

RESIDENTIAL FLOOD INFORMATION

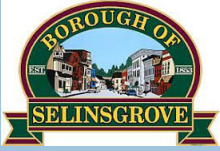
BOROUGH OF SELINGSGROVE: CHECKLIST #1

Access Information

- Determine water level for Susquehanna River & Penns Creek.**
 - USGS Susquehanna River Level Graph Report (Sunbury): www.usgs.gov
 - Selinsgrove Borough Website: www.selinsgrove.org
 - WNEP-TV Weather
 - WKOK.com & WKOK 1070 AM
- Monitor water levels & projected crest levels every 3-4 hours.**
- Cross reference above data with Flooding Reference Level sheet (included) to develop individual Flood Plan.**
- Reference Historic River Crests for Sunbury (included) and Penns Creek (included) and compare projected crest to past flood crests. If you don't know where the water level was in your home during floods listed 1-5, try to find out by asking a neighbor.**

Individual Responsibility

- Flood Action Plan in place approximately 8 HOURS prior to the Emergency Access Ramp opening, based on current projected river levels.**
 - NOTE: In the event of a major flood, the Creek Bridge may be closed by Penns Creek flooding before the river level has caused the bridge closure. Creek level will usually fall rapidly allowing a brief time period for bridge access before the river causes the creek level to rise again - closing the Bridge.
- Remove ALL motorized vehicles from Isle of Que prior to Penns Creek Bridge closure. Park in designated 'flood vehicle' parking area (Do not park them on borough streets during this emergency).**
 - At this point, it is also important for all residents to evacuate before the Penns Creek Bridge closure.
 - Residents should leave during the flood event.
 - You may lose utility services, leaving you in the cold and dark.
 - Bottom Line: If someone would have to come and rescue you from your home during the flood, you put others at risk.
 - **See Checklist #2: BEFORE YOU EVACUATE**



RESIDENTIAL FLOOD INFORMATION

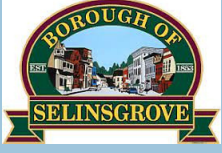
BOROUGH OF SELINGSGROVE: CHECKLIST # 2

Before You Evacuate

- Fill bathtub with fresh water, as well as containers, with at LEAST 2 DAYS of drinking water. Fill a cooler with ice & drinks for cold drinks during clean-up.**
- Make sure to have fuel for charcoal or gas grill; it might be your source for hot food and hot water post-flood (do not use the grill indoors).**
- Additional Items to Consider: generator & gas, chain saw & gas, floor fans, and 1 gallon spray tank (for cleaning post-flood).**
- Have a squeegee, push broom, and 50-100 ft. of garden hose with a trigger nozzle hooked up to your outside faucet and placed inside your house.**
 - The earlier you can start washing flood mud from you walls and floors, the better.
- Take all of your medications with you.**
- Take your pets with you and do NOT leave them in the house alone.**
- Lock your house. Place a note with your name and cell phone number in a ziplock bag so you can be contacted by emergency personnel, if necessary, and hang above the main entrance to your home.**
- Turn off your power at your panel in case power isn't lost. If water gets into the outlets, a fire could start if the electricity is still on.**

HELPFUL FLOOD TIPS:

- **To elevate furniture and appliances:** Have on hand 8 to 10, 4ft, 2X6" planks. Place one end of plank on the windowsill and the other end on a table, sawhorse, or blocks - and place items on planks.
- **Basement storage:** Place items in 18 gal. totes or other airtight containers (weight as 1 person can carry) and if stored in weather tight container, they won't leak.
- **Move all paints, gas, or oil based products OUT of the flood waterway,** as it will be difficult to clean-up and downstream neighbors will appreciate your consideration.
- **Heating Oil Tank (Inside or Outside):** Fill tank with as much water as it will hold. Water will act as ballast and may keep tank from breaking fittings and spilling oil inside or outside home. Post-flood, you can drain the water - the oil & water separate.
- Pre-Flood Planning should include **anchoring ALL outside items.**
- During Flood: **Do NOT try to keep water from seeping or flowing into your basement.** It could cause basement walls to collapse. Saturated ground puts a lot of pressure on your home's foundation walls and allowing water in will help equalize that pressure.



RESIDENTIAL FLOOD INFORMATION POST FLOOD RECOVERY

Where Do We Start?

If possible, get to your home as soon as the water is below your first floor.

- Take pictures of every room & any damage to your home.
- Take pictures of all furniture & appliances that were damaged by flood water.
- Mark the water level on the wall of your home.

Remove all flood damaged furniture, appliances, and carpets.

- Set up a table or planks on saw horses to place items you want to keep.
- When possible, remove all HVAC ducts from your basement.

Start washing down walls & floors to remove as much flood mud as you can before it dries. Now is when you will use your push broom and squeegee.

- Do not try to save furniture/appliances that were in flood water; they will smell & grow mold.
- Do not try to pump out your basement for **at least 24 hours after the water has receded** from your foundation, then pump it out slowly.

Once mud has been removed from walls and floors, cut and remove drywall, paneling, etc. (up chair rail high or at least one foot above the flood water line).

- Once lower wall is open and any insulation is removed, wash out any flood mud & let dry.
- Fans will help. Opening doors & windows to allow air flow through your house will also help.
- Wooden doors in your home may swell and will not shut.
- Some of your flooring may buckle. Once things are dried out, they should return to normal. If you have hollow core interior doors that were in flood water, throw them out (they will grow mold).

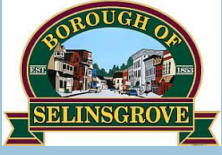
At this time, mix a 50/50 solution of water and bleach. Spray the inside of your walls, cupboards, and closets. This will help to kill mold spores and keep mold from growing. (Repeat at least TWO more times until everything is dry).

- As soon as your basement is clean, spray everything that was in flood water with bleach mixture.
- Dust Mask - Safety Glasses - Rubber Gloves and Coveralls are a must for this part of your clean-up.

NOTE: Now is the time for patience. The reality is, you may be living like this for several months. Local contractors were busy before the flood & you may experience delays in getting one to make repairs to your home. This is when the reality of all that has happened sinks in - it is important that you express how you feel, as this time can be very stressful.

At this point, your basement is dry & empty - your 1st floor is dry & opened up, it is now time to review items that were in flood water that you may want to save from the table outside. Remember, when in doubt - throw it out.

Life before the flood now begins to resume for everyone - you're back to work, kids are back at school, other activities will resume but you still come home everyday to a house that is still torn apart. Now is the time to focus on what you may want to change as you make post-flood improvements. Reference the "Post-Flood Improvements" section of this packet.



RESIDENTIAL FLOOD INFORMATION POST FLOOD

HOME IMPROVEMENTS

Most residents will be working with a budget limited to the amount of their flood insurance settlement check. You may want to consider talking to your banker about refinancing your home mortgage or a home equity loan to provide funds to relocate HVAC, water heaters, and electrical panels above the flood level for your home.

Some suggested changes & improvements:

- Move water heater to your attic,
- On-demand hot water system,
- Mini-split HVAC system,
- Electrical panel located on 2nd floor, attic,
- Construct an addition to your home to house all or part of the above.

Prior to any renovations or improvements, obtain a zoning permit from the Borough!

Consider ceramic or vinyl water proof flooring enhanced with area rugs that can be rolled up and moved in a flood event.

Walls should be cut to a chair rail height -36-42-48 inches, which creates an upper wall and a lower wall.

- First consideration should be electrical boxes that were exposed to flood water. No matter how clean they look, replace them.
- Your next consideration is the type of insulation you will put back in your outside lower walls. Two types of insulation to consider:
 - Foam type insulation
 - Rock Wool, which is made of a mineral wool that will not mold, can be washed off, dried, reinstalled in the same place, and comes in a 4' X 2' - 6 inch thick block that can be cut to fit with a large knife or sawzall.
 - When installing, place a number on the insulation block and on the inside wall so when dry, each block can fit back into its original spot.
 - Rock wool is more expensive, but may be worth the extra cost because it can be used over again in future floods.
- Remember -- based on where you live, it is not a matter of "if" it will flood again but rather "when" will it flood again.

Finish your lower wall using drywall, paneling, or wainscot.

- Fasten with drywall screws so panel can be removed easily for future flood clean-up.
- The goal: Minimize future flood loss & maximize ease of clean-up and repair.

There may be details to clean-up & repairs that are unique to your home. This summary is intended to be a guide to help you organize your pre, during, and post-flood preparation & recovery plans. It is strongly suggested that you keep a written log or journal of your flood experience & pass your information on to the new owner in the event you sell your property.

Selinsgrove Borough: Susquehanna River Flooding, General Reference Levels

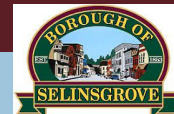


- Stages are Sunbury Gauging Station (#01554000) datum (see <http://pa.waterdata.usgs.gov>).
- Selinsgrove private gauges on River bank (1 along N. Front St. & 1 along S. Front St.) read approx. the same as Sunbury Gauge at crest.

Susquehanna River Levels

STAGE	IMPACT
	(Penn Township Impacts)
20 ft.	ACTION STAGE (Advanced Hydrologic Prediction Center)
20.0 ft.	Water along western edge of southbound lane of Front St. at lowest point, 1 mi. south of southern Borough boundary.
20.3 ft.	Water on western 1/3 of southbound lane of Front St. at lowest point, 1 mi. south of southern Borough boundary.
20.5 ft.	Water on western 2/3 of southbound lane of Front St. at lowest point, 1 mi. south of southern Borough boundary.
20.7 ft.	Water on full southbound lane of Front St. at lowest point, 1 mi. south of southern Borough boundary.
21.2 ft.	Water across full width of Front Street at lowest point, 1 mi. south of southern Borough boundary (passable with caution at 6 to 9" deep).
21.5 ft.	Water across full width of Front Street at 3 different locations, 0.5 to 1.0 mi. south of southern Borough boundary (worst passable with caution at 10 to 13" deep).
21.7 ft.	Water on western 1/3 of Front St. at entrance to ESCRA WWTP (WWTP outfall Manhole along east edge of Front St. discharging through cover).
21.9 ft.	Water on western 2/3 of Front St. at entrance to ESCRA WWTP.
	(Selinsgrove Borough Impacts)
22.8 ft.	Water along western edge of southbound lane of Front St. at the souther Borough boundary (boat launch area).
23.2 ft.	Water across full width of Front St. at the southern Brough Boundary.
24.0 ft.	FLOOD STAGE (Advanced Hydrologic Prediction Center)
26.0 ft.	MINOR FLOODING BEGINS (Advanced Hydrologic Prediction Center)
26.0 ft.	50-year Flood Level (from Historic Simulation, Advanced Hydrologic prediction Service Flood of 03/11/2011)
26.02 ft.	Flood of 03/11/2011
26.15 ft.	Crest of Flood of April 3, 2005
26.2 ft.	Water backing up through storm sewers, that drain to River, at top of grate of stormwater inlets on East Chestnut St. near River Alley.
26.7 ft.	Water backing up through storm sewers, that drain River, at top of grate of stormwater inlets on East Walnut and East Bough Streets at South Second St. intersections.
26.9 ft.	Flooding, resulting from backwater from River up Penns Creek, on South Water St. extends to Bough St. (delays rate of recession of Penns Creek).
26.9 ft.	Flooding along South Front Street extends to unopened Arrow Avenue (600 South Front St. +/-).
27.0 ft.	Water backing up through storm sewers, which drain to River, at top of grate of stormwater inlets on East Pine Street at easternmost low area on street.
27.52 ft.	Flood of 03/07/1979
28+/- ft.	Bridge entrance compromised (verify level during next occurrence)
28+/- ft.	Emergency Access entrance compromised (verify level during next occurrence).
30.32 ft.	Flood of 01/20/1996
30.44 ft.	Crest for TS Ivan, September 18-19-20, 2004 (access to Isle of Que closed and guarded).
30.62 ft.	Flood of 09/27/1975
31.66 ft.	Flood of 09/09/2011
32+/- ft.	50-year Flood Level (East Chestnut Street section).
34.0 ft.	MAJOR FLOODING BEGINS (Advanced Hydrologic Prediction Center)
34.4 ft.	100-year Flood Level (East Chestnut Street section).
35.80 ft.	Highest Flood of Record (Hurricane Agnes, 06/24/1972, 170-year frequency flood event.

Selinsgrove Borough: Penns Creek Flooding, General Reference Levels



- Stages are Penns Creek Gauging Station (#01555000) datum (see <http://pa.waterdata.usgs.gov>), reasonable correlation in heights, with time delay of approximately 4-7 hours (7 hours +/- 3/10/2011 to 3/11/2011)

Penns Creek Levels

STAGE	IMPACT
7.2 ft	Flooding from inlets on South Water Street near East Sassafras Street intersection
7.6 ft	Ice Skating building first floor flooded (10.32 ft. crest with 33" water on floor)
8 ft	Flood Stage (Advanced Hydrologic Prediction Center)
8.0 ft	Flood of 03/29/2005 (Spring)
8.2 ft	Flood of 11/20/2005 (Fall)
9.7 ft	Intersection of South Water Street at East Bough Street flooded across the diagonal.
10 ft	Moderate Flooding Begins (Advanced Hydrologic Prediction Center)
10-12 ft	Creek flooding breaks over lower section of Isle of Que and floods Front St., requires heavy vehicle for evacuations.
10.1 ft	Flood of 03/11/2011 - Door knob on Little Norway II Skate House
10.8 ft	50-year Flood Level (from Historical Simulation, Advanced Hydrologic Prediction Center) Flooding from Penns Creek breaks over east banks and flows over South Front St. at the lowest point on South Front St. to effectively close the road.
11.73 ft	Flood of 02/15/1984
11-12 ft	Pump House highest flood level (11.5 +/- by 3/11/2011 crest)
12 ft	Major Flooding Begins (Advanced Hydrologic Prediction Center)
12.12 ft	Flood of 03-18-1936
12.19 ft	Crest for Tropical Storm Ivan. 09/18/2004
12.7 ft +/-	Flooding from inlet on northwestern corner of the intersection of North Strawberry Alley with East Spruce Street (10.32 ft. crest with 29" from grate down to water level)
13.0 ft	Floods of 09/16/1934 and 02/26/1979
13.4 ft +/-	Flooding from inlet on south side of Bridge St. across from Dwelling on 900 N. Market St. (10.32 ft. crest with 37" from grate down to water level)
13.5 ft +/-	Flooding from inlet on east side of Pump House Alley near Pump House Park sign (10.32 ft. crest with 38" from grate down to water level)
13.74 ft	Flood of 01/19/1996
14.85 ft	Highest Flood of Record (Hurricane Agnes, 06/23/1972)

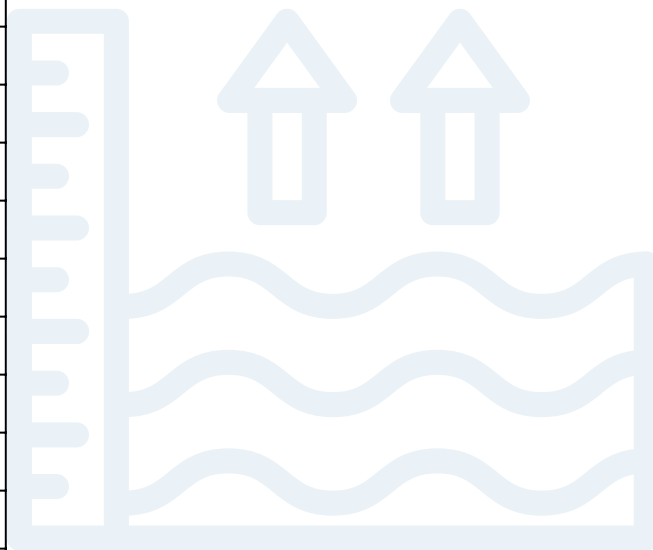
Isle of Que inlets isolated from Penns Creek by By-Pass Backwater Flooding from Susquehanna River, Reference Levels:

- Stages approximately correlate with Sunbury Gauging Station (#01554000) readings
 - (see <http://pa.waterdata.usgs.gov>)

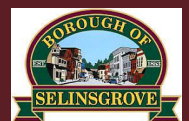
STAGE	IMPACT
26.9 ft	Flooding on South Water St. extends to Bough St.
34.4 ft	100-year Flood Level - backwater effect believed to extend to Pine Street bridge +/-

1	35.80 ft	06/24/1972
2	31.66 ft	09/09/2011
3	30.62 ft	09/27/1975
4	30.44 ft	09/19/2004
5	30.32 ft	01/20/1996
6	27.52 ft	03/07/1979
7	27.3 ft	01/01/1943
8	27.2 ft	04/02/1960
9	27.03 ft	04/02/1993
10	26.91 ft	02/16/1984
11	26.89 ft	06/28/2006
12	26.85 ft	03/19/1936
13	26.4 ft	11/27/1950
14	26.15 ft	04/03/2005
15	26.03 ft	03/12/2011
16	25.9 ft	03/14/1920
17	25.8 ft	02/27/1961
18	25.58 ft	04/29/2011
19	25 ft	03/09/1956
20	25 ft	03/07/1964
21	24.9 ft	03/16/1986
22	24.49 ft	12/15/1983
23	23.83 ft	03/26/1994
24	23.83 ft	03/26/1983
25	22.98 ft	05/29/1946
26	22.5 ft	03/01/1865
27	22.31 ft	04/03/1970
28	22.19 ft	03/11/1964
29	21.78 ft	02/24/1981
30	21.37 ft	02/19/1976
31	20.15 ft	11/29/1993
32	20 ft	06/01/1889

Historic Crests: Susquehanna River for Sunbury, PA



MORE INFORMATION
www.selinsgrove.org



Selinsgrove Borough
1 North High Street
P. O. Box 34
Selinsgrove, PA 17870

IMPORTANT

U.S. POSTAGE
PAID
SELINGROVE
PA
PERMIT NO. 40

Flood Task Force Members:

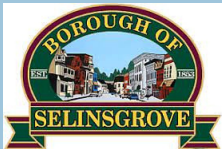
Janet Powers
Jim Charles
Joe Herb
Heather Bohn

Other Borough Officials:

Jeff Reed – Mayor
Lauren Martz – Borough Manager
& Borough Secretary
Sharon Badman – Asst. Borough Manager
& Borough Treasurer
Shanee Mitchell – Chief of Police
Roger Feltman – Public Works Director
Robert M. Cravitz – Borough Solicitor

POSTAL PATRON

**Selinsgrove Borough Police Department
(non-emergency phone #) 570-374-8655**



RESIDENTIAL FLOOD INFORMATION

This packet of information about flooding in Selinsgrove Borough is being provided to residents of the floodplain as a helpful guide by Selinsgrove Borough Council and Flood Task Force members.

It contains helpful tips for preparation before a flood, during a flood, and after a flood. They are meant to help you minimize the impacts of flooding.

Flood level and staging information is for reference only. The Borough of Selinsgrove is not liable for any damages incurred by using the references. Development impacts flooding and the speed at which flood waters rise.

If you have any questions about flooding at your property, or if you are interested in joining the Flood Task Force or volunteering to do Substantial Damage determinations following a flood event, please contact the Borough Office at 570-374-2311.