State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

Utah Water Quality Board Meeting
DEQ Board Room 1015
195 N 1950 W
Salt Lake City, UT 84116
May 24, 2017

Work Meeting Begins @ 8:30 a.m.
Discussion: Funding Sustainable Infrastructure…..……..……..….....John Mackey

Board Meeting Begins @ 9:30 a.m.
AGENDA

A. **Water Quality Board Meeting – Roll Call**

B. (Tab 1) **Minutes:**
Approval of Minutes for April 19, 2017 Water Quality Board Meeting
……..…….Myron Bateman

C. **Executive Secretary's Report** ……. Erica Gaddis

D. (Tab 2) **Funding Requests:**
1. **Financial Report** ……..……Emily Cantón

2. **Utah State University Extension:** *Request for Hardship Grant*……..…Skyler Davies

E. (Tab 3) **Rule Making:**
1. **Proposed Revisions to R317-2:** *Standards of Quality for Waters of the State*……..……....……Chris Bittner

F. (Tab 4) **Other Business:**
1. **Tibble Fork Settlement**…….……..Kevin Okleberry

2. **Appointment of Vice-Chair**…….……Myron Bateman

3. **Recognition of Service on the Wastewater Operator Certification Council**…….……..….....Myron Bateman

Next Meeting June 28, 2017
DEQ Board Room 1015
195 N 1950 W
Salt Lake City, UT 84116

Revised 5/16/2017

In compliance with the American Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human Resources, at (801) 536-4281, TDD (801) 536-4284, or by email at lwyss@utah.gov, at least five working prior to the scheduled meeting

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MINUTES
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
UTAH WATER QUALITY BOARD
Dixie Convention Center
1835 S. Convention Center Dr.
St. George, UT 84790
April 19, 2017

UTAH WATER QUALITY BOARD MEMBERS PRESENT

Myron Bateman	Clyde Bunker
Steven Earley	Gregg Galecki
Jennifer Grant	Michael Luers
Alan Matheson	Shane Pace
Jim VanDerslice	

DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Erica Gaddis, Kim Shelley, John Mackey, Jen Pruitt, Brenda Johnson, Marsha Case, Emily Cantón, Cheryl Parker, Beth Wondimu, Skyler Davies, Mathew Garn, Chris Bittner, Judy Etherington, Ken Hoffman, Woody Campbell

OTHERS PRESENT

Name	Organization Representing
John Zilles	Roosevelt City
Ryan Snow	Roosevelt City
Lawrence Burton	Orem City
Ken Burdick	Duchesne County Commissioner
Ruben VanTassell	JBS Swift Hyrum
Paul Fulgham	Tremonton City/RWAC
Dale Pieron	Rural Water Association of Utah
Tom Pendley	Wastewater Certification Council
Jordan Mathes	Tricounty Health Department
Doug Nielsen	Sunrise Engineering
Justin Atkinson	Sunrise Engineering
Matt Meyers	South Davis Sewer District
Chad Woolley	Arches Special Service District
Randy Zollinger	CH2M
Dan James	EUWRF
Tyson Kindsen	CES

Myron Bateman called the Board meeting to order at 9:00 AM and took roll call for the members of the Board and audience.

APPROVAL OF MINUTES OF THE MARCH 22, 2017 MEETING

Mr. Baker made note that a correction to the minutes needed to be made to the Blanding City motion on page four of the meeting packet. The last sentence of the motion "The original motion and the amended motion passed unanimously." will be struck from the record.

Motion: **Mr. Pace moved to approve the amended minutes of the March 22, 2017 meeting. Mr. Galecki seconded the motion. The motion passed with Ms. Grant and Mr. Bunker abstaining from the vote.**

EXECUTIVE SECRETARY REPORT

- Mr. Baker provided an update on the Utah Lake Study. The Board has allocated $1 million of funding to initiate the study. The seating of a steering committee to direct this effort is underway. Dr. Gaddis will Co-Chair the committee along with Executive Director of the Utah Lake Commission, Eric Ellis. This will be the most intensive study on Utah Lake that has ever occurred.

- Mr. Baker notified the Board that a survey is being conducted by the EPA of all dischargers that have an NPDES permit. It is a voluntary study that will be used to determine what levels of nitrogen and phosphorous removal are occurring nationally at wastewater treatment plants and if there are opportunities for optimization of these plants.

- EPA has sought public comment for recreational criteria relative to cyanotoxins. They are working with states to outline an advisory approach. The states have three options with the standards being developed by the EPA: 1) embrace the standard and include those in water quality standards to reduce toxins; 2) utilize this as an advisory element only; or 3) do nothing. The public comment period ended in March and the EPA will have the advisory element for this recreational season ready around the first of July.

- Mr. Baker notified the Board that the public notice for the settlement agreement for the Tibble Fork sediment release will end in one week to ten days. It will come back to the Board for the Board to affirm the penalty that will be associated with the settlement. Currently a $52,500 settlement has been proposed, in addition to the district covering the response costs, which would bring the total to approximately $93,000.

FUNDING REQUESTS

Financial Reports: Ms. Cantón updated the Board on the Loan Funds, and Hardship Grant Funds, as seen in the Board Packet on pages 6-8.

Utah State University Extension Grant Request: This item was deferred to the May meeting.

Roosevelt City: Mr. Davies presented Roosevelt City's request for financial assistance in the amount of $3,167,000 to construct a new sewer main that will connect the Stonegate subdivision with the City's collection system and treatment plant. The City also requested a design advance in the amount of $496,000 and a rights-of-way advance of $40,000. Staff recommended the Board authorize a 0% interest 30 year loan in the amount of $1,167,000 to Roosevelt City and a grant of $2,000,000 including a design advance of $536,000 with the following special conditions:

Special Conditions:

1. Roosevelt City must agree to participate annually in the Municipal Wastewater Planning Program (MWPP).
2. Blanding City must maintain an updated Water Conservation and Management Plan.
3. Roosevelt City must obtain the remaining funds to complete the project from other funding sources, including storm water management and septic tank abandonment costs not eligible under Clean Water SRF.
4. Roosevelt City must set an appropriate impact fee for the assets constructed with this funding. All future connections to this asset after the 46 homes currently in Stonegate must pay the impact fee to the City.

Motion: **Mr. Galecki moved to approve the request for financial assistance as presented by staff. Mr. Earley seconded the motion, and the motion passed with Mr. Pace and Mr. Bunker opposing.**

Arches Special Sewer District: Ms. Parker introduced Arches Special Service District's request for a hardship planning advance in the amount of $35,000 to complete a study to determine the District's infrastructure needs for wastewater management within its boundaries. Staff recommended the Board authorize the planning advance to be repaid when a project is identified and funded, in addition to the following conditions:

1. The Division of Water Quality must approve the engineering agreement and plan of study before the advance will be executed.
2. An approved Facility Plan must be submitted to the Division of Water Quality at the completion of the project.

Motion: **Following a discussion, Mr. Earley moved to approve the hardship planning advance as presented by staff. Mr. Luers seconded the motion, and the motion passed unanimously.**

OTHER BUSINESS

LaVere Merritt Response: Dr. Gaddis provided an update to the Board regarding Dr. Lavere Merritt's opposition to the Division's nutrient program, especially as it pertains to Utah Lake. The Board has funded a $1 million study on Utah Lake and that will be used to guide the Division's decisions with respect to nutrient limits for Utah Lake.

Wastewater Operator Certification Council: Mr. Pendley and Ms. Etherington presented the 2016 Utah Wastewater Operator Certification Council Annual Report to the Board. The Board thanked Mr. Pendley for their work.

Sudweeks Award: Mr. Bateman presented the 2016 Calvin K. Sudweeks award to Mr. Dale Pierson.

To listen to the full recording of the Board meeting go to: http://www.utah.gov/pmn/index.html

Next Meeting - May 24, 2017
DEQ Board Room 1015
195 N 1950 W
Salt Lake City, UT 84116

_____
Myron Bateman, Chair
Utah Water Quality Board

LOAN FUNDS
FINANCIAL STATUS REPORT

STATE REVOLVING FUND (SRF)	State Fiscal Year 2017	State Fiscal Year 2018	State Fiscal Year 2019
Funds Available			
2014 Capitalization Grant	356,915	-	-
2015 Capitalization Grant	1,465,154	-	-
2016 Capitalization Grant	4,507,700	-	-
Principal Forgiveness	4,657,415		
State Match	1,402,200	-	-
SRF - 2nd Round	109,463,288	107,571,492	32,926,929
Interest Earnings at 0.9%	164,195	968,143	296,342
Loan Repayments	2,034,625	12,442,293	12,632,187
Total Funds Available	124,051,492	120,981,929	45,855,458
Project Obligations			
Logan City	-	(39,131,000)	(30,000,000)
Loan Authorizations			
Duchesne City	(1,000,000)	(1,000,000)	(700,000)
Moab City	(5,480,000)	(5,800,000)	-
Roosevelt City (Stonegate)	-	(1,167,000)	(2,000,000)
Salem City	-	(10,000,000)	(3,000,000)
San Juan Spanish Valley SSD	-	(968,000)	(1,547,000)
South Davis Sewer District (with NPS)	(10,000,000)	(15,000,000)	(3,851,000)
Planned Projects			
Nutrient Projects - Various	-	(14,989,000)	(17,671,500)
Total Obligations	(16,480,000)	(88,055,000)	(58,769,500)
SRF Unobligated Funds	$ 107,571,492	$ 32,926,929	$ (12,914,042)

UTAH WASTEWATER LOAN FUND (UWLF)	State Fiscal Year 2017	State Fiscal Year 2018	State Fiscal Year 2019
Funds Available			
UWLF	$ 20,058,101	$ 17,629,401	$ 19,111,071
Sales Tax Revenue	-	3,587,500	3,587,500
Loan Repayments	170,000	3,156,170	2,837,662
Total Funds Available	20,228,101	24,373,071	25,536,233
General Obligations			
State Match Transfer	(1,402,200)	-	-
DWQ Administrative Expenses	(355,500)	(1,422,000)	(1,422,000)
Project Obligations			
None at this time	-	-	-
Loan Authorizations			
Blanding City	-	(2,557,000)	-
Eagle Mountain City (White Hills)	-	(1,283,000)	-
Summit County	(841,000)		
Projects Requesting Funding			
None at this time			
Total Obligations	(2,598,700)	(5,262,000)	(1,422,000)
UWLF Unobligated Funds	$ 17,629,401	$ 19,111,071	$ 24,114,233

*Presenting to the Water Quality Board

HARDSHIP GRANT FUNDS
FINANCIAL STATUS REPORT

HARDSHIP GRANT FUNDS (HGF)	State Fiscal Year 2017	State Fiscal Year 2018	State Fiscal Year 2019
Funds Available			
Beginning Balance		$ 551,577	$ 176,285
Federal HGF Beginning Balance	3,837,053	-	-
State HGF Beginning Balance	1,302,873	-	-
Interest Earnings at 0.9%	7,710	4,964	1,587
UWLF Interest Earnings at 0.9%	30,087	39,666	43,000
Hardship Grant Assessments	319,730	1,346,351	1,225,888
Interest Payments	-	323,727	282,239
Advance Repayments	-	220,000	-
Total Funds Available	5,497,453	2,486,285	1,728,998
Financial Assistance Project Obligations			
Arches Special Service District - Planning Advance	(35,000)		
Big Plains - Planning Grant	(38,000)	-	-
Duchesne City - Construction Grant	-	(400,000)	-
Eagle Mountain City - White Hills - Construction Grant	-	(510,000)	-
Emigration Sewer Imp Dist - Planning Grant	(26,158)	-	-
Francis City - Construction Grant	(513,000)	-	-
Hinckley Town - Hardship Grant	(5,000)		
Roosevelt City (Stonegate) - Design Advance	(536,000)	-	-
San Juan Spanish Valley SSD - Design Advance	(220,000)		
Town of Tropic	(44,000)		
Tri-County - Construction Grant	(221,000)	-	-
Non-Point Source/Hardship Grant Obligations			
(FY11) Gunnison Irrigation Company	(48,587)	-	-
(FY11) DEQ - Willard Spur Study	(113,326)	-	-
(FY12) Utah Department of Agriculture	(652,233)	-	-
(FY13) DEQ - Great Salt Lake Advisory Council	(245,615)	-	-
(FY15) DEQ - Ammonia Criteria Study	(70,674)		
(FY15) DEQ - Nitrogen Transformation Study	(59,816)		
(FY16) DEQ - San Juan River Monitoring	(166,288)		
(FY17) DEQ - GW Quality Study	(68,100)		
(FY17) DEQ - Utah Lake Water Quality Study	(300,000)	(400,000)	(300,000)
FY 2012 - Remaining Payments	(5,315)	-	-
FY 2013 - Remaining Payments	(9,877)	-	-
FY 2014 - Remaining Payments	-	-	-
FY 2015 - Remaining Payments	(145,253)	-	-
FY 2016 - Remaining Payments	(484,406)	-	-
FY 2017 Allocation	(896,228)	-	-
FY 2018 Allocation	-	(1,000,000)	-
FY 2019 Allocation	-	-	(1,000,000)
Planned Projects			
*USU Extension - Hardship Grant	(42,000)		
Total Obligations	(4,945,876)	(2,310,000)	(1,300,000)
HGF Unobligated Funds	$ 551,577	$ 176,285	$ 428,998

*Presenting to the Water Quality Board

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DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

TO: Water Quality Board

THROUGH: Walter L. Baker, P.E.

FROM: Skyler C. Davies, P.E.

DATE: May 24, 2017

SUBJECT: Utah State University Extension Grant Request

The Utah State University Extension is requesting **a hardship grant of $42,000** to provide funding for its proposed project "Documenting Current and Projected Water Reuse for Irrigation along the Wasatch Front." Water Quality Board funding would be matched with a $42,000 Water Initiatives Grant for which the applicant has applied. The applicant's Water Initiatives Grant proposal was included with the previous board packet. The applicant has since written a memo to the Board that summarizes the justification for their request. This memo is included as Attachment 1 to this memo in place of their proposal to the Water Initiatives Grant.

The proposed study would assess the extent of current water reuse for irrigation in six Utah counties (Cache, Box Elder, Weber, Davis, Salt Lake, and Utah Counties) and would gather perspectives of water treatment managers and related irrigation providers on potential future implementation of water reuse systems. Compiling up to date information on who is doing what in terms of water reuse for irrigation would support the exchange of information on experiences, techniques and best practices. The goal of this study would be to provide information concerning water conservation opportunities in the most populous areas of the state. This research would provide information to state water agencies and water providers, districts, and companies as well as agricultural and public stakeholders as they seek to make water conservation decisions for the future, and would inform regional water management decisions in regard to water reuse.

The proposed project is estimated to be completed within 2 years following complete funding authorization.

Staff supports this study as it would promote water reuse thus reducing nutrient loads on Waters of the State, benefiting water quality. A letter of support from the Division Water Quality is included as Attachment 2.

Staff recommends the Board **authorize a hardship grant of $42,000** to The Utah State University Extension.

Special Conditions include:

1. The applicant must obtain $42,000 from other grant sources prior to receive hardship grant funds.
2. The Division of Water Quality must approve the plan of study before the grant will be executed.
3. The applicant must present study results to the Water Quality Board and provide the Database/tool (or open access thereto) to the Division upon completion of the study.

USU Extension Grant Request
May 24, 2017
Attachment 1- Memo

DEPARTMENT OF CIVIL AND
ENVIRONMENTAL ENGINEERING
4110 Old Main Hill
Logan, UT 84322-4110
Telephone: (435) 797-3926

To: Utah Division of Water Quality Board

From: L. Niel Allen, Ph.D., P.E.
Courtney Flint, Ph.D.

Date: May 4, 2017

Subject: Utah State University Grant Request to Documenting Current and Projected Water Reuse for Irrigation along the Wasatch Front

Thank you for considering this grant request. Our proposed plan is to survey and interview wastewater plant managers and related stakeholders to understand current and planned efforts to incorporate water reuse into irrigation systems. It is our opinion that documented water reuse status provides useful information for State agencies, water users and wastewater treatment entities. Wastewater reuse is not new along the Wasatch Front, yet there are likely creative opportunities that some wastewater treatment entities could consider based on data and experience of others. We believe that by documenting current and future reuse efforts and plans, as well as systematically gathering perspectives from water treatment managers and irrigation stakeholders as to the perceived opportunities and barriers to water reuse, we can better understand the trajectory of water reuse in the most populated region of Utah. Our research seeks to answer the following questions: Who is doing and planning water reuse for irrigation? Where? With what level of type of treatment? Why or why not?

Treated wastewater is being used to irrigate fruits, vegetables, livestock feed, and gardens, along with irrigation of landscaping, parks, golf courses. Reuse needs to be implemented safely to protect public health and the environments. Positive water conservation and water quality potential outcomes from wastewater reuse may include:

- Providing nutrients for crop production.
- Reducing direct diversions from streams and rivers to maintain flows with higher quality water.
- Helping to facilitate agriculture-to-urban (by providing an agriculture replacement source of water) and urban-to-agriculture (by providing new agriculture water) through water exchanges.
- Extending municipal water supplies by replacing some irrigation demands currently provided by municipal potable water supplies.

- Providing opportunities for innovative discharge permit compliance variances to reduce phosphorus discharge into streams and lakes.
- Providing environmental instream flow benefits from reduced diversions, along with reduced nutrient inflow to streams and lakes from wastewater discharge.

A significant amount of wastewater discharge is used for irrigation; sometimes directly and other times indirectly because wastewater becomes a part of the overall water supply. In some cases and at certain times, it may be best use wastewater for direct irrigation rather than discharging into water bodies. Water law and water rights are also major considerations in the reuse of wastewater.

We hope you will support this effort to provide water reuse information to inform regional water management decisions.

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Walter L. Baker, P.E.
Director

MAR 17 2017

Utah State University Extension
4900 Old Main Hill
Utah State University
Logan, UT 84322-4900

Dear Selection Committee,

RE: 2017 Extension Water Initiative Grants

This letter confirms that the Utah Division of Water Quality supports the research proposal titled "Documenting Current and Projected Water Reuse for Irrigation along the Wasatch Front," prepared by Drs. Courtney Flint and L. Niel Allen. The proposal is to be submitted to the 2017 Extension Water Initiative Grant Program. My staff will assist Utah State University Extension and its principal investigators in applying to the Utah Water Quality Board for a water quality hardship grant in the amount $42,000 to support the project and meet the external matching funds requirement of the Water Initiative Grants. John Mackey, P.E., with Utah Division of Water Quality will serve as an advisor to the project.

Reuse of treated wastewater for irrigation is a critical component in water conservation strategies implemented in Utah to satisfy irrigation and increasing urban water demands, protect water quality, and bolster future water supplies. The proposed research project will provide relevant information about current wastewater reuse activities, opportunities, and acceptance among wastewater treatment utilities, water supply entities, and their users. The resulting database and website will be an effective tool for these and other stakeholders seeking partnerships to conserve water through reuse. Extension workshops and water conservation programs will provide an effective means of sharing information concerning water reuse. This information is a relevant Extension activity that can extend Utah's water supplies, improve water quality, and will serve the people of Utah.

Sincerely,

Walter L. Baker, P.E.
Director

DWQ-2017-002201.docx

195 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144870 • Salt Lake City, UT 84114-4870
Telephone (801) 536-4300 • Fax (801) 536-4301 • T.D.D. (801) 903-3978
www.deq.utah.gov

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M E M O R A N D U M

TO: Water Quality Board

FROM: Chris Bittner, Standards Coordinator

DATE: May 24, 2017

SUBJECT: Proposed Revisions to R317-2, Standards of Quality for Waters of the State

Action Item: Request Board approval to initiate rulemaking on the proposed changes.

Staff requests the Board's approval to commence rulemaking for the following proposed revisions to Utah's water quality standards. These changes have been vetted with the Water Quality Standards Workgroup. With the approval of the Board, staff can initiate the formal rulemaking process with the Utah Division of Administrative Rules. The process will include publication in the Utah Bulletin, public notices with comment periods, mailings to Utah's political leaders and hearings. After the hearings are scheduled, staff will invite a member of the Board to serve as hearing officer. Alternatively, the Board can delegate this responsibility to staff.

The Board will be apprised of all comments received during the hearings and public comment period. After considering the comments received, staff will return to the Board with recommendations for changing or adopting the revisions.

Summary of Proposed Revisions.

Attachment 1 is a redline-strikeout version of the proposed changes. Attachment 2 provides a detailed explanation for the changes that are summarized below. These are ordered sequentially as they appear in rule.

R317-2-3.5 Antidegradation Review

1. R317-2-3.5.d. The proposed change is to delete the requirement that an Antidegradation Level II Review is always required for Class 1c drinking water use waters. The Level II review has two critical steps. The first is that the use of assimilative capacity when effluent concentrations exceed ambient concentrations is socially and economically important. The second is that the least degrading, feasible treatment alternative is being used.

Prior to the substantive revisions to Utah's antidegradation review requirements in circa 2009, most discharges were not required to perform a Level II antidegradation reviews. At the request of drinking water providers, DWQ agreed that all discharges should be subject to a Level II antidegradation review. Utah's current antidegradation policy requires a Level II antidegradation review for all new discharge permits and whenever concentrations or loading increase from previously permitted values. These changes precluded the need for a special requirement for discharges to Class 1C drinking water use waters. However, the rule requirement still required that a Level II antidegradation review be conducted at each permit renewal even when a review has already been completed and the renewed permit had no increases. These reviews are perfunctory and unnecessarily burdensome because no new information was available.

This change was endorsed by Reed Obendorfer who at the time represented the Central Utah Project on the water quality standards workgroup. The Division of Drinking Water was notified of the proposed change as were every surface water drinking water provider in the State in 2015. No comments objecting to the change were received.

R317-2-13 Classification of Waters of the State.

2. R317-2-13.1. Mill Creek, Grand County. The proposed change is from Class 2B, infrequent primary and secondary contact recreation to Class 2A, frequent primary and secondary contact recreation. As specified in R317-2-6.2.a, specific examples of frequent primary contact include swimming. Letters of support and pictures of swimmers were received from the Moab Watershed Council and Bureau of Land Management supporting the proposed change. Mill Creek is the location of a popular swimming hole in the summer.

3. R317-2-1312.x. Utah Lake, Utah County. The proposed change is from Class 2B, infrequent primary and secondary contact recreation to Class 2A, frequent primary and secondary contact recreation. As specified in R317-2-6.2.a, specific examples of frequent primary contact include swimming and water skiing. Utah Lake has public swim beaches (e.g., Lincoln Beach, Sandy Beach Access) and several marinas for access to waterskiing and wakeboarding (e.g., American Fork Boat Harbor, Lincoln Harbor, Utah Lake State Park).

   This change is anticipated to have little effect on Utah Lake because frequent primary and secondary contact recreation are "existing uses." Utah's water quality standards require that existing uses be protected (r317-2-3.5) . "Existing Uses" means those uses actually attained in a water body on or after November 28, 1975, whether or not they are included in the water quality standards (R317-1-1-1).

R317-2-14 Numeric Criteria

4. Table 2.14.1. Fluoride. The fluoride criteria for the Class 1C drinking water use waters are 1.4-2.4 mg/L depending on the air temperature (Footnote 3 to Table 2.14.1). The current USEPA finished drinking water maximum contaminant level (MCL) is 4.0 mg/L and the maximum contaminant level goal (MCLG) is 4.0 mg/L. The proposed change is to update to the current MCL of 4.0 mg/L. This change would apply to all Class 1C waters in Utah. All of the drinking water providers and the Division of Drinking Water were notified of the proposed changed in 2015. No comments were received by DWQ.

5. Table 2.14.1, Footnote (4) Site-Specific Standards for Total Dissolved Solids (TDS). The proposed change is to add "and tributaries" to the site-specific TDS criteria for Quitchupah Creek, Emery County. The "and tributaries" was inadvertently omitted when the site-specific criteria were promulgated. This resulted in the statewide TDS criterion of 1,200 mg/L being applicable for the tributaries resulting in an impairment of Quitchupah Creek in 2016. The rationale used to support the site-specific criteria for Quitchupah Creek applies equally to the tributaries. The site-specific criteria are 3,800 mg/L and a total sulfate of 2,000 mg/L to protect the existing livestock watering agricultural use.

6. Table 2.14.1, Footnote (4) Site-Specific Standards for Total Dissolved Solids (TDS). The proposed change is to correct the reference:

   Sevier River from Gunnison Bend Reservoir to Clear Lake: 3,370 mg/l
   to:
   Sevier River from Gunnison Bend Reservoir to Crafts Lake: 3,370 mg/l

   The reference to Clear Lake is incorrect because it's not on the Sevier River.

7. Table 2.14.2, Cadmium. The proposed change is to update Utah's water quality criteria for the protection of aquatic life to be consistent with the USEPA criteria updated in 2016. The updates would apply to all Classes 3A through 3D waters in Utah. The cadmium c riteria are expressed as equations that include pH and hardness. The table below compares Utah's existing cadmium criteria to the 2016 USEPA criteria at 100 mg/L $CaCO_3$ hardness. The conversion factors from dissolved (criterion) to totals (UDPES permits) are unchanged.

	Acute (µg/L)	Chronic (µg /L)
Utah	2.0	0.25
USEPA 2015	1.8	0.72

   As shown in the table above, the proposed acute criterion is marginally more stringent and the chronic criterion is almost 3-times less stringent. These changes are anticipated to have little effect on Utah's water quality programs. No discharge permits with cadmium water quality-based effluent limits were identified. Some Utah waters are currently impaired for cadmium and these include segments of the San Juan River, Little Cottonwood, Big Cottonwood City and Parley's Creeks in Salt Lake County, Spring Creek in Utah County and McHenry and Silver Creeks in Summit County. The potential effects of the proposed cadmium criteria on these impairments are unknown.

8. Table 2.14.2, Carbaryl. The proposed change is to add new aquatic life criteria for carbaryl to Classes 3A through 3D. The USEPA published new criteria for carbaryl in 2012. The U.S. Geological Service reports that carbaryl is the 2nd most commonly detected pesticide in urban streams. Carbaryl is used in agriculture to control pests on terrestrial food crops including fruit and nut trees, many types of fruit and vegetables, and grain crops; cut flowers; nursery and ornamentals; turf, including production facilities; greenhouses; and golf courses. Carbaryl is also registered for use on residential sites (e.g., annuals, perennials, shrubs) by professional pest

control operators and by homeowners on gardens, ornamentals and turfgrass. Carbaryl can enter the water via runoff.

No specific data regarding the use of carbaryl in Utah were available from DWQ's pesticide permitting program or the Utah Department of Agriculture and Food. Carbaryl is not a regular target analyte for DWQ's monitoring programs. Carbaryl is not expected to be a common pollutant in permitted discharges.
The proposed carbaryl aquatic life criteria are:

Acute (1 hour) (µg /L)	Chronic (4 days) (µg/L)
2.1	2.1

ATTACHMENT 1
Redline/Strikeout of Proposed Amendments to R317-2
Standards of Quality for Waters of the State
May 24, 2017 Utah Water Quality Board Meeting

R317. Environmental Quality, Water Quality.
R317-2. Standards of Quality for Waters of the State.

----------BREAK----------

R317-2-3. Antidegradation Policy.

3.1 Maintenance of Water Quality

Waters whose existing quality is better than the established standards for the designated uses will be maintained at high quality unless it is determined by the Director, after appropriate intergovernmental coordination and public participation in concert with the Utah continuing planning process, allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. However, existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses.

In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with Section 316 of the Federal Clean Water Act.

3.2 Category 1 Waters

Waters which have been determined by the Board to be of exceptional recreational or ecological significance or have been determined to be a State or National resource requiring protection, shall be maintained at existing high quality through designation, by the Board after public hearing, as Category 1 Waters. New point source discharges of wastewater, treated or otherwise, are prohibited in such segments after the effective date of designation. Protection of such segments from pathogens in diffuse, underground sources is covered in R317-5 and R317-7 and the rules for Individual Wastewater Disposal Systems (R317-501 through R317-515). Other diffuse sources (nonpoint sources) of wastes shall be controlled to the extent feasible through implementation of best management practices or regulatory programs.

Discharges may be allowed where pollution will be temporary and limited after consideration of the factors in R317-2-3.5.b.4., and where best management practices will be employed to minimize pollution effects.

Waters of the state designated as Category 1 Waters are listed in R317-2-12.1.

3.3 Category 2 Waters

Category 2 Waters are designated surface water segments which are treated as Category 1 Waters except that a point source discharge may be permitted provided that the discharge does not degrade existing water quality. Discharges may be allowed where pollution will be temporary and limited after consideration of the factors in R317-2-.3.5.b.4., and where best management practices will be employed to minimize pollution effects. Waters of the state designated as Category 2 Waters are listed in R317-2-12.2.

3.4 Category 3 Waters

For all other waters of the state, point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in Section 3.5.

3.5 Antidegradation Review (ADR)

An antidegradation review will determine whether the proposed activity complies with the applicable antidegradation requirements for receiving waters that may be affected.

An antidegradation review (ADR) may consist of two parts or levels. A Level I review is conducted to insure that existing uses will be maintained and protected.

Both Level I and Level II reviews will be conducted on a parameter-by-parameter basis. A decision to move to a Level II review for one parameter does not require a Level II review for other parameters. Discussion of parameters of concern is those expected to be affected by the proposed activity.

Antidegradation reviews shall include opportunities for public participation, as described in Section 3.5e.

a. Activities Subject to Antidegradation Review (ADR)

1. For all State waters, antidegradation reviews will be conducted for proposed federally regulated activities, such as those under Clean Water Act Sections 401 (FERC and other Federal actions), 402 (UPDES permits), and 404 (Army Corps of Engineers permits). The Director may conduct an ADR on any projects with the potential for major impact on the quality of waters of the state. The review will determine whether the proposed activity complies with the applicable antidegradation requirements for the particular receiving waters that may be affected.

2. For Category 1 Waters and Category 2 Waters, reviews shall be consistent with the requirement established in Sections 3.2 and 3.3, respectively.

3. For Category 3 Waters, reviews shall be consistent with the requirements established in this section

b. An Anti-degradation Level II review is not required where any of the following conditions apply:

1. Water quality will not be lowered by the proposed activity or for existing permitted facilities, water quality will not be further lowered by the proposed activity, examples include situations where:

(a) the proposed concentration-based effluent limit is less than or equal to the ambient concentration in the receiving water during critical conditions; or

(b) a UPDES permit is being renewed and the proposed effluent concentration and loading limits are equal to or less than the concentration and loading limits in the previous permit; or

(c) a UPDES permit is being renewed and new effluent limits are to be added to the permit, but the new effluent limits are based on maintaining or improving upon effluent concentrations and loads that have been observed, including variability; or

2. Assimilative capacity (based upon concentration) is not available or has previously been allocated, as indicated by water quality monitoring or modeling information. This includes situations where:

(a) the water body is included on the current 303(d) list for the parameter of concern; or

(b) existing water quality for the parameter of concern does not satisfy applicable numeric or narrative water quality criteria; or

(c) discharge limits are established in an approved TMDL that is consistent with the current water quality standards for the receiving water (i.e., where TMDLs are established, and changes in effluent limits that are consistent with the existing load allocation would not trigger an antidegradation review).

Under conditions (a) or (b) the effluent limit in an UPDES permit may be equal to the water quality numeric criterion for the parameter of concern.

3. Water quality impacts will be temporary and related only to sediment or turbidity and fish spawning will not be impaired,

4. The water quality effects of the proposed activity are expected to be temporary and limited. As general guidance, CWA Section 402 general discharge permits, CWA Section 404 general permits, or activities of short duration, will be deemed to have a temporary and limited effect on water quality where there is a reasonable factual basis to support such a conclusion. Factors to be considered in determining whether water quality effects will be temporary and limited may include the following:

(a) Length of time during which water quality will be lowered.

(b) Percent change in ambient concentrations of pollutants of concern

(c) Pollutants affected

(d) Likelihood for long-term water quality benefits to the segment (e.g., dredging of contaminated sediments)

(e) Potential for any residual long-term influences on existing uses.

(f) Impairment of the fish spawning, survival and development of aquatic fauna excluding fish removal efforts.

c. Anti-degradation Review Process

For all activities requiring a Level II review, the Division will notify affected agencies and the public with regards to the requested proposed activity and discussions with stakeholders may be held. In the case of Section 402 discharge permits, if it is determined that a discharge will be allowed, the Director will develop any needed UPDES permits for public notice following the normal permit issuance process.

The ADR will cover the following requirements or determinations:

1. Will all Statutory and regulatory requirements be met?

The Director will review to determine that there will be achieved all statutory and regulatory requirements for all new and existing point sources and all required cost-effective and reasonable best management practices for nonpoint source control in the area of the discharge. If point sources exist in the area that have not achieved all statutory and regulatory requirements, the Director will consider whether schedules of compliance or other plans have been established when evaluating whether compliance has been assured. Generally, the "area of the discharge" will be determined based on the parameters of concern associated with the proposed activity and the portion of the

receiving water that would be affected.

2. Are there any reasonable less-degrading alternatives?

There will be an evaluation of whether there are any reasonable non-degrading or less degrading alternatives for the proposed activity. This question will be addressed by the Division based on information provided by the project proponent. Control alternatives for a proposed activity will be evaluated in an effort to avoid or minimize degradation of the receiving water. Alternatives to be considered, evaluated, and implemented to the extent feasible, could include pollutant trading, water conservation, water recycling and reuse, land application, total containment, etc.

For proposed UPDES permitted discharges, the following list of alternatives should be considered, evaluated and implemented to the extent feasible:

(a) innovative or alternative treatment options
(b) more effective treatment options or higher treatment levels
(c) connection to other wastewater treatment facilities
(d) process changes or product or raw material substitution
(e) seasonal or controlled discharge options to minimize discharging during critical water quality periods
(f) pollutant trading
(g) water conservation
(h) water recycle and reuse
(i) alternative discharge locations or alternative receiving waters
(j) land application
(k) total containment
(l) improved operation and maintenance of existing treatment systems
(m) other appropriate alternatives

An option more costly than the cheapest alternative may have to be implemented if a substantial benefit to the stream can be realized. Alternatives would generally be considered feasible where costs are no more than 20% higher than the cost of the discharging alternative, and (for POTWs) where the projected per connection service fees are not greater than 1.4% of MAGHI (median adjusted gross household income), the current affordability criterion now being used by the Water Quality Board in the wastewater revolving loan program. Alternatives within these cost ranges should be carefully considered by the discharger. Where State financing is appropriate, a financial assistance package may be influenced by this evaluation, i.e., a less polluting alternative may receive a more favorable funding arrangement in order to make it a more financially attractive alternative.

It must also be recognized in relationship to evaluating options that would avoid or reduce discharges to the stream, that in some situations it may be more beneficial to leave the water in the stream for instream flow purposes than to remove the discharge to the stream.

3. Does the proposed activity have economic and social importance?

Although it is recognized that any activity resulting in a discharge to surface waters will have positive and negative aspects,

information must be submitted by the applicant that any discharge or increased discharge will be of economic or social importance in the area.

The factors addressed in such a demonstration may include, but are not limited to, the following:

(a) employment (i.e., increasing, maintaining, or avoiding a reduction in employment);

(b) increased production;

(c) improved community tax base;

(d) housing;

(e) correction of an environmental or public health problem; and

(f) other information that may be necessary to determine the social and economic importance of the proposed surface water discharge.

4. The applicant may submit a proposal to mitigate any adverse environmental effects of the proposed activity (e.g., instream habitat improvement, bank stabilization). Such mitigation plans should describe the proposed mitigation measures and the costs of such mitigation. Mitigation plans will not have any effect on effluent limits or conditions included in a permit (except possibly where a previously completed mitigation project has resulted in an improvement in background water quality that affects a water quality-based limit). Such mitigation plans will be developed and implemented by the applicant as a means to further minimize the environmental effects of the proposed activity and to increase its socio-economic importance. An effective mitigation plan may, in some cases, allow the Director to authorize proposed activities that would otherwise not be authorized.

5. Will water quality standards be violated by the discharge?

Proposed activities that will affect the quality of waters of the state will be allowed only where the proposed activity will not violate water quality standards.

6. Will existing uses be maintained and protected?

Proposed activities can only be allowed if "existing uses" will be maintained and protected. No UPDES permit will be allowed which will permit numeric water quality standards to be exceeded in a receiving water outside the mixing zone. In the case of nonpoint pollution sources, the non-regulatory Section 319 program now in place will address these sources through application of best management practices to ensure that numeric water quality standards are not exceeded.

7. If a situation is found where there is an existing use which is a higher use (i.e., more stringent protection requirements) than that current designated use, the Director will apply the water quality standards and anti-degradation policy to protect the existing use. Narrative criteria may be used as a basis to protect existing uses for parameters where numeric criteria have not been adopted. Procedures to change the stream use designation to recognize the existing use as the designated use would be initiated.

d. Special Procedures for Drinking Water Sources

~~An Antidegradation Level II Review will be required by the Director for discharges to waters with a Class 1C drinking water use assigned.~~

Depending upon the locations of the discharge and its proximity to

downstream drinking water diversions, additional treatment or more stringent effluent limits or additional monitoring, beyond that which may otherwise be required to meet minimum technology standards or in stream water quality standards, may be required by the Director in order to adequately protect public health and the environment. Such additional treatment may include additional disinfection, suspended solids removal to make the disinfection process more effective, removal of any specific contaminants for which drinking water maximum contaminant levels (MCLs) exists, and/or nutrient removal to reduce the organic content of raw water used as a source for domestic water systems.

Additional monitoring may include analyses for viruses, Giardia, Cryptosporidium, other pathogenic organisms, and/or any contaminant for which drinking water MCLs exist. Depending on the results of such monitoring, more stringent treatment may then be required.

The additional treatment/effluent limits/monitoring which may be required will be determined by the Director after consultation with the Division of Drinking Water and the downstream drinking water users.

e. Public Notice

The public will be provided notice and an opportunity to comment on the conclusions of all completed antidegradation reviews. When possible, public notice on the antidegradation review conclusions will be combined with the public notice on the proposed permitting or certifying action. In the case of UPDES permits, public notice will be provided through the normal permitting process, as all draft permits are public noticed for 30 days, and public comment solicited, before being issued as a final permit. The Statement of Basis for the draft UPDES permit will contain information on how the ADR was addressed including results of the Level I and Level II reviews. In the case of Section 404 permits from the Corps of Engineers, the Division of Water Quality will develop any needed 401 Certifications and the public notice may be published in conjunction with the US Corps of Engineers public notice procedures. Other permits requiring a Level II review will receive a separate public notice according to the normal State public notice procedures.

f. Implementation Procedures

The Director shall establish reasonable protocols and guidelines (1) for completing technical, social, and economic need demonstrations, (2) for review and determination of adequacy of Level II ADRs and (3) for determination of additional treatment requirements. Protocols and guidelines will consider federal guidance and will include input from local governments, the regulated community, and the general public. The Director will inform the Water Quality Board of any protocols or guidelines that are developed.

----------BREAK----------

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.

----------BREAK----------

R317-2-13. Classification of Waters of the State (see R317-2-6).

a. Colorado River Drainage

13.1 Upper Colorado River Basin

TABLE

Paria River and tributaries, from state line to headwaters	2B	3C	4
All tributaries to Lake Powell, except as listed below	2B	3B	4
Tributaries to Escalante River from confluence with Boulder Creek to			

headwaters, including Boulder Creek			2B	3A	4
Dirty Devil River and tributaries, from Lake Powell to Fremont River			2B	3C	4
Deer Creek and tributaries, from confluence with Boulder Creek to headwaters			2B	3A	4
Fremont River and tributaries, from confluence with Muddy Creek to Capitol					
Reef National Park, except as listed below	1C		2B	3C	4
Pleasant Creek and tributaries, from confluence with Fremont River to East boundary of Capitol Reef National Park			2B	3C	4
Pleasant Creek and tributaries, from East boundary of Capitol Reef National Park to headwaters	1C		2B	3A	
Fremont River and tributaries, through Capitol Reef National Park to headwaters	1C	2A		3A	4
Muddy Creek and tributaries, from confluence with Fremont River to Highway U-10 crossing, except as listed below			2B	3C	4
Quitchupah Creek and Tributaries, from Highway U-10 crossing to headwaters			2B	3A	4
Ivie Creek and tributaries, from Highway U-10 to headwaters			2B	3A	4
Muddy Creek and tributaries, from Highway U-10 crossing to headwaters	1C		2B	3A	4

San Juan River and Tributaries, from Lake Powell to state line except As listed below	1C	2A		3B	4
Johnson Creek and tributaries, from confluence with Recapture Creek to headwaters	1C		2B	3A	4
Verdure Creek and tributaries, from Highway US-191 crossing to headwaters			2B	3A	4
North Creek and tributaries, from confluence with Montezuma Creek to headwaters	1C		2B	3A	4
South Creek and tributaries, from confluence with Montezuma Creek to headwaters	1C		2B	3A	4
Spring Creek and tributaries, from confluence with Vega Creek to headwaters			2B	3A	4
Montezuma Creek and tributaries, from U.S. Highway 191 to headwaters	1C		2B	3A	4
Colorado River and tributaries, from Lake Powell to state line except as listed below	1C	2A		3B	4
Indian Creek and tributaries, through Newspaper Rock State Park to headwaters	1C		2B	3A	4
Kane Canyon Creek and tributaries, from confluence with Colorado River to headwaters			2B	3C	4
Mill Creek and tributaries, from confluence with Colorado River to headwaters	1C		~~2B~~ 2A	3A	4
Dolores River and tributaries, from confluence with Colorado River to state line			2B	3C	4
Roc Creek and tributaries, from					

confluence with Dolores River to headwaters	2B	3A		4
LaSal Creek and tributaries, from state line to headwaters	2B	3A		4
Lion Canyon Creek and tributaries, from state line to headwaters	2B	3A		4
Little Dolores River and tributaries, from confluence with Colorado River to state line	2B		3C	4
Bitter Creek and tributaries, from confluence with Colorado River to headwaters	2B		3C	4

----------BREAK----------

x. Utah County

TABLE

Big East Lake	2B	3A			4
Salem Pond	2A	3A			4
Silver Flat Lake Reservoir	2B	3A			4
Tibble Fork Resevoir	2B	3A			4
Utah Lake	~~2B~~	~~2A~~	3B	3D	4

----------BREAK----------

R317-2-14. Numeric Criteria.

TABLE 2.14.1
NUMERIC CRITERIA FOR DOMESTIC,
RECREATION, AND AGRICULTURAL USES

Parameter	Domestic Source	Recreation and Aesthetics		Agri-culture
	1C	2A	2B	4
BACTERIOLOGICAL (30-DAY GEOMETRIC MEAN) (NO.)/100 ML) (7)				
E. coli	206	126	206	

MAXIMUM (NO.)/100 ML) (7)				
E. coli	668	409	668	
PHYSICAL				
pH (RANGE)	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0
Turbidity Increase (NTU)		10	10	
METALS (DISSOLVED, MG/L) (2)	MAXIMUM			
Arsenic	0.01			0.1
Barium	1.0			
Beryllium	<0.004			
Cadmium	0.01			0.01
Chromium	0.05			0.10
Copper				0.2
Lead	0.015			0.1
Mercury	0.002			
Selenium	0.05			0.05
Silver	0.05			
INORGANICS (MAXIMUM MG/L)				
Bromate	0.01			
Boron				0.75
Chlorite	<1.0			
Fluoride ~~(3)~~	~~1.4-2.4~~4.0			
Nitrates as N	10			
Total Dissolved Solids (4)				1200
	RADIOLOGICAL			
(MAXIMUM pCi/L)				
Gross Alpha	15			15
Gross Beta	4 mrem/yr	Radium 226, 228		
(Combined)	5			
Strontium 90	8			
Tritium	20000			
Uranium	30			
ORGANICS (MAXIMUM UG/L)				
Chlorophenoxy Herbicides				
2,4-D	70			
2,4,5-TP	10	Methoxychlor		40
POLLUTION INDICATORS (5)				

BOD (MG/L)	5	5	5
Nitrate as N (MG/L)	4	4	
Total Phosphorus as P (MG/L)(6)	0.05	0.05	

FOOTNOTES:

(1) Reserved

(2) The dissolved metals method involves filtration of the sample in the field, acidification of the sample in the field, no digestion process in the laboratory, and analysis by approved laboratory methods for the required detection levels.

~~(3) Maximum concentration varies according to the daily maximum mean air temperature.~~

~~TEMP (C)~~	~~MG/L~~
~~12.0~~	~~2.4~~
~~12.1-14.6~~	~~2.2~~
~~14.7-17.6~~	~~2.0~~
~~17.7-21.4~~	~~1.8~~
~~21.5-26.2~~	~~1.6~~
~~26.3-32.5~~	~~1.4~~

(4) SITE SPECIFIC STANDARDS FOR TOTAL DISSOLVED SOLIDS (TDS)

Blue Creek and tributaries, Box Elder County, from Bear River Bay, Great Salt Lake to Blue Creek Reservoir:
March through October daily maximum 4,900 mg/l and an average of 3,800 mg/l; November through February daily maximum 6,300 mg/l and an average of 4,700 mg/l. Assessments will be based on TDS concentrations measured at the location of STORET 4960740.

Blue Creek Reservoir and tributaries, Box Elder County, daily maximum 2,100 mg/l;

Castle Creek from confluence with the Colorado River to Seventh Day Adventist Diversion: 1,800 mg/l;

Cottonwood Creek from the confluence with Huntington Creek to I-57: 3,500 mg/l;

Ferron Creek from the confluence with San Rafael River to Highway 10: 3,500 mg/l;

Huntington Creek and tributaries from the confluence with Cottonwood Creek to U-10: 4,800 mg/l;

Ivie Creek and its tributaries from the confluence with Muddy Creek to the confluence with Quitchupah Creek: 3,800 mg/l provided that total sulfate not exceed 2,000 mg/l to protect the livestock watering agricultural existing use;

Ivie Creek and its tributaries from the confluence with Quitchupah Creek to U10: 2,600 mg/l;

Lost Creek from the confluence with Sevier River to U.S. Forest Service Boundary: 4,600 mg/l;

Muddy Creek and tributaries from the confluence with Ivie Creek to U-10: 2,600 mg/l;

Muddy Creek from confluence with Fremont River to confluence with Ivie Creek: 5,800 mg/l;

North Creek from the confluence with Virgin River to headwaters: 2,035 mg/l;

Onion Creek from the confluence with Colorado River to road crossing above Stinking Springs: 3000 mg/l;

Brine Creek-Petersen Creek, from the confluence with the Sevier River to U-119 Crossing: 9,700 mg/l;

Price River and tributaries from confluence with Green River to confluence with Soldier Creek: 3,000 mg/l;

Price River and tributaries from the confluence with Soldier Creek to Carbon Canal Diversion: 1,700 mg/l

Quitchupah Creek and tributaries from the confluence with Ivie Creek to U-10:
3,800 mg/l provided that total sulfate not exceed 2,000 mg/l to protect the livestock watering agricultural existing use;

Rock Canyon Creek from the confluence with Cottonwood Creek to headwaters: 3,500 mg/l;

San Pitch River from below Gunnison Reservoir to the Sevier River: 2,400 mg/l;

San Rafael River from the confluence with the Green River to Buckhorn Crossing: 4,100 mg/l;

San Rafael River from the Buckhorn Crossing to the confluence with Huntington Creek and Cottonwood Creek: 3,500 mg/l;

Sevier River between Gunnison Bend Reservoir and DMAD Reservoir: 1,725 mg/l;

Sevier River from Gunnison Bend Reservoir to ~~Clear~~ Crafts Lake: 3,370 mg/l;

South Fork Spring Creek from confluence with Pelican Pond Slough Stream to US 89 1,450 mg/l (Apr.-Sept.)
1,950 mg/l (Oct.-March)

Virgin River from the Utah/Arizona border to Pah Tempe Springs: 2,360 mg/l

(5) Investigations should be conducted to develop more information where these pollution indicator levels are exceeded.

(6) Total Phosphorus as P (mg/l) indicator for lakes and reservoirs shall be 0.025.

(7) Where the criteria are exceeded and there is a reasonable basis for concluding that the indicator bacteria E. coli are primarily from natural sources (wildlife), e.g., in National Wildlife Refuges and State Waterfowl Management Areas, the criteria may be considered attained provided the density attributable to non-wildlife sources is less than the criteria. Exceedences of E. coli from nonhuman nonpoint sources will generally be addressed through appropriate Federal, State, and local nonpoint source programs.

Measurement of E. coli using the "Quanti-Tray 2000" procedure is approved as a field analysis. Other EPA approved methods may also be used.

For water quality assessment purposes, up to 10% of representative samples may exceed the 668 per 100 ml criterion (for 1C and 2B waters) and 409 per 100 ml (for 2A waters). For small datasets, where exceedences of these criteria are observed, follow-up ambient monitoring should be conducted to better characterize water quality.

TABLE 2.14.2
NUMERIC CRITERIA FOR AQUATIC WILDLIFE(8)

Parameter	Aquatic Wildlife				
	3A	3B	3C	3D	5
PHYSICAL					
Total Dissolved Gases	(1)	(1)			
Minimum Dissolved Oxygen (MG/L) (2)(2a)					
30 Day Average	6.5	5.5	5.0	5.0	
7 Day Average	9.5/5.0	6.0/4.0			
Minimum	8.0/4.0	5.0/3.0	3.0	3.0	
Max. Temperature(C)(3)	20	27	27		
Max. Temperature					

Change (C)(3)	2	4	4	
pH (Range)(2a)	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0
Turbidity Increase (NTU)	10	10	15	15
METALS (4) (DISSOLVED, UG/L)(5)				
Aluminum				
4 Day Average (6)	87	87	87	87
1 Hour Average	750	750	750	750
Arsenic (Trivalent)				
4 Day Average	150	150	150	150
1 Hour Average	340	340	340	340
Cadmium (7)				
4 Day Average	~~0.25~~0.72	~~0.25~~0.72		
1 Hour Average	~~2.0~~1.8	~~2.0~~1.8	~~2.0~~1.8	~~2.0~~1.8
Chromium (Hexavalent)				
4 Day Average	11	11	11	11
1 Hour Average	16	16	16	16
Chromium (Trivalent) (7)				
4 Day Average	74	74	74	74
1 Hour Average	570	570	570	570
Copper (7)				
4 Day Average	9	9	9	9
1 Hour Average	13	13	13	13
Cyanide (Free)				
4 Day Average	5.2	5.2	5.2	
1 Hour Average	22	22	22	22
Iron (Maximum)	1000	1000	1000	1000
Lead (7)				
4 Day Average	2.5	2.5	2.5	2.5
1 Hour Average	65	65	65	65
Mercury				
4 Day Average	0.012	0.012	0.012	0.012
Nickel (7)				
4 Day Average	52	52	52	52
1 Hour Average	468	468	468	468
Selenium				

~~0.25~~0.72 ~~0.25~~0.72

4 Day Average	4.6	4.6	4.6	4.6
1 Hour Average	18.4	18.4	18.4	18.4
Selenium (14)				
Gilbert Bay (Class 5A)				
Great Salt Lake				
Geometric Mean over				
Nesting Season (mg/kg dry wt)				12.5
Silver				
1 Hour Average (7)	1.6	1.6	1.6	1.6
Tributyltin				
4 Day Average	0.072	0.072	0.072	0.072
1 Hour Average	0.46	0.46	0.46	0.46
Zinc (7)				
4 Day Average	120	120	120	120
1 Hour Average	120	120	120	120
INORGANICS				
(MG/L) (4)				
Total Ammonia as N (9)				
30 Day Average	(9a)	(9a)	(9a)	(9a)
1 Hour Average	(9b)	(9b)	(9b)	(9b)
Chlorine (Total Residual)				
4 Day Average	0.011	0.011	0.011	0.011
1 Hour Average	0.019	0.019	0.019	0.019
Hydrogen Sulfide (Undissociated, Max. UG/L)	2.0	2.0	2.0	2.0
Phenol(Maximum)	0.01	0.01	0.01	0.01
RADIOLOGICAL (MAXIMUM pCi/L)				
ORGANICS (UG/L) (4)				
Acrolein				
4 Day Average	3.0	3.0	3.0	3.0
1 Hour Average	3.0	3.0	3.0	3.0
Aldrin				
1 Hour Average	1.5	1.5	1.5	1.5
Carbaryl				
4 Day Average	2.1	2.1	2.1	2.1
1 Hour Average	2.1	2.1	2.1	2.1
Chlordane				
4 Day Average	0.0043	0.0043	0.0043	0.0043

1 Hour Average	1.2	1.2	1.2	1.2
Chlorpyrifos				
4 Day Average	0.041	0.041	0.041	0.041
1 Hour Average	0.083	0.083	0.083	0.083
4,4' -DDT				
4 Day Average	0.0010	0.0010	0.0010	0.0010
1 Hour Average	0.55	0.55	0.55	0.55
Diazinon				
4 Day Average	0.17	0.17	0.17	0.17
1 Hour Average	0.17	0.17	0.17	0.17
Dieldrin				
4 Day Average	0.056	0.056	0.056	0.056
1 Hour Average	0.24	0.24	0.24	0.24
Alpha-Endosulfan				
4 Day Average	0.056	0.056	0.056	0.056
1 Hour Average	0.11	0.11	0.11	0.11
beta-Endosulfan				
4 Day Average	0.056	0.056	0.056	0.056
1 Day Average	0.11	0.11	0.11	0.11
Endrin				
4 Day Average	0.036	0.036	0.036	0.036
1 Hour Average	0.086	0.086	0.086	0.086
Heptachlor				
4 Day Average	0.0038	0.0038	0.0038	0.0038
1 Hour Average	0.26	0.26	0.26	0.26
Heptachlor epoxide				
4 Day Average	0.0038	0.0038	0.0038	0.0038
1 Hour Average	0.26	0.26	0.26	0.26
Hexachlorocyclohexane (Lindane)				
4 Day Average	0.08	0.08	0.08	0.08
1 Hour Average	1.0	1.0	1.0	1.0
Methoxychlor (Maximum)	0.03	0.03	0.03	0.03
Mirex (Maximum)	0.001	0.001	0.001	0.001
Nonylphenol				
4 Day Average	6.6	6.6	6.6	6.6
1 Hour Average	28.0	28.0	28.0	28.0

Parathion				
4 Day Average	0.013	0.013	0.013	0.013
1 Hour Average	0.066	0.066	0.066	0.066
PCB's				
4 Day Average	0.014	0.014	0.014	0.014
Pentachlorophenol (11)				
4 Day Average	15	15	15	15
1 Hour Average	19	19	19	19
Toxaphene				
4 Day Average	0.0002	0.0002	0.0002	0.0002
1 Hour Average	0.73	0.73	0.73	0.73
POLLUTION				
INDICATORS (10)				
Gross Alpha (pCi/L)	15	15	15	15
Gross Beta (pCi/L)	50	50	50	50
BOD (MG/L)	5	5	5	5
Nitrate as N (MG/L)	4	4	4	
Total Phosphorus as P(MG/L) (12)				
	0.05	0.05		

FOOTNOTES:

(1) Not to exceed 110% of saturation.

(2) These limits are not applicable to lower water levels in deep impoundments. First number in column is for when early life stages are present, second number is for when all other life stages present.

(2a) These criteria are not applicable to Great Salt Lake impounded wetlands. Surface water in these wetlands shall be protected from changes in pH and dissolved oxygen that create significant adverse impacts to the existing beneficial uses. To ensure protection of uses, the Director shall develop reasonable protocols and guidelines that quantify the physical, chemical, and biological integrity of these waters. These protocols and guidelines will include input from local governments, the regulated community, and the general public. The Director will inform the Water Quality Board of any protocols or guidelines that are developed.

(3) Site Specific Standards for Temperature
Ken's Lake: From June 1st - September 20th, 27 degrees C.

(4) Where criteria are listed as 4-day average and 1-hour average concentrations, these concentrations should not be exceeded more often than once every three years on the average.

(5) The dissolved metals method involves filtration of the sample in the field, acidification of the sample in the field, no digestion process in the laboratory, and analysis by EPA approved laboratory methods for the required detection levels.

(6) The criterion for aluminum will be implemented as follows:

Where the pH is equal to or greater than 7.0 and the hardness is equal to or greater than 50 ppm as CaC03 in the receiving water after mixing, the 87 ug/1 chronic criterion (expressed as total recoverable) will not apply, and aluminum will be regulated based on compliance with the 750 ug/1 acute aluminum criterion (expressed as total recoverable).

(7) Hardness dependent criteria. 100 mg/l used. Conversion factors for ratio of total recoverable metals to dissolved metals must also be applied. In waters with a hardness greater than 400 mg/l as CaC03, calculations will assume a hardness of 400 mg/l as CaC03. See Table 2.14.3 for complete equations for hardness and conversion factors.

----------BREAK----------

TABLE 2.14.3a

EQUATIONS TO CONVERT TOTAL RECOVERABLE METALS STANDARD WITH HARDNESS (1) DEPENDENCE TO DISSOLVED METALS STANDARD BY APPLICATION OF A CONVERSION FACTOR (CF).

Parameter	4-Day Average (Chronic) Concentration (UG/L)
CADMIUM	CF * $e^{(0.7977*\ln(\text{hardness})-.909)}$ ~~$(0.7409 (\ln(\text{hardness})) -4.719$~~ CF = 1.101672 - ln(hardness) (0.041838)
CHROMIUM III	CF * $e^{(0.8190(\ln(\text{hardness})) + 0.6848}$ CF = 0.860
COPPER	CF * $e^{(0.8545(\ln(\text{hardness})) -1.702)}$ CF = 0.960
LEAD	CF * $e^{(1.273(\ln(\text{hardness}))-4.705)}$ CF = 1.46203 - ln(hardness)(0.145712)
NICKEL	CF * $e^{(0.8460(\ln(\text{hardness}))+0.0584)}$ CF = 0.997
SILVER	N/A
ZINC	Cf * $e^{(0.8473(\ln(\text{hardness}))+0.884)}$ CF = 0.986

TABLE 2.14.3b

EQUATIONS TO CONVERT TOTAL RECOVERABLE METALS STANDARD WITH HARDNESS (1) DEPENDENCE TO DISSOLVED METALS STANDARD BY APPLICATION OF A CONVERSION FACTOR (CF).

Parameter	1-Hour Average (Acute) Concentration (UG/L)
CADMIUM	CF * e $^{(0.9789*\ln(\text{hardness})-3.866)}$ ~~(1.0166(ln(hardness))-3.924)~~ CF = 1.136672 - ln(hardness)(0.041838)
CHROMIUM (III)	CF * e $^{(0.8190(\ln(\text{hardness}))+3.7256)}$ CF = 0.316
COPPER	CF * e $^{(0.9422(\ln(\text{hardness}))-1.700)}$ CF = 0.960
LEAD	CF * e $^{(1.273(\ln(\text{hardness}))-1.460)}$ CF = 1.46203 - ln(hardness)(0.145712)
NICKEL	CF * e $^{(0.8460(\ln(\text{hardness}))+2.255)}$ CF= 0.998
SILVER	CF * e $^{(1.72(\ln(\text{hardness}))-6.59)}$ CF = 0.85
ZINC	CF * e $^{(0.8473(\ln(\text{hardness}))+0.884)}$ CF = 0.978

FOOTNOTE:
(1) Hardness as mg/l $CaCO_3$.

----------BREAK----------

KEY: water pollution, water quality standards
Date of Enactment or Last Substantive Amendment: November 30, 2015
Notice of Continuation: October 2, 2012 1329
Authorizing, and Implemented or Interpreted Law: 19-5; FWPCA 33 USC 1251, 1311-1317,

ATTACHMENT 2
Criteria Support Documents

Contents

R317-2-3.5.d. Antidegradation Policy

d. Special Procedures for Drinking Water Sources

~~An Antidegradation Level II Review will be required by the Director for discharges to waters with a Class 1C drinking water use assigned.~~

The proposed change is to delete the requirement that an Antidegradation Level II Review is always required for Class 1c drinking water use waters. The Level II review has two critical steps. The first is that the use of assimilative capacity when effluent concentrations exceed ambient concentrations is socially and economically important. The second is that the least degrading, feasible treatment alternative is being used. Prior to the substantive revisions to Utah's antidegradation review requirements in *circa* 2009, most discharges were not required to perform a Level II antidegradation reviews. At the request of drinking water providers, DWQ agreed that all discharges should be subject to a Level II antidegradation review. Utah's current antidegradation policy requires a level II antidegradation review for all new discharge permits and whenever concentrations or loading increase from previously permitted values. These changes precluded the need for a special requirement for discharges to Class 1C drinking water use waters. However, the rule requirement still required that a Level II antidegradation review be conducted at each permit renewal even when a review has already been completed and the renewed permit had no increases. These reviews are perfunctory and unnecessarily burdensome because no new information was available. This change was endorsed by Reed Obendorfer who at the time represented the Central Utah Project on the water quality standards workgroup. The Division of Drinking Water was notified of the proposed change as were every surface water drinking water provider in the State (example letter follows). No comments objecting to the change were received.

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

FILE COPY

March 23, 2015

DAN MATTHEWS
JORDANELLE SSD
PO BOX 519
HEBER CITY, UT 84032

Document Date 3/23/2015
DWQ-2015-004306

Dear Water Provider:

Subject: Proposed Changes to Surface Water Standards that affect the Class 1C Drinking Water Use

I am writing to inform you about two proposed changes to Utah's water quality standards that affect the Class 1C drinking water use. Waters that are designated as Class 1C are protected for domestic purposes with prior treatment processes approved by the Utah Division of Drinking Water.

Prior to proposing these changes to the Utah Water Quality Board, I am seeking feedback from you, the water providers. Ultimately, if changes to the standards occur, the changes will be made in accordance with the required rulemaking procedures. These procedures include initial permission from the Utah Water Quality Board to initiate rulemaking, public notice and comment, and finally, formal adoption of the changes by the Water Quality Board.

The first proposed change is to the fluoride criterion. The existing fluoride criterion ranges from 1.4-2.4 mg/l depending on the maximum air temperature (UAC R317-2-14, Table 2.14.1). This range is based on the assumption that the higher the air temperature, the more water people will drink. The more water that people drink, the lower the criterion is to provide equivalent protection from the adverse effects of fluoride. However, the current USEPA maximum contaminant level (MCL) and maximum contaminant level goal (MCLG) for fluoride in finished culinary water is 4.0 mg/l and a temperature correction is no longer recommended. The proposed change is to revise the fluoride criterion for Class 1C waters to 4.0 mg/l with no temperature correction.

The second proposed change is to the procedures for conducting antidegradation reviews (UAC R317-2-3). Antidegradation is a complicated topic. In summary, degradation occurs when the concentration of a pollutant in a discharge is higher than the background concentration in the receiving water. When degradation is permitted, the antidegradation review is intended to ensure that the least degrading, feasible treatment option is used. The existing requirements for conducting antidegradation reviews include special procedures for Class 1C waters (UAC R317-2-3.5.d.):

> An Antidegradation Level II Review will be required by the Director for discharges to waters with a Class 1C drinking water use assigned.
>
> Depending upon the locations of the discharge and its proximity to downstream drinking water diversions, additional treatment or more stringent effluent limits or additional monitoring, beyond that which may otherwise be required to meet minimum technology standards or in stream water quality

standards, may be required by the Director in order to adequately protect public health and the environment. Such additional treatment may include additional disinfection, suspended solids removal to make the disinfection process more effective, removal of any specific contaminants for which drinking water maximum contaminant levels (MCLs) exists, and/or nutrient removal to reduce the organic content of raw water used as a source for domestic water systems.

Additional monitoring may include analyses for viruses, Giardia, Cryptosporidium, other pathogenic organisms, and/or any contaminant for which drinking water MCLs exist. Depending on the results of such monitoring, more stringent treatment may then be required.

The additional treatment/effluent limits/monitoring which may be required will be determined by the Director after consultation with the Division of Drinking Water and the downstream drinking water users.

The proposed change is deletion of the requirement that "An Antidegradation Level II Review will be required by the Director for discharges to waters with a Class 1C drinking water use assigned." All of the remaining special procedures will be retained. At the time that this provision was added to the antidegradation review requirements, the requirements included several exceptions or "off ramps." The vast majority of discharge permits were issued based on these exceptions and antidegradation reviews were not required. At the explicit request of some of Utah's water providers, the requirement was added to conduct an antidegradation review and ensure the least degrading, feasible, treatment option for all discharges to Class 1C waters.

In 2010, the antidegradation review requirements were revised in response to court decisions in other states. One of these changes was to eliminate the previous exceptions to when an antidegradation review was required. Under the current requirements, an antidegradation review is required for all new discharges and for any increases in concentration or loading for existing discharges. Therefore, antidegradation reviews are required for all new or increased discharges to Class 1C waters. However, because of the requirement that "An Antidegradation Level II Review will be required by the Director for discharges to waters with a Class 1C drinking water use assigned," dischargers to Class 1C waters are still required to do an antidegradation review every time a discharge permit is renewed (every 5 years) even when the concentrations or volume of the discharge has not changed. These antidegradation reviews are perfunctory because they simply reiterate the previous antidegradation review and constitute an unnecessary regulatory burden.

Like you, the Division of Water Quality is committed to providing the highest level of protection to our drinking water source waters and these proposed changes do not decrease the existing protections for Class 1C waters. If you have any questions or concerns regarding these proposed changes, please contact Mr. Chris Bittner who is the Standards Coordinator (801-536-4371 or cbittner@utah.gov) by April 17, 2015. After this date, the revisions may be proposed to the Utah Water Quality Board.

Sincerely,

Walter L. Baker, P.E.
Director

WLB:cb:mc

cc: Ken Bousfield, Utah Division of Drinking Water

DWQ-2015-004066

R317-2-13.1. Mill Creek, Grand County.

Mill Creek and tributaries, from
confluence with Colorado River to
headwaters 1C ~~2B~~ 2A 3A
4

In R317-2-13, the proposal is to change the recreational use for Mill Creek in Grand County from Class 2B, infrequent primary and secondary contact recreation, to Class 2A, frequent primary and secondary contact recreation. Local residents have petitioned for the change and provided pictures of people swimming at a popular "swimming hole." Letters of supporting the change from the U.S. Bureau of Land Management and the Moab Area Watershed Partnership were also provided.

Mill Creek is currently impaired for E. coli. in the lower reaches and this impairment is being investigated by the local Health Department. Frequent primary and secondary contact recreation occur in the summer months when people swim in the deeper pools. Frequent primary and secondary contact recreation are an existing use in the portions of the creek that are accessible and where the water is deep enough.

Mill Creek is also classified as Class 1C. The already applicable Class 1C criteria for e. coli are identical to the Class 2A criteria. Segmenting Mill Creek with frequent and infrequent contact recreation classifications, i.e., Classes 2A and 2B, would have no effect on e. coli assessments. However, no specific data are available for recreational activities in all of the tributaries or for the higher elevations of Mill Creek included in the change from Class 2B to 2A. Portions of these are unlikely to support frequent contact recreation because of lack of sufficient water and access. For instance, Mill Creek upstream of the diversion for Ken's Lake does not appear to have enough water to support frequent contact recreation. In the absence of the existing Class 1C designation, this information may have supported segmenting Mill Creek for recreational use

Carl

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Moab Field Office
82 East Dogwood
Moab, Utah 84532
http://www.blm.gov/ut/st/en/fo/moab.html

RECEIVED
APR 13 2015
Utah Division of Water Quality
APR 09 2015

In Reply Refer To:
1010 (UTY010)

Mr. Walter Baker
Director Utah Division of Water Quality
P.O. Box 144870
Salt Lake City, Utah 84114-4870

Subject: Recreational Beneficial Use Designation for Mill Creek in Grand County, UT

Dear Mr. Walter Baker,

The Moab Field Office of the Bureau of Land Management (BLM) manages a significant portion of the Mill Creek and Tributaries stream corridor. Specifically, BLM is responsible for management of the portion of Mill Creek where swimming is one of the recreational uses. The BLM Moab Field Office supports the local organization "Moab Area Watershed Partnership" and their decision to officially request a change to the Beneficial Use Classification of Mill Creek and Tributaries from Recreational Use Class 2B (protected for infrequent primary contact recreation) to Recreational Use Class 2A (protected for frequent primary contact recreation). This request is based on the level of frequent primary contact recreation that occurs in Mill Creek.

If you have any questions, or would like more information regarding this request, please contact Lisa Bryant at 435-259-2150 or Ann Marie Aubry at 435-259-2173.

Thank you for considering our request.

Sincerely,

Beth Ransel
Moab Field Manager

Document Date 4/13/2015
DWQ-2015-005030

Moab Area Watershed Partnership

Dave Erley,
Moab Area Watershed Partnership Chair
P. O. Box 46
Moab, UT 84532

Arne Hultquist
Southeastern Utah Watershed Coordinator
P. O. Box 46
Moab, UT 84532

Walter Baker
Utah Division of Water Quality, Director
P.O. Box 144870
Salt Lake City, Utah 84114-4870

Subject: Recreational Use Designation for Mill Creek in Grand County, UT

Dear Walter Baker,

The Moab Area Watershed Partnership appreciates the support the Utah Division of Water Quality (UDWQ) has historically provided. Your monetary and monitoring support have provided a solid foundation for our efforts to improve water quality in Spanish and Castle Valley.

The Moab Area Watershed Management Plan requires the watershed coordinator to summarize and present the previous water year's data at our November meeting. The members consider the results and make recommendations for monitoring, projects and policy. During the last meeting the membership appreciated UDWQ's support for E. Coli sampling in our watersheds and discussed the recreational use designations of Mill Creek in Grand County. It is currently classified as 2B, protected for infrequent primary contact recreation. The MAWP considers this classification inappropriate for Mill Creek in Grand County because the creek is Moab's swimming hole. With this letter, the MAWP is requesting a "rule change" to R317-2 for the recreation classification of Mill Creek in Grand County to 2A, protected for frequent primary contact recreation.

Historically, Mill Creek was originally separated from classification with the "Colorado River and Tributaries from Lake Powell to the State line" because it is a cold water fishery (Class 3A), whereas the Colorado River is a warm water fishery (Class 3B). The Colorado River and tributaries from Lake Powell to the State line was originally a 2B stream but was changed to recreational class 2A because of the rafting and swimming that occurs seasonally. Swimming is also a very popular seasonal use of Mill Creek. Mill Creek originally received a 2B classification because it was a tributary to a 2B stream

What the MAWP does not understand is how to apply for and work through the use reclassification process. We are willing to help with the process if necessary. Please let us know how to proceed.

Sincerely, Dave Erley
Arne Hultquist

R317-2-13.12.x. Utah Lake, Utah County

Utah Lake ~~2B~~ 2A 3B 3D 4

The proposed change is from Class 2B, infrequent primary and secondary contact recreation to Class 2A, frequent primary and secondary contact recreation. As specified in R317-2-6.2.a, specific examples of frequent primary contact include swimming and water skiing. Utah Lake has public swim beaches (e.g., Lincoln Beach, Sandy Beach Access) and several marinas for access to waterskiing and wakeboarding (e.g., American Fork Boat Harbor, Lincoln Harbor, Utah Lake State Park).

This change is anticipated to have little effect on Utah Lake because frequent primary and secondary contact recreation are "existing uses." Utah's water quality standards require that existing uses be protected (R317-2-3.5) . "Existing Uses" means those uses actually attained in a water body on or after November 28, 1975, whether or not they are included in the water quality standards (R317-1-1-1). Below are summaries of recreation facilities around Utah Lake from the Department of Natural Resources website (**https://wildlife.utah.gov/utah_lake_access/**).

Last modified: Wednesday, March 22, 2017

Utah Lake access

One of the state's largest natural treasures sits right in your backyard. Utah Lake — with the Wasatch Mountains reflecting in its waters — begs to be boated upon, fished and camped around. Use this guide for tips on the best way to access the lake and maximize your playtime. Please respect private property, pack out your trash, keep vehicles on the road and build campfires only in designated areas.

American Fork Boat Harbor

- **GPS coordinates/map:** -111.8016, 40.3435
- **Ownership:** American Fork City
- **Facilities:** boat ramps, docks, bathrooms, picnic tables, shade, day-use facility, wheelchair-accessible fishing areas
- **Fees:** yes
- **Daily launch:** $8.00
- **Walk-in fee:** $1.00
- **Senior citizen launch:** $4.00
- **Parking tips:** ample parking for boats and RVs.
- **Recreation & wildlife tips:** Fishing, boating, birding and other activities.
- **Website:** afcity.org (search for "boat harbor")

Lindon Marina and Boat Harbor

- **GPS coordinates / map:** -111.7629, 40.3262
- **Facilities:** restrooms, boat ramp, docks, picnic tables, store
- **Fees:** yes
- **Boat launch:** $5.00
- **Walk-in:** $2.00
- **Overnight parking:** $12.00
- **Season pass:** $70.00
- **Parking tips:** paved parking area, unpaved jetties.
- **Recreation & wildlife tips:** fishing, boating, birding, etc. fishing friendly shoreline area, limited shade.
- **Wheelchair accessibility:** Limited access to water, benches near water for sitting while angling.
- **Website:** LindonBoatHarbor.com

Vineyard Beach and Utah Lake Parkway

- **GPS coordinates / map:** -111.7643, 40.3167
- **Ownership:** Utah County
- **Facilities:** restrooms, picnic tables, shade, pavilions. A handicapped-accessible ramp goes to one pavilion which is located near the water (depending on lake level). No fish-cleaning stations, docks or ramps.
- **Fees:** none
- **Parking tips:** gravel parking area located east of the park and beach area (on east side of Vineyard Rd./Utah Lake Pkwy.).
- **Recreation & wildlife tips:** Fishing, kayaking/canoeing, birding, etc. No open fires allowed. A new paved running and biking trail begins on the south end of the Lindon Marina and proceeds 1.75 miles to this wetland and beach area. There are two picnic tables along the trail. This paved trail will become part of the Jordan River and Provo River Parkways.

Vineyard Center Street access

- **GPS coordinates / map:** -111.761625, 40.296915
- **Ownership:** Town of Vineyard
- **Facilities:** none
- **Fees:** none
- **Parking tips:** paved parking area that can accommodate about 10 cars.
- **Recreation & wildlife tips:** The paved trail extends southward for about 0.4 miles and northward 0.5 miles. The trail is at the lake's edge, with access to the shore. Launching a canoe or kayak might be possible. Fishing might be an option. Birding might be good from this area because of its vantage point, several trees and other vegetation. Good wheelchair access exists along the trail but not to the water's edge. Private land lies immediately east of the trail.

Powell Slough, north access

- **GPS coordinates / map:** -111.7392, 40.2747
- **Ownership:** Various government agencies
- **Facilities:** none
- **Fees:** none
- **Parking tips:** Limited space on the paved road for parking if gate is locked.
- **Recreation & wildlife tips:** Popular location for waterfowl hunters and upland game hunters. However, very dense, tall vegetation (phragmites), mud and water make access to the slough and lakeshore difficult. The lake is about 0.75 to 1 mile through the vegetation from the parking area. In addition to private property, do not trespass on water treatment plant or golf course property.

Powell Slough, south access

- **GPS coordinates / map:** -111.7368, 40.2732

- **Ownership:** Government
- **Facilities:** gravel parking area
- **Fees:** none
- **Parking tips:** Parking is limited.
- **Recreation & wildlife tips:** Waterfowl and upland game hunting, birding. No shooting within 600 feet of buildings. Obtain written permission to hunt on private property. The best way to get to the lakeshore is to head south from the parking area. Go past the gate (on the west side of the fence) and look for trails that lead to a dike located southwest of the parking area. It's difficult to hunt in this densely vegetated (phragmites) area. After hunting, please brush off your clothes and equipment so you do not transport phragmites seeds.

Skipper Bay trailhead

- **GPS coordinates / map:** -111.7343, 40.2393
- **Ownership:** Utah County
- **Facilities:** paved pedestrian trail that travels about 1 mile north.
- **Fees:** none
- **Parking tips:** limited parking on paved road at trailhead.
- **Recreation & wildlife tips:** Tall, heavy vegetation limits views and access to Utah Lake. Good birding trail. Private lands line the east side of the trail.

Utah Lake State Park

- **GPS coordinates / map:** -111.7388 40.2385
- **Ownership:** State of Utah
- **Fees:** yes
- **Parking tips:** paved parking areas and gravel jetties provide some pull-offs.
- **Recreation & wildlife tips:** Fishing, birding, boating, water skiing, camping. Provo River drains into the state park area making it a popular fishing spot. Two jetties at the state park are popular fishing locations. Two ADA handicapped-accessible campsites at the state park. Wheelchair-accessible visitor center and restrooms. Wheelchair-accessible boat dock in the marina (fishing from docks is not allowed). Two Americans With Disabilities Act-compliant campsites and a wheelchair-accessible fishing pier on the north jetty. For more information, call Utah Lake State Park at 801-375-0731.

- **Website:** utah.com/stateparks/utah_lake.htm

Airport dike road

- **GPS coordinates / map:** -111.7353, 40.2351
- **Ownership:** Provo City
- **Facilities:** none
- **Fees:** none
- **Parking tips:** very limited, small pullout areas. Turning a vehicle around is difficult in most spots.
- **Recreation & wildlife tips:** Good for fishing, hunting and birding. During some years, fishing from the dike may not be possible due to lower water levels. No trespassing on the east and north sides of the airport dike.

Mill Race access

- **GPS coordinates / map:** -111.6546, 40.2017
- **Ownership:** State of Utah
- **Facilities:** gravel boat ramp
- **Fees:** no
- **Parking tips:** gravel parking area & gravel boat ramp for small boats/trailers.
- **Recreation & wildlife tips:** fishing, waterfowl hunting, limited upland game hunting, birding. Tall, thick stands of phragmites and bulrush vegetation run west of the frontage road and are difficult to walk through. Gravel boat ramp is popular for anglers and duck hunters with small, shallow-bottomed boats. Water channel leads out to Provo Bay.

Hobble Creek Wildlife Management Area

- **GPS coordinates / map:** -111.64727, 40.18363
- **Ownership:** Utah Division of Wildlife Resources

- **Facilities:** none
- **Fees:** none
- **Parking tips:** parking area accommodates 4 or 5 vehicles.
- **Recreation & wildlife tips:** This wildlife management area was purchased to improve the river channel for the endangered June sucker. There are good fishing opportunities for white bass and other species. The river closes to fishing every spring. Read the DWR Fishing Guidebook for more information. This area is also a popular waterfowl hunting access point to Utah Lake. The wildlife management area is surrounded by private property.

Swede Lane access

- **GPS coordinates / map:** -111.7221, 40.1742
- **Ownership:** State of Utah (DWR)
- **Facilities:** small gravel ramp for small boats
- **Fees:** None
- **Parking tips:** Gravel parking area for at least 10 vehicles.
- **Recreation & wildlife tips:** Popular location to launch small boats for waterfowl hunting and fishing. No fires.

Sandy Beach access

- **GPS coordinates / map:** -111.7475, 40.1682
- **Facilities:** none
- **Fees:** none
- **Parking tips:** very good beach areas during lower water elevation years, otherwise the road dead ends at the lake. Limited parking. No trailers.
- **Recreation & wildlife tips:** Popular area for fishing, birding, swimming, launching small boats (that can be carried by hand—no trailers) and waterfowl hunting. The last half mile of the road to the beach area is tree-lined and is a popular birding location. The river entrance to Utah Lake is also popular with anglers. Tributaries may be closed to fishing during certain times in the spring, so please read the DWR Fishing Guidebook. Please pack out your garbage. No fires.

4000 West access (in Lake Shore)

- **GPS coordinates / map:** -111.7497, 40.1500
- **Ownership:** State of Utah
- **Facilities:** none
- **Fees:** none
- **Parking tips:** gravel parking area can accommodate about 10 cars.
- **Recreation & wildlife tips:** Popular location for waterfowl & upland game hunting, angling, wading and birding. Private property is on east and west sides of the road—please stay on public land. Pack out your garbage. No fires.

Lincoln Beach Park and Marina

- **GPS coordinates / map:** -111.8031, 40.1427
- **Ownership:** Utah County
- **Facilities:** restrooms, boat ramp, pavilions, picnic tables, boat docks, water.
- **Fees:** $15.00 overnight camping fee (fees may change). Boat launching is free. Group pavilion holds 100 people and costs $30 for one-time slot or $50 for full-day rental. Call 801-865-8640.
- **Parking tips:** no parking on the boat ramp. Prepare boats for launching away from the boat ramp.
- **Recreation & wildlife tips:** No alcoholic beverages, discharge of firearms or archery inside the park. Owners are responsible for pet cleanup. Overnight camping permitted in designated areas. No swimming in the marina area. Boats must not produce wakes until clear of the marina area. No ATVs or other off-road vehicles allowed. Call 801-865-8640 more information or visit Utah County's website: UtahCountyOnline.org/parks/ParkDetails.asp?IDNO=9.

Lincoln Point access

- **GPS coordinates / map:** -111.8121, 40.1436

- **Ownership:** State of Utah
- **Facilities:** none
- **Fees:** none
- **Parking tips:** parking area is located on north side of Lincoln Beach Rd. Parking lot can accommodate about 10 vehicles, no trailers.
- **Recreation & wildlife tips:** Popular shore fishing location. Access to water is usually about 100 yards from parking area. Small canoes and kayaks could be carried to water.

Mulberry Beach access

- **GPS coordinates / map:** -111.8456, 40.1194
- **Facilities:** none
- **Fees:** none
- **Parking tips:** this is a pull-off loop that can, depending on water level, take you right to the water's edge.
- **Recreation & wildlife tips:** Popular shore fishing location. Small watercraft such as canoes and kayaks can be launched from this location. Some waterfowl hunting occurs as well. Please pack out your garbage.

Goose Point north access

- **GPS coordinates / map:** -111.8612, 40.0894
- **Facilities:** none
- **Fees:** none
- **Parking tips:** when water level is low enough, this road will parallel the shoreline along Goose Point and connect to the Goose Point South access located further south on the Lincoln Beach Road. Do not drive off of the established dirt road and pull-offs. When wet, this road can be very muddy and soft in spots.
- **Recreation & wildlife tips:** Popular area for fishing. Some waterfowl hunting opportunities and some birding opportunities for waterfowl and shorebirds. Please pack out your garbage.

Goose Point south access

- **GPS coordinates / map:** -111.8559, 40.0746
- **Facilities:** none
- **Fees:** none
- **Parking tips:** during lower water levels, this road will connect to the Goose Point North access. Access is over a gravel and dirt road that parallels the lakeshore along Goose Point. Stay on the road and park on established pull-offs only. When wet, the road can be soft and muddy.
- **Recreation & wildlife tips:** This is a popular shore fishing area. Some waterfowl hunting opportunities. Fair birding location for waterfowl and shorebirds.

Tower View Point access

- **GPS coordinates / map:** -111.8606, 40.0631
- **Facilities:** none
- **Fees:** none
- **Parking tips:** Stay on the established dirt road.
- **Recreation & wildlife tips:** This is another popular fishing location. With care, canoes, kayaks and other small watercraft may be carried down the steep bank to the water's edge. Please pack out your garbage and consider packing out litter that others might have left behind.

LeBaron Point access

- **GPS coordinates / map:** -111.8783, 40.0437
- **Ownership:** State of Utah
- **Facilities:** Small gravel boat ramp
- **Fees:** None

- **Recreation & wildlife tips:** Popular location for waterfowl hunters and birders. Small gravel boat ramp is located about 0.8 miles from the entrance. Please pack out your garbage.

Mile post 13, Mosida Acres access

- **GPS coordinates / map:** -111.9380, 40.1379
- **Facilities:** none
- **Fees:** none
- **Parking tips:** Parking area accommodates about 10 vehicles.
- **Recreation & wildlife tips:** Once you leave the parking area, you will encounter tall vegetation (mostly tamarisk). Water is about 50 yards from the parking area. There is no beach. This is a popular area for waterfowl hunters and anglers. Waders are helpful. Carry canoes or kayaks through the vegetation to the water. A small population of burrowing owls might be seen with binoculars on the private property found on both sides of the access road toward the parking area or along Redwood Rd. Do not trespass.

Mile post 19, The Knolls access

- **GPS coordinates / map:** -111.8868, 40.1985
- **Facilities:** none
- **Fees:** none
- **Parking tips:** no formal parking area. Please stay on established gravel road and off of private property.
- **Recreation & wildlife tips:** Several roads exist once you leave the highway, but continue east toward Utah Lake and stay on the established road. It's rough in places. Small boats can be launched (kayaks, canoes and car-toppers). It's best not to drive all the way to the shore, as there is a fairly steep drop near the shoreline. Excellent open shoreline for anglers, hunters, birders, etc. Please help keep the area clean by picking up others' trash.

Pelican Bay access in Saratoga Springs

- **GPS coordinates / map:** -111.8711, 40.2900
- **Ownership:** City of Saratoga Springs
- **Facilities:** boat ramp, docks, bathrooms, fish-cleaning station, pavilions, picnic tables, drinking fountain, green grass areas, etc.
- **Fees:** free entry if parking outside the marina and walking in. There is an $8.00 entry/boat launch fee. Call the marina entry booth at 801-766-1083 on weekends to check on available parking slots. Call Saratoga Springs City for pavilion rental or other fee questions at 801-766-9793.
- **Parking tips:** Forty parking stalls for cars and trailers. The park situated at the entrance makes for a nice option to park your vehicle and walk in (if marina parking spots are full). There are currently 40 parking stalls and you may have to wait to launch a boat on busy days.
- **Recreation & wildlife tips:** Pelican Bay Marina is a scenic and clean access point to Utah Lake. Hunting is not permitted, but launching, angling, birding, picnicking, biking and other activities are popular. The park at the entrance makes a nice vehicle parking option. There are 40 parking stalls, so expect launching delays on busy days. Marina hours are from 6 a.m. to 10 p.m. There is no overnight boat docking or camping. Boats should be out of the marina by 10 p.m. An attendant is at the entry booth on Fridays from 3 to 8 p.m., and Saturdays and Sundays from 8 a.m. to 7 p.m. If you launch your boat outside these times, you must use the self-pay envelopes in the black box just east of the entry booth. Do not to fish from the docks and jetties during busy times. There is a lakeside trail system. Good wheelchair access for anglers.

Eagle Park in Saratoga Springs

- **GPS coordinates / map:** -111.9071, 40.3341
- **Ownership:** City of Saratoga Springs
- **Facilities:** playground, picnic tables, green grass areas, trails, restrooms
- **Fees:** none
- **Parking tips:** parking spaces for about 25 vehicles.
- **Recreation & wildlife tips:** No shooting or hunting in the park or in the residential area. This is primarily a birding and picnic location with a playground. A trail is being developed as part of the Jordan

River/Provo River Trail system. Thick stands of vegetation make angling and general access to the lake difficult. Future removal of phragmites might improve lake access.

Table 2.14.1. Fluoride.

Fluoride ~~(3)~~	~~1.4-2.4~~4.0

~~(3) Maximum concentration varies according to the daily maximum mean air temperature.~~

~~TEMP (C)~~	~~MG/L~~
~~12.0~~	~~2.4~~
~~12.1-14.6~~	~~2.2~~
~~14.7-17.6~~	~~2.0~~
~~17.7-21.4~~	~~1.8~~
~~21.5-26.2~~	~~1.6~~
~~26.3-32.5~~	~~1.4~~

The fluoride criteria for the Class 1C drinking water use waters are 1.4-2.4 mg/L depending on the air temperature (Footnote 3 to Table 2.14.1). The current USEPA finished drinking water maximum contaminant level (MCL) is 4.0 mg/L and the maximum contaminant level goal (MCLG) is 4.0 mg/L. The proposed change is to update to the current MCL of 4.0 mg/L. This change would apply to all Class 1C waters in Utah. All of the drinking water providers and the Division of Drinking Water were notified of the proposed changed in 2015 (see letter below). No comments were received by DWQ.

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

FILE COPY

March 23, 2015

DAN MATTHEWS
JORDANELLE SSD
PO BOX 519
HEBER CITY, UT 84032

Document Date 3/23/2015
DWQ-2015-004306

Dear Water Provider:

Subject: Proposed Changes to Surface Water Standards that affect the Class 1C Drinking Water Use

I am writing to inform you about two proposed changes to Utah's water quality standards that affect the Class 1C drinking water use. Waters that are designated as Class 1C are protected for domestic purposes with prior treatment processes approved by the Utah Division of Drinking Water.

Prior to proposing these changes to the Utah Water Quality Board, I am seeking feedback from you, the water providers. Ultimately, if changes to the standards occur, the changes will be made in accordance with the required rulemaking procedures. These procedures include initial permission from the Utah Water Quality Board to initiate rulemaking, public notice and comment, and finally, formal adoption of the changes by the Water Quality Board.

The first proposed change is to the fluoride criterion. The existing fluoride criterion ranges from 1.4-2.4 mg/l depending on the maximum air temperature (UAC R317-2-14, Table 2.14.1). This range is based on the assumption that the higher the air temperature, the more water people will drink. The more water that people drink, the lower the criterion is to provide equivalent protection from the adverse effects of fluoride. However, the current USEPA maximum contaminant level (MCL) and maximum contaminant level goal (MCLG) for fluoride in finished culinary water is 4.0 mg/l and a temperature correction is no longer recommended. The proposed change is to revise the fluoride criterion for Class 1C waters to 4.0 mg/l with no temperature correction.

The second proposed change is to the procedures for conducting antidegradation reviews (UAC R317-2-3). Antidegradation is a complicated topic. In summary, degradation occurs when the concentration of a pollutant in a discharge is higher than the background concentration in the receiving water. When degradation is permitted, the antidegradation review is intended to ensure that the least degrading, feasible treatment option is used. The existing requirements for conducting antidegradation reviews include special procedures for Class 1C waters (UAC R317-2-3.5.d.):

> An Antidegradation Level II Review will be required by the Director for discharges to waters with a Class 1C drinking water use assigned.
>
> Depending upon the locations of the discharge and its proximity to downstream drinking water diversions, additional treatment or more stringent effluent limits or additional monitoring, beyond that which may otherwise be required to meet minimum technology standards or in stream water quality

standards, may be required by the Director in order to adequately protect public health and the environment. Such additional treatment may include additional disinfection, suspended solids removal to make the disinfection process more effective, removal of any specific contaminants for which drinking water maximum contaminant levels (MCLs) exists, and/or nutrient removal to reduce the organic content of raw water used as a source for domestic water systems.

Additional monitoring may include analyses for viruses, Giardia, Cryptosporidium, other pathogenic organisms, and/or any contaminant for which drinking water MCLs exist. Depending on the results of such monitoring, more stringent treatment may then be required.

The additional treatment/effluent limits/monitoring which may be required will be determined by the Director after consultation with the Division of Drinking Water and the downstream drinking water users.

The proposed change is deletion of the requirement that "An Antidegradation Level II Review will be required by the Director for discharges to waters with a Class 1C drinking water use assigned." All of the remaining special procedures will be retained. At the time that this provision was added to the antidegradation review requirements, the requirements included several exceptions or "off ramps." The vast majority of discharge permits were issued based on these exceptions and antidegradation reviews were not required. At the explicit request of some of Utah's water providers, the requirement was added to conduct an antidegradation review and ensure the least degrading, feasible, treatment option for all discharges to Class 1C waters.

In 2010, the antidegradation review requirements were revised in response to court decisions in other states. One of these changes was to eliminate the previous exceptions to when an antidegradation review was required. Under the current requirements, an antidegradation review is required for all new discharges and for any increases in concentration or loading for existing discharges. Therefore, antidegradation reviews are required for all new or increased discharges to Class 1C waters. However, because of the requirement that "An Antidegradation Level II Review will be required by the Director for discharges to waters with a Class 1C drinking water use assigned," dischargers to Class 1C waters are still required to do an antidegradation review every time a discharge permit is renewed (every 5 years) even when the concentrations or volume of the discharge has not changed. These antidegradation reviews are perfunctory because they simply reiterate the previous antidegradation review and constitute an unnecessary regulatory burden.

Like you, the Division of Water Quality is committed to providing the highest level of protection to our drinking water source waters and these proposed changes do not decrease the existing protections for Class 1C waters. If you have any questions or concerns regarding these proposed changes, please contact Mr. Chris Bittner who is the Standards Coordinator (801-536-4371 or cbittner@utah.gov) by April 17, 2015. After this date, the revisions may be proposed to the Utah Water Quality Board.

Sincerely,

Walter L. Baker, P.E.
Director

WLB:cb:mc

cc: Ken Bousfield, Utah Division of Drinking Water

DWQ-2015-004066

Table 2.14.1, Footnote (4) Site-Specific Standards for Total Dissolved Solids (TDS).

Quitchupah Creek and tributaries from the confluence with Ivie Creek to U-10:
3,800 mg/l provided that total sulfate not exceed
2,000 mg/l to protect the livestock watering agricultural existing use;

The regulatory basis for the TDS criteria was that higher (less stringent) TDS criteria would remain protective of the agricultural use (UAC R317-2-7.1.c). The rationale is documented in *Evaluation of Acceptable Sulfate Concentrations for Quitchupah and Ivie Creeks* (DWQ, October, 2009). When the site-specific criteria were proposed to the Water Quality Board, the tributaries were inadvertently omitted from the description. Therefore, the statewide TDS criterion of 1,200 mg/L applies to the tributaries.

In 2016, Quitchupah Creek was determined to be impaired for TDS based on data from one of the tributaries exceeding 1,200 mg/L. As shown on the following figure, the sources of water to the tributaries include irrigation return flows and effluent from coal mines.

The data and analyses that supported the site-specific TDS criteria for Quitchupah Creek apply equally to the tributaries.

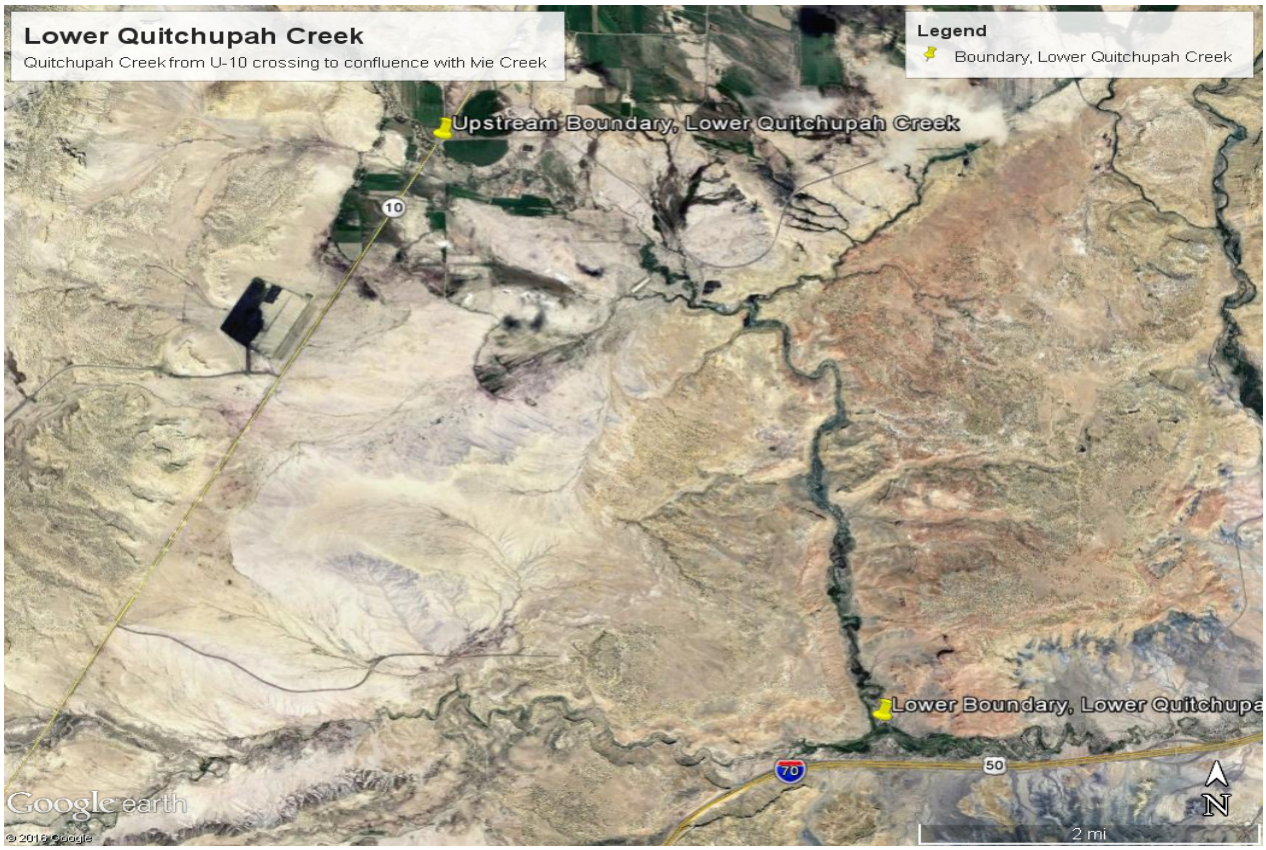

Table 2.14.1, Footnote (4) Site-Specific Standards for Total Dissolved Solids (TDS).

Sevier River from Gunnison Bend Reservoir to ~~Clear~~ Crafts Lake: 3,370
mg/l;

As shown on the following figure, Clear Lake was incorrectly used to define this segment of the Sevier River and Crafts Lake is correct.

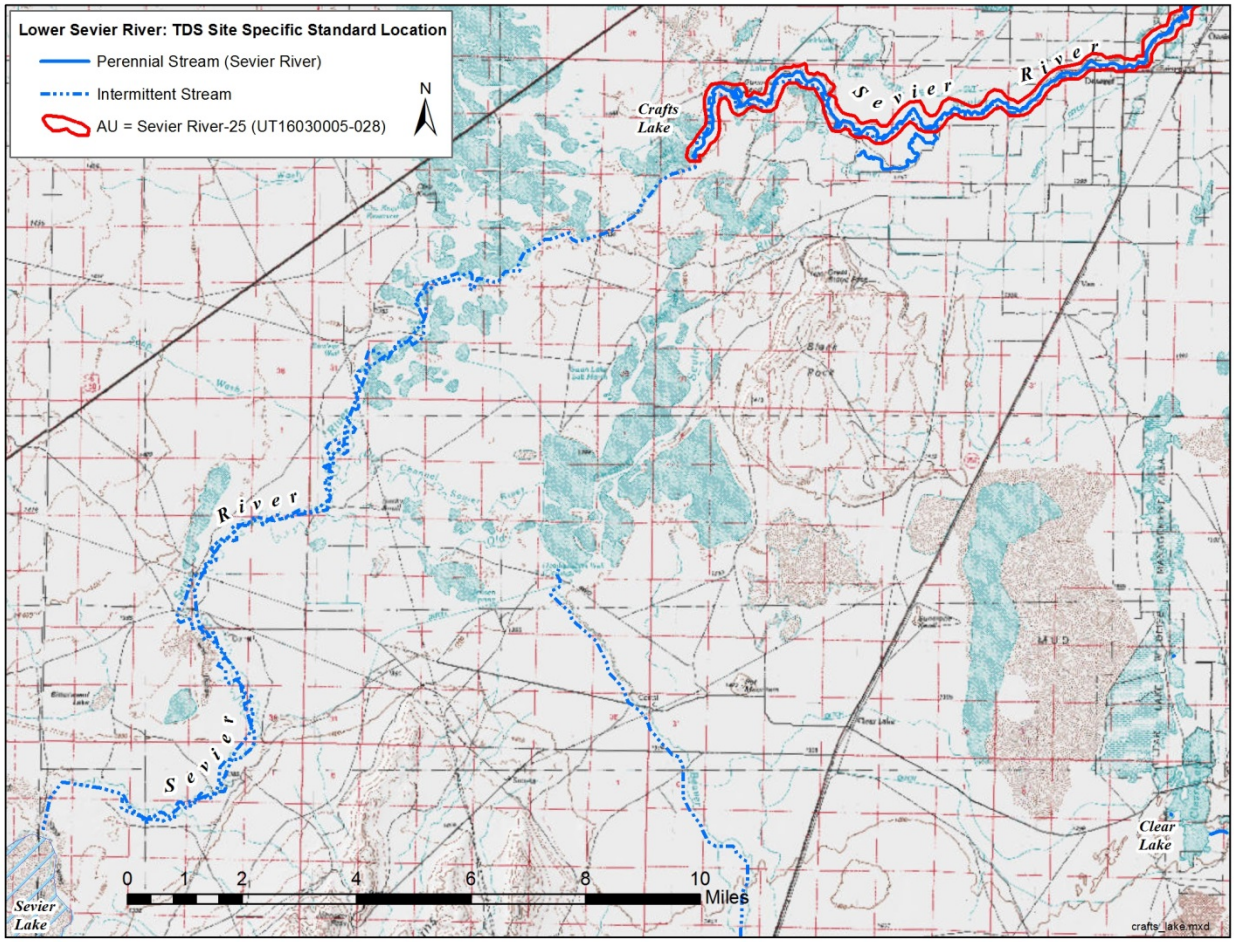

Table 2.14.2, Cadmium

Class	3A	3B	3C	3D
Cadmium (7)				
4 Day Average	~~0.25~~0.72	~~0.25~~0.72	~~0.25~~0.72	~~0.25~~0.72
1 Hour Average	~~2.0~~1.8	~~2.0~~1.8	~~2.0~~1.8	~~2.0~~1.8

TABLE 2.14.3a

EQUATIONS TO CONVERT TOTAL RECOVERABLE METALS STANDARD WITH HARDNESS (1) DEPENDENCE TO DISSOLVED METALS STANDARD BY APPLICATION OF A CONVERSION FACTOR (CF).

Parameter	4-Day Average (Chronic) Concentration (UG/L)
CADMIUM	CF * $e^{(0.7977*\ln(\text{hardness})-.909)}$ ~~(0.7409 (ln(hardness)) -4.719~~
	CF = 1.101672 - ln(hardness) (0.041838)

TABLE 2.14.3b

EQUATIONS TO CONVERT TOTAL RECOVERABLE METALS STANDARD WITH HARDNESS (1) DEPENDENCE TO DISSOLVED METALS STANDARD BY APPLICATION OF A CONVERSION FACTOR (CF).

Parameter	1-Hour Average (Acute) Concentration (UG/L)
CADMIUM	CF * $e^{(0.9789*\ln(\text{hardness})-3.866)}$ ~~(1.0166(ln(hardness)) 3.924)~~
	CF = 1.136672 - ln(hardness)(0.041838)

The proposed change is to update Utah's water quality criteria for the protection of aquatic life to be consistent with the USEPA *Aquatic Life Ambient Water Quality Criteria for Cadmium-2016*. The updated criteria will apply to all Classes 3A through 3D waters in Utah. The cadmium c riteria are expressed as equations that include pH and hardness. The table values above are the acute and chronic criteria at 100 mg/L $CaCO_3$ hardness. The conversion factors from dissolved (criterion) to totals (UDPES permits) are unchanged.

The proposed acute criterion is marginally more stringent and the chronic criterion is almost 3-times less stringent. These changes are anticipated to have little effect on Utah's water quality programs. No discharge permits with cadmium water quality-based effluent limits were identified. Some Utah waters are currently impaired for cadmium and these include segments of the San Juan River, Little Cottonwood, Big Cottonwood City and Parley's Creeks in Salt Lake County, Spring Creek in Utah County and McHenry and Silver Creeks in Summit County. The potential effects of the proposed cadmium criteria on these impairments are unknown.

As noted in the USEPA (2016) criteria document, the acute criterion was lowered to protect rainbow trout. Future refinements of the cadmium criteria may include a recalculation of the acute criteria for waters that do not support trout, i.e., Classes 3B-3D.

Table 2.14.2, Carbaryl.

Class	3A	3B	3C	3D
Carbaryl				
4 Day Average	2.1	2.1	2.1	2.1
1 Hour Average	2.1	2.1	2.1	2.1

The proposed change is to add new aquatic life criteria for carbaryl to Classes 3A through 3D consistent with the USEPA *Carbaryl Aquatic Life Ambient Water Quality Criteria for Carbaryl-2012*. The U.S. Geological Service reports that carbaryl is the 2nd most commonly detected pesticide in urban streams. Carbaryl is used in agriculture to control pests on terrestrial food crops including fruit and nut trees, many types of fruit and vegetables, and grain crops; cut flowers; nursery and ornamentals; turf, including production facilities; greenhouses; and golf courses. Carbaryl is also registered for use on residential sites (e.g., annuals, perennials, shrubs) by professional pest control operators and by homeowners on gardens, ornamentals and turfgrass. Carbaryl can enter the water via runoff.
No specific data regarding the use of carbaryl in Utah were available from DWQ's pesticide permitting program or the Utah Department of Agriculture and Food. Carbaryl is not a regular target analyte for DWQ's monitoring programs. Carbaryl is not expected to be a common pollutant in permitted discharges.

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

M E M O R A N D U M

TO: Water Quality Board

THROUGH: Walt Baker, P.E.
Director

FROM: Kevin Okleberry
Environmental Scientist III

DATE: May 24, 2017

SUBJECT: Request for Approval of Settlement Agreement for North Utah County Water Conservancy District

The Utah Water Quality Act, UCA 19-5-104 (3) (h) (i, ii), requires that any Settlement Agreement (SA) negotiated by the Director in excess of $25,000 must be reviewed and approved or disapproved by the Water Quality Board.

On August 22, 2016, the North Utah County Water Conservancy District, herein referred to as NUCWCD, released an estimated 5,100 cubic yards of sediment from the Tibble Fork Dam into the North Fork of the American Fork River. This release occurred during a planned drawdown of the water level in Tibble Fork Reservoir as part of a required seismic upgrade of the dam. The release resulted in the deaths of an estimated 5,200 fish and contaminated the river with sediment containing elevated concentrations of heavy metals such as arsenic, lead, and zinc. The negotiated penalty is $145,122.55. Attached for your reference is the proposed SA, I16-07SA.

The terms of the financial settlement in the I15-03SA:

Monetary Penalty	$52,500
Investigation Costs	$92,622.55
Total Settlement	**$145,122.55**

The severity of the penalty for I16-07SA is due to the significant environmental impact created by the violation, which was documented to last for a total of 9 days.

The public comment period for the proposed SA ran from March 31, 2017 through May 1, 2017. Several comments from interested groups and individuals have been received. None of the comments were substantive; therefore, the SA has not been modified. The comments and comment response documents will be posted on the Tibble Fork webpage at: https://deq.utah.gov/locations/T/tibble-fork-reservoir/index.htm

The proposed SA represents a fair and reasonable settlement. It is Staff's recommendation that this settlement be approved.

Attachments:

1. Notice of Violation (DWQ-2016-013834)
2. Settlement Agreement (DWQ-2017-002712)
3. Public Notice (DWQ-2017-002714)
4. Copy of R317-1-8

State of Utah
GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

FILE COP

SEP 28 2016

CERTIFIED MAIL
(Return Receipt Requested)

North Utah County Water Conservancy District
Attn: Mr. John Jacobs
75 North Center Street
American Fork, Utah 84003

Dear Mr. Jacobs:

Subject: Notice of Violation and Compliance Order, Docket No. 116-07, Tibble Fork Dam Sediment Discharge, Environmental Incident Report Number 12730

Enclosed is the Notice of Violation and Compliance Order (Order), issued to North Utah County Water Conservancy District by the Division of Water Quality, for your immediate attention.

This Order has been issued as a result of a large sediment discharge into American Fork Creek from the Tibble Fork Dam construction site.

If you have any questions regarding this information, please contact Kevin Okleberry at 801-536-4054 or kokleberry@utah.gov.

Sincerely,

Walter L. Baker, P.E.
Director

DWQ-2016-013834

WLB:KO:ag

Enclosure: Notice of Violation and Compliance Order (DWQ-2016-013093)

cc: Jason Gipson, U.S. Army Corps of Engineers
Jim Ireland, National Park Service
Charlie Condrat, U.S. Forest Service
Norm Evenstad, Natural Resources Conservation Service
Bryce Larsen, Utah County Health Department
Craig Anderson, Office of Attorney General
Mike Slater, Utah Division of Wildlife Resources

DWQ-2016-013092

In the Matter of: NORTH UTAH COUNTY WATER CONSERVANCY DISTRICT Attn: Mr. John Jacobs 75 North Center Street American Fork, Utah 84003	NOTICE OF VIOLATION AND COMPLIANCE ORDER DOCKET NO. I16-07

A. STATUTORY AUTHORITY

This **NOTICE OF VIOLATION and COMPLIANCE ORDER (NOV/CO)** is issued by the **DIRECTOR OF THE UTAH DIVISION OF WATER QUALITY (DIRECTOR)** pursuant to the authority under the Utah Water Quality Act, as amended, Utah Code Ann. §§ 19-5-101 to 19-5-124 (the **ACT**), including Utah Code Ann. §§ 19-5-106(2)(d), 19-5-111 and 19-5-115. This **NOV/CO** is also issued in accordance with the Utah Administrative Procedures Act, Utah Code Ann. §§ 63G-4-101 through 63G-4-601.

B. APPLICABLE STATUTORY AND REGULATORY PROVISIONS

1. It is unlawful for any person to discharge a pollutant into waters of the state, unless the discharge is authorized by permit, Utah Code Ann. § 19-5-107(1)(a). Waters of the State means "all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state.", Utah Code Ann. § 19-5-102(23)(a). See also Utah Admin. Code R 317-1-1.

2. It is unlawful for any person to make any discharge not authorized under an existing valid discharge permit, Utah Code Ann. § 19-5-107(1)(a).

3. It is unlawful "to cause pollution which constitutes a menace to public health and welfare, or is harmful to wildlife, fish or aquatic life, or impairs domestic, agricultural, industrial, recreational, or other beneficial uses of water". It is also unlawful "to place or cause to be placed any wastes in a location where there is probable cause to believe it will cause pollution", Utah Code Ann. § 19-5-107(1)(a).

4. *Utah Admin. Code R 317-2-7.1(numeric standard)* prohibits any person from discharging, or placing "...any wastes or other substances, in a manner that may interfere with water's designated uses protected by assigned classes or to cause any of the applicable standards to be violated...".

5. *Utah Admin. Code R 317-2-7.2, Narrative Standards* prohibits any person from discharging or placing any waste or other substance ".....in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or

result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures."

6. *Utah Admin. Code R 317-15-1* requires that any federally permitted activity "...be conducted in a manner that will comply with applicable discharge and water quality requirements in order to maintain the chemical, physical, and biological integrity of waters of the United States within the State."

C. FINDINGS OF FACT

1. On information and belief, **NORTH UTAH COUNTY WATER CONSERVANCY DISTRICT** (hereinafter "**NUCWCD**") is a water conservancy district organized under the laws of Utah and located in American Fork, Utah. On information and belief, **NUCWCD** owns and operates the Tibble Fork Dam, located below the confluence of Deer Creek and North Fork American Fork River in American Fork Canyon, Utah County, Utah.

2. The American Fork River and its tributaries are designated as 2B, 3A, 4 State Waterways in *R317-2-13.5(c), Classification of Waters of the State, Standards of Quality for Waters of the State*. In addition, the American Fork River and its tributaries are designated as a Category 1 Water for antidegradation purposes in *R317-2-12.1(a), Category 1 and Category 2 Waters, Standards of Quality for Waters of the State*.

3. As part of a required effort to seismically upgrade and increase storage capacity of the Tibble Fork Dam, **NUCWCD** and its contractors, Whitaker Construction Co., Inc., and RB&G Engineering, Incorporated, are rebuilding the Tibble Fork Dam. Part of this rebuilding effort requires the draining of Tibble Fork Reservoir, a 259 acre-feet reservoir created by the construction of Tibble Fork Dam in 1966.

4. The drainage basin of the North Fork of American Fork River contains several inactive and closed mines dating from the late 1800s and early 1900s. In preparation for the construction, in 2010 a contractor for the Natural Resources Conservation Service (NRCS) took samples of the sediment from the bottom of Tibble Fork Reservoir. Analysis of these samples confirmed the sediment was contaminated with arsenic and lead in excess of EPA's Residential Regional Screening Levels. These findings were documented in Appendix D of the *Final Supplemental Watershed Plan No. 10 and Environmental Assessment for the Rehabilitation of Tibble Fork Dam*, prepared for the NRCS by McMillen, LLC, and dated January, 2015.

5. On or about June 13, 2016, construction on the dam rehabilitation project began. The projected completion date for the construction is December 15, 2016.

6. On or about August 19, 2016, **NUCWCD** began to release water from Tibble Fork Reservoir as part of a planned reduction in the water level to allow construction on the lower portions of the dam and water outlet. As the water level in the reservoir dropped, the North Fork of American Fork River began to erode through a large bar of sediment which had accumulated on the bottom of the reservoir, releasing an estimated 8,700 cubic yards of sediment into the river.

7. On or about August 21, 2016, a witness observed a large amount of sediment in the waters of the North Fork of American Fork River, which flowed into American Fork River and contaminated the water. The witness stated the river appeared to be full of mud and he observed numerous dead fish. According to Mike Slater, of the Utah Division of Wildlife Resources (DWR), there were no live fish found in a two-mile stretch of the North Fork of the American Fork River between the Tibble Fork Dam and the confluence with the South Fork of the American Fork River during a survey conducted by the DWR on August 23, 2016. Mr. Slater estimated the total number of rainbow and brown trout killed in the affected areas of the river to be approximately 5,250 fish.

8. On August 21, 2016, employees of the National Park Service at Timpanogos Cave National Monument observed a "substantial sediment discharge" in American Fork River near the monument headquarters. On August 22, 2016, Park Service employees took water samples from the river near Cave Camp Springs in the Monument. Subsequent analysis of these samples revealed the water contained 7,680 milligram per liter (mg/L) of suspended solids, and 0.276 mg/L arsenic, 5.61 mg/L lead, 0.00427 mg/L mercury, and 8.05 mg/L zinc. By contrast, a water sample taken by Park Service employees at the same location on August 8, 2016, contained only 3.60 mg/L of suspended solids, and no detectable concentrations of arsenic, lead, mercury or zinc.

9. On the morning of August 23, 2016, the United States Forest Service notified the Division of Water Quality (**DIVISION**) of the release via phone message. Kevin Okleberry, Scott Daly, and Toby Hooker, Division employees, traveled to the location of the release. They noted that the American Fork River and the North Fork of American Fork River had a deep brown color and gave off a faint odor of rotting organic materials. They took water and sediment samples at several locations along the River. Subsequent analysis of these samples showed the sediment contained concentrations of arsenic, cadmium, lead, and zinc in excess of the EPA Region 3 Freshwater Sediment Screening Values for Aquatic Life. The sediment sample taken from the mouth of the canyon also exceeded a human health-based Comparison Value for lead. Analysis of the water samples also revealed the turbidity of the water exceeded the standards outlined in *R317-2-14.1, Numeric Criteria, Standards of Quality for Waters of the State*, which prohibit an increase in turbidity of 10 Nephelometric Turbidity Units (NTU) above background levels.

10. On August 24, 25, 26, 27, 28, 30, and September 1, 2016, Division employees returned to the same sampling locations and collected additional water and sediment

samples. The turbidity values for all water samples taken downstream from Tibble Fork Reservoir on those dates exceeded the *R317-2-14.1* standard of 10 NTU above background, and based on readings of water quality sondes installed in the river above and below Tibble Fork Reservoir the turbidity of the water did not consistently return to levels below the standard until September 2, 2016, a total of 13 days of violations. All sediment samples taken during that time frame contained arsenic, cadmium, lead, and zinc concentrations in excess of EPA Freshwater Sediment Screening Values for Aquatic Life.

11. Based on inspections and surveys of the river, along with the preceding sampling data and visual observations provided by the public and employees of other agencies, conditions relative to sediment deposition currently exist in the river which continue to violate the Narrative Standards outlined in *R317-2-7.2, Narrative Standards, Standards of Quality for Waters of the State.*

D. VIOLATIONS

Based on the foregoing Findings of Fact, **NUCWCD** has violated the following:

1. Utah Code Ann. § 19-5-107(1)(a) for a discharge not authorized under an existing valid discharge permit as listed and described in the Findings of Fact paragraphs C.5 through C.9.

2. Utah Code Ann. § 19-5-107(1)(a) for releasing "...a pollutant into waters of the state or to cause pollution which constitutes a menace to public health and welfare, or is harmful to wildlife, fish or aquatic life, or impairs domestic, agricultural, industrial, recreational, or other beneficial uses of water, or placing or causing to be placed any wastes in a location where there is probable cause to believe that it will cause pollution.", as listed and described in the Findings of Fact paragraph C.5 through C.9.

3. *Utah Admin. Code R317-2-3.1* for violating the antidegradation policy for Category 1 Waters, which stipulates that "No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses."

4. *Utah Admin. Code R317-2-7.1* for discharging or placing "...wastes or other substances, in a manner that may interfere with a water's designated uses, or to cause any of the applicable standards to be violated." as described in Findings of Fact paragraph C.5 through C.9.

5. *Utah Admin. Code R317-2-7.2* for discharging or placing a waste that is "...offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health

effects, as determined by bioassay or other tests performed in accordance with standard procedures." as described in Findings of Fact paragraphs C.3 and C.4.

6. *Utah Admin. Code R317-15* for discharging a waste that degraded water quality in American Fork River beyond the state water quality standards set forth in the terms and conditions of the April 16, 2012, Utah 401 Water Quality Certification (Cert) issued to the United States Army Corps of Engineers (USACE) 404 permit SPK-2014-00541. Specifically the failure to conduct activities in the water of the state that must: 1) minimize turbidity increases to less than the 10 NTUs numeric criteria for the assigned beneficial use class 2B and 3A in the American Fork River; and 2) immediately modify the implemented BMPs to ensure compliance with water quality standards. Additionally, for the non-compliance with Cert condition #6, which requires "all practical Best Management Practices (BMPs) on disturbed banks and within waters of the state shall be implemented to minimize turbidity during in-water work"; Cert condition #7, which requires that "that any spill, discharge of oil or other substance which may cause pollution to the waters of the state must be immediately reported to DWQ at (801) 536-4100 or after hours to (801) 536-4123"; Cert condition #11, which requires that "discharge must meet a Total Suspended Solids (TSS) of total daily maximum of 70 mg/L"; and Cert condition #12, which requires that "permittee shall protect any potentially affected fish spawning areas" as described in Findings of Fact paragraph C.5 through C.9

E. ORDER

Based on the foregoing **FINDINGS OF FACT** and **VIOLATIONS** and pursuant to Utah Code Ann. § 19-5-107 and § 19-5-111, **NUCWCD** is hereby **ORDERED** to:

1. Immediately initiate all action required to come into compliance with all applicable provisions of the Utah Water Quality Act and the Water Quality rules in the Utah Administrative Code, R317.

2. Immediately cease and desist all un-permitted releases of sediment at the site which violate Utah Water Quality standards.

3. Submit a report containing the information below. The report must be submitted to the **DIRECTOR** within thirty (30) days of receipt of this **NOV/CO** and must provide the information listed below:

   A. An evaluation of what caused the cited violations. This information should include the following:

      - Dates of the initial sediment release from the reservoir.
      - How long sediment was released from the reservoir during each occurrence.
      - An estimation of the volume and quality of sediment released from the reservoir during each occurrence.
      - Any other information regarding the releases that occurred that may be important in resolving the violations listed in Section D of this **NOV/CO.**

   B. Describe, in detail, the actions taken and/or planned to be implemented (including dates), to attain and continue to be in full compliance with this **NOV/CO.**

   C. Describe, in detail, any environmental mitigation plans for the construction that were in place prior to the initial release on August 19, 2016 and any deviations from that plan.

   D. Provide a written explanation as to why no federal, state, or local agencies were notified of the sediment release until August 21, 2016, two days after it had commenced.

   E. Describe how the polluted excess sediment will be removed from the affected portions of the American Fork River drainage, and what steps will be taken to rehabilitate wildlife habitat in the creek and protect public

health from any contaminated canals, including timeframes.

F. Prepare a comprehensive monitoring plan for **DIRECTOR** approval for the sediment and water in the affected portions of the American Fork River drainage, including the frequency, duration, and specific analyses that will be conducted. The monitoring plan must be sufficient to demonstrate full extent of impacts to the aquatic life, agricultural, and recreational beneficial uses described in R317-2-13.5(c) and to demonstrate effectiveness of restoration efforts for these uses, and should include the following:

- An evaluation of the impacts to aquatic organisms; for example, changes to fish and macroinvertebrate population and composition as a result of the release, and long-term evaluation of fish tissue metal accumulation.

- Monitoring of cleanup status to include a demonstration that substrate and aquatic populations have returned to pre-release condition through the impacted segments of the river.

- Demonstration that sediment conditions are not harmful to the public health.

- Monitoring to demonstrate irrigation and secondary water use is not negatively impacted.

F. NOTICE

This **NOV/CO** is effective immediately. **NUCWCD** may contest this **NOV/CO** by submitting a Request for Agency Action (RFAA) in writing as provided for in Utah Code Ann. § 19-1-301, and as specified in Utah Admin. Code R305-7-303. Any such request must be received by the **DIRECTOR** within 30 days of the **NOV/CO**'s issuance or the **NOV/CO** shall become final. Failure to file an RFAA within 30 days waives any right to contest this **NOV/CO**.

Compliance with the provisions of this **ORDER** is mandatory. Failure to respond may subject **NUCWCD** to further civil penalties or criminal fines under Utah Code Ann. § 19-5-115.

Any compliance schedules submitted by the violator as required by this NOV/CO must be submitted by the deadlines established in the Order and approved by the **DIRECTOR**. Once compliance schedules are approved by the **DIRECTOR**, the compliance schedule must be implemented according the deadlines and requirements established in the compliance schedules(s) and/or this **NOV/CO**. Once approved, timeframes and requirements of any compliance schedules become binding on the violator.

All reports required under the **NOV/CO** must be accompanied by the following certification, which is to be signed in accordance with Utah Admin. Code R 317-8-3.4(4):

> *"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."*

Utah Code Ann. § 19-5-115 provides that violation of the **ACT** or a related order may be subject to a civil penalty of up to $10,000 per day of violation. Under certain circumstances of willfulness or gross negligence, violators may be fined up to $25,000 per day of violation.

This **NOV/CO** does not relieve **NUCWCD** from complying with all other local, State, and Federal laws and requirements, nor does it preclude the Utah Department of Environmental Quality or the **DIRECTOR** from taking any and all other actions allowed by law.

Signed this 28 day of September 2016.

Walter L. Baker, P.E.
Director

UTAH DIVISON OF WATER QUALITY

IN THE MATTER OF NORTH UTAH COUNTY WATER CONSERVANCY DISTRICT	DOCKET NUMBER I16-07 SETTLEMENT AGREEMENT

This **SETTLEMENT AGREEMENT** (hereinafter "**AGREEMENT**") is between **NORTH UTAH COUNTY WATER CONSERVANCY DISTRICT** (hereinafter "**OPERATOR**") and the **DIRECTOR OF THE UTAH DIVISION OF WATER QUALITY** (hereinafter the "**DIRECTOR**"), concerning violations of the *Utah Water Quality Act* (the *Act*), *Utah Code Annotated*, and the *Utah Administrative Code*.

1. The **DIRECTOR** has authority to administer the *Utah Water Quality Act, as amended 1953*, as specified in *UCA 19-5-106(2)(d)* (hereinafter the "*ACT*").

2. The **DIRECTOR** has been delegated authority by the U.S. Environmental Protection Agency (EPA) to administer the *National Pollutant Discharge Elimination System (NPDES)* permit program under the *Federal Clean Water Act* (CWA).

3. The parties met on November 30, 2016 to discuss the **NOTICE OF VIOLATION** and the facts and circumstances surrounding the incident, and now desire to resolve this matter fully without further administrative proceedings except to the extent provided herein by entering into this **AGREEMENT**. Entering into this **AGREEMENT** is not an admission of liability or factual allegation set out in the **NOTICE**, nor is it an admission of or an agreement to any disputed facts or disputed legal theories, nor is it an admission of any violation of any law, rule, regulation or permit by the **OPERATOR**.

4. The **DIRECTOR** will administer the terms and provisions of this **AGREEMENT**.

5. This **AGREEMENT** resolves the **NOTICE OF VIOLATION** and **ORDER**, Docket Number I16-07 (hereinafter the "**NOTICE**"), between the **OPERATOR** and the **DIRECTOR**, issued to the **OPERATOR** in September 28, 2016, by the **DIRECTOR**. It does not in any way relieve the **OPERATOR** from any other obligation imposed under the Act or any other State or Federal laws.

6. In resolution of said **NOTICE** in Paragraph 5 of this **AGREEMENT**;

   A. The **OPERATOR** agrees to pay a penalty in the amount of $52,500 and associated costs incurred by the Division of Water Quality in the amount of $92,622.55 for a total of $145,122.55, which was calculated and adjusted for circumstances in conformance with the penalty policy outlined in *UAC 317-1-8*, according to the following payment schedule:

      - Within 30 days of the Settlement Agreement being signed by the Director of the Division of Water Quality, NUCWCD will remit payment in the amount of $70,802.05. This amount is to reimburse monitoring costs that DWQ incurred from August 23 through September 5th.

- On or before January 1, 2018, NUCWCD will remit payment in the amount of $21,820.50 to DWQ for labor costs associated with Tibble Fork investigations from August 23rd through November 4th.
- On or before January 1, 2019, January 1, 2020, and January 1, 2021, NUCWCD will remit payments in the amount of $17,500 for penalties assessed to resolve the NOV.

Payments are to begin within thirty (30) days of the effective date of this **AGREEMENT** by online payment, or check made payable to the State of Utah delivered or mailed to:

Department of Environmental Quality
Division of Water Quality
P. O. Box 144870
Salt Lake City, Utah 84114-4870

B. The **OPERATOR** further agrees to fund a restoration and monitoring project(s) for the American Fork River in order to return it to its pre-incident state. The plan(s) for these project(s) must be completed and approved by the Division of Water Quality and initiated within 30 days of the effective date of this **AGREEMENT**.

The **OPERATOR**'s participation in the restoration and monitoring project(s) must fully adhere to *UAC R317-1-8.* The **OPERATOR** agrees not to attempt to gain or generate any positive publicity, and further agrees not to deduct or otherwise attempt to obtain a tax benefit from the foregoing funding of these projects.

C. The **OPERATOR** may be required to submit updates, based on the approved project(s). Updates must be submitted every 3 months. The updates must include how the project is progressing and any known setbacks that may impact the progress of the mitigation and recovery.

7. Nothing contained in this **AGREEMENT** shall preclude the **DIRECTOR** from taking additional actions against the **OPERATOR** for permit violations not resolved by this **AGREEMENT**.

8. If an agreement between the **OPERATOR** and the **DIRECTOR** cannot be reached in a dispute arising under any provision of this **AGREEMENT,** then the **OPERATOR** or the **DIRECTOR** may commence a proceeding with the **BOARD** under the *Administrative Procedures Act* to resolve the dispute. A final decision in any adjudicative proceeding shall be subject to judicial review under applicable state law.

9. Nothing in this **AGREEMENT** shall constitute a waiver by the **OPERATOR** to raise in defense any legal or factual contention for future allegations of noncompliance.

10. Nothing in this **AGREEMENT** shall constitute or be considered as a release from any claims,

to include natural resource damage claims, cause of action, or demand in law or equity which the **STATE** may have against the **OPERATOR**, or any other person, firm, partnership or corporation for any liability arising out of or relating in any way to the release of pollutants to waters of the State.

AGREED to this _____ day of _____, 2017.

NORTH UTAH COUNTY WATER CONSERVANCY DISTRICT	**UTAH DIVISION OF WATER QUALITY**
By _____	By _____
Authorized Agent	Director

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

March 31, 2017

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

PUBLIC NOTICE OF STIPULATED COMPLIANCE ORDER,
DOCKET NO. I-16-07 SETTLEMENT AGREEMENT

PURPOSE OF PUBLIC NOTICE

This notice is to declare that the State of Utah has issued a Stipulated Compliance Order to North Utah County Water Conservancy District. This Public Notice is issued pursuant to Utah Administrative Code R317-8-1.9, to provide opportunity for public comment on the proposed settlement of an enforcement action. The proposed order is for the purpose of resolving alleged violations of Utah Code Annotated 19-5 (Water Quality Act), and is a resolution of enforcement proceedings brought against PacifiCorp.

PUBLIC COMMENTS

Public comments are invited any time prior to close of business May 1, 2017. Comments may be directed to the Department of Environmental Quality, Division of Water Quality, 195 North 1950 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870.

FURTHER INFORMATION

The settlement agreement is available for public review under "Public Notices" at www.waterquality.utah.gov/PublicNotices. If internet access is not available, a copy may be obtained by calling Kevin Okleberry at 801-536-4054. Written public comments can be submitted to: Kevin Okleberry, P.O. Box 144870, Salt Lake City, Utah 84114-4870 or by email at: kokleberry@utah.gov. The deadline to receive comments is close of business May 1, 2017. After considering public comment the Director of the Division of Water Quality may execute the settlement agreement, revise it, or abandon it.

DWQ-2017-002714

R317-1-8. Penalty Criteria for Civil Settlement Negotiations.

8.1 Introduction. Section 19-5-115 of the Water Quality Act provides for penalties of up to $10,000 per day for violations of the act or any permit, rule, or order adopted under it and up to $25,000 per day for willful violations. Because the law does not provide for assessment of administrative penalties, the Attorney General initiates legal proceedings to recover penalties where appropriate.

8.2 Purpose And Applicability. These criteria outline the principles used by the State in civil settlement negotiations with water pollution sources for violations of the UWPCA and/or any permit, rule or order adopted under it. It is designed to be used as a logical basis to determine a reasonable and appropriate penalty for all types of violations to promote a more swift resolution of environmental problems and enforcement actions.

To guide settlement negotiations on the penalty issue, the following principles apply: (1) penalties should be based on the nature and extent of the violation; (2) penalties should at a minimum, recover the economic benefit of noncompliance; (3) penalties should be large enough to deter noncompliance; and (4) penalties should be consistent in an effort to provide fair and equitable treatment of the regulated community.

In determining whether a civil penalty should be sought, the State will consider the magnitude of the violations; the degree of actual environmental harm or the potential for such harm created by the violation(s); response and/or investigative costs incurred by the State or others; any economic advantage the violator may have gained through noncompliance; recidivism of the violator; good faith efforts of the violator; ability of the violator to pay; and the possible deterrent effect of a penalty to prevent future violations.

8.3 Penalty Calculation Methodology. The statutory maximum penalty should first be calculated, for comparison purposes, to determine the potential maximum penalty liability of the violator. The penalty which the State seeks in settlement may not exceed this statutory maximum amount.

The civil penalty figure for settlement purposes should then be calculated based on the following formula: CIVIL PENALTY = PENALTY + ADJUSTMENTS - ECONOMIC AND LEGAL CONSIDERATIONS

PENALTY: Violations are grouped into four main penalty categories based upon the nature and severity of the violation. A penalty range is associated with each category. The following factors will be taken into account to determine where the penalty amount will fall within each range:

A. History of compliance or noncompliance. History of noncompliance includes consideration of previous violations and degree of recidivism.

B. Degree of willfulness and/or negligence. Factors to be considered include how much control the violator had over and the foreseeability of the events constituting the violation, whether the violator made or could have made reasonable efforts to prevent the violation, whether the violator knew of the legal requirements which were violated, and degree of recalcitrance.

C. Good faith efforts to comply. Good faith takes into account the openness in dealing with the violations, promptness in correction of problems, and the degree of cooperation with the State.

Category A - $7,000 to $10,000 per day. Violations with high impact on public health and the environment to include:

1. Discharges which result in documented public health effects and/or significant environmental damage.

2. Any type of violation not mentioned above severe enough to warrant a penalty assessment under category A.

Category B - $2,000 to $7,000 per day. Major violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Discharges which likely caused or potentially would cause (undocumented) public health effects or significant environmental damage.

2. Creation of a serious hazard to public health or the environment.

3. Illegal discharges containing significant quantities or concentrations of toxic or hazardous materials.

4. Any type of violation not mentioned previously which warrants a penalty assessment under Category B.

Category C - $500 to $2,000 per day. Violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Significant excursion of permit effluent limits.

2. Substantial non-compliance with the requirements of a compliance schedule.

3. Substantial non-compliance with monitoring and reporting requirements.

4. Illegal discharge containing significant quantities or concentrations of non toxic or non hazardous materials.

5. Any type of violation not mentioned previously which warrants a penalty assessment under Category C.

Category D - up to $500 per day. Minor violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

1. Minor excursion of permit effluent limits.

2. Minor violations of compliance schedule requirements.

3. Minor violations of reporting requirements.

4. Illegal discharges not covered in Categories A, B and C.

5. Any type of violations not mentioned previously which warrants a penalty assessment under category D.

ADJUSTMENTS: The civil penalty shall be calculated by adding the following adjustments to the penalty amount determined above: 1) economic benefit gained as a result of non-compliance; 2) investigative costs incurred by the State and/or other governmental levels; 3) documented monetary costs associated with environmental damage.

ECONOMIC AND LEGAL CONSIDERATIONS: An adjustment downward may be made or a delayed payment schedule may be used based on a documented inability of the violator to pay.

Also, an adjustment downward may be made in consideration of the potential for protracted litigation, an attempt to ascertain the maximum penalty the court is likely to award, and/or the strength of the case.

8.4 Mitigation Projects. In some exceptional cases, it may be appropriate to allow the reduction of the penalty assessment in recognition of the violator's good faith undertaking of an environmentally beneficial mitigation project. The following criteria should be used in determining the eligibility of such projects:

A. The project must be in addition to all regulatory compliance obligations;

B. The project preferably should closely address the environmental effects of the violation;

C. The actual cost to the violator, after consideration of tax benefits, must reflect a deterrent effect;

D. The project must primarily benefit the environment rather than benefit the violator;

E. The project must be judicially enforceable;

F. The project must not generate positive public perception for violations of the law.

8.5 Intent Of Criteria/Information Requests. The criteria and procedures in this section are intended solely for the guidance of the State. They are not intended, and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with the State.