

Piceance Basin				
Geologic Period	Phase	Stratigraphic Unit	Hydrogeologic Unit	
Quaternary	Modern-Glaciation	Alluvium associated with present rivers	Alluvial Aquifers	
Neogene	Extension	Basalt flows	Volcanics	
Paleogene	Transition	No strata		
	Laramide	Uinta Formation	Upper Piceance Basin Aquifer	
		Green River Formation	Parachute Creek Member	Mahogany confining unit
			Anvil Points Member	Lower Piceance Basin Aquifer
			Garden Gulch Member	Green River confining unit
			Douglas Creek Member	
		Wasatch Formation	Wasatch-Fort Union Aquifer	
		Fort Union Formation		
Cretaceous	Interior Seaway	Mesaverde Group	Hunter Canyon/ Williams Form Formatation	Mesaverde Aquifer
			Mt. Garfield/Iles Formation	
			Lower Mesaverde Group, undivided	
		Mancos Shale	Mancos confining unit	
		Regional Cretaceous Seaway shale-dominated formations form multiple hydrogeologic units, most are confining units	Colorado Plateaus Regional and Eagle Basin-Central Colorado Trough hydrogeologic units	
Jurassic	Mesozoic Sandstones	Multiple sedimentary units deposited in the stable continent interior may be present that may form aquifers		
Triassic				
Permian	Ancestral Rocky Mountains	Ancestral Rocky Mountains event marine and non-marine sedimentary formations form multiple hydrogeologic units in the Eagle Basin-Central Colorado Trough and may be present, depending on location		
Pennsylvanian				
Mississippian	Paleozoic Carbonates	Lower Paleozoic sedimentary formations that are dominantly limestone and dolomite form multiple aquifers preserved in the Eagle Basin-Central Colorado Trough may be present depending on location		
Devonian				
Silurian				
Ordovician				
Cambrian				
Precambrian	Precambrian	Crystalline rocks of igneous and metamorphic origin in mountainous region	Crystalline bedrock	

Table 11b-02-05-01. Piceance Basin stratigraphic chart.

Piceance Basin								
Geologic Period	Phase	Stratigraphic Unit	Unit Thickness (ft)	Physical Characteristics	Hydrogeologic Unit	Hydrologic Characteristics		
Quaternary	Modern-Glaciation	Alluvium associated with present rivers			Alluvial Aquifers			
Neogene	Extension	Basalt flows			Volcanics			
Paleogene	Transition	No strata						
	Laramide	Uinta Formation		0-1,400	Silty sandstone, siltstone and marlstone	Upper Piceance Basin Aquifer		
		Green River Formation	Parachute Creek Member		500-1,800	Kerogenous, dolomitic marlstone and shale, nahcolite and halite	Mahogany confining unit	
			Anvil Points Member		0-1,870	Shale, fine-grained sandstone and marlstone	Lower Piceance Basin Aquifer	
			Garden Gulch Member		0-900	Claystone, siltstone, clay-rich oil shale and marlstone	Green River confining unit	
			Douglas Creek Member		0-900	Siltstone, shale and channel sandstone		
		Wasatch Formation		About 5,000	Shale, lenticular sandstone, and conglomerate	Wasatch-Fort Union Aquifer		
		Fort Union Formation		Very thin	Coarse-grained sandstone			
Cretaceous	Interior Seaway	Mesaverde Group	Hunter Canyon/Williams Form Formatation		up to 1,400	Interbedded sandstone, mudstone, carbonaceous claystone, shale and Cameo Coal	Mesaverde Aquifer	Target formations for coalbed methane
			Mt. Garfield/Iles Formation		up to 400	Interbedded sandstone, siltstone, shale and Pallisade or Cameo-Fairfield Coal		
			Lower Mesaverde Group, undivided		up to 3,000	Sandstone interbedded shale and Anchor Coal		
		Mancos Shale		More than 7,000	Mainly shale but Frontier Sandstone may be local aquifer	Mancos confining unit		
		Regional Cretaceous Seaway shale-dominated formations form multiple hydrogeologic units, most are confining units						
Jurassic	Mesozoic Sandstones	Multiple sedimentary units deposited in the stable continent interior may be present that may form aquifers				Colorado Plateaus Regional and Eagle Basin-Central Colorado Trough hydrogeologic units		
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Permian	Ancestral Rocky Mountains	Ancestral Rocky Mountains event marine and non-marine sedimentary formations form multiple hydrogeologic units in the Eagle Basin-Central Colorado Trough and may be present, depending on location						
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Precambrian	Precambrian	Crystalline rocks of igneous and metamorphic origin in mountainous region			Crystalline bedrock			

Table 11b-02-05-01. Piceance Basin stratigraphic chart, detailed. Colorado Geological Survey ON-010 Colorado Groundwater Atlas.

Sources: Taylor and others (1986); Freethey and Cordy (1991); Glover and others (1998); Raynolds and Hagadorn (2017)