



**FINANCIAL REPORT** (District must retain receipts of all expenditures for at least seven years)

**1. Income**

<b>Source of Income</b>	<b>Amount</b>
1. Grant funds to be received from the District _____	
2. Other funding (specify) _____	
3. _____	
<b>Total Project Income</b> _____	

**2 Expenditures** (Please be specific and add lines as needed. Copies of all proof of spending must be attached.)

<b>Budget Items</b>	<b>Name of Supplier</b>	<b>Amount</b>
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
<b>Total Project Expenditures</b> _____		

**Certifying Signature**

By signing this report, I confirm that to the best of my knowledge these District Grant funds were spend only for eligible items in accordance with Trustee-approved guidelines, and that all the information contained herein is true and accurate. I also understand that all photographs submitted in connection with this report will become the property of RI and will not be returned. I warrant that I own all rights in the photographs, including copyright, and hereby grant RI and TRF a royalty free irrevocable license to use the photographs now or at any time in the future, throughout the world in any manner it so chooses and in any medium now known or later developed. This includes, without limitation, use on or in the web sites, magazines, brochures, pamphlets, exhibition and any other promotional materials of RI and TRF.

**Certifying Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

Print name, Rotary title, and club \_\_\_\_\_



To be completed by the District Community Grant Committee Chair:

District Community Grant # \_\_\_\_\_

Individual Project Report # \_\_\_\_\_

**INVOICE**

**FOR:** City of Sunbury Wetlands Signage Project

**DATE:** March 25, 2022

**CUSTOMER P.O.:** 71800

CUSTOMER NO.	INVOICE NO.	JOB NO.	TERMS	SALES REP.
867820	71800	71800	Net 30	Lauren Koch

DESCRIPTION	PRICE
(4) 2' x 3' signs Aluminum Kiosk Panel with Mounting Hardware	\$5,435
<b>TOTAL</b>	<b>\$5,435</b>

Make check payable to AdOne Advertising and Design.





NUTRON-OSM

# OUTDOOR SIGNS & MARKERS

Proposal#: 17437-00

City of Sunbury  
225 Market Street  
Sunbury, PA 17801  
Attn: Jolinn Barner

Hi Jolinn,  
I spoke with Victoria this morning and have priced up some options per her request.

Wetland Signs (can combine different packs of styles to reach 3pk discount, 10 signs per pk)  
3 packs @ \$119/pk....\$357.00  
UPS Ground 17801 @ \$17.75  
Total \$374.75

1 pack Wetland Signs @ \$149.00  
10 UCP-4G, 4' green baked enamel steel u channel posts @ \$17.25/EA...\$172.50  
10 HK1, stainless steel hardware kit for WB series to U channel mount @ \$3.00/kit....\$30.00  
UPS Ground 17801 @ \$42.00  
TOTAL \$393.50

Let me know if you have any follow up questions or would like to move forward and order one of these options! Thanks,

Rusty Butchko  
Nutron  
P(888) 737-5052, x231

**Ask me about our [Trailhead Map Signage](#) & [Pedestal Sign Systems](#)!**

*Family owned and operated. Proudly made in the USA since 1950!*







**Educational Credits:**  
Sunbury Municipal Authority  
Rebecca Bourgault, PHD

**Funding Source for Educational Signage:**  
Sunbury Rotary Club Grant 2021

**FLOODS ARE THE MOST COMMON NATURAL DISASTER IN THE UNITED STATES.**



# CITY OF SUNBURY WETLANDS PROJECT

**THE CITY OF SUNBURY** is vulnerable to flooding due to its exposure to both the North and West branches of the Susquehanna River and the effects of flash flooding from Shamokin Creek.

In 1936 the Susquehanna River reached a *height never equaled* in the records of Susquehanna floods since 1782. The community needed protection from future disasters.

**THE SUNBURY FLOOD WALL** along Front Street was authorized under the *Flood Control Act of 1936*. The flood wall was designed and built by the US Army Corps of Engineers. The system consisted of levees and concrete floodwalls. Construction began in 1946 and completed in 1952. *It has protected the City from over 14 major flood events.* The Sunbury Municipal Authority maintains the flood control system.



Flood of March, 1936



Flood of April, 1940

*News Flash Bulletin from 1940*

550219  
**AIR VIEW OF FLOODED SUNBURY, PA**  
SUNBURY, PA. - AN AIR VIEW OF SUNBURY, PA., APRIL 2, SHOWING MUCH OF THE CITY UNDER WATER. TWELVE PERSONS WERE KNOWN DEAD AND ONE WAS MISSING IN THE FLOOD AREA. PRELIMINARY ESTIMATES OF PROPERTY DAMAGE SET THE FIGURE AT BETWEEN \$2,000,000 AND \$3,000,000. THE LOSS WAS SMALL AUTHORITIES EXPLAINED, BECAUSE RESIDENTS IN THE AREA, HARD HIT BY FLOODS IN 1936, WERE PREPARED FOR THIS DISASTER.  
CREDIT LINE (ACME) 4-2-40 (CT)  
1 CL CAN SP DJH NH MIL TFB FOR SA SJ MX

**WETLANDS** can help reduce flooding, by *soaking up and slowly releasing* flood waters like a sponge.

**WETLANDS** are known as "*nature's kidneys*" due to their ability to purify water. In an urban area such as this one, pollutants such as motor oil, gasoline, lead paint, pet waste, fertilizers, and pesticides may run off into the wetland, which collects and transforms these pollutants into less harmful forms.



**GROUNDWATER AND SURFACE WATER** drain into wetlands like this one (*shown above*) due to basin-like topography and precipitation.

*All wetlands lose water.* It is estimated that the water flow from this wetland off north 6th Street is **392,000 gallons per day**. The flow will vary due to precipitation.

The water from this wetland enters a *combine waste stream*. Combine meaning both storm water and sewer water flow through the same conveyance system.

The water then flows to a wastewater treatment facility, whereby it is treated using both *physical and biological treatment* before being discharged to Shamokin Creek.

This wetland receives routine maintenance from the City of Sunbury.

**SUNBURY WETLAND ECOLOGICAL EDUCATIONAL PARK**





**Educational Credits:**  
Rebecca Bourgault, PHD  
**Funding Source for Educational Signage:**  
Sunbury Rotary Club Grant 2021

**Pennsylvania has more than 400,000 ACRES OF WETLANDS. These include forested wetlands, scrub-shrub wetlands and emergent wetlands.**



# Pennsylvania Wetlands

**STATE DEFINITION: WETLANDS**—Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.

## PERCENTAGES OF PENNSYLVANIA'S WETLANDS

Palustrine Wetland.....**97%**  
Lacustrine Wetland.....**2%**  
Riverine Wetland.....**1%**

## WETLAND CLASSIFICATION

**PALUSTRINE WETLAND SYSTEMS** are generally **non-tidal wetlands** that are dominated by trees, shrubs, persistent emergent species, lichens, or mosses. Palustrine wetlands are **bordered entirely by upland areas or other wetland systems**, and are commonly called marshes, bogs, swamps, or prairies

**LACUSTRINE WETLANDS SYSTEMS** are generally described as being in a **topographic depression or a dammed river channel**, generally lacking vegetation (including trees, shrubs, persistent emergent, emergent mosses, or lichens), and generally larger than 20 acres.

**RIVERINE WETLAND SYSTEMS** are generally composed of **all wetland areas in a channel connecting two standing bodies of water**, are not dominated by vegetation, and do not have ocean-derived salinity greater than 0.5 parts per thousand.



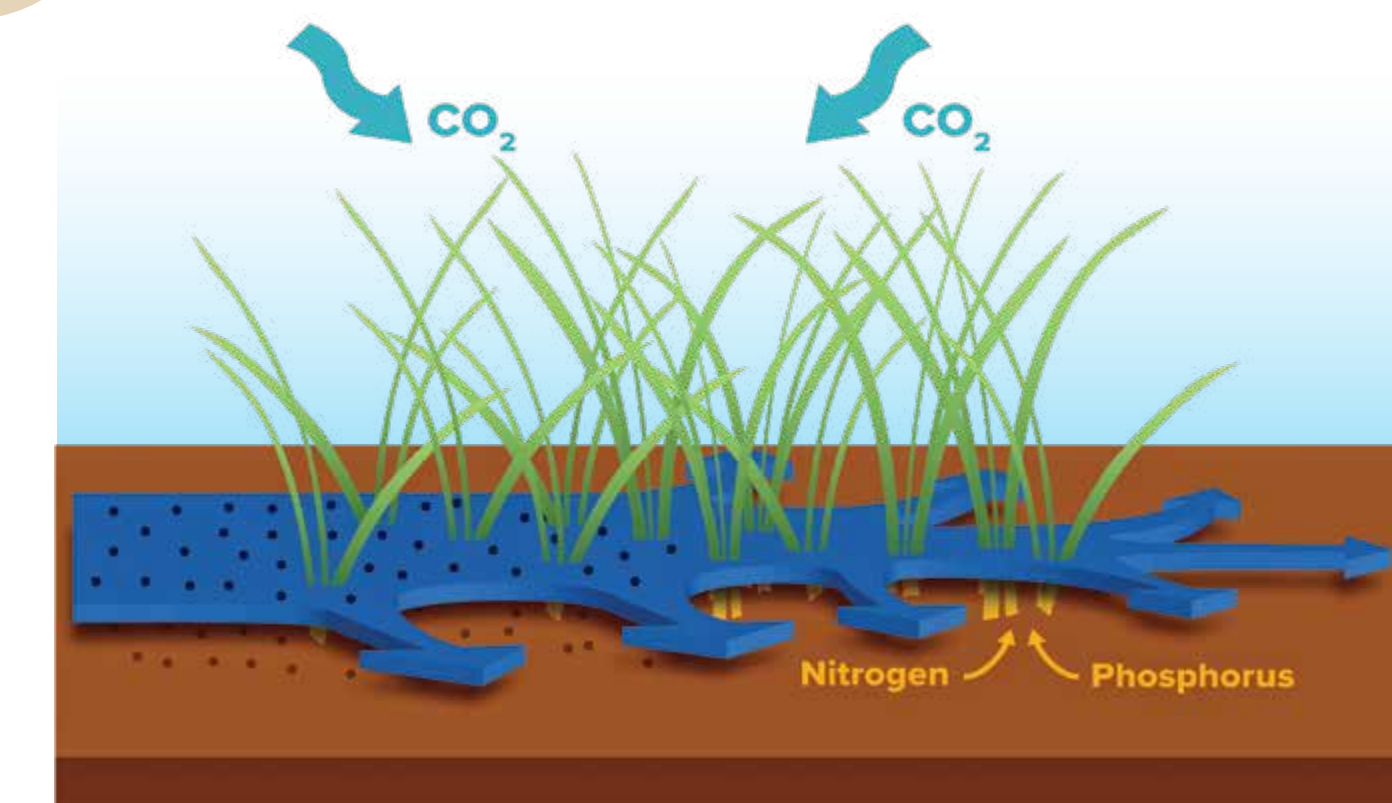
## WHY ARE WETLANDS IMPORTANT?



Wetlands are essential to protecting public and environmental health due to the many ecological services they provide.

- ① **FIRST**, wetlands are especially effective at cleaning and purifying dirty water. Wetland soils, vegetation, and microbes are very efficient at removing pollutants from runoff water on its way to rivers and oceans.
- ② **SECOND**, wetlands offer extensive flood control. Wetlands along streams and rivers act as sponges to absorb and slowly release flood waters, thereby reducing flood damage.
- ③ **THIRD**, wetlands are home to many diverse plants and animals, some of which are threatened, endangered, and/or highly valued by humans for food or recreation.

- ④ **FOURTH**, wetlands have a unique bio-chemistry that allows them to sequester carbon from the atmosphere - an effective offset to climate change.
- ⑤ **FIFTH**, wetlands have certain aesthetic, cultural, and educational values.







**Educational Credits:**  
Rebecca Bourgault, PHD  
**Funding Source for Educational Signage:**  
Sunbury Rotary Club Grant 2021

*Over the years, many invasive species has been transplanted from their native ecosystem though travel and commerce across Pennsylvania.*

## VEGETATION

**IN WETLANDS**, most upland plants cannot survive in waterlogged soils, mostly due to the lack of oxygen. Like us, plant roots require oxygen to carry out **cellular respiration**. Wetland plants, known as **hydrophytes**, have to be specifically adapted to conditions in which there is little or no oxygen. Common adaptations to these conditions involve various structures that **pipe atmospheric air** down to the roots.

**INVASIVE SPECIES** are those that are **non-native** to an area and tend to spread to a degree that **causes harm to the environment, local species, or human interests**. These problem species have popped up in Pennsylvania over the years, primarily through travel and commerce that displaces them from their native ecosystem.

**IN AREAS THAT ARE DISTURBED**, such as this one, there is often **low biodiversity, and invasive species** may be dominant. Here, a dominant invasive wetland species is **Fallopia Japonica**, also known as Knotweed.



**Knotweed**



What invasive plant species do you spot?

## WILDLIFE

**WETLANDS** are important habitats for maintaining biodiversity of wildlife. **Wetlands act as breeding grounds** for many game and non-game species of birds, amphibians, fish, and mammals, including threatened and endangered species.

In Pennsylvania, some common wetland animals are beaver, ducks, bittern, bog turtle, muskrats, herons, green frogs, spring peepers, rails and other frogs and salamanders. In **disturbed urban wetlands** such as this one, the habitat is isolated and disconnected from surrounding habitats.

What animal wildlife do you spot?



## SOILS

Soils develop gradually over time from **decomposing minerals** (from rocks) and organic matter (from plants). Soils that develop in wetlands are different than those that develop in uplands. There are **two major differences** in wetland soils when compared to upland soils:

- 1 Because they are waterlogged**, there is little room for oxygen in wetland soils. These low- or no-oxygen conditions slow the decomposition of organic matter by bacteria and fungi. Therefore, wetland topsoil tend to preserve and accumulate more organic matter than oxygen-rich upland soils. Organic matter buildup can be observed here. Look for black, greasy material at the soil surface. These are the remains of dead and decomposing plant materials.
- 2 Because there is little to no oxygen in wetland soils**, the chemistry is different, compared to upland soils. Iron oxides (rust compounds) are normally responsible for giving upland subsoil its reddish-brown color. However, in wetland soils, iron oxides dissolve easily due to the lack of oxygen. The reddish-brown iron oxide "paint" is stripped away, revealing gray soil mineral particles. Therefore, wetland mineral subsoils are often gray in color. You would have to dig below the topsoil to observe this feature here.