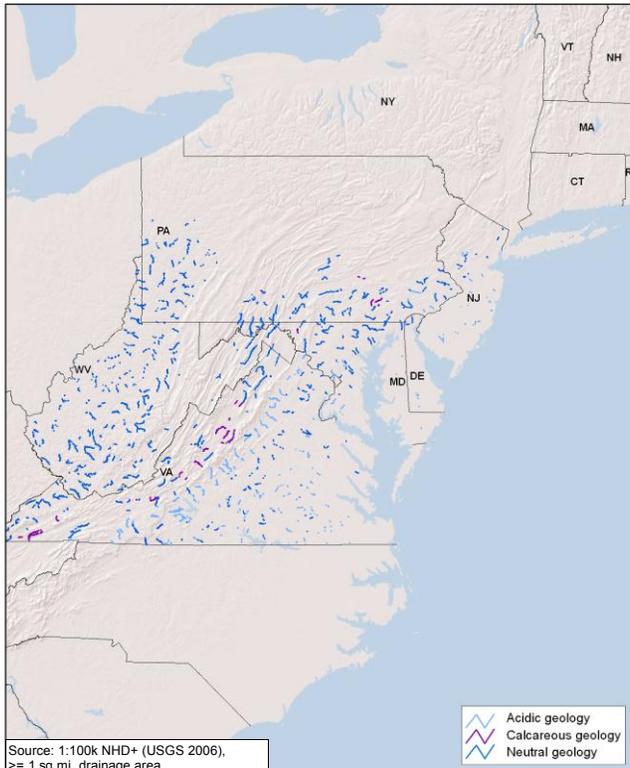


# Moderate Gradient, Warm, Small River

## Macrogroup: Small River

This map is based on a model and has had little field-checking. Contact your State Natural Heritage Ecologist or State Fish Game Agency for more information about this habitat.



Sideling Creek, © Doug Samson

### Description:

Warm, moderately fast-moving, small rivers of the southern Mid-Atlantic region. These small rivers of the south drain watersheds up to 200 sq.mi and have an average bankfull width of 69 feet. The moderately fast-moving waters are dominated by a well-defined pattern of alternating pools, riffles, and runs. Their substrate is composed of sand, gravel, and cobble, and they often have high water clarity and are well oxygenated. These moderate gradient rivers exhibit moderate to low sinuosity with moderately narrow valleys and adjacent riverside upland communities. Warm water temperatures in these rivers means the fish community will contain a higher proportion of warmwater species relative to coolwater species. These systems are unlikely to support any resident coldwater species. Additional variation in the biological community is expected in acidic, calcareous, and neutral geologic settings where the pH of the water will limit the distribution of certain macroinvertebrates, plants, and other aquatic biota.

**State Distribution:** DE, DC, MD, NJ, NY, PA, VA, WV

**Total Habitat (mi):** 3,664

**% Conserved:** 8.3 Unit = Acres of 100m Riparian Buffer

State	State Habitat %	Miles of Habitat	Acres GAP 1 - 2	Acres GAP 3	Total Acres Unsecured
VA	41	1501	4	26	918
WV	26	973	16	32	577
PA	21	773	14	24	456
MD	9	323	23	40	144
NJ	2	77	8	5	34
DE	1	20	0	3	10
DC	0	10	0	0	7
NY	0	1	0	0	1

### Similar Habitat Types:

These moderate gradient rivers are transitional types and often exhibit some characteristics of both the higher and lower gradient streams. Warm moderate gradient small rivers typically flow into moderate or low gradient warm larger rivers in areas of less topography.

### Places to Visit this Habitat:

Deer Creek, Rocks State Park | MD Gunpowder Falls, Gunpowder Falls State Park | MD Sideling Hill Creek, Sideling Hill Wildlife Management Area | PA Pennypack Creek, Penny Pack Park | PA Cranberry River, Monongahela National Forest | WV

## Associated Fish:

**Most Abundant:** central stoneroller, bluntnose minnow, white sucker, redbreast sunfish, river chub, american eel, eastern blacknose dace, warpaint shiner, rock bass, common shiner, northern hog sucker, greenside darter, tennessee shiner, telescope shiner, rosyface shiner, tessellated darter, creek chub, crescent shiner, redline darter, bigeye chub, longnose dace, striped shiner. **Less Abundant:** rainbow darter, mimic shiner, smallmouth bass, mottled sculpin, cutlip minnow, banded sculpin, banded darter, whitetail shiner, fantail darter, mountain shiner, margined madtom, bluehead chub, gizzard shad, fallfish, black redhorse, bigmouth chub, green sunfish, spotfin shiner, johnny darter, bluegill, creek chubsucker, rosefin shiner, spottail shiner, longear sunfish, largemouth bass, shield darter, golden redhorse.

## Species of Concern (G1 - G4):

**Fishes:** duskytail darter, yellowfin madtom, cheat minnow, roanoke logperch, roughhead shiner, orangefin madtom, blotchside logperch, sickle darter, sharphead darter, candy darter, tippecanoe darter, ohio lamprey, mountain brook lamprey, popeye shiner, longhead darter, fatlips minnow, kanawha minnow, potomac sculpin, gravel chub, bluebreast darter, greenfin darter, bluespar darter, swannanoa darter, glassy darter, tonguetied minnow, american brook lamprey, river redhorse, bigmouth chub, new river shiner, mirror shiner, tangerine darter, channel darter, gilt darter, appalachia darter, stripeback darter. **Crayfish, Mussels, and Snails:** elk river crayfish, big sandy crayfish, spiny scale crayfish, new river crayfish, cumberlandian combshell, shiny pigtoe, littlewing pearl mussel, james spiny mussel, purple bean, yellow lance, atlantic pigtoe, clubshell, tennessee clubshell, tennessee pigtoe, slabside pearl mussel, fluted kidneyshell, brook floater, atlantic spike, snuffbox, yellow lamp mussel, tennessee heelsplitter, green floater, salamander mussel, tan riffleshell, elktoe, triangle floater, slippershell mussel, northern lance, eastern pond mussel, round hickorynut, round pigtoe, kidneyshell, spiny riversnail

See Appendix 2 for scientific names

## Crosswalk to State Names:

**New York:** Confined river. **Maryland:** Piedmont Streams, Highland Streams, Coastal Plain Streams. **Pennsylvania:** Atlantic Basin Fish Warmwater Community 2, Atlantic Basin Fish Warmwater Community 1, Ohio-Great Lakes Basins Fish Warmwater Stream Community, Ohio - Great Lakes Basins Mussels Fluted Shell Mussel Community, Susquehanna - Potomac River Basins Mussels Eastern Elliptical Community.



Central stoneroller, © Matthew Pintar

