



US Army Corps  
of Engineers®

UNION CITY RESERVOIR

PITTSBURGH DISTRICT

BUILDING STRONG®

**Union City Reservoir** is a unique part of a series of flood control projects in the Pittsburgh District Watershed. Located on French Creek among the rolling hills of Erie County, Pennsylvania, the Union City Reservoir is the only dry-bed reservoir in the district.

Authorized by the Flood Control Act of 1962, the dam was completed in 1971 and provides flood protection for the French Creek Valley, and to a lesser degree, the Allegheny River below Franklin, Pa. The reservoir has the capability of storing the equivalent runoff of 4.08 inches of precipitation from its 222 square mile watershed. The flood prevention benefits provided by the project since completion are estimated to be approximately \$121 million.

Although Union City does not provide for typical lake-related activities, it does offer visitors the unusual opportunity to observe the process by which this dry bed reservoir becomes a lake.

The dam functions as an uncontrolled detention structure that automatically stores and releases water during periods of peak flow.

A 460-foot-long concrete conduit, 4.5 ft. by 8 ft., runs through the base of the dam to allow for uncontrolled discharge of waters. The conduit permits normal flows of French Creek to pass through unimpeded. When the amount of water entering the reservoir exceeds the dam's capacity to discharge it through the drainage conduit, a temporary lake is formed.

If the flow of waters into the lake fills the reservoir to capacity the excess waters are then discharged into a side-channel spillway constructed through the right abutment of the dam.

The spillway was designed with a discharge capacity capable of handling the maximum flow of record at the damsite (14,900 cubic feet per second on April 5, 1947). At maximum flood pool Union City Reservoir will extend 7.4 miles up French Creek and cover 2,290 acres. As the water inflow decreases, the stored water gradually drains out, and once again the reservoir bed becomes dry.

The lake forming process usually occurs during late winter and early spring as a result of melting snow and spring rains. The resulting lake usually

lasts only two or three months. However, if authorized, the present outlet facilities at Union City Reservoir could be modified to permit the creation of a summer pool of 580 acres.

Union City Reservoir is the perfect site for a picnic with family and friends. Visitors can relax in the quiet rural surroundings and enjoy the scenery and view of the dam. Picnic tables, grills, and restroom facilities are available for day use.

The Union City Reservoir provides visitors with the chance to enjoy a number of outdoor recreational opportunities. The different types of habitat and ecosystems that can be found at the reservoir provide hikers, bird watchers and the novice naturalist with a variety of flora and fauna to discover and enjoy.

French Creek entices many fishermen to the project to test their skills against game such as northern pike, walleye and muskie. There is also

an abundance of smallmouth bass and panfish in the creek and trout in many of the creek's feeder streams.

Hunting activities are open in non-developed areas of the Union City Reservoir unless posted otherwise.

**Union City Reservoir - Physical Address**

**1438 Middleton Rd.  
Waterford, PA 16441**

**Resource Manager's Office  
22079 State Highway 198  
Saegertown, PA 16433-6213  
(814) 763-4422**

[https://www.lrp.usace.army.mil/  
Missions/Recreation/Lakes/Union-  
City-Dam/](https://www.lrp.usace.army.mil/Missions/Recreation/Lakes/Union-City-Dam/)

**Lake and Dam Statistics**

Location: On French Creek, about 71.5 miles upstream from its junction with the Allegheny River at Franklin, Pa. The reservoir is located entirely in Erie County, Pa.

Drainage area above dam: . . . . . 222 sq. mi.  
Construction costs: . . . . . \$14,559,000

**Dam**

Type structure: Rolled earth embankment type  
Maximum height above streambed . . . . . 88 ft.  
Total length: . . . . . 1,420 ft.  
Maximum width at base: . . . . . 560 ft.  
Outlet works: . . . . .  
. . . . . 460-foot-long, 4.5' wide by 8' high  
inside dimension concrete conduit at  
base of dam  
. . . . . Uncontrolled side-channel spillway at  
the right abutment of the dam

**Lake**

Length at maximum pool: . . . . . 7.4 mi.  
Maximum Area: . . . . . 2,290 acres  
Elevation above sea level:  
Streambed at Dam: . . . . . 1,210 ft.  
Maximum Pool: . . . . . 1,278 ft.





Enjoy a safe outing. Observe these safety tips!

Water Hazards

Boat with caution! Be especially aware of the existence of underwater obstructions. In addition, floating debris may be at or near the lake surface as a result of fluctuating lake levels. Boaters and skiers should be watchful for these hazards; because of these floating and underwater hazards, diving is discouraged.

Personal Flotation Device (PFD)

When boating, the best protection against drowning is to wear your PFD. In Pennsylvania, U.S. Coast Guard approved PFDs are required for passengers 12 years of age and under, non-swimmers, and for all persons on board a kayak, canoe, paddle board or boat under 16 feet in length. Know the rules before you go out on the water.

Fire Protection

The fire potential is generally high during the recreation season. Help prevent forest fires by obeying the No Open Fire regulation in effect.

Boaters

Be considerate of those in canoes or fishing at anchor.

Alcohol and Boating Don't Mix

Don't drink while operating a boat. Alcohol is involved in at least 50 percent of all drownings and a major cause of death in recreational boating accidents.

Alcoholic beverages are prohibited on all Corps of Engineers lake lands and waters!

Be alert to changing weather/ lake conditions

Storms can come on very quickly. If lightning is spotted, head for shore immediately and seek out a safe location.

Anglers

Use a wading stick to check for sudden drop-offs in the water and for extra balance.

Federal rules and regulations concerning the use of this reservoir are set forth in Title 36, Chapter III, of the Code of Federal Regulations and are on display in public areas of this reservoir.



U.S. Army Corps of Engineers

