



OGMCOAL DNR <ogmcoal@utah.gov>

Fwd: FYI: Letter to Alton Coal, re: site-specific standard schedule

Steve Christensen <stevechristensen@utah.gov>

Tue, Jul 21, 2015 at 5:05 PM

To: Keenan Storrar <kstorrar@utah.gov>, Daron Haddock <daronhaddock@utah.gov>, Dana Dean <danadean@utah.gov>, OGMCOAL DNR <ogmcoal@utah.gov>, Priscilla Burton <priscillaburton@utah.gov>, Cheryl Parker <cherylparker@utah.gov>

fyi-

July 7th, 2015 DWQ letter to Alton Coal regarding a 2016 site specific standard.

Steve

----- Forwarded message -----

From: **Mike Herkimer** <mherkimer@utah.gov>

Date: Tue, Jul 21, 2015 at 10:27 AM

Subject: Fwd: FYI: Letter to Alton Coal, re: site-specific standard schedule

To: Steve Christensen <stevechristensen@utah.gov>

Steve: FYI

----- Forwarded message -----

From: **Christopher Bittner** <cbittner@utah.gov>

Date: Mon, Jul 13, 2015 at 7:58 AM

Subject: FYI: Letter to Alton Coal, re: site-specific standard schedule

To: Kim Shelley <kshelley@utah.gov>, Mike Herkimer <mherkimer@utah.gov>, Paul Mcconkie <pmcconkie@utah.gov>

Cc: Jodi Gardberg <jgardberg@utah.gov>, Amy Dickey <adickey@utah.gov>

Attached is the letter that went out to Alton Coal.

A complication to the site-specific TDS standard is that pending approval of the 2014 303d list, Sink Hollow may be "newly" impaired for boron.

Chris

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 **DWQ-2015-007808.pdf**
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State of Utah

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Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

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

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JUL 07 2015

Mr. B. Kirk Nicholes
Environmental Specialist
Alton Coal Development, LLC
463 N. 100 W., Suite 1
Cedar City, UT 84721

Document Date 7/7/2015



DWQ-2015-007808

LS

Subject: Anticipated Schedule for Resolving the Total Dissolved Solids Water Quality Impairment for Lower Robinson Creek, Sink Hollow, and Kanab Creek, Kane County, Utah

Dear Mr. Nicholes,

As you are aware, a portion of Kanab Creek was determined to be impaired for total dissolved solids (TDS) in 2012 because the TDS concentrations exceed the Class 4 criterion of 1,200 mg/l. The specific reach, known as the Kanab Creek-2 assessment unit, is Kanab Creek and tributaries from the confluence with Fourmile Hollow near the White Cliffs to Reservoir Canyon (see enclosed map). Division of Water Quality (DWQ) staff have begun evaluation of the creek with the ultimate goal of resolving the impairment.

Based on our preliminary evaluation of the data, the impaired reaches of Kanab Creek, Lower Robinson Creek, and Sink Hollow will likely qualify for a site-specific TDS criterion that are higher than the statewide criterion. Utah's water quality standards (UAC R317-2-7.1) permit a criterion to be based on unalterable conditions and/or natural concentrations when these factors are the cause of an exceedance of the statewide criterion.

This preliminary conclusion is supported by the *Water Quality Characteristics of Kanab Creek and its Tributaries near Alton, Kane County, Utah* (Petersen, 2014) report that you have provided. We will use this hydrological and water quality data to supplement our data to develop an appropriate TDS standard.

The data presented by Petersen (2014) and DWQ's monitoring data show that this reach of Kanab Creek has exceeded the 1,200 mg/l statewide criterion since TDS concentrations were first measured in 1987. Other historical records support that the major sources of TDS are natural. The U.S. Geological Survey (USGS) reported in 1980¹ that TDS concentrations were up to 3,000 mg/l

¹ pubs.usgs.gov/imap/1235a/plate-1.pdf

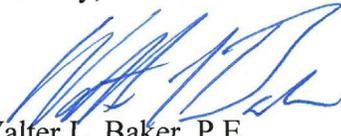
in Kanab Creek and tributaries between Alton and the confluence with Sink Wash. The USGS also notes that easily erodible shales, siltstones, and associated rocks contribute large quantities of salt and sediment. Further downstream, groundwater discharges from non-saline aquifers dilute the TDS concentrations to below 1,200 mg/l all the way to the Arizona border.

In the 2007 Draft Resource Management Plan and Draft Environmental Impact Statement², the Bureau of Land Management (BLM) identified the natural sources of TDS as saline geologic formations and highly saline soils. The major salt-bearing formations that are a source of the saline soils include the Tropic Shale, Moenkopi, and Carmel.

While the majority of TDS appears to be from natural sources, DWQ will also evaluate the potential impacts of nonpoint sources such as crop irrigation. Our preliminary evaluation of land use has identified that most of the crop irrigation in this area uses the best management practice of pivot irrigation but some flood irrigation still occurs. The portion of TDS contributed as the result of agriculture, once best management practices are implemented, are typically considered unalterable. Unalterable conditions can be used as a basis for supporting a site-specific standard higher than the statewide standard.

We anticipate that a site-specific standard or standards will be promulgated for the waters in the Kanab Creek-2 assessment unit based on natural and unalterable conditions in 2016. This is an expedited schedule given the complexity and size of the watershed in addition to the required administrative rulemaking procedures. If you have questions, please contact Chris Bittner at 801-536-4371 or cbittner@utah.gov.

Sincerely,



Walter L. Baker, P.E.
Director

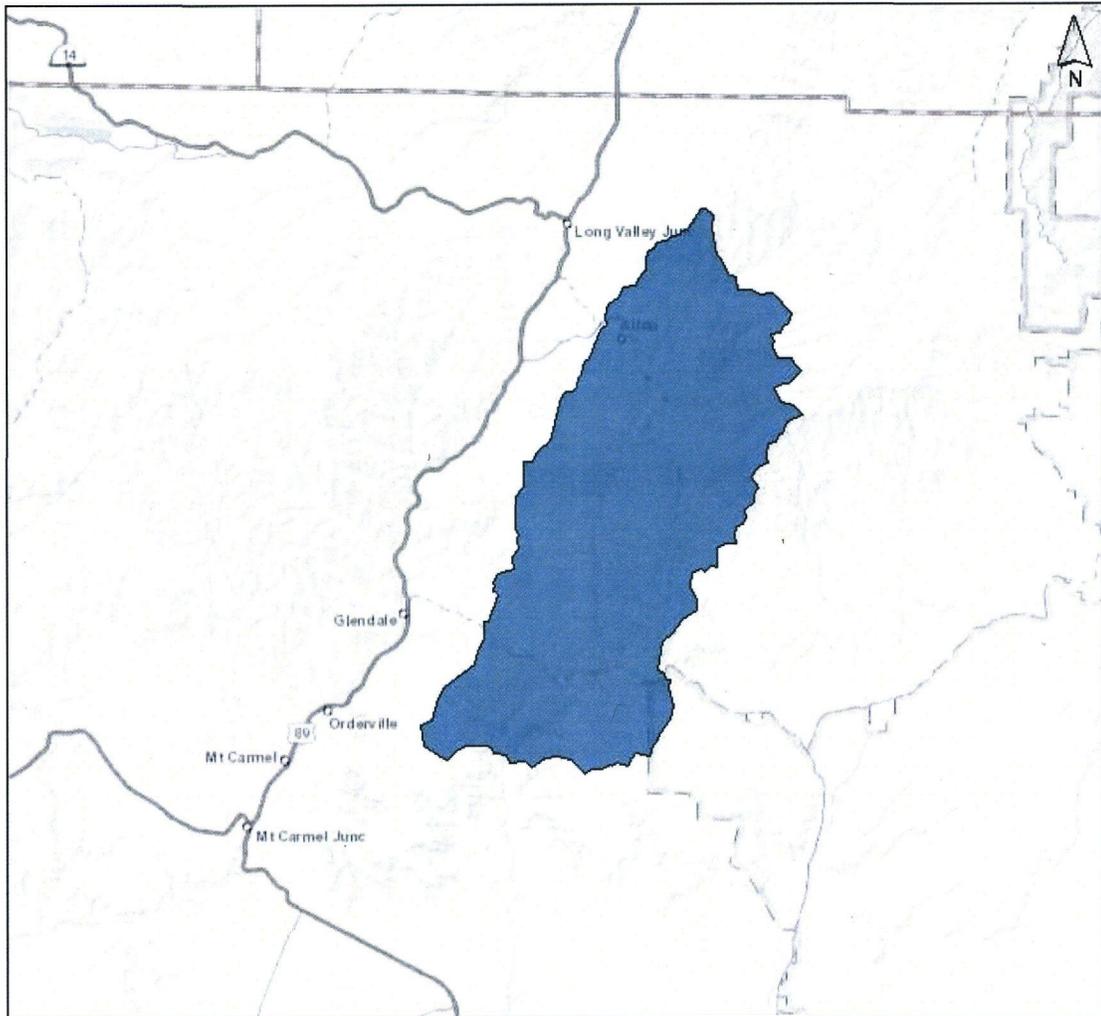
WLB:CB:ph

cc: Denise Dragoo, Snell & Wilmer LLP
Paul McConkie, Assistant Attorney General

DWQ-2015-007707

² http://www.blm.gov/style/medialib/blm/ut/kanab_fo/planning/rmp/draft_rmp_eis.Par.65476.File.dat/03_Kanab-DEIS_Chapter-3_sfs.pdf

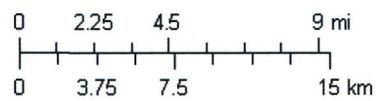
Printed from the Utah DEQ Interactive Map



6/17/2015

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Assessed Waters



Kanab Creek-2 Assessment Unit