Supporting rationale for changes to Utah's Standards of Water Quality R317-2-2011 for the 2011 Triennial Review July 18, 2011 Water Quality Standards Workgroup Meeting

Rule	Change	Page
R317-2-3.2, R317-2-3.3,	Change the numbering of Antidegradation	
R317-2-3.5.a.2., R317-2-	Review Categories, e.g., Category 1 changes	2
3.5.a.3., R317-2-12, R317-	to Category 3.5.	
2-12.1., R317-2-12.1.a.,		
R317-2-12.2		
	Revise the description of temporary and	
R317-2-3.2 and 3.3	limited for (new) Category 3.5 and add to	3
	exclusion to (new) Category 3	
	Delete antidegradation example disapproved	
R317-2-3.5.b.1.(d)	by USEPA	4
R317-2-7.1, Tables 2.14.1	Revise and broaden description for developing	
and 2.14.2	site-specific standards	5
	Correct error in previous rulemaking where	
R317-2-12.1.a. and R317-2-	antidegradation category of the Weber River	6
12.2.a	was the unintentionally changed	
	Reassign the antidegradation category	
	boundary for Chalk Creek and Weber	10
R317-2-12.2.b.6.	(Coalville and Oakley) from previous	
	boundary because of highway name changes.	
	Change beneficial use for Fremont River to	
R317-2-13.1	frequent recreation from infrequent recreation	19
	Assign beneficial uses to a previously	
R317-2-13.5.a.	unclassified reach of Red Butte Creek	23
	Assign beneficial uses to a previously	
R317-2-13.5.a.	unclassified reach of Red Butte Creek	25
R317-2-13.2.a. and R317-	Delete ** where no site-specific temperature	
13.2.bb.	standard was promulgated	26
R317-2-13.2.x.	Assign beneficial uses to Big East Lake	27
	Assign beneficial uses to Sand Hollow	
R317-2-13.2.	Reservoir	29
	Delete infrequent recreation beneficial use	
R317-2-13.2	when frequent recreation is specified	30
Table 2.14.1 Site-Specific	Revise boundary for Price River site-specific	
TDS Standards, Price River	TDS standards to resolve USEPA disapproval	31
Table 2.14.2	Delete acute criteria for mercury	32
Table 2.14.2	Add numeric criteria for tributyl tin	33
Tables 2.14.2, 2.14.6	Add numeric criteria for acrolein	34
Tables 2.14.2	Add numeric criteria for chlorpyrifos	35
Table 2.14.6	Add numeric criteria for phenol	36

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¹ Refers to the <u>UT WQS workplan 04202011</u>

No.1	Rule Number	Change Summary
1	R317-2-3.2 and 3.3	Federal rules allow degradation in Tier 3 waters
		for discharges that are temporary and limited.
		Utah included this exemption for existing
		Category 1 waters with roads being listed as a
		specific example. The road example was deleted
		and a reference to the criteria to be considered for
		making a temporary and limited determination was
		added. Road construction and other activities that
		meets the criteria for temporary and limited will
		continue to be allowed. In addition, this same
		exemption was added to the less stringent, existing
		Category 2 waters (proposed Category 3).

¹ Refers to the <u>UT WQS workplan 04202011</u>

No.1	Rule Number	Change Summary
1	R317-2-3.5.b.1.(d)	This example for when an antidegradation review
		is not required was deleted to resolve a USEPA
		disapproval in 2010.

¹ Refers to the <u>UT WQS workplan 04202011</u>

No.1	Rule Number	Change Summary
11	R317-2-7.1, Tables 2.14.1	This section regarding numeric standards was
	and 2.14.2	revised to acknowledge that numeric standards can
		be modified based on certain site-specific
		conditions. The previous version of the standards
		listed changes based on bioassays or other
		methods, and site-specific temperature and total
		dissolved solids standards based on natural
		conditions. This change consolidates and broadens
		the reasons for allowing site-specific standards
		consistent with USEPA policies and the Clean
		Water Act. Footnote (4) from Table 2.14.1 was
		moved to R37-2-7.1 and Footnote (3) from Table
		2.14.2 was deleted but site-specific temperature
		can be developed per the revised R317-2-7.1. The
		Water Quality Board must approve any change to
		the Standards thereby preserving their approval
		role.

¹ Refers to the <u>UT WQS workplan 04202011</u>

No. ¹	Rule Number	Change Summary
17	R317-2-12.1.a. and R317-	This reach of the Weber River was mistakenly
	2-12.2.a	moved to R317-2-12,2 during the Standards
		changes in 2010 (see Utah Bulletin below 33233
		on pp. 50-51). This change inadvertently changed
		the Category of this reach from existing Category
		3 to existing Category 2 and this correction
		restores the original classifications.

¹ Refers to the <u>UT WQS workplan 04202011</u>

UTAH STATE BULLETIN

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> Number 2009-24 December 15, 2009

Kimberly K. Hood, Executive Director Kenneth A. Hansen, Director Nancy L. Lancaster, Editor

The *Utah State Bulletin (Bulletin)* is an official noticing publication of the executive branch of Utah State Government. The Department of Administrative Services, Division of Administrative Rules produces the *Bulletin* under authority of Section 63G-3-402.

Inquiries concerning the substance or applicability of an administrative rule that appears in the *Bulletin* should be addressed to the contact person for the rule. Questions about the *Bulletin* or the rulemaking process may be addressed to: Division of Administrative Rules, 4120 State Office Building, Salt Lake City, Utah 84114-1201, telephone 801-538-3764, FAX 801-538-1773. Additional rulemaking information, and electronic versions of all administrative rule publications are available at: http://www.rules.utah.gov/

The information in this *Bulletin* is summarized in the *Utah State Digest (Digest)*. The *Digest* is available by E-mail or over the Internet. Visit http://www.rules.utah.gov/publicat/digest.htm for additional information.

treatment requirements. Protocols and guidelines will consider federal guidance and will include input from local governments, the regulated community, and the general public. The Executive Secretary will inform the Water Quality Board of any protocols or guidelines that are developed.

R317-2-6. Use Designations.

The Board as required by Section 19-5-110, shall group the waters of the state into classes so as to protect against controllable pollution the beneficial uses designated within each class as set forth below. Surface waters of the state are hereby classified as shown in R317-2-13.

- 6.1 Class 1 -- Protected for use as a raw water source for domestic water systems.
 - a. Class 1A -- Reserved.
 - b. Class 1B Reserved.
- c. Class 1C -- Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water
- 6.2 Class 2 -- Protected for recreational use and aesthetics.
- a. Class 2A -- Protected for frequent primary contact recreation where there is a high likelihood of ingestion of water or a high degree of bodily contact with the water. Examples include, but are not limited to, swimming, rafting, kayaking, diving, and water skiing.
- b. Class 2B -- Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
 - 6.3 Class 3 -- Protected for use by aquatic wildlife.
- a. Class 3A Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
- b. Class 3B -- Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.
- c. Class 3C -- Protected for nongame fish and other aquatic life, including the necessary aquatic organisms in their food chain.
- d. Class 3D -- Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.
- e. Class 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.
- 6.4 Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.
 - 6.5 Class 5 -- The Great Salt Lake.
 - a. Class 5A Gilbert Bay

Geographical Boundary -- All open waters at or below approximately 4,208-foot elevation south of the Union Pacific Causeway, excluding all of the Farmington Bay south of the Antelope Island Causeway and salt evaporation ponds.

Beneficial Uses -- Protected for frequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

b. Class 5B Gunnison Bay

Geographical Boundary -- All open waters at or below approximately 4,208-foot elevation north of the Union Pacific Causeway and west of the Promontory Mountains, excluding salt evaporation ponds.

Beneficial Uses - Protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

c. Class 5C Bear River Bay

Geographical Boundary -- All open waters at or below approximately 4,208-foot elevation north of the Union Pacific Causeway and east of the Promontory Mountains, excluding salt evaporation ponds.

Beneficial Uses -- Protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

d. Class 5D Farmington Bay

Geographical Boundary -- All open waters at or below approximately 4,208-foot elevation east of Antelope Island and south of the [Union Pacific] Antelope Island Causeway, excluding salt evaporation ponds.

Beneficial Uses -- Protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

e. Class 5E Transitional Waters along the Shoreline of the Great Salt Lake Geographical Boundary -- All waters below approximately 4,208-foot elevation to the current lake elevation of the open water of the Great Salt Lake receiving their source water from naturally occurring springs and streams, impounded wetlands, or facilities requiring a UPDES permit. The geographical areas of these transitional waters change corresponding to the fluctuation of open water elevation.

Beneficial Uses -- Protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

R317-2-12. Category 1 and Category 2 Waters.

12.1 Category 1 Waters.

In addition to assigned use classes, the following surface waters of the State are hereby designated as Category 1 Waters:

a. All surface waters geographically located within the outer boundaries of U.S. National Forests whether on public or private lands with the following exceptions:

Category 2 Waters as listed in R317-2-12.2.

[Weber River, a tributary to the Great Salt Lake, in the Weber River Drainage from Uintah to Mountain Green.

— Jb. Other surface waters, which may include segments within U.S. National Forests as follows:

1. Colorado River Drainage

Calf Creek and tributaries, from confluence with Escalante River to headwaters.

Sand Creek and tributaries, from confluence with Escalante River to headwaters.

Mamie Creek and tributaries, from confluence with Escalante River to headwaters.

Deer Creek and tributaries, from confluence with Boulder Creek to headwaters (Garfield County).

Indian Creek and tributaries, through Newspaper Rock State Park to headwaters.

2. Green River Drainage

Price River (Lower Fish Creek from confluence with White River to Scofield Dam.

Range Creek and tributaries, from confluence with Green River to headwaters.

Strawberry River and tributaries, from confluence with Red Creek to headwaters.

Ashley Creek and tributaries, from Steinaker diversion to headwaters.

Jones Hole Creek and tributaries, from confluence with Green River to headwaters.

Green River, from state line to Flaming Gorge Dam.

Tollivers Creek, from confluence with Green River to headwaters.

Allen Creek, from confluence with Green River to headwaters.

3. Virgin River Drainage

North Fork Virgin River and tributaries, from confluence with East Fork Virgin River to headwaters.

East Fork Virgin River and tributaries from confluence with North Fork Virgin River to headwaters.

4. Kanab Creek Drainage

Kanab Creek and tributaries, from irrigation diversion at confluence with Reservoir Canyon to headwaters.

5. Bear River Drainage

Swan Creek and tributaries, from Bear Lake to headwaters.

North Eden Creek, from Upper North Eden Reservoir to headwaters.

Big Creek and tributaries, from Big Ditch diversion to headwaters.

Woodruff Creek and tributaries, from Woodruff diversion to headwaters.

6. Weber River Drainage

Burch Creek and tributaries, from Harrison Boulevard in Ogden to headwaters.

Hardscrabble Creek and tributaries, from confluence with East Canyon Creek to headwaters.

Chalk Creek and tributaries, from U.S. Highway 189 to headwaters.

Weber River and tributaries, from U.S. Highway 189 near Oakley to headwaters.

7. Jordan River Drainage

City Creek and tributaries, from City Creek Water Treatment Plant to headwaters (Salt Lake County).

Emigration Creek and tributaries, from Hogle Zoo to headwaters (Salt Lake County).

Red Butte Creek and tributaries, from Foothill Boulevard in Salt Lake City to headwaters.

Parley's Creek and tributaries, from 13th East in Salt Lake City to headwaters.

Mill Creek and tributaries, from Wasatch Boulevard in Salt Lake City to headwaters.

Big Cottonwood Creek and tributaries, from Wasatch Boulevard in Salt Lake City to headwaters.

Little Willow Creek and tributaries, from diversion to headwaters (Salt Lake County.)

Bell Canyon Creek and tributaries, from Lower Bells Canyon Reservoir to headwaters (Salt Lake County).

South Fork of Dry Creek and tributaries, from Draper Irrigation Company diversion to headwaters (Salt Lake County).

8. Provo River Drainage

Upper Falls drainage above Provo City diversion (Utah County).

Bridal Veil Falls drainage above Provo City diversion (Utah County).

Lost Creek and tributaries, above Provo City diversion (Utah County).

9. Sevier River Drainage

Chicken Creek and tributaries, from diversion at canyon mouth to headwaters.

Pigeon Creek and tributaries, from diversion to headwaters.

East Fork of Sevier River and tributaries, from Kingston diversion to headwaters.

Parowan Creek and tributaries, from Parowan City to headwaters.

Summit Creek and tributaries, from Summit City to headwaters.

Braffits Creek and tributaries, from canyon mouth to headwaters.

Right Hand Creek and tributaries, from confluence with Coal Creek to headwaters.

10. Raft River Drainage

Clear Creek and tributaries, from state line to headwaters (Box Elder County).

Birch Creek (Box Elder County), from state line to headwaters.

Cotton Thomas Creek from confluence with South Junction Creek to headwaters.

11. Western Great Salt Lake Drainage

All streams on the south slope of the Raft River Mountains above 7000' mean sea level.

Donner Creek (Box Elder County), from irrigation diversion to Utah-Nevada state line.

Bettridge Creek (Box Elder County), from irrigation diversion to Utah-Nevada state line.

Clover Creek, from diversion to headwaters.

All surface waters on public land on the Deep Creek Mountains.

12. Farmington Bay Drainage

Holmes Creek and tributaries, from Highway US-89 to headwaters (Davis County).

Shepard Creek and tributaries, from Height Bench diversion to headwaters (Davis County).

Farmington Creek and tributaries, from Height Bench Canal diversion to headwaters (Davis County).

Steed Creek and tributaries, from Highway US-89 to headwaters (Davis County).

12.2 Category 2 Waters.

In addition to assigned use classes, the following surface waters of the State are hereby designated as Category 2 Waters:

a. Green River Drainage

Deer Creek, a tributary of Huntington Creek, from the forest boundary to 4800 feet upstream.

Electric Lake.

b. Weber River Drainage

Weber River from Uintah to Mountain Green.

No.1	Rule Number	Change Summary
16	R317-2-12.2.b.6.	US 189 was the previous boundary for existing
		Category 1 waters Chalk Creek and the Weber
		River. With the construction of Jordanelle
		Reservoir, US 189 was rerouted and is no longer a
		valid boundary. The boundary for the existing
		Category 1 waters was updated to reflect the
		previous geographic boundary with existing roads.
		The protection status of Chalk Creek and the
		Weber river are unchanged. See the discussion
		below for documentation of the road boundaries.

¹ Refers to the <u>UT WQS workplan 04202011</u>

Change in Alignment and Jurisdiction of US Highway 189, Summit County, Utah

Category 1 high quality waters include all waters within U.S. Forest Service outer boundaries (Section R317-2-12 *in* R317-2 Standards of Quality for Waters of the State). In addition, other waters are specifically named, such as Chalk Creek and the Weber River:

Weber River and tributaries, from U.S. Highway 189 near Oakley to headwaters.

Chalk Creek and tributaries, from U.S. Highway 189 to headwaters.

Due to the construction of Interstate 80 (I-80) and Jordanelle Reservoir in Summit County, the alignment of U.S. Highway 189 (US-189) changed so that now US-189 and the Weber River near Oakley no longer intersect. Similarly, U.S. Highway 189 and Chalk Creek no longer intersect in Coalville.

Prior to 1967, US-189 ran from Provo, Utah, up Provo Canyon to Heber City where it joined U.S. Highway 40 (US-40). From Heber City, US-189 followed on top of, or coincident with, US-40 north to Hailstone Junction. At Hailstone Junction, now inundated by Jordanelle Reservoir, US-189 diverted from US-40 and traveled east to Francis, north to Oakley (fig. 1), and northwest around Rockport Reservoir to Wanship. From Wanship, US-189 was aligned on top of State Route 2 (which name replaced SR4) to Coalville, crossed Chalk Creek as Coalville's Main Street (fig. 2), ran north to Echo Canyon, and east to Evanston, Wyoming. State Route 2 was a forerunner to I-80 which followed the same general route except I-80 bypassed small towns along the way.

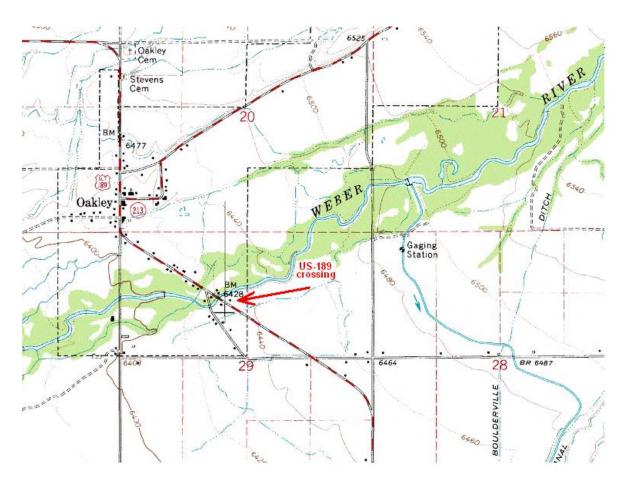


Figure 1. US-189 and Weber River crossing located southeast of Oakley, Summit County, Utah prior to the construction of I-80 and Jordanelle Reservoir (U.S. Geological Survey, *Kamas* 1:24,000 scale map).

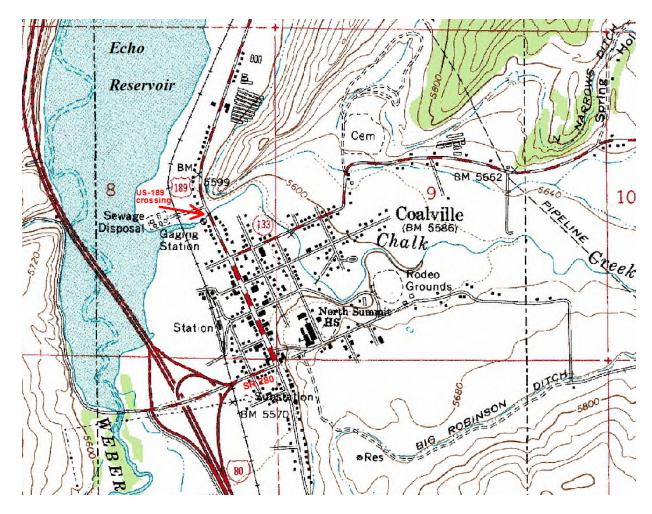


Fig. 2. Location of US189 crossing of Chalk Creek in Coalville, Summit County, Utah prior to the construction of I-80 and Jordanelle Reservoir (U.S. Geological Survey, *Coalville* 1:24,000 scale map).

To organize public highways for state tracking purposes, the Utah Transportation Commission instituted a road numbering system that changed the names of all interstates and U.S. highways to state route numbers. US-189 became known as State Route 189 (SR189) and I-80 became State Route 80.

Summary of Changes to US-189 Alignment Through Oakley, Summit County, Utah

The completion of I-80 in the 1960s and the construction of Jordanelle Reservoir Dam in the early 1980s changed the alignment and maintenance jurisdiction of US-189 (SR189). The junction where SR189 diverted from US-40 was inundated by Jordanelle Reservoir. Route designation for US-189Alt from Francis to Kamas to Oakley and beyond was deleted in late 1975. Later, US-189 (SR189) routing changed to follow, or "piggy-back," US-40 from Heber City past newly completed Jordanelle Reservoir to the Park City interchange, then on to Kamas and through Oakley but bypassing Francis.

The water quality standards description for the Weber River above Oakley as category 1 waters became inaccurate through changes in the late 1980s. By 1990, the existing route alignment was approved for US-189 (SR189) which now is coincident with US-40 from Heber to Silver Creek Junction at I-80, then coincident on I-80 to Wanship, past Coalville on the west side of Echo

Reservoir, and on to Evanston (fig.3 and fig. 4). The road through Francis, Kamas, and Oakley is now called SR32.



RESOLUTION

Relocation of U.S. Route 189

WHEREAS, AASHTO has established policy number 8-B to provide guidance in determining U.S. Route designations and.

WHEREAS, construction of the Jordanelle Dam Project has created improvements along with shortening the length of U.S. 40, also eliminating Hailstone Junction as well as other sections of roadway that U.S. Route 189 traversed and.

WHEREAS, policy calls for following the newest, shortest, and best route and,

WHEREAS, the new alignment of U.S. Route 40 has created a situation where the present alignment of U.S. 189 from Wanship to Hailstone junction no longer warrants a U.S. Route designation.

NOW THEREFORE, be it resolved as follows:

1. That application be made to the American Association of State Highway and Transportation Officials, U.S. Numbering Committee, requesting that U.S. Route 189 should run concurrently with Interstate Route 80 and U.S.Route 40, and the description for U.S. Route 189 within the State of Utah should read in the following manner.

UTAH	State Line	0	0	
	Echo Jct.	30	30	I-84 begins and leaves
	Silver Creek Jct.	21	51	Leaves I-80, Joins U.S. 40
	Heber	19	7.0	Leaves U.S. 40
	Provo	28	98	Crosses U.S. 89
	Provo	2	100	Route ends. Jct. I-15

The accompanying map, and AASHTO application be made part of this resolution.

Dated this 2/st day of 52 ytt while 1990

Utah Transportation Commission

Commissioner

Mairman

Commissioner Commissioner

Commissioner

Secretary to Commission

Figure 3. Description of US-189 alignment with I-80 and US-40 to Heber City, bypassing the Oakley area, as approved in 1990 by American Association of State Highway and Transportation Officials.

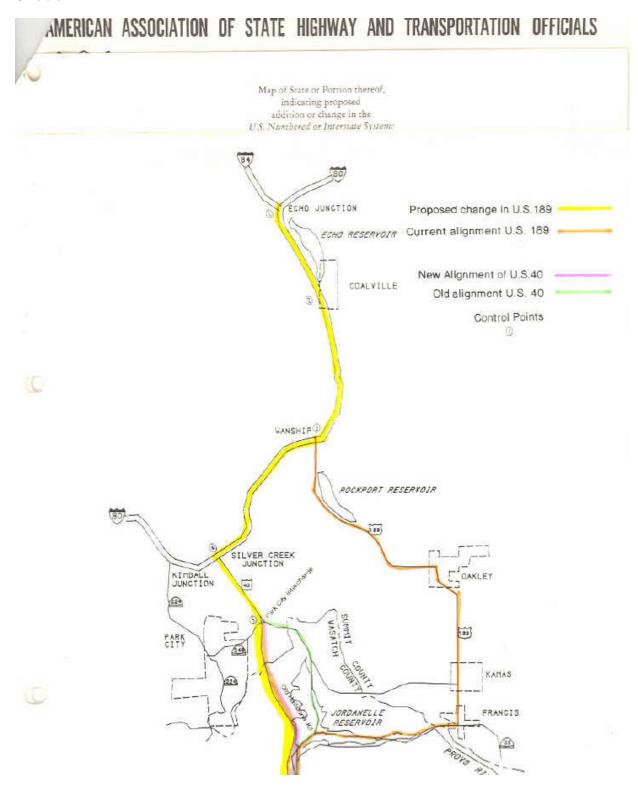


Figure 4. Map of current US-189 alignment coincident with I-80 and US-40 as approved in September of 1990 by the American Association of State Highway and Transportation Officials.

Summary of Changes to US-189 Alignment in the Coalville, Summit County, Utah, Area

Written correspondences between the State of Utah Department of Transportation, Summit County, and Coalville City in late 1967 and early 1968 indicate that US-189 used to pass through Coalville. Upon completion of I-80, Coalville City and Summit County officials agreed to take over control and maintenance of SR189 (US-189) from the State. At this time US-189 went through Coalville as its Main Street. After road damage caused by heavy trucks hauling material for I-80 construction was repaired, the jurisdiction and maintenance of SR189 (US-189), running from Wanship on through Hoytsville and on to Coalville, was transferred from the State of Utah to Coalville City and Summit County (fig. 5)

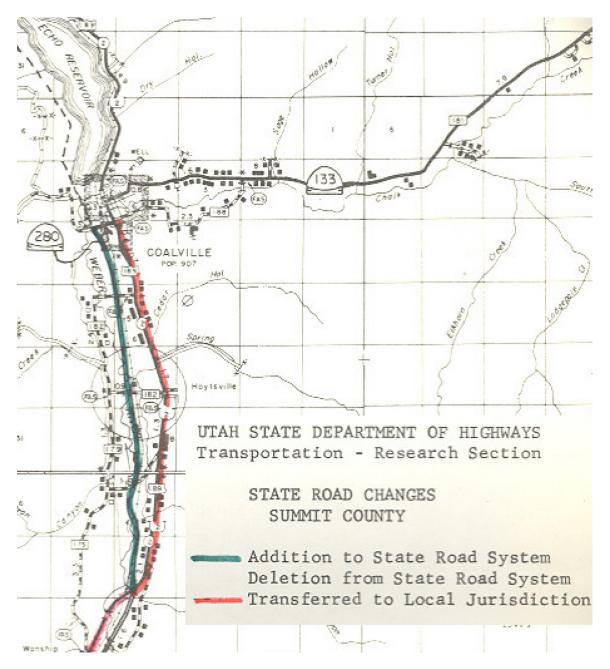


Figure 5. Location of State Route 2 and US-189 from Wanship to Coalville, Summit County, Utah prior to 1967 changes in alignment and jurisdiction.

After gaining control of SR189, Summit County officials requested that the State repair the damage done to it during the construction of I-80. The damage was repaired and the transfer was later completed. Scanned maps (fig. 5) and letters shown in Figure 6 and 7 indicate that I-80 and US-189 were not the same route at that time.



Summit County State of Utah COALVILLE, UTAH

REED D. PAGE BLANCHE R. YOUNG WANDA Y. SPRIDGS RONALD R. ROBINSON SHERIFF DAIL R. SIDDOWAY

October 18, 1967

Mr. David R. Greenwood Class "B" & "C" Road Aministrator State Office Bldg. Salt Lake City, Utah

Dear Mr. Greenwood;

On February 13, 1967, the State of Utah turned over to Summit County a portion of highway 189, from Wanship to Coalville.

Summit County will formally accept this road for maintenance and snow removal, but we feel that the STate of Utah should keep their promise to us, that of resurfacing this portion of highway.

A great part of this highway was broken up during construction of the freeway-nearly all of the gravel was heuled from the Harvey Pace gravel pit in Wanship and the heavy loads caused considerable amount of damage to nearly all of this section.

We also urge you to have this section of highway placed on our Class "B" System, as we removed the snow from it after February 13, 1967.

Your cooperation will be greatly appreciated.

Yours truly,

Summit County Commission R.W. Durrant Chairman

RW Murant

Figure 6. Conditional acceptance of State Road 189 (US-189) by Summit County officials. US-189 alignment has since been moved to coincide with I-80 through the Wanship and Coalville area.

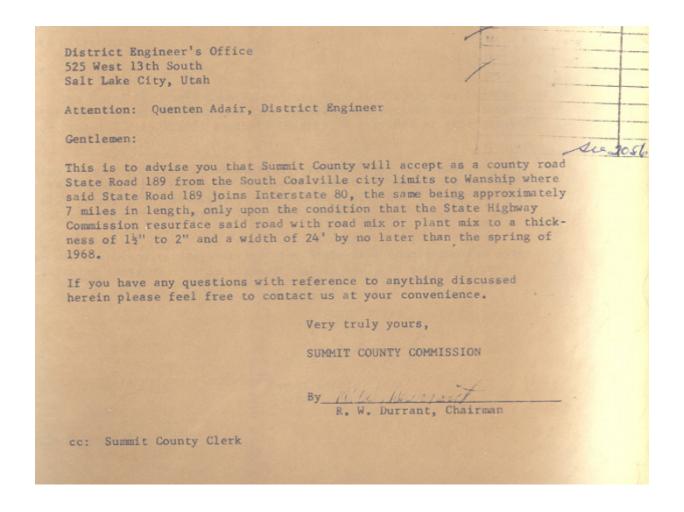


Figure 7. Summit County officials indicate they will accept SR189 (US-189) as a county road after repairs from Coalville City limits to Wanship are made.

US-189, re-named SR189, piggy-backed on the old SR2 prior to I-80 and was also Main Street through Coalville. Now US-189 piggy-backs on US-40 and on I-80 and never passes though Coalville nor crosses Chalk Creek.

Internet references:

State Roads resolutions (route history) list: http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:1348,

Specific highway resolutions:

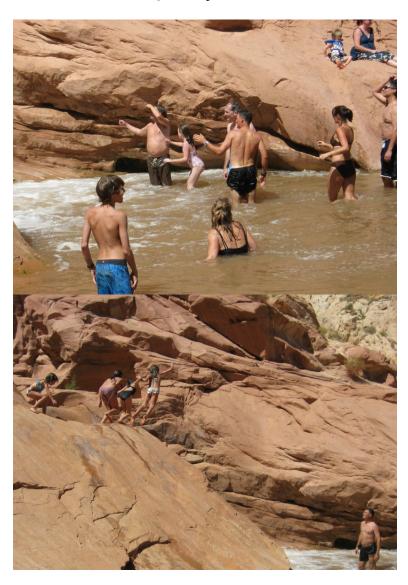
Route 2 (SR2): http://www.udot.utah.gov/main/uconowner.gf?n=200609121731373 Route 189 (US 189): http://www.udot.utah.gov/main/uconowner.gf?n=200609121729253

Route summaries:

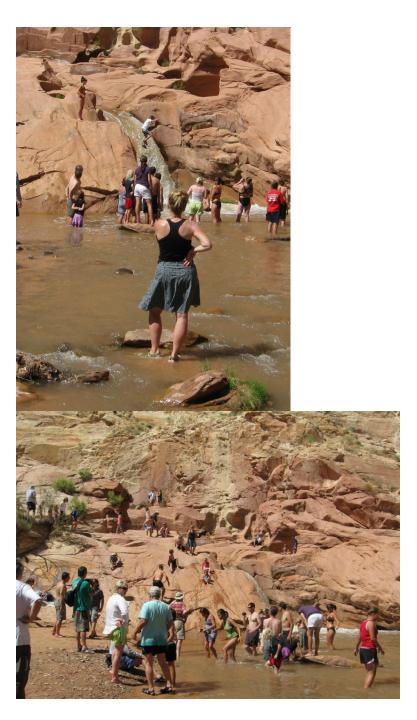
Summary of U.S. Route 189: http://en.wikipedia.org/wiki/U.S. Route 189: http://en.wikipedia.org/wiki/Utah_State_Route_280 (names east junction with US-189 as Main Street in Coalville).

No.1	Rule Number	Change Summary
5	R317-2-13.1	Fremont River and tributaries, through Capitol
		Reef National Park to headwaters were changed
		from Class 2B (infrequent primary and secondary
		contact recreation) to Class 2A (frequent primary
		and secondary contact recreation) based on
		information and the pictures below provided by the
		U.S. Park Service. Frequent primary recreation has
		more stringent numeric standards than infrequent
		primary recreation.

¹ Refers to the <u>UT WQS workplan 04202011</u>



Swimmers in Fremont River, September 2010



Swimmers in Fremont River, September 2010



Swimmers in Fremont River, September 2010

No.1	Rule Number	Change Summary
5	R317-2-13.4.a.	Ogden River and tributaries, from confluence with
		Weber River to Pineview Dam, except as listed
		below to Class 2A (frequent primary and secondary
		contact recreation) from Class 2B (infrequent
		primary and secondary contact recreation). Frequent
		primary recreation has more stringent numeric
		standards than infrequent primary recreation and one
		of the goals of the Ogden River restoration is to
		encourage recreation. Ms. Kari Lundeen, DWQ
		Watershed Coordinator, reported that people
		regularly swim in this reach of the Ogden River.

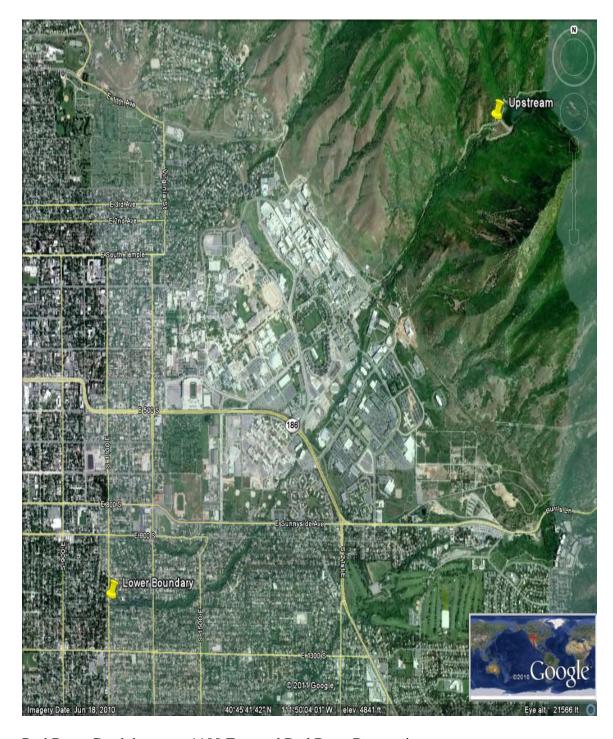
¹ Refers to the <u>UT WQS workplan 04202011</u>

No.1	Rule Number	Change Summary
4	R317-2-13.5.a.	Assign beneficial uses of 2B, 3A, and 4 to Red
		Butte Creek and tributaries from Liberty Park pond
		inlet to Red Butte Reservoir.

¹ Refers to the UT WQS workplan 04202011

In the absence of designated beneficial uses, the defaults are class 2B and 3D (waterfowl) for the urbanized portion of Red Butte Creek (see map below). At 1100 East, Red Butte Creek is channelized and buried in a subterranean culvert until discharging to the Jordan River. The beneficial uses of Red Butte Creek from Red Butte Reservoir to headwaters are Classes 1C (drinking water), 2B (infrequent primary and secondary contact recreation), 3A (cold water aquatic life), and 4 (agriculture).

This reach between 1100 East and Red Butte Reservoir is not regularly monitored through DWQ programs. Unlike the reach above Red Butte Reservoir, drinking water is not a beneficial use for Red Butte as it flows through the urbanized area. Recreation contact is anticipated to be infrequent primary and secondary contact based on the small size of Red Butte Creek (e.g., 0.05 m³/s during low water). Trout have been observed and are planned to be restocked as part of the restoration from the Chevron Oil Pipeline spill in 2010. The presence of trout supports the cold water aquatic life designation which is the most stringent aquatic life use. e Class 4 beneficial use for agriculture is intended to protect water quality to support irrigation such as Mt. Olivet cemetery.

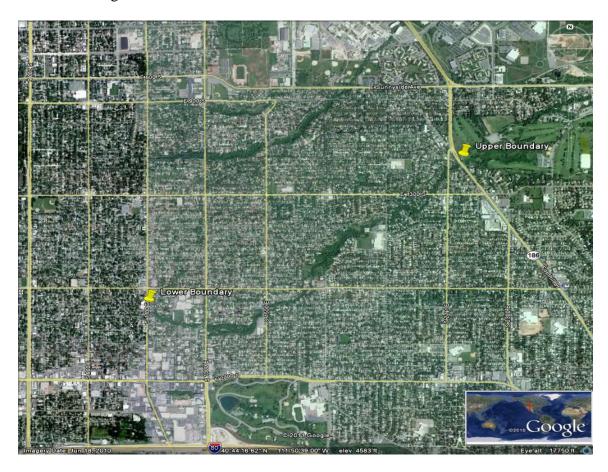


Red Butte Creek between 1100 East and Red Butte Reservoir

No.1	Rule Number	Change Summary
4	R317-2-13.5.a.	Assign beneficial uses of 2B, 3A, to Emigration Creek Emigration Creek and tributaries, from 1100 East in Salt Lake City to headwaters. This changes the boundary from Foothill Blvd. to 1100 East. In addition, add the beneficial use of Class 4 (agriculture) to protect the water rights for irrigation.

¹ Refers to the UT WQS workplan 04202011

The reach between 1100 East and Foothill Blvd. was previously unclassified and would default to Classes 2B (infrequent primary and secondary contact) and 3D (waterfowl). Based on the small size of the creek and location, infrequent primary and secondary contact recreation is appropriate. Cold water aquatic life (Class 3A) is the most stringent aquatic life use and is appropriate for the cold water species known to reside in Emigration Creek. Emigration Creek has water rights in this reach for irrigation and Class 4 is being added.



Emigration Creek between 1100 East and Foothill Blvd.

No.1	Rule Number	Change Summary	
19	R317-2-13.2.a. and R317-	Delete "**" that referred to a site-specific	
	13.2.bb.	temperature standard. No site-specific temperature	
		standard has been was promulgated for Hyrum or	
		Pineview Reservoirs	

¹ Refers to the <u>UT WQS workplan 04202011</u>

No.1	Rule Number	Change Summary	
4	R317-2-13.2.x.	Add beneficial uses of 2B (infrequent primary and	
		secondary contact recreation, 3A (cold water	
		aquatic life), and 4 (agriculture) to Big East Lake	

¹ Refers to the <u>UT WQS workplan 04202011</u>

In the absence of specifically designated beneficial uses, Big East Lake is assigned the default uses of 2B and 3D. As shown on the first page of the Lake Report for Big East Lake (http://www.waterquality.utah.gov/watersheds/lakes/BIGEAST.pdf) below, the beneficial use classes of 3A and 4 are appropriate. Class 2B is recommended because the cold waters (average temperature June-July 62° F, maximum 62° F) and cool air temperatures due to elevation will limit contact recreation.

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No.1	Rule Number	Change Summary
4	R317-2-13.2.	Assign beneficial uses of 1C (drinking water), 2A
		(frequent primary and secondary recreation
		contact), 3B (warm water aquatic life), and 4
		(agriculture).

¹ Refers to the <u>UT WQS workplan 04202011</u>

The water source for Sand Hollow is Quail Creek which has the beneficial uses of 1C, 2B, 3A, and 4. Nearby Quail Creek Reservoir has the beneficial uses of 1C, 2A, 2B, 3B, and 4 and water can be transferred between Quail Creek and Sand Hollow Reservoirs. Sand Hollow is a State Park (http://stateparks.utah.gov/parks/sand-hollow) that includes beaches and boat ramps to facilitate recreation. Fish in Sand Hollow include bass, bluegill, and crappie supporting the warm water aquatic life designation.

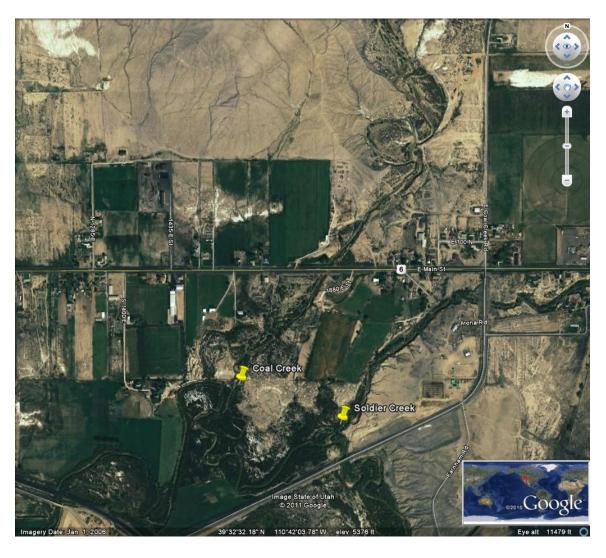
No.1	Rule Number	Change Summary	
	R317-2-13.2	Delete Class 2B (infrequent primary recreation)	
		where water is also Class 2A (frequent primary	
		recreation because the numeric standards for 2A	
		are more stringent than 2B. Class 2B was deleted	
		from: Bear Lake, Deer Creek, East Canyon, Echo,	
		Flaming Gorge, Gunlock, Huntington Lake North,	
		Hyrum, Lyman, Joe's Valley, Millsite, Moon,	
		Palisades, Pineview, Powell, Pyramid, Quail	
		Creek, Redfleet, Rockport, Scout, Starvation,	
		Steinaker, and Yuba. This change does not affect	
		the level of protection for these waters.	

¹ Refers to the <u>UT WQS workplan 04202011</u>

No. ¹	Rule Number	Change Summary	
	Table 2.14.1 Site-Specific	Change the boundary of the 3,000/1,700 mg/l site-	
14	TDS Standards, Price	specific TDS standard from Coal Creek to Soldier	
	River	Creek	

¹ Refers to the UT WQS workplan 04202011

The image below shows the confluences of Coal and Soldier Creeks with the Price River. This reach of the Price River was omitted when the site-specific total dissolved solids standards were originally promulgated. In 2011, this reach was included with the site-specific TDS standard for the lower Price River (3,000 mg/l). USEPA disapproved this change. No data specific to this reach is available and no dischargers or significant nonpoint anthropogenic sources impact this reach. The site-specific TDS standard was changed to the more conservative 1,700 mg/l.



No.1	Rule Number	Change Summary
10	Table 2.14.2	Delete acute criteria for mercury

¹ Refers to the <u>UT WQS workplan 04202011</u>

USEPA recommended that the acute criteria for mercury be deleted because USEPA's data indicates that the criteria are not adequately protective. This change is expected to have little effect on DWQ's programs because permits that have a mercury limit are based on the chronic criteria.

No. ¹	Rule Number	Change Summary
8	Table 2.14.2	Add numeric criteria for tributyl tin

¹ Refers to the <u>UT WQS workplan 04202011</u>

USEPA requested that Utah adopt numeric criteria for tributyl tin, a Clean Water Act nonpriority pollutant. DWQ proposes to adopt USEPA's criteria in lieu of developing Utah-specific criteria. Tributyl tin (TBT) is commonly used in antifouling coatings for watercraft, a chemical intermediary, and an antimicrobial in cooling systems (http://www.cdpr.ca.gov/docs/emon/pubs/ehapreps/eh9507.pdf). When used in cooling systems, TBT has been detected in treatment plant effluents. The impacts of adopting these criteria are not precisely known. No UPDES permits have TBT limits. Waters with boat marinas may be affected if TBT-based antifouling coatings were used but this is currently unknown because DWQ does not routinely monitor for TBT.

Tributyltin Numeric Criteria for Aquatic Wildlife (μg/l)				
Class 3A 3B 3C 3D				
4 Day Average	0.072	0.072	0.072	0.072
1 Hour Average 0.46 0.46 0.46 0.46				
Source: AWQC For Tributyl Tin Final EPA 822-R-03-031 December 2003				

No.1	Rule Number	Change Summary	
7, 8	Table 2.14.2 and 2.14.7	Add numeric criteria for acrolein	

¹ Refers to the <u>UT WQS workplan 04202011</u>

Acrolein is a CWA priority pollutant and is toxic to aquatic life. Acrolein is a biocide currently registered as an herbicide to control aquatic weeds in irrigation canals, as a burrow fumigant to control rodents, and as a microbiocide to eliminate slime-forming microbes in oil drilling operations, pulp and paper mills, and in industrial cooling towers. It has activity as a molluscicide, but is not currently registered for use against mollusks. Acrolein has not been detected in Utah waters and is not a UPDES parameter.

Acrolein Numeric Criteria for Aquatic Wildlife (µg/l)				
Class	3A	3B	3C	3D
4 Day Average	3.0	3.0	3.0	3.0
1 Hour Average	3.0	3.0	3.0	3.0

Acrolein List of Human Health Criteria (µg/l)			
Class 1C 3A, 3B, 3C, 3D			
	6.0	9.0	
Source: FR Vol. 73, No. 179 / Monday,			
September 15, 2008 pp. 53246-53248			

No.1	Rule Number	Change Summary
8	Table 2.14.2	Add numeric criteria for chlorpyrifos

¹ Refers to the <u>UT WQS workplan 04202011</u>

Chloropyrifos is a CWA priority pollutant. Chlorpyrifos is an organophosphate insecticide, acaricide, and miticide used to control foliage and soil-borne insect pests on a variety of food and feed crops. It controls Coleoptera, Diptera, Homoptera, and Lepidoptera in soil or on foliage in over 100 crops. Also used for control of household pests, mosquitoes (larvae and adults) and in animal houses. It is one of the most widely used pesticides in the United States and has been one of the top five insecticides used in residential settings. Chlorpyrifos has not been detected in Utah water's and is not a permitted parameter for UPDES permits.

Chlorpyrifos Numeric Criteria for Aquatic Wildlife (μg/l)					
Class	3A	3B	3C	3D	
4 Day Average	0.041	0.041	0.041	0.041	
1 Hour Average	0.083	0.083	0.083	0.083	

No.1	Rule Number	Change Summary
7	Table 2.14.6	Add numeric criteria for phenol

¹ Refers to the <u>UT WQS workplan 04202011</u>

Phenol is a CWA priority pollutant and a SWDA organoleptic pollutant. Phenol is infrequently detected in waters of the State and these detections are well below the standards. Some of the Utah refineries have permit limits for phenolic compounds. Phenol is used a general disinfectant, either in solution or mixed with slaked lime, etc., for toilets, stables, cesspools, floors, drains, etc. Phenol is also a chemical intermediate for phenolic resins, bisphenol A, and other chemicals.

Phenol List of Human Health Criteria (µg/l)				
Class	1C	3A, 3B, 3C, 3D		
	10,400	860,000		
Source: FR Vol. 73, No. 179 / Monday,				
September 15, 2008 pp. 53246-53248				