

Sand Wash Basin					
Period	Phase	Stratigraphic Unit		Hydrogeologic Unit	
Quaternary	Modern-Glaciation	Alluvium associated with present rivers		Alluvial Aquifer	
Neogene	Extension	Basalt flows and small intrusives		Volcanics	
		Browns Park Formation		Browns Park Aquifer	
Paleogene	Transition	Bishop Conglomerate		Bishop Aquifer	
	Laramide	Green River Formation	Laney Member	Green River confining unit	
			Cathedral Bluffs Tongue	Wasatch Aquifer	
			Tipton Tongue	Green River confining unit	
		Wasatch Formation		Wasatch-Fort Union Aquifer: Wasatch Zone	
		Fort Union Formation		Fort Union Zone	
Cretaceous	Interior Seaway	Lance Formation-Fox Hills Sandstone		Lance-Fox Hills Aquifer	
		Lewis Shale		Lewis confining unit	
		Mesaverde Group	Williams Fork Formation	Upper member	Mesaverde Aquifer
				Twentymile Sandstone	
				Middle Member	
				Lower member	
		Iles Formation	Trout Creek Sandstone	Mesaverde Aquifer	
			lower members		
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 th		
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	Colorado Plateaus Regional and Eagle Basin-Central Colorado Trough hydrogeologic units		
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	Colorado Plateaus Regional and Eagle Basin-Central Colorado Trough hydrogeologic units		
Devonian					
Silurian					
Ordovician					
Cambrian					
Precambrian	Precambrian	Crystalline rocks of igneous and metamorphic origin in mountainous region	Crystalline bedrock		

Table 11b-02-06-01. San Wash Basin stratigraphic chart.

Sand Wash Basin

Period	Phase	Stratigraphic Unit	Unit Thickness (ft)	Physical Characteristics	Hydrogeologic Unit	Hydrologic Characteristics		
Quaternary	Modern-Glaciation	Alluvium associated with present rivers			Alluvial Aquifer			
Neogene	Extension	Basalt flows and small intrusives		Basalt flows, mafic, intermediate, and felsic intrusives	Volcanics			
		Browns Park Formation		Loosely cemented tuffaceous sandstone and conglomerate	Browns Park Aquifer			
Paleogene	Transition	Bishop Conglomerate		Conglomerate and ash flow tuff	Bishop Aquifer			
	Laramide	Green River Formation	Laney Member	1,000 to >3,000	Shale and marlstone	Green River confining unit		
			Cathedral Bluffs Tongue		Shale and fine-grained sandstone	Wasatch Aquifer		
			Tipton Tongue		Shale and marlstone	Green River confining unit		
		Wasatch Formation	<1,000 to >4,000	Siltstone and sandy shale; thick arkosic sandstone in eastern part of the basin	Wasatch-Fort Union Aquifer: Wasatch Zone			
		Fort Union Formation	<1,000 to 3,000	Interbedded sandstone, variable thickness with siltstone, shale, lignite and coal; basal sandstone and conglomerate	Fort Union Zone			
Cretaceous	Interior Seaway	Lance Formation-Fox Hills Sandstone			Sandstone with interbedded shale and coal	Lance-Fox Hills Aquifer		
		Lewis Shale			Shale with fine-grained sandstone beds	Lewis confining unit	Sandstone beds can be local aquifer	
		Mesaverde Group	Williams Fork Formation	Upper member	300 to 900	Claystone, siltstone, sandstone, and commercially mined coal	Mesaverde Aquifer	Target formations for coalbed methane
				Twentymile Sandstone	80 to 180	Fine grained well sorted sandstone		
				Middle Member	400 to 600	Marine shale in the east grading west to nonmarine mudstone, siltstone, and sandstone to the west		
				Lower member	300 to 500	Mudstone, shale, sandstone, and commercially mined coal		
			Iles Formation	Trout Creek Sandstone	75-150	Fine grained well sorted sandstone		
			lower members	1,200 to 1,600	Sandstone with interbedded shale and coal			
		Mancos Shale		Average 7,000	Predominately shale, mudstone and claystone interbedded with sandstone	Mancos confining unit	Sandstones are local aquifers	
		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		
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-02-06-01. San Wash Basin stratigraphic chart, detailed. Colorado Geological Survey ON-010 Colorado Groundwater Atlas.

Sources: Tweto (1976); Taylor and others (1986); Robson and Stewart (1990); Freethey and Cordy (1991); Glover and others (1998); Geldon (2003); Raynolds and Hagadorn (2017)