



Cedar/Beaver Watershed Management Unit Water Quality Assessment - 2004

The Cedar / Beaver Watershed Management Unit includes all streams located in the U.S.G.S Hydrological Units (HUCs) listed in Table 1. There are not many streams within this unit with the major streams being the Beaver River, Coal Creek, Shoal Creek and Pinto Creek.

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 Lower Colorado Management Unit are classified as one of the following or a combination of the following beneficial use classifications: secondary contact recreation (2B), cold water game fish (3A), warm water game fish (3B), non-game fish and other aquatic life and agricultural use including irrigation and stock watering (4).

Hydrological Unit Code	Hydrological Unit Name
16030006	Escalante Desert
16030007	Beaver Bottoms-Upper Beaver

There were 226 stream miles assessed. Of these, 176 miles (77.7%) were assessed as fully supporting based up at least one beneficial use being assessed; and 51 miles (22.3 %) were assessed as partially supporting at least

one beneficial use (Figure 1).

Two-hundred twenty-six (226) stream miles were assessed for aquatic life and agricultural use support. Of the stream miles assessed for agricultural use, all of them were evaluated as fully supporting this designated beneficial use. For aquatic life use support, 176 miles (77.7%) were assessed as fully supporting and 23 miles (23.3%) as partially supporting. The individual beneficial use support is listed in Table 2. The number of stream miles assessed by category are listed in Table 3.

The major causes of impairment were nutrients (total phosphorus), temperature, and habitat alterations. The percent of miles impacted were 22.3 percent respectively for all causes. (Figure 2). The relative impact of these causes is shown in Figure 3.. Table 3 lists the stream miles that were included in the new assessment categories after being evaluated for beneficial use support.

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.

The streams within the Cedar/Beaver Watershed Management Unit were also placed in new assessment categories: **Category 2**, some beneficial uses assessed and fully supporting; **Category 3**, not assessed; **Category 4A**, all TMDLs completed; and **Category 4C**, waters impaired by pollution, no TMDL required. One assessment unit was assigned to Category 4A and 4C.

Table 3 is a list of the categories with the number of stream miles assigned to each category. Specific assessment units within each category are published in Utah's 2004 305(b) report. The beneficial use assessment categories for streams are displayed in Figure 4. The reader is referred to the 305(b) report to obtain individual assessment unit names, descriptions and stream miles.

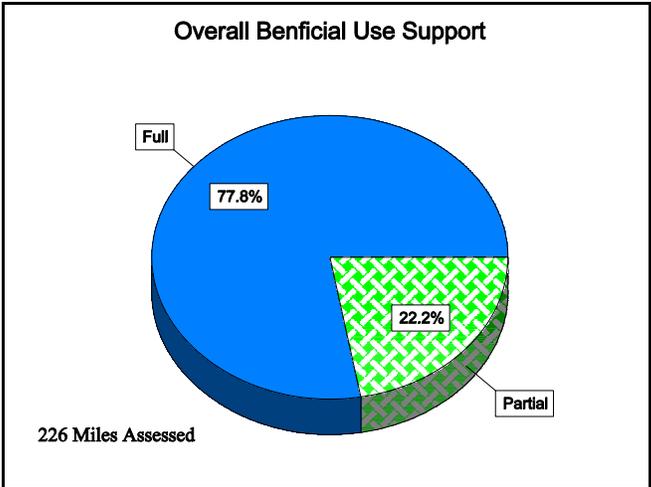


Figure 1. Overall beneficial use support based upon at least one beneficial use being assessed-Cedar/Beaver.

Beaver River–The Beaver River and its tributaries from the USFS boundary to its headwaters was assessed as a Category 2 water, all beneficial uses assessed were fully supported.

From Minersville Reservoir to the USFS boundary, the river and its tributaries were assessed as partially supporting its aquatic life beneficial use. A TMDL for total phosphorus has been completed and approved by EPA. This section was assessed as a Category 4A water, all TMDLs completed. In addition, it was placed in Category 4C, waters that are affected by pollution. The cause was habitat alteration and it does not require a TMDL.

The section of the Beaver River below Minersville Reservoir was not assessed and that segment was placed in Category 3.

Coal Creek--All beneficial uses that were assessed were fully supporting and it was placed in Category 2.

Table 8-3. Individual Use Support Summary for the Cedar/Beaver Watershed Management Unit (Stream Miles).							
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	226.4	175.8 (77.7%)	0.0	50.6 (22.3%)	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	0.0	0.0	0.0	0.0	0.0	0.0
Social and Economic	Agricultural	226.4	226.4 (100.05)	0.0	0.0	0.0	0.0
	Total	226.4	175.8 (77.7%)	0.0	50.6 (22.3%)	0.0	0.0

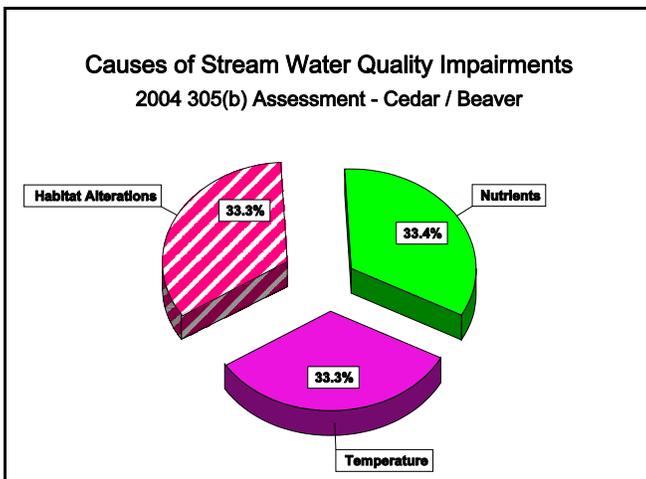


Figure 2. Relative percent contribution by cause to impairment of stream water quality.

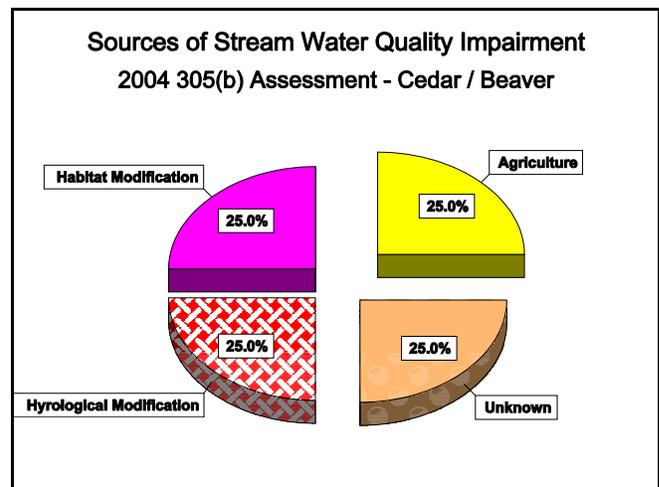


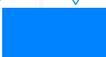
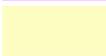
Figure 3. Relative percent contribution by source to impairment of stream water quality.

Table 3. Stream Miles by Assessment Category - Cedar / Beaver

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.	176
3	Insufficient or no data and information to determine if any designated use is attained	184
4A	TMDL has been completed for all pollutants.	51
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.	51
5A	Assessment unit is impaired by a pollutant and a TMDL is needed.	0
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

Cedar / Beaver Unit

Beneficial Use Classes

-  8 Digit HUC Boundary
-  Perennial Streams
-  Lakes and Reservoirs
- Beneficial Use Classification**
-  2B, 3A, 4
-  2B, 3C, 4
- undefined (white)

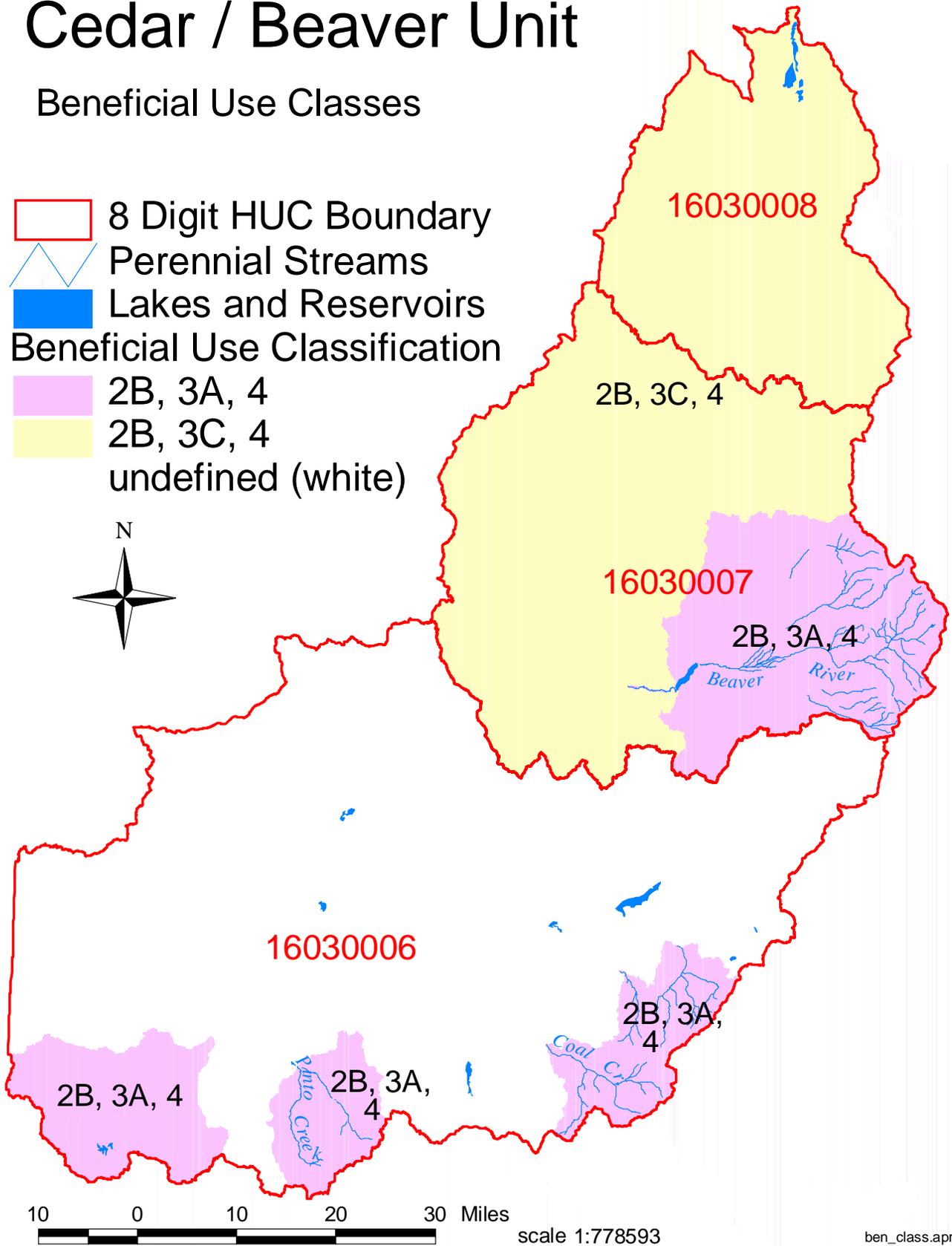


Figure 4. Beneficial use designations - Cedar/Beaver Watershed Management Unit.

Cedar / Beaver Unit

2004 Assessment Categories

- STORET
 - ▭ 8-digit HUC Boundary
 - ▭ Perennial Streams
 - ▭ Lakes and Reservoirs
- Assessment Categories
- ▭ 2: Assessed Beneficial Uses Supporting
 - ▭ 3: Not Assessed
 - ▭ 4A, 4C*
- 4A: Approved TMDLs.
 *A pollution parameter listed as category 4C does not require a TMDL analysis.

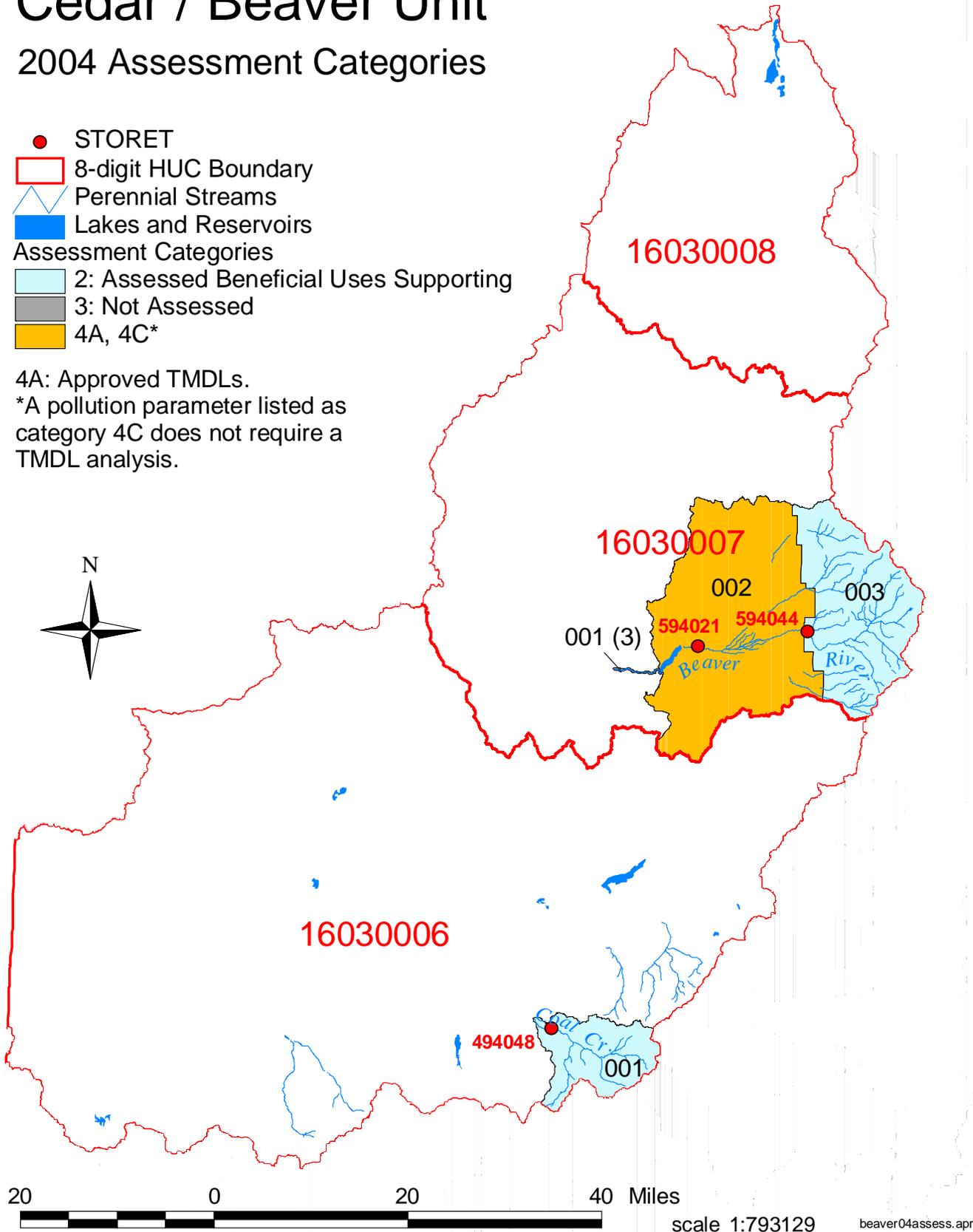


Figure 5. Beneficial use assessment by categories - Cedar/Beaver Watershed Management Unit.

