
12.1 INTRODUCTION

The Colorado River Southeast Watershed Management Unit (WMU) includes all streams located in the USGS Hydrological Units (HUCs) listed in Table 12-1. Some of the major streams in this WMU include: San Juan River, Dolores River, Mill Creek, Montezuma Creek, La Sal River, Geyser Creek and part of the Colorado River.

Biological, water chemistry and field data collected from January 1, 2004 through December 31, 2008 were used to make assessments. Water quality data were compared against standards established for each of the designated beneficial uses. Figure 12-1 shows the beneficial use classes for this watershed management unit.

12.2 IMPAIRED WATERS

The list of streams and lakes impaired and requiring a TMDL (Category 5; Section 303d) for the Colorado River Southeast are presented in Table 12-2. New listings for 2010 include Comb Wash, Cottonwood Wash, Westwater Creek, Pack Creek, Johnson Creek, and Recapture Reservoir. Assessment results for all stream AUs are presented in Table 12-3 and for lakes in Table 12-4. Lake assessments are further discussed in the next section.

12.3 LAKE ASSESSMENTS

Water quality assessment for lakes includes determination of Carlson's trophic state index (TSI), water chemistry, phytoplankton species dominance, reported fish kills, and water quality trends.

Table 12-5 shows TSIs based on each sample collected from May through September by sample date. Table 12-6 contains a summary of lake trophic status by study periods. Note that some of the changes in TSIs between assessment periods are due to the variability in the lakes and reservoirs and some is due to switching methodologies between 2008 and 2010. The reported TSI for 2010 is based on Chl-a whereas prior reporting cycles averaged the TSI based on secchi disk depth (TSI-SD), Chl-a (TSI-Chla), and total phosphorus (TSI-TP). Table 12-6 includes the TSIs using both the 2008 and 2010 method using the 2010 data.

TSI values for some lakes and reservoirs differed between the 2008 and 2010 methods. Small differences are defined as a difference in TSIs of 6-10, medium differences 11-20, and large differences as greater than 20. Small differences were observed for Lloyds and Recapture Reservoirs. These small differences suggest little difference in trophic state between the new and older methods.

For the purpose of assessing trends, the TSI's from the most recent five assessment periods were considered. No obvious trends in TSIs were observed among lakes in this watershed.

12.4 HEALTH ADVISORIES

Mill Creek-1 has a fish consumption advisory for mercury.

Tables

Table 12-1 USGS Hydrological Units in the Colorado River Southeast Watershed Management Unit

USGS 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 Delores
14030004	Lower Delores
14030005	Upper Colorado-Kane Springs
14070006	Lower Lake Powell
14070007	Paria
14080201	Lower San Juan-Four Corners Southeast
14080202	McElmo
14080203	Montezuma
14080204	Chinle
14080205	Lower San Juan

Table 12-2 Impaired Streams and Lakes Requiring a TMDL – Colorado River Southeast Watershed

Impaired Streams and Lakes Requiring a TMDL - Colorado River Southeast Watershed				
AU ID	AU Name	Water Type	Size	Location Description
UT14080201-011_00	Comb Wash	STREAM	31.6	Comb Wash and tributaries from the confluence with San Juan River to headwaters
Cause	Cycle First Listed	TMDL Status	Use	Source
Benthic-Macroinvertebrate Bioassessments	2010	Low Priority	Warm Water Aquatic Life	<ul style="list-style-type: none"> • Source Unknown
AU ID	AU Name	Water Type	Size	Location Description
UT14010005-001_00	Colorado River-6	RIVER	3.84 MILES	Colorado River from HUC 14010005-14030001 boundary to Colorado State Line
Cause	Cycle First Listed	TMDL Status	Use	Source
Selenium	2006	Medium Priority	Warm Water Aquatic Life	<ul style="list-style-type: none"> • Sources Outside State Jurisdiction or Borders
AU ID	AU Name	Water Type	Size	Location Description

Impaired Streams and Lakes Requiring a TMDL - Colorado River Southeast Watershed

UT14030001-001_00	Cottonwood Wash	RIVER	20.869 MILES	Cottonwood Wash from Colorado River confluence to headwaters
Cause	Cycle First Listed	TMDL Status	Use	Source
Benthic-Macroinvertebrate Bioassessments	2010	Low Priority	Cold Water Aquatic Life	• Source Unknown
AU ID	AU Name	Water Type	Size	Location Description
UT14030001-003_00	Westwater Creek	RIVER	0.01 MILES	Westwater Creek and tributaries from confluence with Colorado River to headwaters
Cause	Cycle First Listed	TMDL Status	Use	Source
Benthic-Macroinvertebrate Bioassessments	2010	Low Priority	Cold Water Aquatic Life	• Source Unknown
AU ID	AU Name	Water Type	Size	Location Description
UT14030001-005_00	Colorado River-5	RIVER	33.895 MILES	Colorado River from Dolores River confluence to HUC 14010005 boundary

Impaired Streams and Lakes Requiring a TMDL - Colorado River Southeast Watershed

Cause	Cycle First Listed	TMDL Status	Use	Source
Selenium	2006	Medium Priority	Warm Water Aquatic Life	<ul style="list-style-type: none"> • Sources Outside State Jurisdiction or Borders
AU ID	AU Name	Water Type	Size	Location Description
UT14030004-001_00	Dolores River	RIVER	61.727 MILES	Dolores River and tributaries (except Granite Creek) from confluence with Colorado River to headwaters or Utah-Colorado state line
Cause	Cycle First Listed	TMDL Status	Use	Source
Total Dissolved Solids	2008	Low Priority	Agricultural	<ul style="list-style-type: none"> • Source Unknown
AU ID	AU Name	Water Type	Size	Location Description
UT14030005-003_00	Colorado River-3	RIVER	62.688 MILES	Colorado River from Green River confluence to Moab
Cause	Cycle First Listed	TMDL Status	Use	Source
Selenium	2006	Medium Priority	Warm Water Aquatic Life	<ul style="list-style-type: none"> • Sources Outside State Jurisdiction or Borders

Impaired Streams and Lakes Requiring a TMDL - Colorado River Southeast Watershed

AU ID	AU Name	Water Type	Size	Location Description
UT14030005-004_00	Colorado River-4	RIVER	35.767 MILES	Colorado River from Moab to HUC unit (14030005) boundary
Cause	Cycle First Listed	TMDL Status	Use	Source
Selenium	2006	Medium Priority	Warm Water Aquatic Life	<ul style="list-style-type: none"> • Sources Outside State Jurisdiction or Borders
AU ID	AU Name	Water Type	Size	Location Description
UT14030005-009_00	Castle Creek-1	RIVER	9.1 MILES	Castle Creek and tributaries from confluence with Colorado River to Seventh-Day Adventist diversion
Cause	Cycle First Listed	TMDL Status	Use	Source
Benthic-Macroinvertebrate Bioassessments	2008	Low Priority	Warm Water Aquatic Life	
AU ID	AU Name	Water Type	Size	Location Description
UT14030005-011_00	Pack Creek	RIVER	15.214 MILES	Pack Creek and tributaries from the confluence with Mill Creek to USFS

Impaired Streams and Lakes Requiring a TMDL - Colorado River Southeast Watershed

				boundary
Cause	Cycle First Listed	TMDL Status	Use	Source
Selenium	2010	Low Priority	Cold Water Aquatic Life	<ul style="list-style-type: none"> • Natural Sources • Source Unknown
Temperature, water	2006	Medium Priority	Cold Water Aquatic Life	
AU ID	AU Name	Water Type	Size	Location Description
UT14030005-013_00	Onion Creek Upper	RIVER	2.198 MILES	Onion Creek and tributaries from road crossing above Stinking Springs to headwaters
Cause	Cycle First Listed	TMDL Status	Use	Source
Total Dissolved Solids	2008	Low Priority	Agricultural	<ul style="list-style-type: none"> • Agriculture • Natural Sources • Source Unknown
AU ID	AU Name	Water Type	Size	Location Description

Impaired Streams and Lakes Requiring a TMDL - Colorado River Southeast Watershed

UT14080201-004_00	Johnson Creek	RIVER	3.894 MILES	Johnson Creek and tributaries from confluence with Recapture Creek to headwaters
Cause	Cycle First Listed	TMDL Status	Use	Source
Temperature, water	2010	Low Priority	Cold Water Aquatic Life	<ul style="list-style-type: none"> • Natural Sources • Source Unknown
AU ID	AU Name	Water Type	Size	Location Description
UT-L-14080201-007_00	Recapture Reservoir	FRESHWATER RESERVOIR	17 ACRES	TOWNSHIP: 36S RANGE: 22E SECTION: 10 USGS MAP AND DATE: BLANDING-1962, WMU Colorado River Southeast
Cause	Cycle First Listed	TMDL Status	Use	Source
Oxygen, Dissolved	2006	Low Priority	Cold Water Aquatic Life	
Temperature, water	2010	Low Priority	Cold Water Aquatic Life	
AU ID	AU Name	Water Type	Size	Location Description

Impaired Streams and Lakes Requiring a TMDL - Colorado River Southeast Watershed

UT-L-14080203-002_00	MONTICELLO LAKE	FRESHWATER LAKE	3 ACRES	LL= 375340/1092800 33S 22E 23 USGS MAP AND DATE: MONTICELLO, UTAH-1957 WATERSHED: SPRING CREEK, WMU Colorado River Southeast
Cause	Cycle First Listed	TMDL Status	Use	Source
pH	2006	Low Priority	Cold Water Aquatic Life	

Table 12-3 Assessment Results for Streams – Colorado River Southeast Watershed

Assessment Results for Streams Colorado River Southeast Watershed						
AU ID	AU Name		Water Type	Size	Location Description	
UT14010005-001_00	Colorado River-6		RIVER	3.84 MILES	Colorado River from HUC 14010005-14030001 boundary to Colorado State Line	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Supporting	N	Selenium	2006	Warm Water Aquatic Life	Not Supporting
AU ID	AU Name		Water Type	Size	Location Description	

Assessment Results for Streams Colorado River Southeast Watershed

UT14010005-002_00	Unknown tribs		RIVER	0.01 MILES	Unknown tributaries from HUC boundary (14010005) to Utah-Colorado state line	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Assessed	N			Warm Water Aquatic Life	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030001-001_00	Cottonwood Wash		RIVER	20.869 MILES	Cottonwood Wash from Colorado River confluence to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment

Assessment Results for Streams Colorado River Southeast Watershed

Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Supporting	N	Benthic-Macroinvertebrate Bioassessments	2010	Cold Water Aquatic Life	Not Supporting
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030001-002_00	Little Dolores Rive		RIVER	0.01 MILES	Little Dolores River from confluence with Colorado River to Utah-Colorado state line	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Assessed	N			Cold Water Aquatic Life	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030001-003_00	Westwater Creek		RIVER	0.01 MILES	Westwater Creek and tributaries from confluence with Colorado River to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Supporting	N	Benthic-Macroinvertebrate Bioassessments	2010	Cold Water Aquatic Life	Not Supporting
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

Assessment Results for Streams Colorado River Southeast Watershed						
AU ID	AU Name		Water Type	Size	Location Description	
UT14030001-004_00	Bitter Creek		RIVER	0.01 MILES	Bitter Creek and tributaries from Colorado River to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Non-Game Fish and Other Aquatic Life	Not Assessed	N			Non-Game Fish and Other Aquatic Life	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030001-005_00	Colorado River-5		RIVER	33.895 MILES	Colorado River from Dolores River confluence to HUC 14010005 boundary	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Fully	N			Agricultural	Fully Supporting

Assessment Results for Streams Colorado River Southeast Watershed

Domestic Water Supply	Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Fully Supporting	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Assessed	N	Selenium	2006	Warm Water Aquatic Life	Not Supporting
	Not Supporting					

AU ID	AU Name	Water Type	Size	Location Description
--------------	----------------	-------------------	-------------	-----------------------------

UT14030001-060_00	Undefined Waterbodies (CU 14030001)	RIVER INTERMITTE NT	5.94 MILES	Area of undefined waterbodies
-------------------	-------------------------------------	---------------------	------------	-------------------------------

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
------------	-------------------	-------------------	--------------	---------------------------	------------	-------------------

Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Assessed	N			Cold Water Aquatic Life	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030001-061_00	Undefined Waterbodies (CU 14030001)		RIVER INTERMITTENT	0.48 MILES	Area of undefined waterbodies	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Assessed	N			Cold Water Aquatic Life	Not Assessed
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	

Assessment Results for Streams Colorado River Southeast Watershed

UT14030001-063_00	Undefined Waterbodies (CU 14030001)		RIVER INTERMITTENT	0 MILES	Area of undefined waterbodies	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Assessed	N			Cold Water Aquatic Life	Not Assessed
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030002-001_00	LaSal Creek		RIVER	18 MILES	LaSal Creek and tributaries from Utah-Colorado state line to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment

Assessment Results for Streams Colorado River Southeast Watershed

Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Cold Water Aquatic Life	Fully Supporting	N			Cold Water Aquatic Life	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030002-002_00	Roc Creek		RIVER	20.222 MILES	Roc Creek and tributaries from Utah-Colorado state line to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Assessed	N			Cold Water Aquatic Life	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

AU ID	AU Name		Water Type	Size	Location Description	
UT14030004-001_00	Dolores River		RIVER	61.727 MILES	Dolores River and tributaries (except Granite Creek) from confluence with Colorado River to headwaters or Utah-Colorado state line	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Supporting	N	Total Dissolved Solids	2008	Agricultural	Not Supporting
Non-Game Fish and Other Aquatic Life	Fully Supporting	N			Non-Game Fish and Other Aquatic Life	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030004-002_00	Granite Creek		RIVER	9.478 MILES	Granite Creek and tributaries from confluence with Dolores River to Utah-Colorado state line	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment

Assessment Results for Streams Colorado River Southeast Watershed

Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Non-Game Fish and Other Aquatic Life	Fully Supporting	N			Non-Game Fish and Other Aquatic Life	Fully Supporting
Primary Recreation	Not Assessed	N			Primary Recreation	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030005-001_00	Kane Spring Wash		RIVER	48.844 MILES	Kane Spring Wash from confluence with Colorado River to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Non-Game Fish and Other Aquatic Life	Not Assessed	N			Non-Game Fish and Other Aquatic Life	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

AU ID	AU Name		Water Type	Size	Location Description	
UT14030005-002_00	Indian Creek-2		RIVER	15.498 MILES	Indian Creek and tributaries from Newspaper Rock north boundary to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Cold Water Aquatic Life	Fully Supporting	N			Cold Water Aquatic Life	Fully Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Fully Supporting	N			Secondary Recreation	Not Assessed
	Not Assessed					
AU ID	AU Name		Water Type	Size	Location Description	
UT14030005-003_00	Colorado River-3		RIVER	62.688 MILES	Colorado River from Green River confluence to Moab	

Assessment Results for Streams Colorado River Southeast Watershed

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Supporting	N	Selenium	2006	Warm Water Aquatic Life	Not Supporting

AU ID	AU Name	Water Type	Size	Location Description
UT14030005-004_00	Colorado River-4	RIVER	35.767 MILES	Colorado River from Moab to HUC unit (14030005) boundary

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Fully Supporting	N			Agricultural	Fully Supporting

Assessment Results for Streams Colorado River Southeast Watershed

Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Supporting	N	Selenium	2006	Warm Water Aquatic Life	Not Supporting

AU ID	AU Name	Water Type	Size	Location Description
--------------	----------------	-------------------	-------------	-----------------------------

UT14030005-005_00	Mill Creek-1	RIVER	31.769 MILES	Mill Creek and tributaries, except Pack Creek, from the confluence with Colorado River to USFS boundary
-------------------	--------------	-------	--------------	---

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
------------	-------------------	-------------------	--------------	---------------------------	------------	-------------------

Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Cold Water Aquatic Life	Not Supporting	N	Temperature , water	2008	Cold Water Aquatic Life	Not Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting

Assessment Results for Streams Colorado River Southeast Watershed

Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
----------------------	--------------	---	--	--	----------------------	--------------

AU ID	AU Name	Water Type	Size	Location Description
-------	---------	------------	------	----------------------

UT14030005-006_00	Mill Creek-2	RIVER	29.614 MILES	Mill Creek and tributaries from USFS boundary to headwaters
-------------------	--------------	-------	--------------	---

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
-----	------------	------------	-------	--------------------	-----	------------

Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Cold Water Aquatic Life	Fully Supporting	N			Cold Water Aquatic Life	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed

AU ID	AU Name	Water Type	Size	Location Description
-------	---------	------------	------	----------------------

UT14030005-007_00	Salt Wash	RIVER	22.907 MILES	Salt Wash and tributaries from confluence with Colorado River to headwaters
-------------------	-----------	-------	--------------	---

Assessment Results for Streams Colorado River Southeast Watershed

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Assessed	N			Warm Water Aquatic Life	Not Assessed

AU ID	AU Name	Water Type	Size	Location Description
UT14030005-008_00	Negro Bill	RIVER	10.115 MILES	Negro Bill Creek from confluence with Colorado River to headwaters

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Assessed	N			Warm Water Aquatic Life	Not Assessed
AU ID	AU Name		Water Type	Size	Location Description	
UT14030005-009_00	Castle Creek-1		RIVER	9.1 MILES	Castle Creek and tributaries from confluence with Colorado River to Seventh-Day Adventist diversion	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Supporting	N	Benthic-Macroinvertebrate Bioassessment	2008	Warm Water Aquatic Life	Not Supporting

Assessment Results for Streams Colorado River Southeast Watershed

Assessment Results for Streams Colorado River Southeast Watershed						
			nts			
AU ID	AU Name		Water Type	Size	Location Description	
UT14030005-010_00	Onion Creek Lower		RIVER	7.973 MILES	Onion Creek and tributaries from confluence with Colorado River to road crossing above Stinking Springs	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Supporting	N	Temperature , water	2006	Warm Water Aquatic Life	Not Supporting
AU ID	AU Name		Water Type	Size	Location Description	

Assessment Results for Streams Colorado River Southeast Watershed

UT14030005-011_00	Pack Creek		RIVER	15.214 MILES	Pack Creek and tributaries from the confluence with Mill Creek to USFS boundary	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Supporting	N	Total Dissolved Solids	2006	Agricultural	Not Supporting
Cold Water Aquatic Life	Not Supporting	N	Selenium Temperature , water	2010 2006	Cold Water Aquatic Life	Not Supporting
Secondary Recreation	Not Assessed	N		Secondary Recreation	Not Assessed	
AU ID	AU Name		Water Type	Size	Location Description	
UT14030005-012_00	Castle Creek-2		RIVER	9.14 MILES	Castle Creek and tributaries from Seventh-Day Adventist diversion to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment

Assessment Results for Streams Colorado River Southeast Watershed

Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Fully Supporting	N			Warm Water Aquatic Life	Fully Supporting
AU ID	AU Name		Water Type	Size	Location Description	
UT14030005-013_00	Onion Creek Upper		RIVER	2.198 MILES	Onion Creek and tributaries from road crossing above Stinking Springs to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Supporting	N	Total Dissolved Solids	2008	Agricultural	Not Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting

Assessment Results for Streams Colorado River Southeast Watershed

Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Supporting	N	Temperature , water	2006	Warm Water Aquatic Life	Not Supporting
AU ID	AU Name		Water Type	Size	Location Description	
UT14030005-044_00	Undefined Waterbodies (CU 14030005)		RIVER INTERMITTE NT	37.46 MILES	Area of undefined waterbodies	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	Attainment
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Assessed	N			Cold Water Aquatic Life	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

AU ID						
UT14030005-045_00	Undefined Waterbodies (CU 14030005)		RIVER INTERMITTENT	0 MILES	Area of undefined waterbodies	
Use	Attainment		Threatened	Cause	Cycle First Listed	
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Non-Game Fish and Other Aquatic Life	Not Assessed	N			Non-Game Fish and Other Aquatic Life	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name	Water Type	Size	Location Description	AU ID	AU Name
UT14030005-046_00	Undefined Waterbodies (CU 14030005)		RIVER INTERMITTENT	0.9 MILES	Area of undefined waterbodies	

Assessment Results for Streams Colorado River Southeast Watershed

Use	Attainment		Threatened	Cause	Cycle First Listed	
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Non-Game Fish and Other Aquatic Life	Not Assessed	N			Non-Game Fish and Other Aquatic Life	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
AU ID	AU Name	Water Type	Size	Location Description	AU ID	AU Name
UT14030005-052_00	Undefined Waterbodies (CU 14030005)		RIVER INTERMITTENT	4.97 MILES	Area of undefined waterbodies	
Use	Attainment		Threatened	Cause	Cycle First Listed	
Agricultural	Not Assessed	N			Agricultural	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Assessed	N			Warm Water Aquatic Life	Not Assessed
AU ID	AU Name	Water Type	Size	Location Description	AU ID	AU Name
UT14030005-058_00	Undefined Waterbodies (CU 14030005)	RIVER INTERMITTENT	0 MILES	Area of undefined waterbodies		
Use	Attainment		Threatened	Cause	Cycle First Listed	
Agricultural	Not Assessed	N			Agricultural	Not Assessed
Cold Water Aquatic Life	Not Assessed	N			Cold Water Aquatic Life	Not Assessed
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	Not Assessed
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed

Assessment Results for Streams Colorado River Southeast Watershed

AU ID	AU Name	Water Type	Size	Location Description	AU ID	AU Name
UT14010005-001_00	Colorado River-6	RIVER	3.84 MILES	Colorado River from HUC 14010005-14030001 boundary to Colorado State Line		
Use	Attainment	Threatened	Cause	Cycle First Listed		
Agricultural	Fully Supporting	N			Agricultural	Fully Supporting
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	Fully Supporting
Secondary Recreation	Not Assessed	N			Secondary Recreation	Not Assessed
Warm Water Aquatic Life	Not Supporting	N	Selenium	2006	Warm Water Aquatic Life	Not Supporting
AU ID	AU Name	Water Type	Size	Location Description	AU ID	AU Name
AU ID	AU Name	Water Type	Size	Location Description		

Assessment Results for Streams Colorado River Southeast Watershed

Assessment Results for Streams Colorado River Southeast Watershed						
UT14080201-001_00	Butler Wash		RIVER	7.664 MILES	Butler Wash and tributaries from confluence with San Juan River to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Not Assessed	N			Agricultural	
Cold Water Aquatic Life	Not Assessed	N			Cold Water Aquatic Life	
Secondary Recreation	Not Assessed	N			Secondary Recreation	
AU ID	AU Name		Water Type	Size	Location Description	
UT14080201-002_00	Cottonwood Wash-1		RIVER	0.01 MILES	Cottonwood Wash and tributaries from confluence with San Juan River to Westwater Creek confluence	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Fully Supporting	N			Agricultural	

Assessment Results for Streams Colorado River Southeast Watershed

Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	
Secondary Recreation	Not Assessed	N			Secondary Recreation	
Warm Water Aquatic Life	Fully Supporting	N			Warm Water Aquatic Life	
AU ID	AU Name		Water Type	Size	Location Description	
UT14080201-003_00	Recapture Creek-2		RIVER	3.989 MILES	Recapture Creek and tributaries from USFS boundary to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Not Assessed	N			Agricultural	
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	
Secondary Recreation	Not Assessed	N			Secondary Recreation	

Assessment Results for Streams Colorado River Southeast Watershed

Warm Water Aquatic Life	Not Assessed	N			Warm Water Aquatic Life	
AU ID	AU Name		Water Type	Size	Location Description	
UT14080201-004_00	Johnson Creek		RIVER	3.894 MILES	Johnson Creek and tributaries from confluence with Recapture Creek to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Fully Supporting	N			Agricultural	
Cold Water Aquatic Life	Not Supporting	N	Temperature , water	2010	Cold Water Aquatic Life	
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	
Secondary Recreation	Not Assessed	N			Secondary Recreation	
AU ID	AU Name		Water Type	Size	Location Description	

Assessment Results for Streams Colorado River Southeast Watershed

UT14080201-005_00	Recapture Creek-1	RIVER	0.01 MILES	Recapture Creek and tributaries from confluence with San Juan River to USFS boundary, except Johnson Creek		
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Fully Supporting	N			Agricultural	
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	
Secondary Recreation	Not Assessed	N			Secondary Recreation	
Warm Water Aquatic Life	Fully Supporting	N			Warm Water Aquatic Life	
AU ID	AU Name	Water Type	Size	Location Description		
UT14080201-006_00	Cottonwood Wash-2	RIVER	4.63 MILES	Cottonwood Wash from Westwater confluence to USFS boundary		
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	

Assessment Results for Streams Colorado River Southeast Watershed

Agricultural	Fully Supporting	N			Agricultural	
Domestic Water Supply	Not Supporting	N	Radium	2000	Domestic Water Supply	
Secondary Recreation	Not Assessed	N			Secondary Recreation	
Warm Water Aquatic Life	Fully Supporting	N			Warm Water Aquatic Life	
AU ID	AU Name		Water Type	Size	Location Description	
UT14080201-007_00	Cottonwood Wash-3		RIVER	17.164 MILES	Cottonwood Wash and tributaries within USFS boundary	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Fully Supporting	N			Agricultural	
Domestic Water Supply	Not Supporting	N	Radium	2000	Domestic Water Supply	

Assessment Results for Streams Colorado River Southeast Watershed

Secondary Recreation	Not Assessed	N			Secondary Recreation	
Warm Water Aquatic Life	Fully Supporting	N			Warm Water Aquatic Life	
AU ID	AU Name		Water Type	Size	Location Description	
UT14080201-008_00	Westwater Creek		RIVER	6.095 MILES	Westwater Creek and tributaries from confluence with Cottonwood Wash to headwaters	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Fully Supporting	N			Agricultural	
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	
Secondary Recreation	Not Assessed	N			Secondary Recreation	
Warm Water Aquatic Life	Fully Supporting	N			Warm Water Aquatic Life	

Assessment Results for Streams Colorado River Southeast Watershed

AU ID	AU Name		Water Type	Size	Location Description	
UT14080201-009_00	San Juan River-2		RIVER	31.132 MILES	San Juan River from the confluence with Chinle Creek to the confluence with Montezuma Creek	
Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Fully Supporting	N			Agricultural	
Domestic Water Supply	Fully Supporting	N			Domestic Water Supply	
Secondary Recreation	Not Assessed	N			Secondary Recreation	
Warm Water Aquatic Life	Fully Supporting	N			Warm Water Aquatic Life	
AU ID	AU Name		Water Type	Size	Location Description	
UT14080201-010_00	San Juan River-3		RIVER	33.739 MILES	San Juan River from the confluence with Montezuma Creek to the Utah-Colorado border	

Assessment Results for Streams Colorado River Southeast Watershed

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
Agricultural	Not Assessed	N			Agricultural	
Domestic Water Supply	Not Assessed	N			Domestic Water Supply	
Secondary Recreation	Not Assessed	N			Secondary Recreation	
Warm Water Aquatic Life	Not Assessed	N			Warm Water Aquatic Life	

AU ID	AU Name	Water Type	Size	Location Description
UT14080201-011_00	Comb Wash	STREAM	31.6 MILES	Comb Wash and tributaries from the confluence with San Juan River to headwaters

Use	Attainment	Threatened	Cause	Cycle First Listed	Use	
-----	------------	------------	-------	--------------------	-----	--

AU ID	AU Name	Water Type	Size	Location Description
UT14080201-011_00	Comb Wash	STREAM	31.6	Comb Wash and tributaries from the confluence with San

Assessment Results for Streams Colorado River Southeast Watershed

				Juan River to headwaters
Cause	Cycle First Listed	TMDL Status	Use	Source
Benthic-Macroinvertebrate Bioassessments	2010	Low Priority	Warm Water Aquatic Life	<ul style="list-style-type: none"> • Source Unknown

Table 12-4 Assessment Results for Colorado River Southeast Watershed Management Unit Lake Assessment Units

Summary of Individual Lake and Reservoir Support for Colorado River Southeast Watershed Management Unit																
Assessment Unit ID	Name	Assessment Category 2008	Assessment Category 2010	Parameters Not Supporting 2008	Parameters Not Supporting 2010				Total P > 0.025 mg/L or TSI > 50	Winter DO/Fish Kills	Cyanobacteria Present	Assessment Cycle				
					DO	pH	T	Other				2002	2004	2006	2008	2010
UT-L-14030004-001	Dark Canyon Lake	2	2						ND		ND	FS	FS	FS	FS	
UT-L-14030005-004	Kens Lake	2	2		FS	FS	FS		No		Y	NS	NS	FS	FS	FS
UT-L-14080203-009	Lloyds Reservoir	2	2	FS	FS	FS	FS		No		Y	FS	NS	NS	FS	FS

Summary of Individual Lake and Reservoir Support for Colorado River Southeast Watershed Management Unit

Assessment Unit ID	Name	Assessment Category 2008	Assessment Category 2010	Parameters Not Supporting 2008	Parameters Not Supporting 2010				Total P > 0.025 mg/L or TSI > 50	Winter DO/Fish Kills	Cyano Bacteria Present	Assessment Cycle				
					DO	pH	T	Other				2002	2004	2006	2008	2010
					UT-L-14080203-002	Monticello Lake	5	5				pH				
UT-L-14080201-007	Recapture Reservoir	5	5, 3B	T, DO	NS	NS	FS		No	N	NS	NS	NS	NS	NS	
UT-L-14030004-001	Dark Canyon Lake	2	2						ND	ND	FS	FS	FS	FS		

Summary of Individual Lake and Reservoir Support for Colorado River Southeast Watershed Management Unit

Assessment Unit ID	Name	Assessment Category 2008	Assessment Category 2010	Parameters Not Supporting 2008	Parameters Not Supporting 2010				Total P > 0.025 mg/L or TSI>5 0	Winter DO/Fish Kills	Cyano Bacteria Present	Assessment Cycle				
					DO	pH	T	Other				2002	2004	2006	2008	2010

Notes:

FS Fully Supporting

NS Not Supporting

Y Yes

N No

DO Dissolved Oxygen

FK Fish Kill

T Temperature

Total P Total Phosphorus

NA Not Analyzed

TDS Total Dissolved Solids

Table 12-5 Individual Lake and Reservoir 2010 Trophic State Index (TSI)

Individual Lake and Reservoir 2010 Trophic State Index (TSI)						
Watershed Management Unit	Assessment Unit	Name	Date	TSI-SD	TSI-Chla	TSI-TP
Colorado River Southeast	UT-L-14030005-004	Kens Lake	7/11/2007	45	42	37
Colorado River Southeast	UT-L-14080203-009	Lloyds Reservoir	7/11/2007	59	39	37
Colorado River Southeast	UT-L-14080201-007	Recapture Reservoir	6/28/2007	46	33	37
Colorado River Southeast	UT-L-14080201-007	Recapture Reservoir	7/10/2007	52		
Colorado River Southeast	UT-L-14080201-007	Recapture Reservoir	7/11/2007		33	37
Colorado River Southeast	UT-L-14080201-007	Recapture Reservoir	8/9/2007	56	27	37
Colorado River Southeast	UT-L-14080201-007	Recapture Reservoir	8/29/2007	54	30	37

Individual Lake and Reservoir 2010 Trophic State Index (TSI)						
Watershed Management Unit	Assessment Unit	Name	Date	TSI-SD	TSI-Chla	TSI-TP
Colorado River Southeast	UT-L-14080201-007	Recapture Reservoir	9/19/2007	60	37	37
<p>Notes:</p> <p>TSI-SD = Trophic State Index from secchi disk</p> <p>TSI-Chla = Trophic State Index from chlorophyll-a</p> <p>TSI-TP = Trophic State Index from total phosphorus</p>						

Table 12-6 Summary of Individual Lake and Reservoir Trophic State Index (TSI)

Summary of Individual Lake and Reservoir Trophic State Index (TSI)														
Watershed Management Unit	Assessment Unit	Lake / Reservoir	Assessment Cycle Trophic State Index										Trophic State	
			1992	1994	1996	1998	2000	2002	2004	2008	2010 Old Method	2010 Current Method	2010 Old Method	2010 Current Method
Colorado River Southeast	UT-L-14030005-004	Kens Lake	57	44	45	36	39	43	41	40	41	42	M	M
Colorado River Southeast	UT-L-14080203-009	Lloyds Reservoir	49	43	47	36	38	36	33	52	45	39	M	E
Colorado River Southeast	UT-L-14080201-007	Recapture Creek Reservoir	46	49	45	36	41	40	34	46	41	32	M	O

Summary of Individual Lake and Reservoir Trophic State Index (TSI)														
Watershed Management Unit	Assessment Unit	Lake / Reservoir	Assessment Cycle Trophic State Index										Trophic State	
			1992	1994	1996	1998	2000	2002	2004	2008	2010 Old Method	2010 Current Method	2010 Old Method	2010 Current Method
<p>Notes:</p> <p>2010 Old Method TSI calculated using the 2008 Integrated Report Methodology</p> <p>2010 Current Method TSI calculated using the 2010 Integrated Report Methodology of only chlorophyll-a</p> <p>O = Oligotrophic</p> <p>M = Mesotrophic</p> <p>E = Eutrophic</p> <p>H = Hypereutrophic</p>														

Figures

Colorado River Southeast Management Unit

Beneficial Use Classification and Monitoring Sites

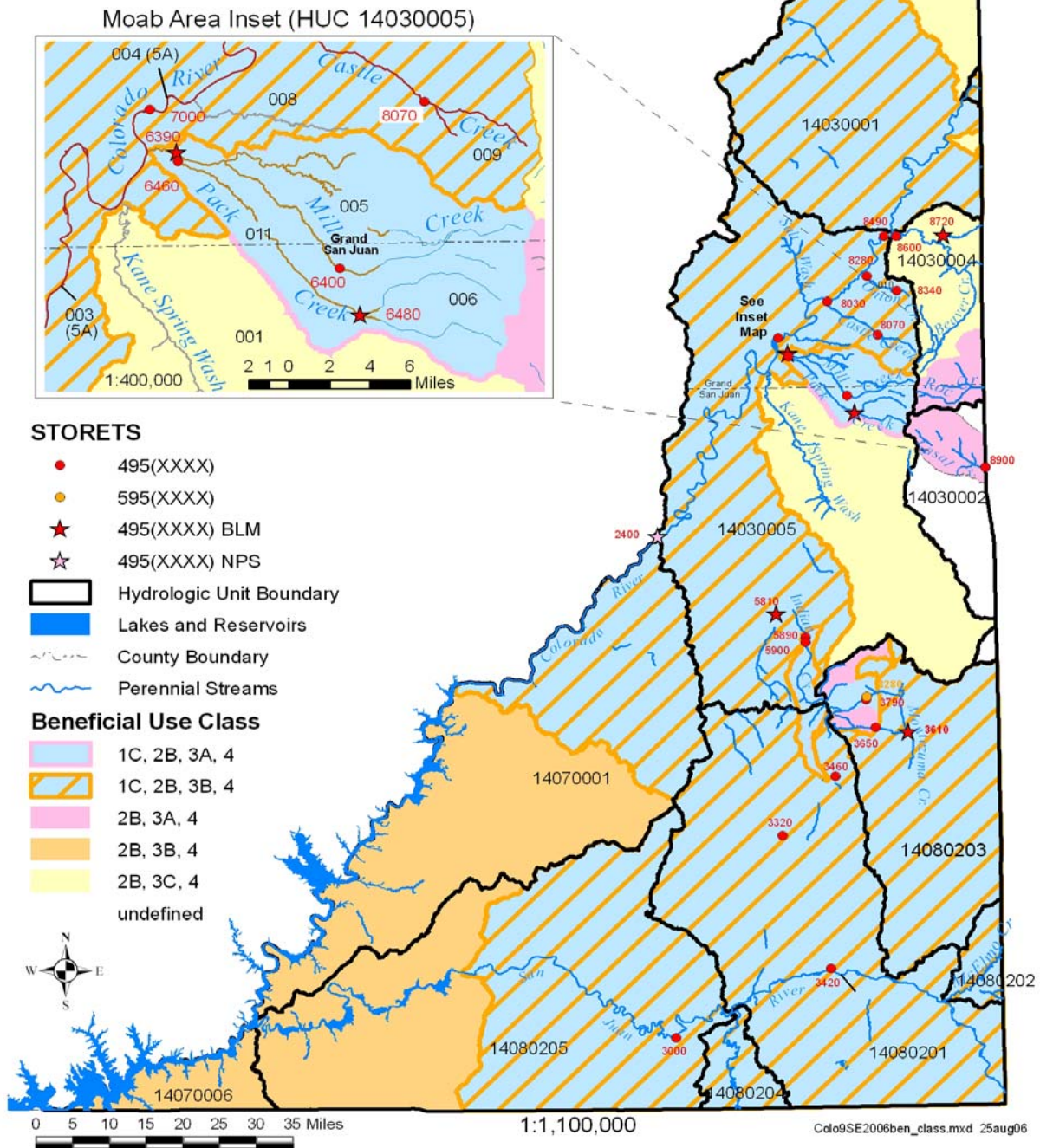


Figure 12-1 Beneficial Use Classes for Colorado River Southeast Watershed Management Unit