



State of Utah

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DIVISION OF WATER QUALITY
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December 3, 2014

Southern Utah Wilderness Alliance
ATTN: Landon Newell
425 East 100 South
Salt Lake City, UT 84111

Dear Mr. Newell,

Thank you for your comments on the revised *Draft 2012-14 Integrated Report (IR)*.

We appreciate your comments regarding the importance of including USGS data in the assessment. As we mentioned in our prior response to your comments, we endeavored to include USGS data in the 2012-14 IR, but were unable to rectify the data with our own datasets to perform the necessary analysis. In addition, we do not currently have mechanisms to analyze high frequency data. After scoping the time necessary to transform the data, we made a decision to proceed without the USGS dataset, due to the fact that the IR was already late. At the time of this decision, we felt it was more important to issue an IR in 2014 and to begin the 2016 cycle on time, rather than delay the 2014 process further. The task of formatting and checking the USGS data was, and continues to be, a time consuming process.

Your comment letter requests that we include the data in the 2012-14 IR, despite that the development and public review of the IR is already complete. That request is not feasible within the timeframe of the 2012-14 IR. However, we are currently working on the task of integrating USGS data in preparation for the 2016 Integrated Report. We assure you that a very high priority will be placed on including USGS, DOGM, and all other publicly submitted data in the 2016 IR analysis. We currently have an open solicitation for data (<http://www.waterquality.utah.gov/WQAssess/IntegratedReport/index.htm>), which closes 12/31/2014. We intend to submit the 2016 IR to EPA as per requirement on 4/1/2016.

The purpose of engaging the public in a second review of the IR was due to solicit input on the substantive changes made between the first and second drafts of the IR. As summarized in the "Response to Public Comment Summary" (www.waterquality.utah.gov/WQAssess/documents/2014/10Oct/IRResponseSummary2.pdf), DWQ recognizes that we inappropriately applied our toxic parameter assessment methods. In the first round of the IR, we used a threshold of 1 exceedance of a toxic parameter to determine if a waterbody was impaired. This was both inconsistent with prior integrated reports, which specifies

2 or more exceedances of a toxic parameter for impairment, as well as EPA guidance, which recommends a recurrence interval of two or more exceedances of toxic parameters to declare an impairment (<http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/text.cfm>). This guidance was based on recovery times for aquatic systems experiencing excursions from toxic parameter criteria. EPA specifies an allowable excursion of 1 in a 3 year period or similar timeframe. DWQ applied a single allowable exceedance in the 5 year period of record used for the IR. We arrived at this decision in consultation with staff and EPA reviewers in an effort to be more consistent with historic methods and EPA guidance. The resulting changes reflected in the list are too numerous to account in this memo, but your site-specific comments are addressed in order below to elucidate how the changes made to the assessment methods affect the final list.

The original listings for Kanab Creek-1 for copper, iron, lead, and zinc were removed in the revised list. The monitoring locations within this AU had single exceedances of the criterion for these constituents and, due to the change in the number of exceedances required for impairment, the AU is not considered impaired for these metals.

You expressed concern regarding the listing of Colorado River -3 AU as category 4 (TMDL Approved). At the time of your comment letter, the approved TMDL had not been posted on the DWQ webpage. It can be found at the following location for your review.
<http://www.waterquality.utah.gov/TMDL/Docs/2014/10Oct/ColoradoRiver.pdf>

Salt Wash and Salt Creek were both listed as impaired in the original list and were changed to Category 3 (insufficient data) in the revised list. This was not due to the aforementioned change in assessment method, but in direct response to the National Park Service's comments during the first public comment period (http://www.waterquality.utah.gov/PublicNotices/docs/2014/IntegratedReport/H_07112014_KCannon.pdf). The sites that were assessed are located in intermittent and often dry washes which NPS staff sampled under stagnant conditions. This is inconsistent with DWQ sampling procedures, which target rivers and streams with a discernable flow. DWQ concurs with the NPS in their assertion that these conditions are not appropriate for performing assessments on aquatic life uses, nor should have these sites been sampled under such conditions. DWQ is dedicated to working with the NPS to more appropriately monitor these sites in future sampling efforts.

In the case of Green River-5, the original listing was due to exceedances of the 87 ug/l aluminum criterion applied at MLID# 4930010 – “GREEN R AB CNFL / COLORADO R”. The aluminum criterion is dependent upon pH and hardness as per footnote 6 in UAC R317-2-14 which states “where the pH is equal to or greater than 7.0 and the hardness is equal to or greater than 50 ppm as CaCO₃ in the receiving water after mixing, the 87 ug/l chronic criterion (expressed as total recoverable) will not apply, and aluminum will be regulated based on compliance with the 750 ug/l acute aluminum criterion (expressed as total recoverable)”. In the first round of the IR, the default of 87 ug/l was used in situations where we were missing pH or hardness (in this case 30 of 34 samples were missing accompanying pH). We received public comment with regard to our improperly defaulting to the 87 ug/l chronic criterion (http://www.waterquality.utah.gov/PublicNotices/docs/2014/IntegratedReport/C_07102014_LMeyers.pdf) and concurred that the 87 ug/l should only be used if both the pH is less than 7 and the hardness is less than 50 ppm. Missing values of pH and hardness will result in applying a default of the 750 ug/l acute criterion. The majority of waters in Utah have pH higher than 7 and

hardness greater than 50 ppm, and as the commenter cited, the EPA recommended criterion of 87 ppm was based on toxicity studies on striped bass in waters with very low hardness and pH. Indeed, of the 34 samples that comprise the data set in question all had hardness values in excess of 50 ppm and of the 4 existing pH measurements all were greater than 7.

We appreciate your thorough review and comments on the 2012-2014 Integrated Report. In addition to the open call for data, we will be issuing Draft 2016 Integrated Report Assessment Methods for public review in January 2015. We hope you take the opportunity to review and comment on our methods and we look forward to working with you as we continually strive to improve our reporting outputs.

Thank you,

James Harris, Manager
Monitoring and Reporting Section