Source Water Protection Plan

for the

Indian Lake Borough Waterworks

PWSID #4560025

Somerset County, Pennsylvania

TABLE OF CONTENTS

Introduction#3 - 6
Purpose of Plan Development
Description of Water System Land Use in Study Area
Other Sources of Drinking Water
Source Water Information
Source Location Map
Overview of the Wellhead Protection and Source Water Assessment Programs #7 - 9
Steering Committee & Public Participation# 10
SWP Area Delineation# 11 - 14
Wellhead Protection Zones
Wellhead Protection Area Delineation Maps
Contaminant Source Inventory & Discussion# 15 - 30
Potential Source of Contamination Discussion
Potential Source of Contamination List
SWP Area Management and Commitment#31 - 37
SWP Area Management Discussion
Management Objective, Implementation Schedule and Funding Table
Water System Security# 38
Contingency Planning#39 - 44
New Sources# 45
Appendices:
Appendix #1 – SSM Group "Indian Lake Borough Waterworks Source Water Protection Plan
Delineation of Source Water Protection Areas"
Appendix #2 - Casselberry and Associate's "Indian Lake Borough 1997 Groundwater Resource Analysis"
Appendix #3 – Example Public Education Materials

Disclaimer

This report is not intended to be nor is a substitute for a hydrogeologic study of the Source Water Protection area (SWPA) as would be performed by a registered Professional Geologist. Ideally, this report is used as a supplement to a study, in order for a water supplier to meet the Minimum Elements for a Source Water Protection Plan as outlined by the PA DEP.

INTRODUCTION

PWS SYSTEM NAME:	Indian Lake Borough Waterworks
PWS ID:	4560025
SYSTEM ADDRESS:	1301 Causeway Drive
	Central City, Pa. 15926
SYSTEM PHONE:	814-754-8161
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Purpose of Plan Development

Source Water Protection plans are necessary for the protection of the system's source from contaminants that are difficult and costly to treat through normal means. The plan clearly identifies actual and potential sources of contamination to the source. Secondly, it allows communities to effectively educate the public on the importance of their drinking water source. Third, the plan serves as the first step for long-term sustainable planning for the future of the community. Finally, it provides a comprehensive action plan in case of an emergency.

Description of Water Supply

The Indian Lake Borough Waterworks is located Somerset County where water is supplied by two wells, Well #2 and Well #99-1. A third well, Well #18B is an emergency source. Well #2 serves the north and west shore area of the Borough while Well #99-1 and Well #18B feed the Cherry Lane tank which supplies the remainder of the Borough. The two service areas are interconnected but separated by a closed valve. Both Well #99-1 and Well #18B disinfect with sodium hypochlorate and use a polyphosphate for sequestering of iron and manganese.

The water system is operated by Borough employees and serves approximately 400 full-time residents. Many of the 600 metered connections are seasonal homes and when fully occupied, the Borough's population is approximately 1,135 residents. Average daily demand varies with population but averages 80,000 gpd in the off season and 140,000 gpd when the population is high. Storage capacity consists of the 200,000 gallon Cherry Lane tank, the 200,000 gallon Peninsula tank which is fed from the Cherry Lane tank and the 100,000 gallon West Shore (Buckstown) tank which is fed by Well #2

Homes utilize on-lot septic systems with the exception of the Lodge, homes in the Cheyenne sub-division and the townhomes near the Lodge which utilize the Lakewood wastewater treatment plant.

Land Use

Based on the DEP Source Water Assessment for the Indian Lake Waterworks wells, land use in the Source Water Protection area is approximately 4.5% residential / urban land, 48% wooded land and 11.4% agricultural land, 32% water and 4.1% disturbed land. The potential for growth in the area is low due to the lack of a centralized sanitary sewer system.

Other Sources of Drinking Water

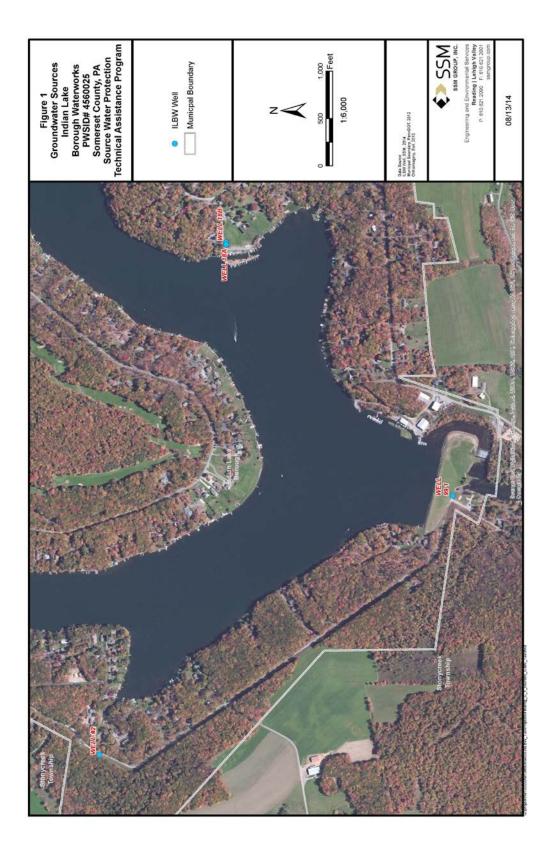
There are no other sources of water available to the system.

Source Information

Well #2			
Location: (latitude; longitude)	N 40.0385	W 78.8826	
Total Depth of Well: (feet)	185 feet		
Depth of Casing: (feet)	80 feet of 4 inch casing		
Casing – Diameter (inches)	4 inch (1994 reconstruction)		
Capacity: (permitted yield - gpd)	43,000 gpd 144,000 gpd Safe Yield		
Daily Use: (gpd)	22,000 gpd avg.	42,000 gpd max.	
Surface Elevation: (feet)	2,320		
Year Developed:	Deepened to 185 for Reconstructed May		
Aquifer Name:	Glenshaw Formation		
Static Water Level (below top of casing - in feet):	28 feet		

Well #99-1			
Location: (latitude; longitude)	N 40.0285	W 78.87278	
Total Depth of Well: (feet)	337 feet		
Depth of Casing: (feet)	102 feet		
Casing – Diameter (inches)	102 feet of 8 inch casing inside 48 feet of 12 inch casing inside 18 feet 16 inch casing		
Capacity: (permitted yield - gpd)	288,000 gpd 2	88,000 gpd Safe Yield	
Daily Use: (gpd)	90,000 gpd avg.	130,000 gpd max.	
Surface Elevation: (feet)	2,238 feet		
Year Developed:	November 2001		
Aquifer Name:	Allegheny Formation		
Static Water Level (below top of casing - in feet):	Artesian		

Well #18B – Emergency Source			
Location: (latitude; longitude)	N 40.03505	W 78.86317	
Total Depth of Well: (feet)	153 feet		
Depth of Casing: (feet)	70 feet of 6 inch casing 1994		
Casing – Diameter (inches)	8 inch 1979, recased with 6 inch 1994		
Capacity: (permitted yield - gpd)	160,000 gpd 230,000 gpd Safe Yield		
Daily Use: (gpd)	50,000 gpd avg.	120,000 gpd max.	
Surface Elevation: (feet)	2,304 feet		
Year Developed:	1979 drilled, recon	structed 1994	
Aquifer Name:	Glenshaw Formation		
Static Water Level (below top of casing - in feet):	18 feet		



OVERVIEW OF THE WELLHEAD PROTECTION AND SOURCE WATER ASSESSMENT PROGRAMS

The 1986 amendments to the federal Safe Drinking Water Act (SDWA) required States to develop Wellhead Protection (WHP) Programs to protect ground-water sources used by public water systems from contamination. Pennsylvania's WHP Program, which is administered by the **Pennsylvania Department of Environmental Protection (PA DEP)**, obtained approval from the U.S. Environmental Protection Agency in March 1999. The responsibilities for WHP are shared among many stakeholders, but the foremost responsibility for ensuring that ground water is adequately protected is at the local government level because the authority to regulate land use resides there. WHP is a cooperative, pro-active, positive approach to protecting ground-water supplies and should not be interpreted as an adverse action. The program involves the delineation of wellhead protection areas for wells and springs, identification of potential sources of ground-water contaminants and the development of management measures as a means to reduce the potential for contamination of the ground-water supply.

Although development of a local WHP program is voluntary, PA DEP regulations do require some basic wellhead protection measures for new public water supply wells, springs, or infiltration galleries. Each new ground-water source must establish an innermost protection zone (Zone I WHP area) with a fixed radius of 100-400 feet depending on certain site-specific characteristics. The water supplier must show that it has ownership of, or substantially controls by a deed restriction or other acceptable means, the Zone I WHP area. In addition to this delineation, communities are encouraged to establish wellhead protection programs, which include the following:

- 1) The formation of a steering committee to establish and implement the wellhead protection program whose role it is to conduct a potential contaminant source inventory, provide options for the management of the WHP area (also known as the source water protection area), seek public input into the creation of the WHP plan, seek approval of the WHP program and to implement the WHP program;
- 2) Development of a public education program;
- 3) Delineation of the contributing areas of the water sources;
- 4) Identification of potential contamination sources within the wellhead protection area;
- 5) Development and implementation of wellhead protection area management actions to protect the water sources;

- 6) Development of an Emergency Contingency Plan for alternative water supply sources in the event the ground water supply becomes contaminated and emergency response planning for incidents that may impact water quality;
- 7) Conduct new water source planning to insure the protection of new water source locations and to augment current supplies.

Wellhead protection (WHP) and source water protection (SWP) to protect surface water sources is a voluntary program, but water systems across the state are encouraged to take the above steps in protecting their water sources. In addition, PA DEP has issued a set of guidelines that outline the minimum elements necessary for a local WHP and SWP programs to obtain DEP approval. DEP approval of local WHP and SWP programs will allow proper tracking and coordination so that local drinking water protection efforts will be supported and recognized.

Wellhead Protection: The focal point of a local WHP program is the delineated wellhead protection area (WHPA). The SDWA defines a wellhead protection area as the surface and subsurface area surrounding a water well or wellfield supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield. The PA DEP Safe Drinking Water Regulations define a three-tiered WHPA as follows:

Zone I: - The protective zone immediately surrounding a well, spring or infiltration gallery which shall be 100' to 400' radius depending on site-specific source and aquifer characteristics.

Zone II: - The zone encompassing the portion of the aquifer through which water is diverted to a well or flows to a spring or infiltration gallery. Zone II shall be a one-half mile radius unless a more detailed delineation is approved.

Zone III: - The zone beyond Zone II that contributes significant surface water and ground water to Zone I and Zone II.

PA DEP Source Water Assessment Program:

To expand the benefits realized from WHP efforts, the 1996 Safe Drinking Water Act reauthorization requires (under Section 1453) States to develop a Source Water Assessment and Protection (SWAP) Program. The SWAP program assesses the drinking water sources serving public water systems for their susceptibility to pollution. This information will be used as a basis for building voluntary, community-based barriers to drinking water contamination.

Pennsylvania's assessment program will:

- (1) Delineate the boundaries of the areas providing source waters for all public water systems; and
- (2) Identify (to the extent practicable) the origins of regulated and certain unregulated contaminants in the delineated area to determine the susceptibility of public water systems to such contaminants.

These assessments are of the raw water quality, not the finished water compliance. DEP will conduct assessments for community water systems supplied primarily by ground water and serving a population of 3,300 or more. The ground-water sources of public water systems serving less than 3,300 will be initially assessed using readily available data from the program's geographic information system (GIS). Assessments for the larger community water systems supplied primarily by surface-water sources will be conducted through contracted services. DEP staff will conduct assessments for community water systems supplied by surface water in basins less than 100 square miles and 90% forested.

Acknowledgement

Standard language used within this document describing potential contaminant sources and management of those sources was provided by Acer Engineering of Lancaster, PA. The original template was designed by PA Rural Water Association and was partially based on previous Plans developed by Moody & Associates - Meadville, PA and Spotts, Stevens & McCoy - Wyomissing, PA. Review and revisions to the template were made by PRWA and PA DEP.

STEERING COMMITTEE AND PUBLIC PARTICIPATION

The Steering Committee is responsible for the forward progress of the source water protection program, as well as leading projects that will ultimately help to protect the water source.

Steering Committee

Member	Role	Representing
Bob Hanson	Chairman / Planning Commission Member/ Council Member	Indian Lake Borough
Dean Snyder	Water System Operator	Indian Lake Borough
Lynn Shimer	Borough Council President	Indian Lake Borough
Michael Miscoe	Mayor / Local Emergency Management Coordinator	Indian Lake Borough

Consultants:

Don Muir – Pa Rural Water Association Tom McCaffrey – Pa. DEP

Steering Committee Meeting Dates

Date	Location	Purpose
Nov. 8, 2012	Indian Lake Borough Building	Initial meeting to discuss SWP and SWPTAP program
July 2, 2014	Indian Lake Borough Building	Initial Steering Committee meeting and review of SSM source delineations. PSOC inventory
Sept. 25, 2014	Conference Call	Draft Plan Review

SWP AREA DELINEATION

Wellhead Protection: The focal point of a local WHP program is the delineated wellhead protection area (WHPA). The SDWA defines a wellhead protection area as the surface and subsurface area surrounding a water well or wellfield supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield. The PA DEP Safe Drinking Water Regulations define a three-tiered WHPA as follows:

Information on the methodology used by the SSM Group to determine the Source Water Protection areas can be found in the SSM Group report "Indian Lake Borough Waterworks Source Water Protection Plan Delineation of Source Water Protection Areas" (Appendix #1)

Zone I: - The protective zone immediately surrounding a well, spring or infiltration gallery which shall be 100' to 400' radius depending on site-specific source and aquifer characteristics.

The Zone I areas for the Indian Lake Borough wells was established using DEP's "Recommended Wellhead Protection Zone I Methodology" (DEP 2005). The methodology requires three pieces of information to determine the Zone 1 radius: porosity of the producing formation, the open borehole interval, and the groundwater withdrawl rate. The Zone I Source Water Protection area for Well #2 was calculated to be a 130 foot radius, for Well #99-1, the Zone I radius is 125 feet and for Well #18B, the Zone I radius is 210 feet. Addition information is found in Table 3 of the SSM report "Indian Lake Borough Waterworks Source Water Protection Plan Delineation of Source Water Protection Areas"

Zone II: - The zone encompassing the portion of the aquifer through which water is diverted to a well or flows to a spring or infiltration gallery. The land that contributes groundwater to a pumping well is called the capture zone or zone of diversion. The Zone II delineations shown in Figure 10 of the "Indian Lake Borough Waterworks Source Water Protection Plan Delineation of Source Water Protection Areas" report represent the volume of water entering the sources in a 10 year time of travel.

The Zone II area for all the water sources occupies an area of 1.63 miles. The Zone II Source Water Protection area for Well #2 is 170 acres, for Well #99-1, the Zone II Source Water Protection area is 695 acres and for Well #18B, the Zone II Source Water Protection area is 351 acres.

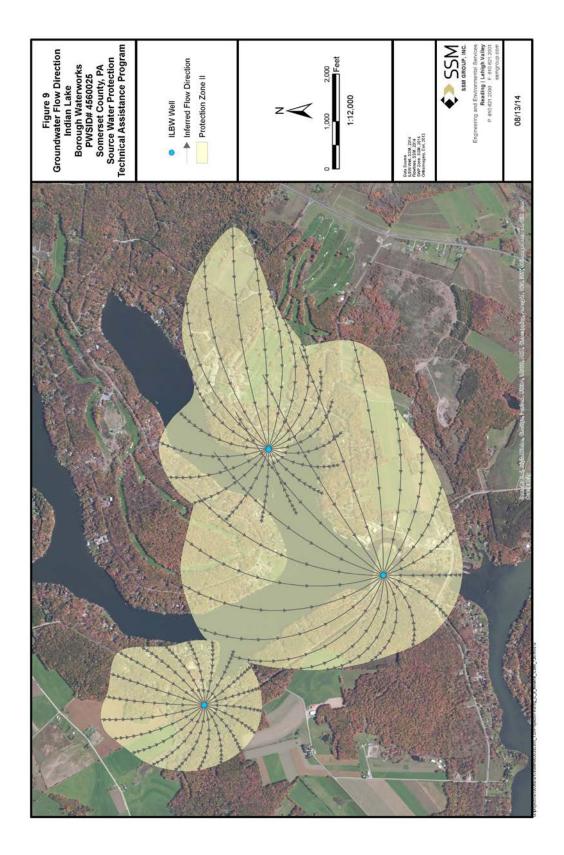
Zone III: - Zone III is the land beyond Zone II that contributes recharge to the aquifer within the first two areas via surface water or groundwater. The Zone III is the up-gradient drainage area that contributes recharge to the aquifer system. The Zone III for all the wells occupies an area of 16.9 miles. In addition to showing the 3 Source Water Protection Zones, Figures 10 and 11 of the SSM report identify the Aquifer Recharge Area for the water system's 3 wells. This Aquifer Recharge Area is an extension of the Zone II Source Water Protection Zone beyond the 10 year Time of Travel.

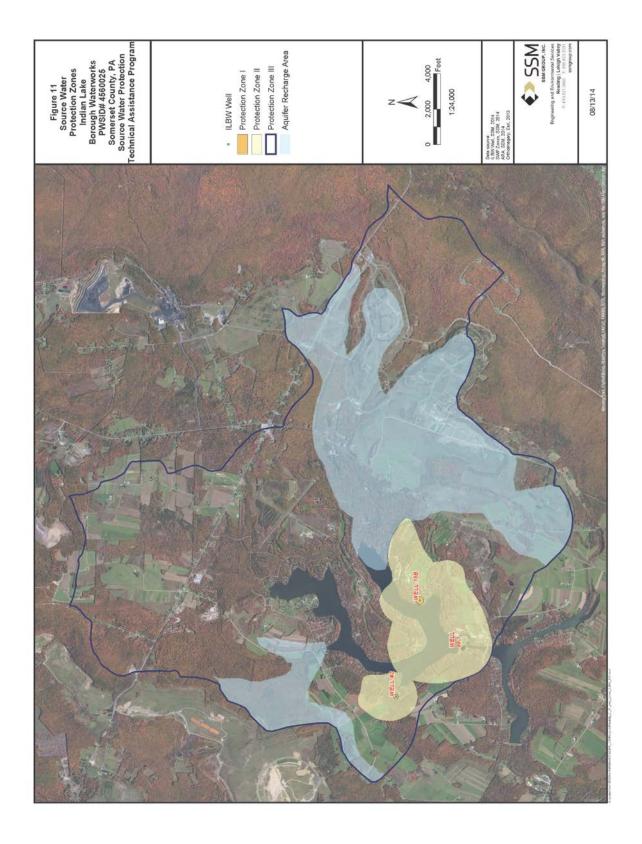
Addition information on Zone II and Zone III is found in Section 8 of the SSM report "Indian Lake Borough Waterworks Source Water Protection Plan Delineation of Source Water Protection Areas"

Local and Regional Hydrogeological Setting

The study area lies within the Allegheny Mountain Section of the Appalachian Plateaus physiographic province and is characterized by wide ridges separated by broad valleys (Sevon, 2000). The geographic structure of the study area resides within the low-amplitude synclinal fold, named the Berlin syncline (Casselberry, 1997). "Indian Lake Borough Waterworks Source Water Protection Plan Delineation of Source Water Protection Areas" (Appendix #1)

Information on the geologic formations underlying the study area can be found in Section 2 of the "Indian Lake Borough Waterworks Source Water Protection Plan Delineation of Source Water Protection Areas" report (*Appendix #1*) and in Sections 4 and 5 of Casselberry and Associate's "Indian Lake Borough 1997 Groundwater Resource Analysis" (*Appendix #2*)





CONTAMINANT SOURCE INVENTORY AND DISCUSSION

Land use activities can pose a wide range of pollution threats to the Indian Lake Borough water sources. Potential Sources of Contamination can be non-point sources where contamination occurs over a widespread area or point sources where contamination originates from a single discharge point

Non-Point / Point Potential Sources of Contamination

Non-Point Source PSOCs

Non-point sources are described as dispersed contamination from many sources such as soil erosion, on-lot septic systems, stormwater run-off and discharges, agricultural activities, and pollution associated with resource extraction and silviculture. Generally, the most significant contamination associated with non-point sources is nitrates associated with the use of manure, fertilizer, and pesticides which drain into streams and infiltrates into ground water. But in the case of the Indian Lake Borough, surface and deep mining are considered the highest risk to the water sources. Previous mining activities have affected the Borough's water sources and have been linked to two Acid Mine Drainage (AMD) seeps along Clear Run.

Potential contamination from residential sources such as fuel oil storage, on-lot septic systems and the improper handling and disposal of Household Hazardous Wastes (HHW) such as paint, paint thinners, waste oil, antifreeze, solvents, etc. are also considered a risk to the water sources.

Other non-point sources of contamination that pose a threat to the Indian Lake Borough water sources include stormwater run-off and recreational activities including a marina and two golf courses.

Industrial and Commercial Activities

Industrial and Commercial contamination sources can be considered both Point and Non-Point contamination sources. A specific storage tank or specific outfall would be considered a Point source while run-off from a parking lot would be considered a Non-Point contamination source. Industrial operations commonly use toxic substances as part of manufacturing, warehousing, and/or distribution. Materials such as petroleum products, cleaning supplies, machinery fluids, metals, electronic products, asphalt, and other chemicals pose a potential threat to the water supply and must be managed. Many commercial businesses handle toxic and hazardous materials. The storage, use, and disposal of chemicals required by these commercial operations can pose a potential threat to water since even small amounts of the hazardous materials can contaminate large amounts of surface or ground water.

Surface and Deep Mining

Surface and underground mining operations are intended as long-term land uses that progress in width and depth. When mining operations proceed below the water table, the operator must begin pumping the inflow of groundwater out of the mine to continue operations. This pumping can lower groundwater levels in areas around the mine and affect public drinking water supplies.

Improper operations and maintenance mining operations at may uncontained spills or contact of contaminants with surface water runoff, creating a potential both ground surface contaminant to and water. Mining is primary source of metals in Pennsylvania waterways. Deposits of iron and other metals in streambeds can interfere with vegetative growth and aquatic animal lifecycles. Acidity and metals impair both surface and ground drinking water resources and quickly corrode pipes and industrial mechanisms.

Abandoned surface and underground coal mines have the potential to severely degrade the quality of groundwater. Contributing factors to water quality degradation at abandoned coal mines are open pits, coal refuse and spoil piles, acid mine drainage (AMD), dangerous highwalls, open shafts, erosion, undermined areas with subsidence potential, underground fires, dilapidated buildings, and illegally dumped garbage. Underground mine openings have the potential to intercept and convey surface water and groundwater. When water and oxygen react with sulfide minerals (e.g., pyrite), metals are released and acidity increases. Weathering of pyrite produces iron and sulfuric acid, which can leach aluminum, calcium, and magnesium and trace elements such as copper and zinc from surrounding rocks. The impact on local water resources depends upon the depth of the abandoned mine, the topographic and hydrologic setting, and the hydrologic characteristics of the adjacent strata. Some impacts may be localized, irregular, and long-delayed; others may be immediate, pervasive, systematic, and predictable.

Both surface and deep mining has occurred in the Source Water Protection area. Surface mining by then, PBS Coal has occurred in the Source Water Protection area east of Route 160. The mining is outside of the Zone II Source Water Protection area but within the recharge area of the current Wells #18A and #99-1 and the former Well #18B which is no longer in use due to AMD impact. Surface mining concluded in the mid-1980's but treatment ponds remain at the site and treatment of two AMD seeps attributed to the surface mining is on-going (the Clear Run Treatment System).



Clear Run AMD Seep

Deep mining by RoxCoal northwest of Indian Lake Borough in and or near the Zone III Source Water Protection area ended in 2003.

A 1997 study by Casselberry and Associates "1997 Indian Lake Borough Groundwater

Resource Analysis" (Appendix #2) while RoxCoal's deep mining activities were still active, reported a 24 lower foot static water in Well #2 as compared to the well's static water level prior to the mining.

The Casselberry report also states that when mining concludes, the mine will be inundated and there is a potential for water in the mine pool, most likely not in large quantities to flow upward into the aquifer supplying Well #2.

Since the 1997 Casselberry report, iron and manganese levels in both Well #2



Clear Run AMD Treatment Pond Discharge

and in Well #99-1 have been increasing. Iron and manganese levels in Well #2 have risen to the point where greensand filtration will soon be necessary to meet DEP drinking water standards. At Well #99-1, iron but not as of yet manganese levels have risen to the point where greensand filtration will be needed to meet DEP drinking water standards.

At the time of the Casselberry report, Well #18B had not been impacted by the AMD from the PBS surface mine. The report predicted the well to be affected by AMD in approximately

15 years. The well was impacted in 5 to 7 years and is no longer used, except as an emergency source.

Pennsylvania 2014. In June the Department of Environmental Protection issued a surface mine permit to LCT Energy, LP allowing the surface mining of coal east of Route 160, partially in Indian Lake Borough despite the area Borough being zoned within the "Agriculture" and presence of Indian Lake Borough Ordinance #13 which prohibits the mining of coal or other mineral within the Borough limits.



AMD Treatment Pond Discharge to Clear Run Tributary

Indian Lake Borough SWP Plan PWSID #4560025 October, 2014

LTC's "Boone Mine" encompasses 127.3 acres, with the vast majority of the acreage being in the SSM Group delineated aquifer recharge area for Wells #18B and #99-1. The SSM Group delineated aquifer recharge area also includes the PBS surface mine which impacted Well #18A and #18B.

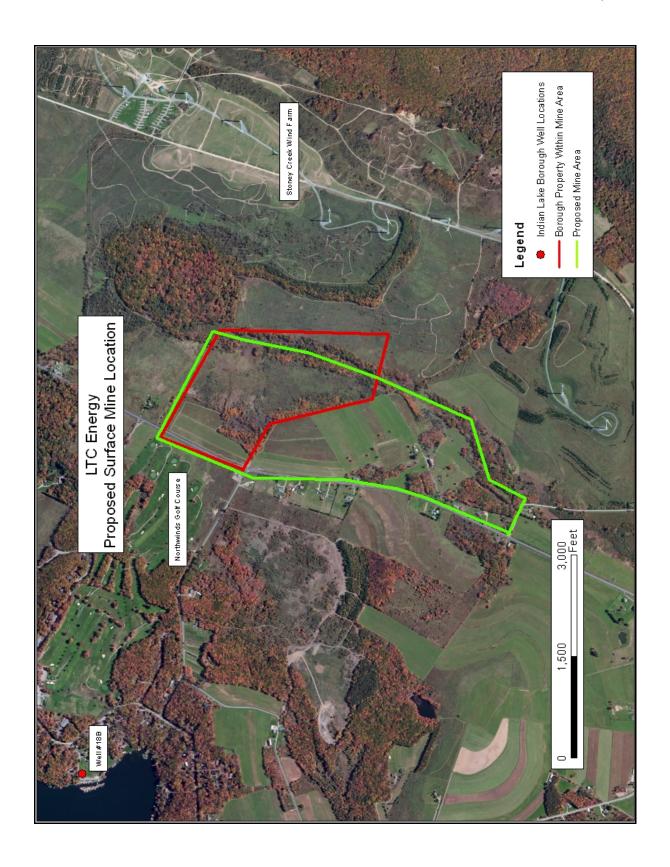
Due to the previous surface mining in the aquifer recharge area affecting Wells #18A and #18B and the violation of Indian Lake Borough zoning and ordinance regulations, Indian Lake Borough is currently appealing the DEP issuing of LCT Energy, LP's "Boone Mine" surface mining permit.

Previous and proposed mining poses a High risk to the water sources and with the highest impact.

Stony Creek Wind Farm

Stony Creek Wind Farm generation windmills and an associated maintenance facility are located on the eastern edge of the watershed in the SSM delineated aquifer recharge area of the Zone III SWP area. The area around each windmill is used as part of the Mountain Ridge Trails ATV Park. Sediment in run-off from the dirt trails poses little risk to the water sources. A small amount of machinery fluid such as oil and grease would be present at each windmill and at the maintenance building.

The wind farm poses a Low risk to the water sources.



Residential Contamination

Residential contamination threats to surface or ground water, if taken on a case-by-case basis, are normally less than other land use contamination. Most citizens are unaware of the effects of numerous potential contaminants stored, used, and disposed of from residential homes. Potential contaminants include:

- * household chemicals
- * automotive products
- * paints/solvents
- * fuel storage systems

- * on-site septic/sand mound systems
- * lawn/garden chemicals
- * private and/or abandoned wells
- * geo-thermal heat pump wells
- **Septic Systems:** Septic systems (i.e., effluent from septic tanks, cesspools, privies, and leachfields) that are improperly sited, designed, constructed, or maintained are potentially serious sources for groundwater contamination. Use of septic system cleaners, which typically contain synthetic organic chemicals, may also contribute to the contamination of groundwater. In addition, these cleaning chemicals also interfere with the natural decomposition processes in septic systems.

Indian Lake Borough Ordinance #140 requires the inspection and if necessary pumping of septic systems every 5 years.

- Buried Fuel Oil Storage Tanks: Many homes in the Borough use fuel oil as a heating source. For aesthetic purposes, fuel storage tanks are buried or placed inside the home. Buried tanks pose a greater risk of groundwater contamination than above ground tanks due to the simple fact that leakage can go on for a long period of time before being detected. If a floor drain is located in the room where a fuel oil tank is located, fuel from a leaking tank can enter the drain and be carried outside the home either to the septic system or to the drainage system surrounding the home increasing the possibility of groundwater contamination
- Household Hazardous Wastes: Homeowners may inadvertently contaminate a water supply through improper disposal of household hazardous waste, such as used motor oil and other vehicle fluids, paints, thinners, over-application of lawn chemicals, and improper disposal of pet waste.

• Geothermal Heat Pump Systems: There are two types of geo-thermal heat pump systems, Closed Loop and Open Loop. In a closed loop system, a liquid circulates through pipes which run either vertically in wells or horizontally in trenches. Open loop systems use groundwater withdrawn from a well as the liquid which is either compressed or expanded to condition the air. The water is then discharged back into the same aquifer it was withdrawn through a second well. Most often in a closed loop system the liquid used is not water by some type of anti-freeze, which if leaked could contaminate groundwater in the area. Even if water is used as the fluid in the system, other chemicals may be added such as corrosion inhibitors and algaecides. In addition to a potentially toxic fluid being pumped through buried pipes and into and out of wells being a threat to groundwater, the wells themselves if not properly sealed could be a potential risk

The risks from Residential threats, collectively, are considered moderate but may be readily addressed through the distribution of public educational material, the development of geothermal well construction standards, and enforcement of previously established Borough ordinances.

Transportation Routes

Chemicals from accidental spills are often diluted with water, potentially washing the chemicals into the soil or nearby surface waters. Chemical spills can create plumes that travel with ground water flow for long distances. Non-point source runoff from roads, highways, rail lines and parking lots contribute a significant source of pollutants into surface and ground water. As rainwater or melting snow drains off of impervious surfaces, it picks up deposited pollutants including: dirt and dust, antifreeze, vehicle fluids and deicing agents/chemicals.

State Routes 160 and 30 are located in the Zone 3 SWP area. Much of Route 160 in the SWP area is located in the SSM delineated Aquifer Recharge Area for Wells #18B and #99-1. Borough and township maintained roads are located in the Zone I and Zone II SWP areas.

Local first responders are aware of the SWP area and will be asked to contact the Borough if an accident or spill occurs in the SWP area. Borough road maintenance personnel will be asked to minimize the use of salt and other road maintenance chemicals such as tar, oil, and herbicides for vegetation control in the Zone II SWP area. The Borough can also consider rerouting fuel oil trucks away from Well #2 which is located very close to West Shore Trail.

The risk from Transportation routes is considered low but worthy of attention primarily due to the large amount of vehicle traffic on Route 160 and Route 30. Routes 160 and 30 present a greater risk as Hazmat regulations redirect some traffic off the Turnpike onto Rt. 30. Mitigation and Hazmat Response Plans are in place throughout the County for State Routes. Indian Lake Borough has developed emergency response and contingency plan in the event an accident or chemical spill threatens a Borough water source.

Agricultural Activities

Improperly applied chemicals such as pesticides, herbicides and fertilizers can leach through the soil into the ground water or runoff into streams and can present a contamination threat to drinking water supplies. When stored in containers, there is the potential of leaks from the storage area into the ground. In addition, erosion caused by animal grazing and improper storage of animal waste can pose a threat to the water sources. The most significant contamination associated with agriculture are non-point sources is nitrates associated with the use of manure, fertilizer, and pesticides which drain into streams and infiltrate into ground water.

A small amount of agricultural activity takes place in the Zone III SWP area west of Well #2 and is considered a Low risk to the water system. Indian Lake Borough proposes no management measures to address agricultural risks at this time

Recreational Activities

Boating and Marinas

Boating activities on Indian Lake poses a minimal risk to the water sources. Small quantities of fuel released directly into the lake would either evaporate or be diluted to a point that it is unlikely they would be detectable in the groundwater aquifer. A spill of a larger quantity of fuel directly onto the ground at the marina would pose a greater risk due to its close proximity to Well #99-1.

A second potential source of contamination at the marina is the acid washing of boats. Best Management Practices (BMP) such as containment and neutralization of run-off before allowing release into the lake should be followed. EPA's "National Management Guidance to Control Non-Point Source Pollution from Marinas and Recreational Boating" can be supplied to the marina as a BMP reference source.

• Golf Courses

The Indian Lake Golf Course and the Northwinds Golf Course are located in the Zone II and Zone III Source Water Protection areas for Wells #99-1 and #18B. Turf care chemicals such as fertilizer, herbicides and pesticides if applied improperly or if handled or stored improperly can pose a risk to the water sources.

Above ground fuel storage tanks are also located at both courses. At the Indian lake Golf Course fuel is stored at the turf center located in the Zone III SWP area. At the Northwinds Golf Course fuel is stored near the clubhouse located in the Zone II SWP area. The golf course will be contacted and encouraged to move the fuel tank out of the Zone II SWP area.

• Mountain Ridge Trails ATV Park

The Mountain Ridge Trails ATV Park is located east of Route 160 in the Zone III SWP area in the SSM delineated aquifer recharge area. Sediment in run-off from the dirt trails poses little risk to the water sources. Small amounts of ATV fuel, if spilled pose a minimal risk to the water sources.

Recreational activities are considered a low to moderate risk to the water sources.

Stormwater Run-off

The need to manage stormwater is created by increased land development - residential, commercial, and industrial - since impervious surfaces prevent rain from soaking into the soil and allow pollutants to accumulate. Stormwater contamination can come from specific discharge points such as NPDES permitted facilities or from Non-point sources which are described as dispersed contamination from many sources such as soil erosion, on-lot septic systems, agricultural activities, and pollution associated with mining and timbering. Improper application, handing and disposal of Household Hazardous Wastes such as fertilizer, herbicides, pesticides, paint, paint thinners, and vehicle fluids which are also sources of non-point pollution.

Indian Lake Borough Stonycreek River Watershed Plan, Stormwater Management Ordinance #156 requires the use of stormwater run-off Best Management Practices (BMPs) to minimize the negative impacts of stormwater run-off and to promote groundwater aquifer recharge.

The risk from Stormwater Run-off is considered low.

Potential Gas Well Drilling and Operation

Brines produced during drilling and gas production from new and existing gas wells could introduce contaminates into ground water or surface water systems. An improperly constructed well could permanently interconnect the brine producing horizons with the fresh water aquifer. Sediment, vehicle fluids and production chemicals could threaten the well recharge areas during gas well development. Contamination of a surface water source due to gas well drilling is usually from vehicle fluids, machinery fluids or sediment from erosion during well construction.

The ability to know early in the permitting process, that a gas well drilling permit application has been submitted to DEP to drill in or near a Source Water Protection area is critical in protecting the water sources. Indian Lake Borough has enrolled in DEP's "e-Notice" program which will inform the Borough if a drilling permit is applied for anywhere in the Borough or Stonycreek Township.

If a drilling permit is applied for, the Borough will contact DEP Bureau of Oil and Gas and express concerns that the system's water sources could be threatened by the drilling of the well. The Borough can request that DEP require measures such as special casing of the gas well to protect the fresh water aquifer and the posting of bonds to insure monies to develop alternative water sources are available if the water source becomes contaminated. The Borough will also request that prior to drilling, contingency plans be developed by the drilling company to supply water to system customers if the drinking water wells become contaminated. The Borough will also request that once in operation, containment measures should be constructed around brine tanks to prevent contamination from accidental releases of brine.

The risk from Gas Well Drilling activities if they would occur is considered Moderate to High

Each of the Non-Point Source land uses in the SWP area were evaluated and designated with a contamination risk ranking of Low, Moderate or High

Non-Point Source Potential Source of Contamination Table

N. B. (BGOG	General	D. 4:10 4 1 4	PSOC Rank		
Non-Point PSOC	Location	Potential Contaminant	Zone I	Zone II	Zone III
Industrial / Commercial Activities - Surface and Deep Mining	Zone II and Zone III.	Acid Mine Drainage, Iron, Manganese and other minerals contaminating groundwater, Vehicle fluids at active mine sites	N/A	High	High
Residential Development	Zone II and Zone III	Buried fuel oil tanks, On-lot septic systems Lawn chemicals, pet waste and other Household Hazardous Wastes (HHW)	N/A	Moderate	Low
Transportation Routes	Throughout all protection zones	Various cargos, Vehicle fluids, Deicing and road maintenance chemicals	High	Low	Moderate
Recreational Activities	Zone II and Zone III	Fuel, Golf course turf maintenance chemicals (fertilizer, herbicides, pesticides)	N/A	Low	Moderate
Agricultural Activities	Zone II of Well # 2 and Zone III	Fertilizers, pesticides, nutrients, and manure.	N/A	N/A	Low
Stormwater Run-off	Throughout all protection zones	Vehicle fluids, Lawn care chemicals, Pet waste	Low	Low	Low
Potential Gas Well Drilling	Zone II and Zone III	Brine, Production chemicals, Vehicle fluids, Sediment	N/A	High	Moderate

Point Source Potential Sources of Contamination

Point sources can include water and wastewater treatment plants and commercial and industrial facilities such as gas stations, dry cleaners and other locations handling hazardous materials. A computerized database search of Point Source Potential Sources of Contamination was completed in June 2014 by Pennsylvania Rural Water Association. A field study to verify the database information and to identify any other Point Source PSOC's including the entire Zone III area was completed by PRWA and DEP on July 2, 2014.

In the case of Indian Lake Borough, point sources of potential contamination are primarily locations that use, dispense or in some manner handle Volatile Organic Compounds. Gas stations, auto and truck repair shops, locations with above ground fuel tanks and construction businesses using and storing paint, solvents and sealants are all located in the Source Water Protection area.

4 of the 30 point sources of potential contamination identified during the on-site PSOC inventory are located in the Zone II Source Water Protection areas. 7 locations within the Zone III SWP area in located in the SSM delineated Aquifer Recharge Area. 4 locations were located just outside the Zone III Source Water Protection area but were identified due to their close proximity to Zone III. A table of these locations follows.



Improperly Stored Volatile Organic Chemicals - Cardinal Industries

Potential Future Sources of Contamination

Undeveloped land areas represent the potential for future contamination sources. Due to the lack of a centralized sewer system in the majority of the Borough, future development is limited. The mostly likely area for development is the Reel's Corner area but currently centralized sewer and public water service is missing from this area also.

If development is proposed, Indian lake Borough will work with all involved entities such as Stonycreek Township officials, the Somerset County Planning Commission and the developer to ensure measures to protect the water sources are included in development plans.

The Steering Committee ranked each of the following point sources of contamination either a High, Moderate or Low risk based on factors such as potential contaminant location relative to the water sources, amount and type of potential contaminant stored at the locations and existing protection measures such as water treatment, contaminant containment and emergency response planning.

ID#	PSOC	Contaminant	Zone	Risk
1	PBS Acid Mine Drainage Treatment Facility	Water Treatment Chemicals	3 / Aquifer Recharge Area	Moderate
2	Hauger Door and Cabinets	Paint and Solvents	3	Low
3	Shade Enterprises – Closed	Unknown	3	Low
4	Cardinal Enterprises	Roofing Material – Tar, Sealants and Solvents	3	Low to Moderate
5	Indian Lake Borough Maintenance Garage	Fuel (AST) and other Vehicle and Machinery Fluids	2	Moderate
6	Camp Allegheny Maintenance Garage	Fuel and other Vehicle and Machinery Fluids	3	Low

ID#	PSOC	Contaminant	Zone	Risk
7	Pa DOT Buckstown Maintenance Shed	Fuel, Deicing Salt and Brine, other Vehicle and Machinery Fluids	3	Low
8	Somerset Rural Electric Cherry Lane Substation	Transformer Oil PCB's???	3 / Aquifer Recharge Area	Moderate
9	Lakewood Wastewater Treatment Plant – off of South Shore Trail	Bacteria, Pathogens, Wastewater Treatment Chemicals	2	Low
10	Peninsula Wastewater Injection Well - proposed	Bacteria, Pathogens, Wastewater Treatment Chemicals	2 and 3	Moderate
11	Indian Lake Golf Course – Turf Care Center	Fuel - AST	3	Low
12	Northwinds Golf Course	Fuel - AST	2 and 3 / Aquifer Recharge Area	Moderate
13	Indian Lake Marina	Fuel – AST Acid washing/cleaning chemicals	2	Low
14	Residential AST – 1259 Route 160	Fuel	3 / Aquifer Recharge Area	Low

ID#	PSOC	Contaminant	Zone	Risk
15	Mulch King	Fuel and other Vehicle Fluids	3	Low
16	Stonycreek Wind Farm Maintenance Building	Vehicle Fluids, Oil, Grease	3 / Aquifer Recharge Area	Low
17	Gulf Gas Station – Route 30	Fuel	3	Low
18	MGP Rat Bikes – Route 30	Vehicle Fluids	3	Low
19	Jake's Speed Shop – Shade Church Road	Vehicle Fluids Paint and Thinners	3	Low
20	Auto Repair Garage (owner unknown) – Route 30 at Shade Church Road	Vehicle Fluids	3	Low
21	Zubeck's Truck Garage – Route 30 at 160	Vehicle Fluids	Close Proximity to Zone 3	Low
22	L. Weyandts Trucking – 8025 Old Lincoln Highway	Vehicle Fluids	Close Proximity to Zone 3	Low



ID#	PSOC	Contaminant	Zone	Risk
23	Truck Repair Garage (owner unknown) – Route 30 west of Buckstown Road	Vehicle Fluids	3	Low
24	1st Truck Repair Garage (owner unknown) – Route 30 east of Route 160	Vehicle Fluids	Close Proximity to Zone 3	Low
25	2 nd Truck Repair Garage (owner unknown) – Route 30 east of Route 160	Vehicle Fluids	Close Proximity to Zone 3	Low
26	Duppstadt's Small Engine Repair – Route 30 at Buckstown Road	Fuel, Oil	3	Low
27	Communication Tower (operator unknown) – Route 30 near Stonycreek Wind Farm	Lead Acid Batteries	3 / Aquifer Recharge Area	Low
28	Communication Tower (operator unknown) – Route 30 west of Buckstown	Lead Acid Batteries	3 / Aquifer Recharge Area	Low
29	"American Tower" Communication Tower – Route 30 at Bald Knob Summit	Lead Acid Batteries	3	Low
30	Pa DOT Communication Tower - Route 30 at Bald Knob Summit	Lead Acid Batteries	3	Low



SWP AREA MANAGEMENT OPTIONS AND COMMITMENT

Addressing the current and potential threats to the water sources can be regulatory or non-regulatory. Regulatory means can be land control measures such as deed restrictions, easements and ordinances. Non-regulatory means include emergency response and contingency planning, public and school education programs, land acquisitions and the use of Best Management Practices for activities such as agriculture, mining and timbering. Information on methods to protect water sources from contamination can be obtained from many sources including:

- PRWA Source Water Protect Program (www.sourcewaterprotection.org)
- PA DEP (<u>www.dep.state.pa.us</u>) Keyword Sourcewater
- US EPA (www.epa.gov)
- League of Women Voters Water Resource Education Network (<u>www.wren.lwv.org</u>)
- The Groundwater Foundation (www.groundwater.org)

The Steering Committee has decided to use a combination of regulatory and non-regulatory methods to protect the water sources. The Steering Committee recommends the following management tools to address current and potential threats to the Source Water Protection area.

Annual Plan Review and Update - Once the Source Water Protection plan is developed, review and updates to the plan are necessary as potential contaminants enter or are removed from the Source Water Protection areas. The Steering Committee or its successor will meet and review the plan on an annual basis and update the Somerset County Hazard Mitigation Plan every 5 years.

Education/Outreach – Indian Lake Borough will take advantage of every opportunity to promote source water protection.

• The Borough will utilize existing educational material to target residents of the Source Water Protection area. The educational material will be available at the Borough office, can be placed in the Borough newsletter and placed on the Borough's website. Source Water Protection information can also be placed at two parking lot informational kiosks located in the Borough along the James W. McIntyre Hiking and Biking Trail.

- The Borough can partner with Stonycreek Township and Somerset County to promote hazardous waste collection activities and with local police to support activities such as "Drug Take Back Days".
- It is recommended that partnerships be formed with local industrial and commercial facilities within or near the Source Water Protection area to make these facilities aware that a chemical spill or release at their facility could possibly contaminate the Borough's water sources. Facilities can be provided Borough contact information and asked to contact the Borough immediately if a spill or release occurs.

Emergency Response and Contingency Planning – Indian Lake Borough will update where necessary its Emergency Response Plan to address potential sources of contamination of the water sources that had not previously been identified. These plans address several specific emergencies and outline appropriate actions to take place in order to rectify the situation.

- Local first responders are aware of the Source Water Protection area and will
 contact the Borough if an accident or spill occurs that could threaten the water
 source.
- Contingency plans have been developed to supply water to customers in the event water sources becomes contaminated to a point where unaffected sources cannot meet system demand.
- Somerset County is updating its county-wide Hazard Mitigation Plan (HMP). The purpose of the HMP is to minimize the effects that natural, technological and man-made hazards have on the people, property, environment and business operations within Somerset County. The 2010 FEMA approved HMP identifies flooding, severe wind storms, severe winter storms, wildfires, environmental hazards and terrorism, war and criminal acts as the six highest risks to Somerset County as a whole. The Indian Lake Borough's Source Water Protection Plan and Emergency Response Plan address where applicable these identified risks



Water Quality/Quantity Monitoring – Water testing occurs when required by DEP. It is recommended that additional raw water quality testing for parameters such as Iron, Manganese, Conductivity, Total Dissolved Solids, Acidity and Alkalinity take place to gather baseline water quality data. Tracking of well static water levels is also recommended as variations in water quality or quantity from the baseline data could signal the beginning of a contamination event.

Should the appeal of the LTC Energy surface mining permit be denied, the Borough will consider developing monitoring wells between the proposed "Boone Mine" surface mine and Wells #18B and #99-1 as an early warning system to detect degradation in groundwater quality before the wells are impacted. The Borough would work with Pa. DEP Bureau of Mines and possibly an outside consulting firm to identify monitoring well locations. The Borough can also petition Pa. DEP to require LTC Energy, the surface mining company to pay for monitoring well installation.

Regulatory Management Measures – Indian Lake Borough has in effect or is considering the developing the following ordinances that help protect the water sources from contamination.

- The Borough may consider the development of a watershed or wellhead/source water protection ordinance which would encompass other Borough ordinances (such as the following which were not developed primarily to protect the drinking water sources) into one document.
- On-lot Septic Disposal Systems The Indian Lake Borough On-Lot Sewage Ordinance #140 requires the inspection and if necessary pumping of septic systems every 5 years or when the property changes ownership. On-lot septic systems are also inspected if a complaint is received by the Borough that an on-lot system may not be operating correctly.
- Stormwater Management Ordinance Indian Lake Borough Stonycreek River Watershed Plan, Stormwater Management Ordinance #156 establishes regulations and requires the use of stormwater run-off Best Management Practices (BMPs) to minimize the negative impacts of stormwater run-off and to promote groundwater aquifer recharge. Although the ordinance is not designed specifically for Source Water Protection, one of the purposes of the ordinance is to "focus on infiltration of stormwater, where appropriate, to maintain groundwater recharge and to prevent degradation of surface water and groundwater quality".



- **Anti-Mining Ordinance** Indian Lake Borough Ordinance #13 prohibits the mining of coal or other minerals within the Borough limits.
- **Development of Geo-Thermal Heat Pump Construction Standards** Geothermal heat pump systems, if not properly constructed could pose a threat to the Borough's drinking water sources. Development by the Borough of a geo-thermal heat pump ordinance or the establishing of geo-thermal heat pump construction standards would help protect the water sources.

"e-Notice" Registration — "e-Notice" is Pa. DEP's electronic notification system that notifies registrants of the status of various permit applications as they proceed through the DEP permitting process. By enrolling in "e-Notice", Indian Lake Borough would be notified via e-mail if mining permits or any other permitted activity are applied for in the area surrounding the water sources. If mining or other regulated activity is proposed in the Source Water Protection area, the Borough will be able to contact DEP and express concerns that the activity could threaten the water sources.



Management Objectives, Implementation Schedule and Funding Source Table

ID Number	Facility/Owner	Contaminant	Management Approach	Implementation Date	Estimated Cost	Funding Source	Responsible Organization
1	Surface and Deep Mining	Acid Mine Drainage Groundwater Contamination Water Depletion	AMD Treatment Raw Water Quality / Quantity Monitoring Possible Monitoring Wells Regulatory Measures (Zoning/Ordinances, Permit Appeals)	In-Place	Unknown	PBS AMD Treatment Trust Indian Lake Borough Mining Company	PBS Coal/ Successor Indian Lake Borough Mining Company
2	Residential	On-Lot Septic Systems Fuel Oil Storage Tanks Private Water Wells / Geo- thermal Heat Pump Wells Household Hazardous Wastes	Public Education Regulatory Measures	In-Place	Unknown	Indian Lake Borough	Indian Lake Borough



Management Objectives, Implementation Schedule and Funding Source Table

ID Number	Facility/Owner	Contaminant	Management Approach	Implementation Date	Estimated Cost	Funding Source	Responsible Organization
3	Transportation Route	Vehicle Fluids and Various Cargos	Emergency Response Planning Possible rerouting of fuel trucks	In-Place	N/A	N/A	Indian Lake Borough
4	Recreational Activities - Boating / Golf Course	Fuel Turf Care Chemicals Boat Cleaning Chemicals	Communication with golf courses and marina Marina Operation Best Management Practices Emergency Response Planning	In-Place	N/A	N/A	Indian Lake Borough Marina Golf Course Operators
5	Agriculture	Fertilizer, Herbicides, Pesticides, Manure	No management options at this time	N/A	N/A	N/A	N/A
6	Stormwater Run-off	Leaked Vehicle Fluids Sediment Household Hazardous Wastes	Public Education Stormwater Management Ordinance	On-going	Already Spent	Indian Lake Borough	Indian Lake Borough



Management Objectives, Implementation Schedule and Funding Source Table

ID Number	Facility/Owner	Contaminant	Management Approach	Implementation Date	Estimated Cost	Funding Source	Responsible Organization
7	Gas Well Drilling and Operation	Brines, well fracturing fluids, sediment, vehicle fluids	Special casing requirements "e-Notice" registration Contingency planning Water quality monitoring	If drilling proposed	N/A	N/A	Indian Lake Borough
8	Point Sources	Primarily Volatile Organic Chemicals	Communication with business / landowners Emergency Response Planning	On-going	N/A	Indian Lake Borough	Indian Lake Borough
9	Future Development	Dependent on development	Work with developer and local officials to ensure measures are taken to protect water sources	If development proposed	Unknown	Developer	Indian Lake Borough County and Township Officials Developer



WATER SYSTEM SECURITY

The area surrounding the wells is patrolled by the Indian Lake Borough Police. Wellheads are located in and water treatment takes place inside locked buildings. Indian Lake Borough should consider decommissioning and properly abandoning all unused ground penetrations within the Borough, including Well #18A, which could act as a conduit for a surface contaminant entering the groundwater aquifer supplying the Borough's drinking water wells.



CONTINGENCY PLANNING

In the event a water source become contaminated, contingency planning should include methods to inform customers of the contamination event and methods to supply customers with potable water. Items to consider when developing contingency plans include:

- Well #99-1 and Well #2 are located in different recharge areas and it is unlikely a contamination event affecting one well would affect the other. A contamination event affecting Well #18B may eventually affect Well #99-1.
- Well #2 serves the north and west shore area of the Borough while Well #99-1 and Well #18B feed the Cherry Lane tank which supplies the remainder of the Borough. The two service areas are interconnected but separated by a closed valve.
- Well #99-1 can supply the west and north shores if needed and can meet system demand by itself. Well #2 cannot meet system demand by itself.
- If Well #99-1 becomes unusable, the amount of time the system can operate on system storage will vary dependent on time of year and system demand. During summer months when system demand is high, supplemental water would be needed in just over 1 day. DEP would be contacted to obtain permission to use Well #18B as an emergency water source
- There are no interconnections with any other public water system.
- The Lodge and both golf courses which are large water consumers would be contacted and asked to limit water use. Stonycreek Fire Department and Somerset County EMA would also be contacted and made aware of the water situation.
- If necessary, bulk and/or bottled water distribution points could be established at the Borough garage, at the Lodge or at Indian Lakes Golf Club.
- If necessary, public notification would be through the SwiftReach automatic dialing system



39

Section 1 - Organization Table

The following persons will be in charge of the water system during any type of emergency:

Order	Name	Position	Contact N	area code)	Radio Freq. (MHz)	
			Office:	Home:	Fax:	
			814-454-8161	814-267-5911		
1	Dean Snyder	Water Operator	Cellular:	Pager:	E-mail:	
			814-701-5556		d.snyder@india nlakepa.us	
			Office:	Home:	Fax:	
	D 0 111	Back-up Operator	814-754-8161	814-267-4189		
2	Dave Smith		Cellular:	Pager:	E-mail:	
			814-483-0069		d.smith@indianl akepa.us	
			Office:	Home:	Fax:	
		Chair, Water & Sewer		814-754-5230		
3	Bob Hanson	Committee for Council	Cellular:	Pager:	E-mail:	
			412-418-0870		hansonrf@aol. com	
			Office:	Home:	Fax:	
	CME Engineering	Professional Technical	814-443-3344			
4	Ed Wisnewski	Oversight	Cellular:	Pager:	E-mail:	
					ed.wisnewski@ cmemgmt.com	



Order	Name	Position	Contact N	umbers (include a	rea code)	Radio Freq (MHz)	
			Office:	Home:	Fax:		
5							
3			Cellular:	Pager:	E-mail:		
			Office:	Home:	Fax:		
6							
			Cellular:	Pager:	E-mail:		
			Office:	Home:	Fax:		
7							
/			Cellular:	Pager:	E-mail:		
			Office:	Home:	Fax:		
8							
			Cellular:	Pager:	E-mail:		



Part B: Emergency Reference Table Contacts and Phone Numbers

Water System Spokesperson	: Mike Miscoe, EMC or Bob Hanson, Chair of Water and Sewer Committee
Tier 1 templates location:	Borough Office
Additional media announcem templates:	ent

Customers: Prioritized Sensitive Sub-Populations to Notify (Tier 1 Public Notification)

Procedure:

In the event of an emergency requiring Tier 1 public notice, call the individuals below to alert them of the situation and then follow-up with notification using the Tier 1 PN templates via fax or email.

	I using the Tier TTT templates				
Contact	Contact Individual	Phone and alternate phone	Pager Number	Fax to send Tier 1 Public Notice	Email to send Tier 1 Public Notice
Indian Lake Christian Center		814-754-4900			
Indian Lake Resort	Pat or Terry St.Clair	814-754-4975 814-754-8272			info@indianlakeresort.com
Indian Lake Golf Club	Alecia Zimmerman	814-754-5601 814-443-2707		754-5923	office@indianlakegolfclub.com
North Winds Golf	Kelly or Chris Smith	814-754-4653 814-267-7101			info@northwindsgolf.com
Indian Lake Marina	Marc Alaia	814-754-4774 814-442-8055		814-754-4588	info@indianlakemarina.com

Note: Tier 1 public notification is required for violations or situations that can have serious adverse health effects as a result of short-term exposure. Tier 1 public notification must be issued to your customers as soon as possible but no later than 24 hours after learning of the violation or situation.



Government Agencies							
Contact	Contact Individual	Phone and alternate phone	Alternate Number	Specific Procedures/Instructions			
DEP Sanitarian	Bob George	814-472-1900					
DEP Southwest Regional Office		412-442-4000					
Somerset County EMA	Richard Lohr	911	814-445-1515 Non-Emergency				
Stonycreek Fire Department		911					
Indian Lake Police		911	814-267-4614 814-267-3776				
Pa. State Police Somerset	Commander – Stephen Adamczyk	814-445-4104					
Pa. Emergency Management Agency (PEMA)	Phillip Barker – Western Area Director	724-357-2990	800-972-7362				

Customers: Industrial and Commercial Users								
Contact	Contact Individual	Phone	Alt. Phone					
Indian Lake Resort	Pat or Terry St.Clair	814-754-4975	814-754-8272	info@indianlakeresort.com				
Northwinds Golf Course	Kelly or Chris Smith	814-754-4653	814-267-7101	info@northwindsgolf.com				
Indian Lake Golf Course	Alecia Zimmerman	814-754-5601	814-443-2707	office@indianlakegolfclub.com				
Indian Lake Marina	Marc Alaia	814-754-4774	814-442-8055	info@indianlakemarina.com				



Media							
Contact	Contact Individual	Phone and alternate phone	Pager Number	Specific Procedures/Instructions			
Radio Station: WFRB		310-689-5000					
Radio Station: WQZS	Roger Wahl	814-634-0234	814-634-9111				
Television Station: WJAC - Johnstown		814-255-7600					
Television Station: WTAJ - Altoona	John Metchum	814-924-1010 X 175	814-943-2929	News Director's number (X 175)			
National Weather Service - Pittsburgh		412-262-2170					
National Weather Service – State College		814-231-2408					

Part B: General Contact Information and Phone Numbers

General Contact Information								
Contact	Phone #2	Pager Number						
Al's Water Service – Bulk or bottled water	www.alswaterservice.com	724-222-9059						
Water On Wheels		724-925-1727						



NEW SOURCES

If the Borough was to develop a new water source, a location outside the current well recharge areas would be preferred. Land may need to be purchased or leased to meet DEP Zone I Source Water Protection requirements.

In lieu of development of a new water source, the Borough may explore developing a water treatment system so to be able to utilize Well #18B.

The Borough may also explore establishing an interconnection with the Somerset County Authority's Quemahoning water line and purchasing water from the Authority.

