



Colorado River Southeast Watershed Management Unit Water Quality Assessment - 2004 305(b)

The Colorado River Southeast Watershed Management Unit includes all streams located in the U.S.G.S. Hydrological Units (HUCs) listed in Table 6-1. Some of the major streams are the San Juan River, Dolores River, Mill Creek, Montezuma Creek, LaSal River, Geysers Creek and part of the Colorado River.

Table 1. U.S.G.S. Hydrological Units in the Colorado River Southeast Watershed Management Unit.

Hydrological Unit Code	Hydrological Unit Name
14010005	Colorado Headwaters/Plateau Utah
14030001	Westwater Canyon
14030002	Upper Dolores
14030004	Lower Dolores
14030005	Upper Colorado-Kane Springs
14070006	Lower Lake Powell
14080201	Lower San Juan-Four Corners Southeast
14080202	McElmo
14080203	Montezuma
14080204	Chinle
14080205	Lower San Juan

Beneficial Use Assessment - Streams were assessed against State water quality standards and pollution indicators to determine if their designated beneficial uses were being met. The streams in the Colorado River Southeast Management Unit are classified as one of the following or a combination of the following beneficial use classifications: protected as a source of drinking water (1C), secondary contact recreation (2B), cold water game fish (3A), warm water game fish (3B), aquatic birds and other aquatic life, (3D), and agricultural use including irrigation and stock watering (4) (Figure 4).

The streams in this unit were not assessed for Class 2B, contact recreation. For the remaining beneficial use designations, at least one beneficial use was assessed. A total of 566 stream miles were assessed. Of those assessed, 431 miles (76.2%) were assessed as fully supporting all the beneficial uses assessed. One-hundred three (103) miles (18.2%) were assessed as partially supporting, 32 miles (5.6%) were assessed as not supporting at least one designated beneficial use (Figure 1).

Of the stream miles assessed for aquatic life, 481.4 miles (85.1%) were assessed as fully supporting, 84.6 miles (14.9%) not supporting this beneficial use (Table 2).

Of the stream miles assessed for agricultural use, 518.6 miles (91.6%) were assessed as fully supporting, 37.3 miles (6.6%) partially supporting, and 10.2 miles (5.6%) not supporting this beneficial use.

For Class 1 waters (source of drinking water), four-hundred (451.2) miles were assessed. Of these, 429.4 miles (95.2%) were assessed as fully supporting, 21.8 miles (4.8%) were partially supporting, and no stream miles were assessed as not supporting this beneficial use.

Table 3 lists the stream miles that were included in the new assessment categories after being evaluated for beneficial use support. Stream assessment units can be assigned to more than one category, i.e. Category 5A, TMDL required, and 4C, impairment caused by pollution, not TMDL required.

Figure 2 shows the relative percent of stream miles effected by various causes of water quality impairment. The causes of impairment included total dissolved solids, metals, temperature, and gross alpha.

The relative impact of each source is shown in Figure 3. The major sources of impairment were agricultural activities and natural sources. Resource extraction from uranium mining was the source of gross alpha contamination.

A map of the beneficial use categories is found in Figure 4. The reader is referred to the 2004 305(b) report to obtain individual assessment unit names, descriptions, and the stream miles in each unit.

Colorado River–The Colorado River was assessed as fully supporting all of its beneficial uses except for 37.6 miles downstream from the Utah/Colorado state line. This portion of the river exceeded the chronic levels for selenium and the source is outside the boundaries of the state.

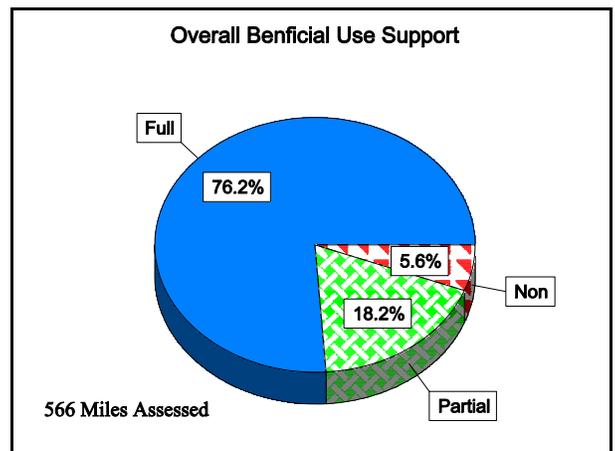


Figure 1. Overall beneficial use support based upon at least one beneficial use being assessed-Colorado River Southeast.

San Juan River–The two segments of the San Juan River that were assessed were found to be supporting their beneficial uses. That portion of the San Juan River that is entirely within the boundaries of the Navajo Indian Reservation was not assessed. The Navajo Indian Nation requested that Utah not list any waters that were within their reservation boundaries as being assessed or placed on the State’s 303(d) list because they are in the process of having their water quality program approved by EPA. As such, the waters within their boundaries would fall under their jurisdiction. The State agreed with their request and did not assess or list the portions of the San Juan River or McElmo Creek that are completely within the reservation boundaries. For those waters where the waterbodies are contiguous with both tribal lands and state or federal lands, either group can choose to list the water on their respective 303(d) lists.

Paria River–The upper and lower sections of the Paria River remained on the 303(d) list as not supporting the agricultural beneficial use classification because of high concentrations of total dissolved solids. During the extreme drought that was in southern Utah, the Paria River dried up and it was not possible to collect samples during the intensive monitoring survey.

Cottonwood Wash–This area was assessed as not supporting its 1C (source of drinking water) classification because violations of the standard for gross alpha. A TMDL has been completed and approved by EPA and was moved to Category 4A, all TMDLs completed and approved by EPA.

Onion Creek has a completed TMDL for total dissolved solids and was placed in the new Category 4A also.

Mill Creek also has an approved TMDL for total dissolved solids and is now listed in Category 4A also.

Dolores River–The Dolores River was assessed as fully supporting all of the beneficial uses that it was assessed for. Although the total dissolved solids exceeded the standard, it was not listed because it was determined that the increase in salinity was caused by the severe drought.

LaSal Creek–This stream was assessed as fully supporting its beneficial uses.

Table 2. Individual Beneficial Use Support Summary Colorado River Southeast Watershed Management Unit							
Goals	Use	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Partially Supporting	Size Not Supporting	Size Not Attainable
Protect & Enhance Ecosystems	Aquatic Life	566.0	481.4 85.1%	0.0	84.6 14.9%	0.0	0.0
Protect & Enhance Public Health	Fish Consumption	0.0	0.0	0.0	0.0	0.0	0.0
	Swimming	0.0	0.0	0.0	0.0	0.0	0.0
	Secondary Contact	0.0	0.0	0.0	0.0	0.0	0.0
	Drinking Water	451.2	429.4 95.2%	0.0	0.0	21.8 4.8%	0.0
Social and Economic	Agricultural	566.0	518.6 91.6%	0.0	37.3 6.6%	10.2 1.8%	0.0
	Total	566.0	431.3 76.2%	0.0	102.8 18.2%	31.9 5.6%	0.0

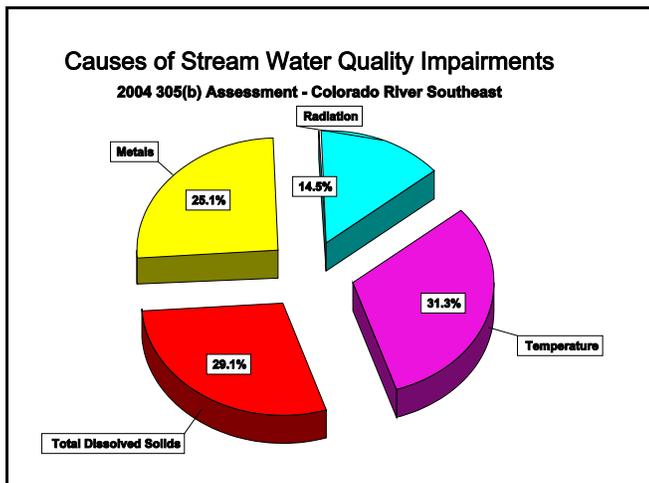


Figure 2. Relative percent contribution of causes to impairment of stream water quality.

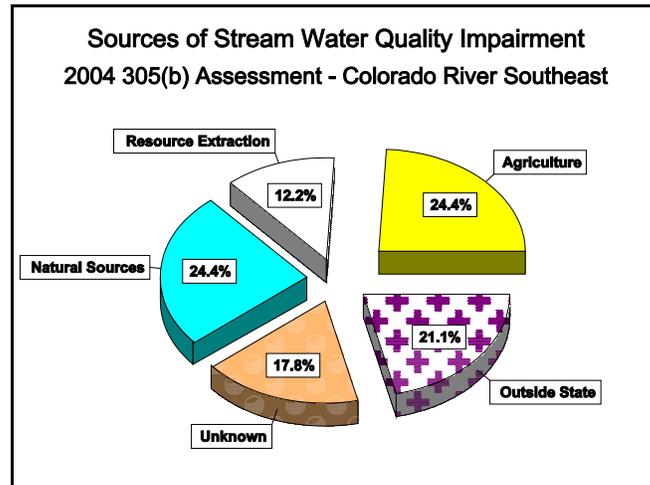


Figure 3. Relative percent contribution by sources to impairment of stream water quality.

Table 3. Stream Miles by Assessment Categories.

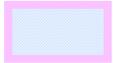
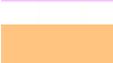
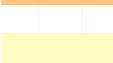
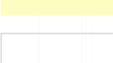
Category	Definition	Stream Miles
1	All designated beneficial uses were assessed and are fully supported.	0
2	Some of the designated uses are fully supported, but there is insufficient data to determine beneficial use support for the remaining designated uses.	431
3	Insufficient or no data and information to determine if any designated use is attained	269
4A	TMDL has been completed for all pollutants.	79
4B	Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future	0
4C	The impairment is not caused by a pollutant, e.g. habitat alteration.	0
5A	Assessment unit is impaired by a pollutant and a TMDL is needed.	55
5B	AUs are listed in this category to identify those pollutants for which a TMDL has been approved, but TMDLs are still required for other pollutants identified, water quality standards are now being met, new delineation of assessment unit, changes in beneficial use classification result in meeting standards, change in listing methods results in meeting standards or change in water quality standards and standards now being met.	0

Colorado River Southeast Unit

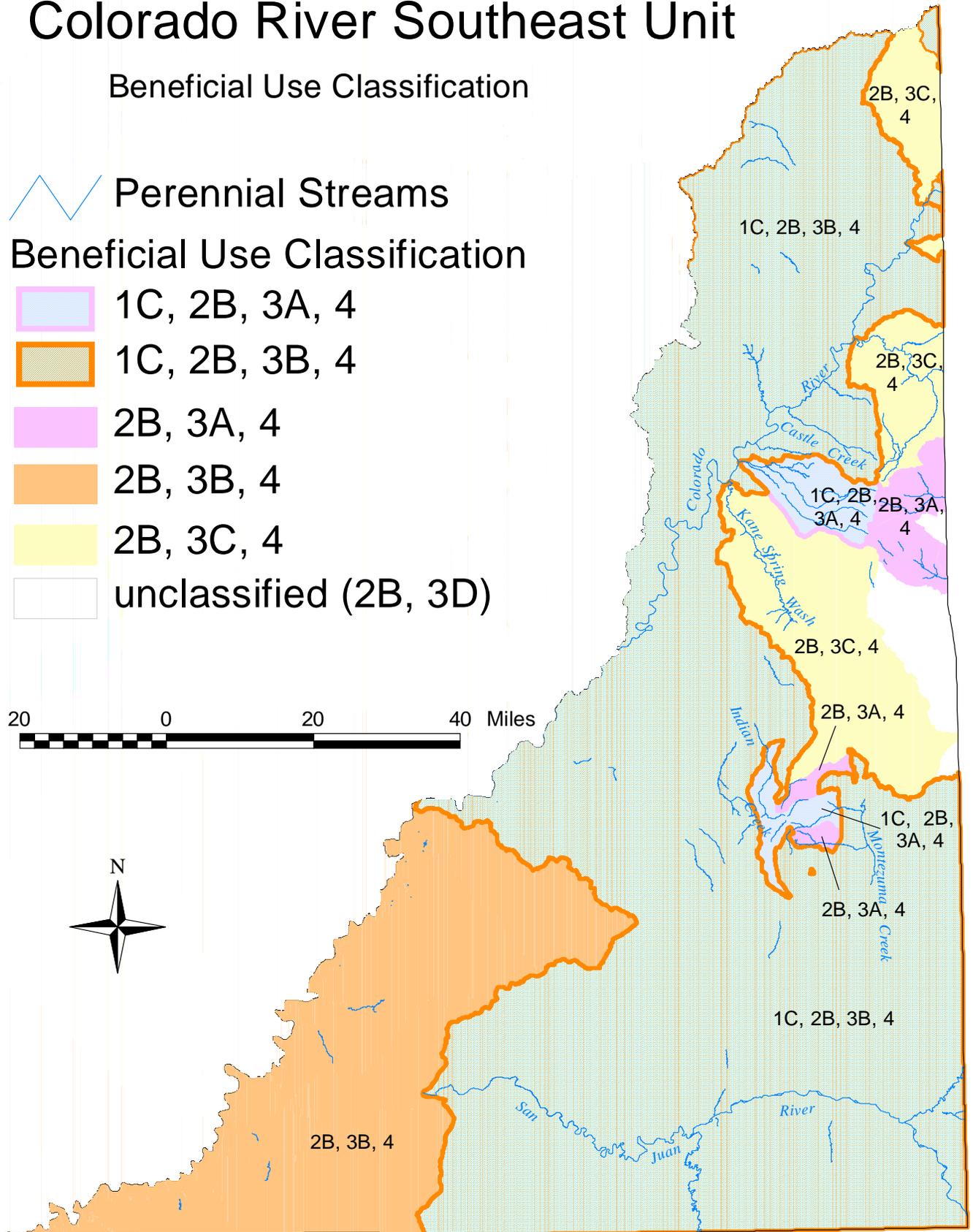
Beneficial Use Classification

 Perennial Streams

Beneficial Use Classification

-  1C, 2B, 3A, 4
-  1C, 2B, 3B, 4
-  2B, 3A, 4
-  2B, 3B, 4
-  2B, 3C, 4
-  unclassified (2B, 3D)

20 0 20 40 Miles

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Figure 4. Beneficial use classifications - Colorado River Southeast.

Colorado River Southeast Management Unit Assessment Categories 2004

Moab Area Inset (HUC 14030005)

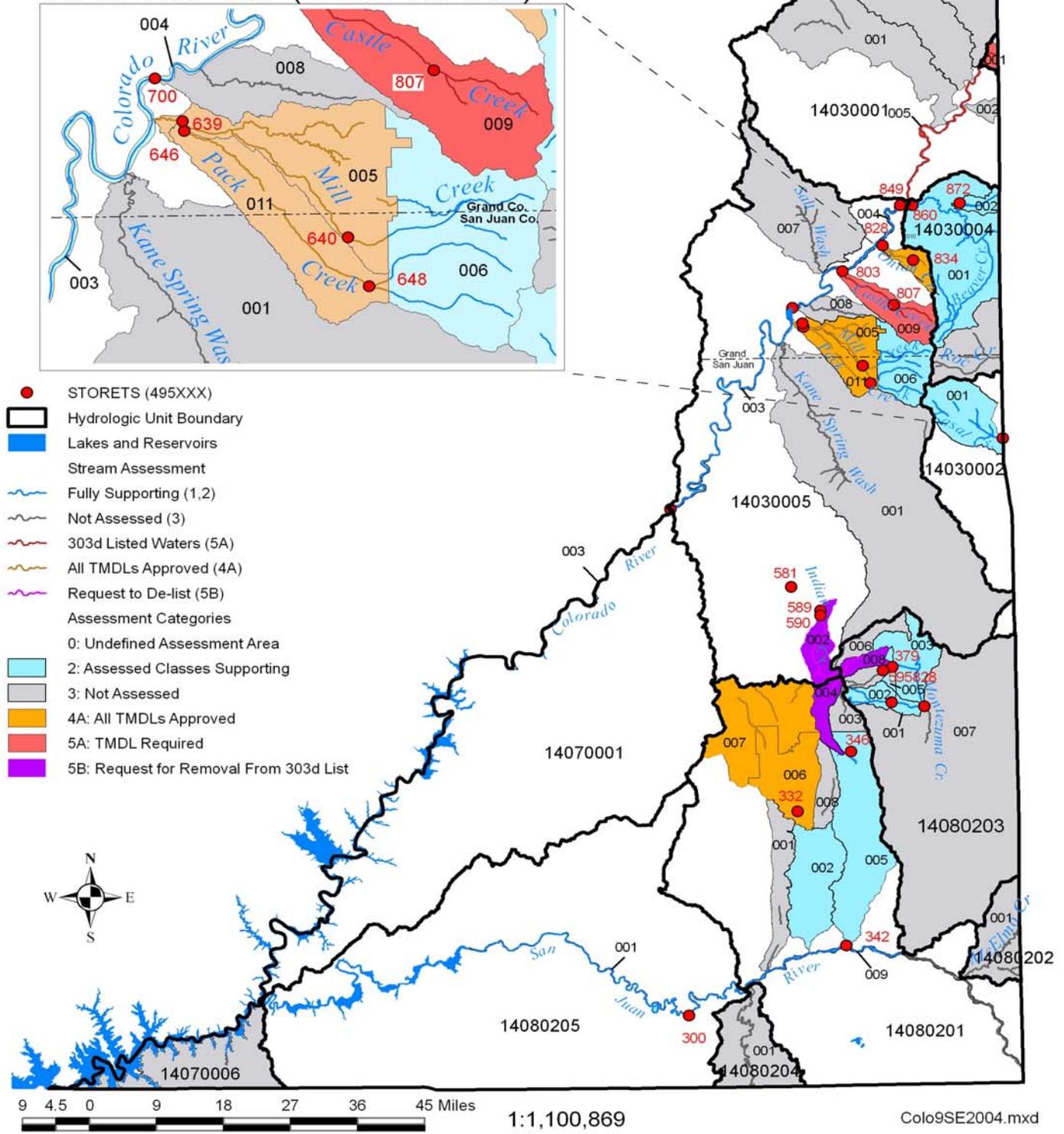


Figure 5. Beneficial use assessment by categories - Colorado River Southeast Watershed Management Unit.

