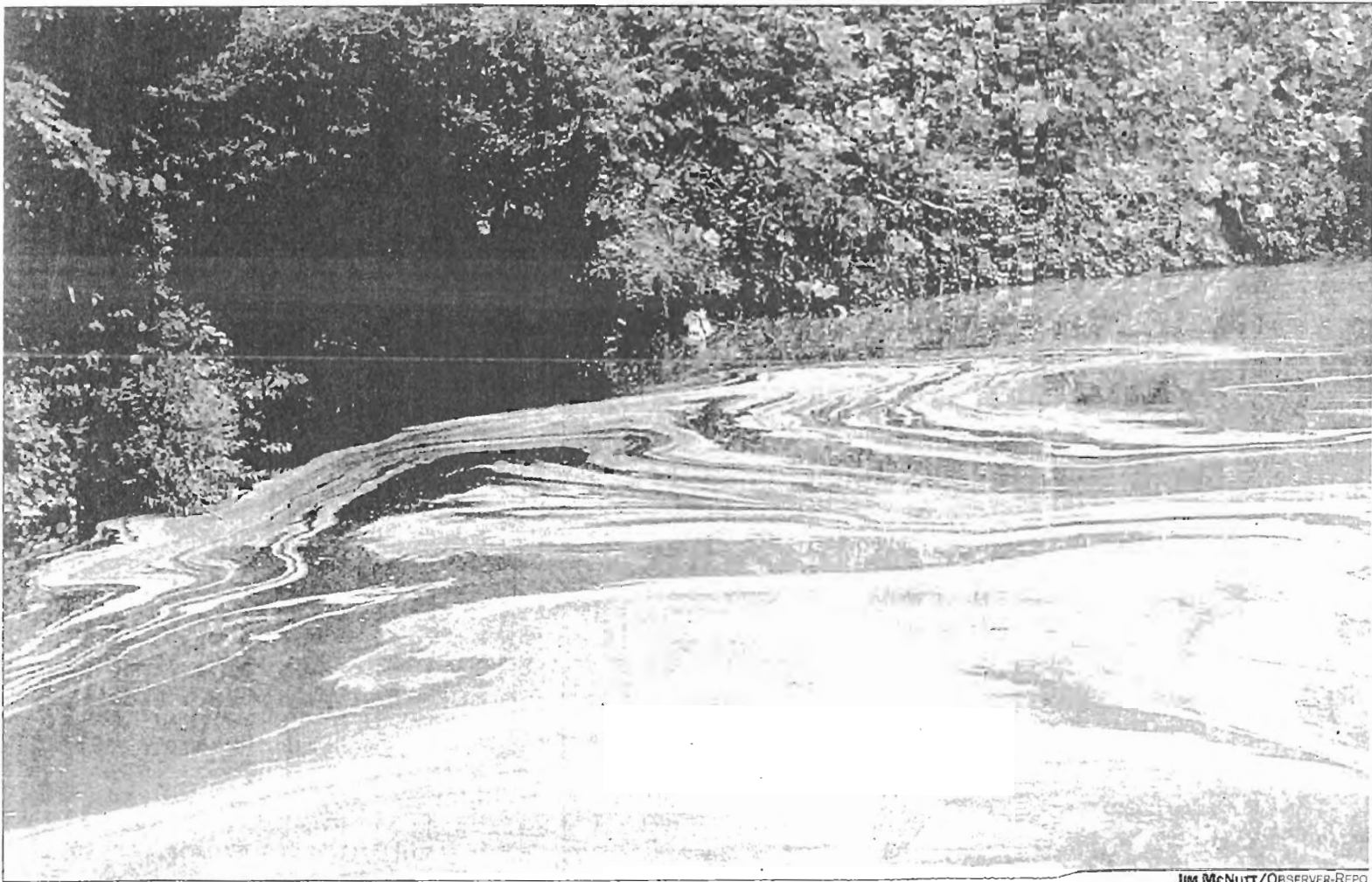
THE SIX-DECADE-OLD LAKE HAS SILTED TO THE POINT WHERE IT'S ONLY A FEW FEET DEEP IN SOME PLACES. DREDGING LOOKS TO BE A MULTIMILLION-DOLLAR PROJECT, WITH NO FUNDING SOURCE READILY FORTHCOMING.

QUICK REA

OBSERVER-REPORTER THURSDAY, AUG. 18, 2005

Hot Shot:

Algae builds up on local lakes and ponds because of hot summer days and low water levels. Near the Route 19 bridge over Canonsburg Lake the swirl of algae makes an interesting pattern.



JIM MCNUTT/OBSERVER-REPO

Groups eye future recreational projects for Canonsburg Lake

By Tamara Hall
for The Almanac
writer@thealmanac.net

The Steering Committee for Canonsburg Lake Study and The Washington County Watershed Alliance held their second public meeting on Oct. 24 at Little Lake Theatre to discuss the future of Canonsburg Lake.

The meetings are a major part of the Canonsburg Lake Study, which is funded by a \$40,000 grant from the Pennsylvania Department of Conservation and Natural Resources.

Formed by an impoundment of Little Chartiers Creek within the Chartiers Creek Watershed, Canonsburg Lake was built over 60 years ago by Alcoa. In recent years, water depth in the lake has decreased due to the accumulation of silt and debris. In order to return the lake to its original state, dredging may have to occur.

"The lake can be dredged, but we also need to look at the cost of getting it done," said Mark R. Fickley, prime consultant of the project Fickley and the Steering Committee for Canonsburg Lake Study and The Washington County Watershed shifted attention toward improving the recreational use of the lake, which is used for boating and fishing.

A master plan for Canonsburg Lake is being developed under the direction of the Steering Committee for Canonsburg Lake and its project manager, Debra Valentino.

Although the development of the plan began last winter, the

process is still in its preliminary stages. The Steering Committee for Canonsburg Lake Study and The Washington County Watershed Alliance is hoping to have the plans completed by its next meeting in the spring.

Using more than 400 surveys that were conducted in North Strabane Township and Peters Township, Valentino and Fickley, along with biologist Pat Gavaghan of Ecotone in Cranberry and Washington County Watershed Alliance president Gary Stokum, presented the public feedback on improvements at the lake. Their recommendations will be taken into consideration during the development of master site plan.

Canonsburg Lake separates North Strabane and Peters Township. Many people who filled out survey forms last spring and said they enjoy fishing, ice skating, bird watching, and other activities at the lake.

The survey forms also offered ideas for future development of recreational activities. Among the recommendations was improving the signage at the entrance of Canonsburg Lake, as well as adding more lights.

"There is a very little signage of who owns the lake," said Fickley. The lake is operated by the Pennsylvania Fish & Boat Commission.

Besides improving the parking spaces near the lake, those surveyed also want to see a dumpster available at the site.

However, Fickley says the decision to place a dumpster on the site is made by the Fish & Boat

Commission and North Strabane and Peters Township officials.

In addition to picnic tables and benches, people surveyed also want to see restrooms at the lake.

"They were the most frequently suggested in the surveys," said Valentino. The Steering Committee for Canonsburg Lake Study and Fickley suggested having compost facilities at the site.

In order for people to learn more about the history of the lake and the pristine wetland habitat that has been formed, an educational center is also being proposed in the plan.

"There will either be a small pavilion or educational signs around the lake," said Stokum.

Concerns are varied about th

BY LAURIE CARSON, Staff writer
newsroom@observer-reporter.com

A public meeting to discuss the recreational future of Canonsburg Lake instead drew many questions about the state Turnpike Commission's proposal to route the Southern Beltway over part of the lake and what steps can be taken to remove sediment from the lake.

The lake, which is managed by the Pennsylvania Fish and Boat Commission, covers 76 acres in North Strabane and Peters townships. It is currently used for fishing and boating, though it is said to have been constructed by Aluminum Company of America in 1943 for industrial use.

The state Department of Conservation and Natural Resources gave a \$20,000 grant to the Washington County Watershed Al-

liance to develop a master site plan for the lake. The plan will include ideas for recreational improvements, and one condition of the grant is that the group must hold three public meetings.

At Monday's meeting at Little Lake Theater, the audience was asked to contribute ideas for potential recreational uses and improvements at the lake. Ideas included such things as providing security, restrooms and trash receptacles, having Boy Scout troops redevelop the existing hiking trails and keeping things as natural as possible.

Michael Silvestri, Peters Township manager, noted that on the Peters side of the lake, a large trash bin has been installed and trash is removed weekly at the township's expense.

"I think anything that's done at the lake is going to have to be low-maintenance," he said. He added that he was concerned that if public restrooms were built, there would be a danger of vandalism.

Ideas presented at the meetings, along with those collected from a survey conducted this spring, will be submitted to the state for review. The spring survey yielded several suggestions similar to those brought up at Monday's meeting but also included requests for such things as bird-watching platforms.

A survey also was distributed at the meeting for those who did not feel comfortable speaking up.

After the submission of the master site plan, a second grant could be awarded for the development of some of the improve-

RE: FIRST PUBLIC MEETING

e future of Canonsburg Lake

ments that the public would like to see.

Concerns about how much could be done to improve recreational facilities weren't the only things weighing on the minds of those who attended the meeting, however.

Some residents are worried that the Turnpike Commission is exploring the possibility of directing the Southern Beltway, a highway that would connect the Mon-Fayette Expressway to Pittsburgh International Airport, over a shallow section of the lake. An alternative route could take the road through a residential area.

Those in the audience who live near the lake raised concerns that if the Turnpike Commission places a highway nearby, they

will be disturbed by the noise and the sight of the cars.

State Rep. Tim Solobay, D-Canonsburg, said that there would be a buffer created so that residents wouldn't be able to see the road.

Debra Valentino, who lives near the lake and is part of the DNCR grant steering committee and the Save Canonsburg Lake Committee, said that if the highway goes over the lake, the Fish and Boat Commission might receive remediation money as compensation. This money could go toward dredging silt from the lake and making repairs to the lake's dam. She added that the group was also looking for other sources of funding.

Over the years, sedimentation has built up at the bottom of the

lake, causing it to become shallower in parts. Such build-up is typical, but Mark Fickley, a landscape architect hired by the grant steering committee, said, "It's coming a lot faster than we'd like it to."

He attributed the speed of sedimentation build-up, in part, to residential development runoff. "Muddy water's coming into the lake," he said.

Fickley showed pictures of portions of the lake that are just a few inches deep.

Dredging could come with a high price tag. Estimates range between \$3 million and \$4 million. Moreover, the dam that forms the lake is also in need of repair.

"I would like to see the lake saved," Valentino said. "It's dying."

Sediment causes problems for lake

Fish count high despite shallow depth

By Tamara Hall
for The Almanac
writer@thealmanac.net

For more than 60 years, Canonsburg Lake has served as a great place for fishing, boating or even to sit and admire.

However, in recent years, the lake, which was once a symbol of nature's beauty, is now deteriorating.

"Canonsburg Lake is dying, and I'd like to see it live," said Debra Valentino, chairman of the Save Canonsburg Lake Committee and president of the Lakeside Drive Homeowners Association.

"We need to do what we can to preserve it."

Because the middle of Canonsburg Lake contains a boundary line that divides North Strabane and Peters townships, residents from both communities (including those who live next to the lake) attended the Aug. 1 public meeting on the importance of maintaining the

62-year old lake. Sponsored by the Department of Conservation and Natural Resources, the meeting was held at Little Lake Theatre in North Strabane. The public not only viewed maps of the proposed recreational plans for Canonsburg Lake, but also presented their ideas on how to restore it.

Other representatives of the Save Canonsburg Lake Committee, the Washington County Watershed Alliance and the Washington County Conservation District were also on hand to discuss maintaining Canonsburg Lake, as well as Mark Fickley of the Department of Conservation and Natural Resources.

Fickley presented the audience a Power Point presentation on the history and current problems plaguing the lake; particularly increasing the sediment underneath the water.

Formed by an impoundment of Little Chartiers Creek within the Chartiers Creek Watershed, the Alcoa (Aluminum Company of America) built the lake in 1943 as a water source for a proposed plant aimed to manufacture paper.

Fourteen years later, the lake

was donated to the Commonwealth of Pennsylvania. Although Canonsburg Lake is now managed by the Pennsylvania Fish & Boat Commission, it is filled up with sediment. Dredging has never been done to maintain its depth.

In fact, areas of the lake where it was once considered deep have become very shallow. If someone paddled a canoe onto the middle part of the lake, the water would only be about four-feet deep.

One of the residents who owns a cottage on the lake, said 25 years ago she remembers being able to find a place at the center of the lake, where it was deep enough to ride in her canoe.

"I used to walk into the middle of the lake and six feet of water would be over my head," she said. "Now, it's so shallow that all you see is what is underneath the water."

"The lake has sediment problems, and needs to be dredged," said Fickley. Along with Valentino, Fickley added there has to be a "balanced amount of dredging" from the lake in order to keep its stability and the wetland habitat that has been formed.

Unfortunately, the lake cannot be dredged until more safety

measures are placed on the waterdam.

"The waterdam is safe, but we were told by the Department of Environmental Protection that because it was built in 1943, more safety aspects are needed," said Valentino.

Fickley also mentioned the rapid residential and commercial development in North Strabane and Peters townships as the cause of the sediments accumulating in the lake.

"The total land area that drains into the lake is 46-square miles," he said. "That includes silt and debris."

Although the sediments in the lake have become a major problem in allowing it to retain its depth, a recent survey conducted by the Pennsylvania Fish and Boat Commission four years ago demonstrates a stock in brown trout, rainbow trout, channel catfish, tiger muskellunge and muskellunge.

Encouraged to voice their input on how to improve Canonsburg Lake, the residents recommended making the hiking paths near the lake more visible, not to build restrooms or light posts at the lake, but instead add trash receptacles and keep it low-maintenance and natural.

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stage lights and sound system, but amazingly, no performances were canceled in either instance. Last year's last minute blackout was handled by using the house lights (lights that serve the auditorium area and are usually shut off during a performance)

SEE THEATRE ON PAGE A5

...of national and world upheaval and blessedly, to destruction as Upper St. Clair changed from farming community to suburb.

The elegant but simple original stone house with its white painted window trim, paneled front door with glass transom

nized the 200th anniversary of the Phillips - Seegar house, the oldest house in Upper St. Clair, to Anne Humphreys and Sam Bertenthal, the home's current owners. The Oliver Miller Homestead (circa 1810) and the John Woods House (circa 1794) are

SEE HOUSE ON PAGE A5



Bottoms up to renew Canonsburg La

Federal funds pay to dredge center of lake

By Tamara Hall
for The Almanac
writer@thealmanac.net

If everything moves according to plan, the recreational future of Canonsburg Lake may include a picnic area, a pedestrian bridge over a narrow portion of the lake, and several benches for people to sit and admire the beauty of the water.

With expectations of completing the Canonsburg Lake Master Site Recreational Development Plan this summer, the project's

Call for volunteers to upgrade trail

Junior Girl Scout Troop 1942 will begin a community service project at Canonsburg Lake. In the fall, under the leadership of Bridget Kirwan, the first phase of the project will be to improve the quarter mile trail connecting two parking lots on the Peters Township side of the lake.

The troop will work on constructing bird houses, creating a low-maintenance perennial garden, garden crafts, memorial benches and trail placards.

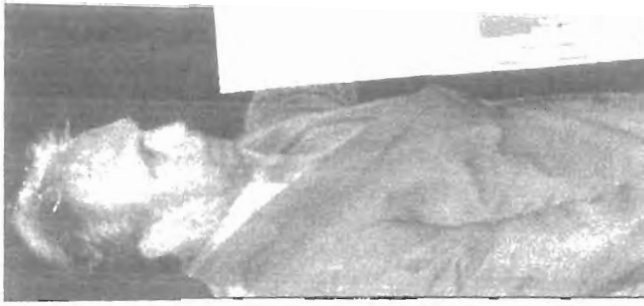
The troop will record the lake's history on tape and video and use photographs from local residents.

The troop is looking for adult

volunteers to help the project which includes constructing a handrail.

Kirwan said the troop is also seeking donations of supplies like mulch, gravel, lumber and refreshments.

For details, call 724-941-5581 or contact oldshow@aol.com



LANDSCAPE ARCHITECT

SEE LAKE ON PAGE A5

Steering Committee held a final public meeting for those interested in the future of the lake to review and comment on the proposed plan before its submission to the Department of Conservation and Natural Resources. The meeting was held on June 20 at Little Lake Theatre in

North Strabane Township where over 30 residents, members of the Pennsylvania Fish and Boat Commission and representatives of local legislators studied maps and heard a presentation of the proposed recreational development by landscape architect Mark Fickley.

Located between North Strabane Township and Peters Township with the dividing boundary line in the middle of the lake, Canonsburg Lake was confirmed by an impoundment

Across the South Hills.....A9	Deaths	A2	Library Events	A6	Ref
Classifieds	Deed Transfers	B4	O'Brien	A2	Rel
Club Events	Health Care.....	A6	Opinion	A4	Tog

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THE ALMANAC JULY 5, 2000
FINAL PUBLIC MEETING

□ Lake

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of Little Chartiers Creek; which is within the Chartiers Creek Watershed.

Canonsburg Lake was originally built in 1943 by the Alcoa Aluminum Company of America as a water source for a proposed plant to manufacture airplane propellers during World War II. However, the war ended before the plant was built.

Now managed by the Pennsylvania Fish and Boat Commission, Fickley compared maps showing the many deep water areas Canonsburg Lake possessed when it was built in the 1940s to it now presently having mostly shallow areas due to a lot of sediments deposited in the lake.

"Although the lake has mostly shallow areas, there are deep areas in the upper portion of the lake," said Fickley.

Fickley introduced the recreational concept of Canonsburg Lake as very "low key"—with the focus on three portions of the lake: middle, upper and lower parts.

Besides improving the parking areas, the lower lake area will include lighting at the site, permanent restroom facility that will connect to the Peters township sewer line, as well as a dumpster maintained by the township.

Although an existing walking trail will be renovated along with an addition to a picnic area and trash receptacles, a new trail system will be added on the North Strabane side of the lake.

There will also be an extended pedestrian walkway across the

Canonsburg Lake was originally built in 1943 by Alcoa.

lake where it will be adjacent to an existing bridge and causeway.

"Because the bridge is very narrow, there will be a walkway for pedestrians only where they will also be able to fish just off the causeway," said Fickley.

U.S. Congressman Tim Murphy recently secured \$250,000 for the Army Corps of Engineers to conduct a feasibility study on restoring Canonsburg Lake and improving the aquatic system in the water. Based on the Army Corps of Engineers plans for dredging the water, new wetlands will be incorporated in the middle area of Canonsburg Lake.

In addition to having a Wetland Interpretive Center, a pedestrian bridge will be added over a narrow portion of the lake. A new trail system will be located on the North Strabane side of the lake as well as a boardwalk throughout the wetland area. More benches and trash receptacles will be added to the middle area of the lake.

The upper part of the lake will include a new parking area and an access road from McDowell Lane. Permanent restroom facilities will be added to the upper portion of the lake despite the unavailability of sewerage lines.

Besides a dumpster being

maintained by North Strabane Township, trash receptacles will be added to upper part of the lake as well as new trail system throughout the existing and proposed wetlands.

A sediment trapping device will be in the lake along with an access road to a sediment trap for maintenance.

In addition, the Canonsburg Lake Steering Committee hasn't received any further updates from the Pennsylvania Turnpike Commission on the proposed I-79 to Mon/Fayette Expressway Southern Beltway Project possibly affecting Canonsburg Lake.

Last year, the Turnpike Commission held public meetings at Canon-McMillan High School concerning the Southern Beltway Project where 652 people viewed maps and asked questions about the recommended and preferred Green Alternative in Section 1 and the Tan-Red Alternative in Section 2.

The Green Alternative contains two possible routes of either Option 1 A (where the Southern Beltway crosses Canonsburg Lake) or Option 1 B (the Southern Beltway avoids Canonsburg Lake and impacts Glencannon Lake and the surrounding houses).

Pennsylvania Turnpike Commission spokesman Joe Agnello said the Draft Environmental Impact says there will be a 45-day circulation period consisting of public hearings and obtaining more public input about DEIS. He says the hearings are scheduled for this fall.

□ Theatre

CONTINUED FROM PAGE A1

for illumination and this year's incident came with enough warning that sound and lighting equipment could be borrowed from the theater's supplier.

The house lights were not impacted. Even though there is

not evidence that the lightning came close to the theater building itself, which is owned and maintained by Allegheny County's Parks and Recreation Department, Castracane was told by county officials that the static would have been enough to frazzle her equipment. The trick now is to find a way to prevent another repeat of the strange coincidence.

That, says the artistic director, is easier said than done.

"We have the best protection we can get on our equipment," she says, "but nothing will withstand a direct hit."

Castracane has received a commitment from the county to look into the problem and install a lightning rod or other device that will help to deflect any future lightning strikes.

GOOD NEIGHBORS

It's all about saving the lake

A North Strabane Township woman is honored by the conservation district for her persistence in trying to restore body of water in Canonsburg.

BY SANDY SABOT
For the Observer-Reporter

Environmental issues have long been a concern for Debra Valentino of North Strabane Township, and her efforts to save Canonsburg Lake have not gone unnoticed.

On Dec. 12 at the Ramada Inn, the Washington County Conservation District presented her with its Volunteer of the Year Award.

Valentino first visited Canonsburg Lake as a child when her aunt and uncle took her fishing, and she immediately fell in love with it. She even bought property along the lake about eight years ago.

About six years ago, she organized a group of neighbors that collected more than 3,000 signatures to clean up and save the lake.

"I naively thought that if I gave the Fish and Boat Commission petitions with lots of residents' names, the lake could be cleaned up," she said.

But she soon realized that members of her Save Canonsburg Lake Committee had plenty of work ahead of them. They met with area legislators, Pennsylvania Turnpike Commission officials and state Fish and Boat Commission representatives to educate them about the vanishing lake.

Canonsburg Lake was built in 1941 and had exceeded the normal 50-year lifespan of a lake. To preserve and maintain the

lake, the sediment and debris must be removed.

Working full time as a postal manager for the U.S. Postal Service, Valentino's time was limited, but she felt strongly enough to continue meeting with elected officials and others to make a difference. Valentino said the lake's sediment build-up had accelerated due to the amount of development in Peters and North Strabane townships, which created increased run-off from Chartiers Creek.

"When I first moved there, I could put a small boat or kayak in the lake, but after about three years, it was impossible," Valentino said.

A new committee, the Canonsburg Lake Restoration and Improvement Committee, was formed and applied for a Department of Conservation and Natural Resources grant under its Growing Greener II plan. The group received a grant to implement a Recreational Site Master Plan with Valentino as the volunteer project manager.

Then, working with Congressman Tim Murphy, Valentino helped secure a \$250,000 grant for the Army Corps of Engineers to prepare a Section 206 Habitat Restoration Study to look at the ecosystems involved in the lake and how to restore them.

Valentino said the money is being used for a feasibility study that is expected to be completed by March. The study will recommend whether the lake should be dredged or left alone, as well as what species of fish or plants remain.

Valentino said if the study recommends the Army Corps of Engineers do the work, 65 percent of the cost will be covered by the grant and "we will need a 35 percent local match." Valentino anticipates the match will be between \$3 and \$4 million.



Debra Valentino received the Conservation Volunteer Award during an award ceremony for The Washington County Conservation District at the Ramada Inn in Washington earlier this month.

Valentino said she was honored to receive the Volunteer of the Year Award, especially when she was working as part of a dedicated group. She said she hopes others will get involved in the project as well.

"Many people have used the lake and enjoyed it. I hope they will help to save it," Valentino said.

Valentino also volunteers for other projects. She serves as vice president of the Southside

Lake Corp. Homeowners' Association and enjoys assisting as a feeder/bird watcher, counting birds by species for the Cornell Lab.

To make a contribution to save Canonsburg Lake, send a check to: the Washington County Conservation District, Suite 602, Courthouse Square, 100 W. Beau St., Washington, PA 15301. Please indicate the check is for Canonsburg Lake.