

**Response Summary for the Triennial Review of Water Quality Standards
(February 2007)**

Arch Western Bituminous Group, LLC (letter from Chris D. Hansen, Environment Coordinator):

- Concerned that the proposed TDS change could affect a current UPDES permit.
Response: We recognize the need of incorporating flexibility into our rule to allow for the development of site specific criteria for individual parameters where it can be shown that the beneficial use is protected and downstream uses are maintained. Through collaboration with the workgroup of various stakeholders an “alternative criteria” or variance mechanism could be developed to provide some flexibility based on established criteria and thresholds. Although the premise for site specific criteria hinges on not impairing the associated beneficial uses that the standard references, it is a concept that needs further investigation, input and definition through a collaborative process. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

City of South Salt Lake (E-mail from Dennis Pay, Public Works Director):

- The current Class 4 Non-Irrigation TDS Standard of 2000 mg/l should remain in place providing road maintenance departments the ability to keep streets safe for the traveling public.
Response: DWQ is still supportive of returning to a single standard for the protection of Class 4 waters. Leaving the 2,000 mg/l TDS standard in place does not help to address the temporary TDS “excursions” caused by salt application practices following snow storm events. Impact on stream TDS readings by salt application may cause excursions above 2,000 mg/l. However, we do recognize the need of incorporating flexibility into our rule. DWQ is currently investigating the federal language associated with “excursion” for certain circumstances and is exploring the possibility of incorporating it into our rule. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

EPA Region 8 (E-mail from Dave Moon):

- On site specific standards it may be appropriate to add a clarifying footnote to the rule and develop implementation guidance to explain how the criteria will be interpreted when making 303(d) and discharge permit decisions.
Response: This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

- Escalante River (above Boulder Creek) and Saleratus Creek from Bear River to the Deseret Ranch High Ditch Diversion: Provide written rationale explain why the change is appropriate (Why is 3A not attainable?).
Response: The information will be provided to EPA for review prior to rule-making during the next Triennial Review and to the public during the formal comment period to provide the rationale and justification for the proposed changes.

Great Salt Lake Keeper (letter from Jeff Salt Executive Director):

- The State has not truly indicated whether the proposed standards truly will bring Utah's Water Quality Standards into compliance with EPA guidance.
Response: We intend to develop a stakeholder workgroup to assist us in evaluating various components of the existing rule and developing language for rule modifications as needed prior to petitioning to the Water Quality Board for rule-making.
- Has the state properly noticed the public that the entire state water quality standards system was up for analysis, debate and revision the Triennial Review? Neither the internet notice nor the postcard notice indicated that the State was conducting their Triennial Review. We therefore recommend the State extend the comment period and re-notice the action as a Triennial Review.
Response: We concur that the process needs definition and refinement. We plan to define the steps needed to support a collaborative process that has a foundation based on public input. We will also look into the possibility of developing language in our rules that defines the triennial review process to assure transparency to the process. DWQ will postpone the rule-making process to allow additional time for further investigation and discussion. Therefore, DWQ will re-notice the action when it is brought again to the Board, and will clearly state that the action will be a triennial review.
- Supports the inclusion of the State Canal to the State's table of stream classifications.
Response: We appreciate the comment.
- Supports the proposal to from including lakes over 20 acres to lakes over 10 acres, but recommend that the rule defines the term "associated".
Response: We appreciate the comment. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.
- Opposes changing the maximum E. coli numeric criteria to an indicator. It must be retained to regulate periodic or peak-use pollution problems.
Response: We will re-evaluate whether removing the maximum not to exceed E. coli standard will compromise the environment or public health. We will examine whether we need to adjust our methodology for assessment and leave a maximum

E. coli value in the water quality standards. We plan to investigate, with the assistance from the stakeholders workgroup, revised language or criteria associated with this parameter. In addition, DWQ is working with EPA to define acceptable methodology for assessment. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

- Supports the elimination of the irritation and stockwater descriptions, and maintaining one numeric TDS value for all Class 4 waters. Supports the removal of the TDS footnote.
Response: We appreciate the comments. These issues will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.
- Supports the wording changing of the phosphorus as a pollution indicator. However, we believe the state should consider establishing a regulatory value for phosphorus.
Response: We appreciate this comment. DWQ and many other states are studying and considering this issue. EPA guidance is minimal and has not been formally generated. At the present time, DWQ is using the indicator values as “defacto” regulatory values unless specific TMDL studies indicate otherwise. DWQ is striving to address this issue by conducting nutrient, biological and other studies to support development of nutrient criteria.
- Believes that the state should consider establishing regulatory values for phosphorus and nitrogen.
Response: We appreciate this comment. DWQ and many other states are studying and considering this issue. EPA guidance is minimal and has not been formally generated. At the present time, DWQ is using the indicator values as “defacto” regulatory values unless specific TMDL studies indicate otherwise. DWQ is striving to address this issue by conducting nutrient, biological and other studies to support development of nutrient criteria.
- The proposed rule does not distinguish which Wildlife Refuges or Wildlife Management Areas will be included in the effort to distinguish *E. coli* from human or wildlife sources.
Response: The actual areas include the State and National Wildlife Management areas as indicated in rule. If other areas need to be included in those areas specifically identified, it will need to be done through rule change. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.
- State should clarify the locations of what constitutes a wildlife area.
Response: Wildlife and management areas are those areas specifically identified in the water quality standards R317-2. Other areas not so designated do not have

the footnote applied. If other areas need to be included in those areas specifically identified, it will need to be done through rule change.

- Recommends that the State designate more 2A area.
Response: We need to investigate whether the current definition “primary contact recreation” is adequate or appropriate, and whether the waters of the State are correctly classified to reflect the defined and existing beneficial uses. This issue will be re-evaluated prior to re-initiation of the Triennial Review.
- State should refine the dissolved oxygen descriptions. Since variability exists in the environment due to diurnal conditions, the dissolved standards should reflect that.
Response: We appreciate this comment. DWQ staff is actively involved with EPA and other states investigating the possibility of developing Tiered Aquatic Life Use (TALU). We intend to work with a water quality workgroup soon on this issue and changes may be made if appropriate.
- Recommends that numeric criteria be adopted that would protect our state’s waterways from trash and litter pollution.
Response: This issue is covered in the narrative standards listed in current rules. We will investigate how to adequately apply the narrative standards to protect the States waterways, as it is difficult to generate the numeric criteria to address this issue.
- State should establish values for viruses, antibiotics and other exotic pollutants.
Response: DWQ currently follows EPA recommendation on this issue. This issue will be re-evaluated if and when EPA recommendations are changed.

Jordan Valley Water Conservative District (letter from Mark G. Atencio Engineering Department Manager):

- Recommends TDS Standards not be changed. If the stock watering standard were eliminated, the groundwater remediation project entered under the DEQ/JVWCD/Kennecott agreements could not be completed with out violating the TDS standard.
Response: We appreciate this comment. We need additional time to evaluate the feasibility of temporary “alternative criteria” or variance where the benefits of the excursion exceed the negative impact. We also recognize the need of incorporating flexibility into our rule to allow for the development of site specific criteria for individual parameters where it can be shown that the beneficial use is protected and downstream uses are maintained. Perhaps through the use of the workgroup as previously proposed an “alternative criteria” or variance mechanism could be developed to provide some flexibility based on established criteria and thresholds. Although the premise for site specific criteria hinges on not impairing the associated beneficial uses that the standard references, it is a

concept that needs further investigation, input and definition through a collaborative process.

Launch Systems Group (letter from David P. Gosen, Environmental Services Director):

- Add a site specific standard for Blue Creek.
Response: DWQ appreciates the comment. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process. We welcome the opportunity to work with you in developing a site specific criterion based on existing protocol.
- Remove Class 4 from lower Blue Creek
Response: DWQ considers this an issue that needs to be addressed and evaluated through a Use Attainability Analysis (UAA) process. Anyone can initiate an action to start the UAA process with a formal request to DWQ. It should be noted that if there is an existing use on or after November, 1975, it cannot be removed.

Parsons, Behle & Latimer (letter from Lisa A. Kirschner):

- Suggested language change of Footnote 4.
Response: We appreciate and concur with this comment. We will consider adopting the language change for clarification. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.
- Suggests reclassifications where waters clearly do not meet irrigation standards should be properly identified.
Response: This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

Salt Lake City Corporation (letter from Florence Reynolds, Water Quality and Treatment Administrator):

- Are the listed values for mercury, selenium and silver more protective than the national values?
Response: No.
- Proposal is vague. Field test is not defined.
Response: A field test is one which can easily be done in the field based upon DWQ professional judgment. The Quanti-Tray procedure falls into this definition.
- Quanti tray procedures are more complicated than a field test.
Response: We respectfully disagree based upon our field sampling experience using the Quanti-Tray procedure

- There should be a correlation of Quanti tray and membrane filter techniques needs to be completed to avoid confusion. Until such correlation is done, past data may not be usable or compared to Quanti tray.

Response: That correlation has been completed by EPA as a part of their Section 136 acceptance procedure. As a rule of thumb, we suggest that a multiplication factor of 200/126 be multiplied to Fecal Coliform bacteria data to “convert” to E. coli. DWQ understands the variability of bacteriological data and actual species and laboratory difficulties associated with all bacteriological testing.

- Changing the maximum E. coli numeric criteria to an indicator makes enforcement of illegal discharge nearly impossible.

Response: We will re-evaluate whether removing the maximum not to exceed E. coli standard will compromise the environment or public health. We will examine whether we need to adjust our methodology for assessment and leave a maximum E. coli value in the water quality standards. We plan to investigate, with the assistance from the stakeholders workgroup, revised language or criteria associated with this parameter. In addition, DWQ is working with EPA to define acceptable methodology for assessment. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

- The numeric criteria for stream TDS (4) should not be revisited.

Response: We recognize the need of incorporating flexibility into our rule to allow for the development of site specific criteria for individual parameters where it can be shown that the beneficial use is protected and downstream uses are maintained. Perhaps through the use of the workgroup as previously proposed an “alternative criteria” or variance mechanism could be developed to provide some flexibility based on established criteria and thresholds. Although the premise for site specific criteria hinges on not impairing the associated beneficial uses that the standard references, it is a concept that needs further investigation, input and definition through a collaborative process.

- Setting the standard at the minimum level doesn’t allow for low flow impact of seasonal non-point source contributions.

Response: We consider road de-icing operation a significant low flow impact of seasonal non-point source contribution. Leaving the 2,000 mg/l TDS standard in place does not adequately address the temporary TDS “excursions” caused by salt application practices following snow storm events. Impact on stream TDS readings by salt application may cause excursions above 2,000 mg/l. DWQ is currently investigating the federal language associated with “excursion” for certain circumstances and is exploring the possibility of incorporating it into our rule.

Swift & Company/Miller's Blue Ribbon Beef (letter from Jerry Peterson, General Manager/VP Operations):

- The new process (under construction) will add TDS to reduce phosphorus and will not meet TDS discharge limits upon completion if this change is incorporated.

Response: Currently in the water quality standards there are no waters identified as only stockwatering where the 2,000 mg/l TDS standard applies. We recognize the need of incorporating flexibility into our rule to allow for the development of site specific criteria for individual parameters where it can be shown that the beneficial use is protected and downstream uses are maintained. Perhaps through the use of the workgroup as previously proposed an "alternative criteria" or variance mechanism could be developed to provide some flexibility based on established criteria and thresholds. Although the premise for site specific criteria hinges on not impairing the associated beneficial uses that the standard references, it is a concept that needs further investigation, input and definition through a collaborative process.

- We understand that there are no federal standards for TDS and thus the proposed rule change before the Water Quality Board is more stringent than corresponding federal regulations. We understand that the process to adopt this rule must comply with Utah Code Ann. 19-5-105. Therefore, we request a copy of, or reference to, the findings accompanied by an opinion referring to and evaluating the public health and environmental information and studies contained in the record be provided to us.

Response: In response to this comment, we sought legal opinion from our legal counsel. The opinion we received was that the proposed TDS standard would not be more stringent than federal regulations because there is no corresponding federal regulation for TDS.

- We recommend that the state water quality TDS standard have seasonal limits of 1,200 ppm during the irrigation season (mid April to mid October) and 2,000 ppm in the sinter month (mid October through mid April).

Response: DWQ is still supportive of returning to a single TDS standard of 1,200 mg/l for the protection of Class 4 waters. However, we do recognize the need of incorporating flexibility into our rule to allow for the development of site specific criteria for individual parameters where it can be shown that the beneficial use is protected and downstream uses are maintained. Perhaps through the use of the workgroup as previously proposed an "alternative criteria" or variance mechanism could be developed to provide some flexibility based on established criteria and thresholds. Although the premise for site specific criteria hinges on not impairing the associated beneficial uses that the standard references, it is a concept that needs further investigation, input and definition through a collaborative process.

University of Utah (Email from Judy Moran, Environmental Specialist):

- The University of Utah would like to see the TDS standard remain at 2,000 mg/l for Class 4 for non irrigation season. A change to 1,200 mg/l year-round could negatively impact public safety by necessitating reduction or elimination of the application of deicing chemicals.

Response: DWQ is still supportive of returning to a single TDS standard of 1,200 mg/l for the protection of Class 4 waters. However, we recognize the need of incorporating flexibility into our rule to allow for the development of site specific criteria for individual parameters where it can be shown that the beneficial use is protected and downstream uses are maintained for certain circumstances such as public safety. Perhaps through the use of the workgroup as previously proposed an “alternative criteria” or variance mechanism could be developed to provide some flexibility based on established criteria and thresholds. Although the premise for site specific criteria hinges on not impairing the associated beneficial uses that the standard references, it is a concept that needs further investigation, input and definition through a collaborative process. In addition, leaving the 2,000 mg/l TDS standard in place does not adequately address the temporary TDS “excursions” caused by salt application practices following snow storm events. Impact on stream TDS readings by salt application may cause excursions above 2,000 mg/l. DWQ is currently investigating the federal language associated with “excursion” for certain circumstances and is exploring the possibility of incorporating it into our rule.

Utah Department of Transportation (letter from Jerry Chaney, UDOT Environmental Engineer):

- The reason for deleting the current Stock Watering standard for TDS is not clearly described in the proposed rule.

Response: This issue will be re-evaluated prior to re-initiating the next Triennial Review. We intend to provide the rationale and justification for the proposed changes to the public during the next Triennial Review.

- We are concerned that the comprehensive application of this standard could affect anti-icing operations performed by state and local governments.

Response: Leaving the 2,000 mg/l TDS standard in place does not adequately address the temporary TDS “excursions” caused by salt application practices following snow storm events. Impact on stream TDS readings by salt application may cause excursions above 2,000 mg/l. DWQ is currently investigating the federal language associated with “excursion” for certain circumstances and is exploring the possibility of incorporating it into our rule.

- The proposed standard for TDS of 1200 ppm would be inconsistent with the Drinking Water Ground Water TDS standard listed in R317-6-3.5(A) and the Ground Water Quality Protection Levels in R317-6-4.3(1).

Response: The 1,200 mg/l TDS standard is based on protection of the beneficial use of irrigation water.

Utah Rivers Council (E-mail from Merritt Frey, Executive Director) and 15 Citizens (E-mails from Jeff Reifman, Chantal Christensen, Carol Curtis, Lisa Verzella, Tamaris and Floyd Jensen, Nancy Orr, Mike Roberson, Jen Lopez, Richard Spotts, John R. Alley, Arthur Berger, Sarah Schrier, Alison Child, Scott McKay, and Matt Peters)

- Opposes the removal of the maximum e coli criteria. Requests that the maximum E. coli criteria be strengthened.

Response: We will re-evaluate whether removing the maximum not to exceed E. coli standard compromise the environment or public health. We will examine whether we need to adjust our methodology for assessment and leave a maximum E. coli value in the water quality standards. We plan to investigate, with the assistance from the stakeholders workgroup, revised language or criteria associated with this parameter. In addition, DWQ is working with EPA to define acceptable methodology for assessment. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

- Requests the Division expand their definition of primary contact recreation as it implementation is far too limited and results in a lack of public health protection. Classifications for primary recreation should be adjusted to include all areas where rafting, water skiing, tubing, and kayaking occur.

Response: Current policy does not include “occasional” full face immersion as a criterion to classify a water body as primary contact recreation. We need to investigate whether the current definition “primary contact recreation” is adequate or appropriate, and whether the waters of the State are correctly classified to reflect the defined and “existing” beneficial uses. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

- Requests to revisit the antidegradation rules. Considers the current antidegradation rules do not meet the federal requirements and implementation of the rules results in exemption from review for many discharges.

Response: In general, we appreciate these comments. We agree that many of the comments are valid and that we need to review the current antidegradation process and the “off ramp” language for antidegradation review to assure proper application of the policy. We will discuss with EPA and other interested parties the current antidegradation language and procedures in the rule. This may be one of the important areas that need further investigation through an open and collaborative process. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.

- Generally supports the proposal to base the exemption of Wildlife Management Areas and other related areas from E. coli impairment designation on wildlife E. coli minus any human impact.
Response: We appreciate the comment.
- Stretches of the Logan, Green, Colorado, Provo, Jordan, and Weber Rivers be reclassified as primary recreation (2A).
Response: This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.
- Supports the proposed change to Footnote 7 in Table 317-2-14 Numeric Criteria.
Response: We appreciate the comment.
- Opposes various changes in beneficial use designations and the establishment of site-specific standards for TDS as failing to safeguard adequately Utah's waters.
Response: Changes in classification such as lower the Escalante River based on the results of the TMDL process. Site specific standards for unalterable natural or man-caused conditions were also changes recommended based on the results of the TMDL process. Prior to initiating the rule-making process for the next Triennial Review, we will provide to the public the rationale and justification for the proposed changes.
- Requests that TDS standard be maintained at 1,200 mg/l.
Response: DWQ is supportive of returning to a single TDS standard of 1,200 mg/l for the protection of Class 4 waters. However, we do recognize the need of incorporating flexibility into our rule to allow for the development of site specific criteria for individual parameters for certain circumstances, such as public safety reason, where it can be shown that the beneficial use is protected and downstream uses are maintained. Perhaps through the use of the workgroup as previously proposed an "alternative criteria" or variance mechanism could be developed to provide some flexibility based on established criteria and thresholds. Although the premise for site specific criteria hinges on not impairing the associated beneficial uses that the standard references, it is a concept that needs further investigation, input and definition through a collaborative process. This issue will be re-evaluated prior to being re-submitted to the Water Quality Board for rule making. We will assure public participation as a part of the Triennial Review process.
- Opposes the proposed site-specific water quality standards for dissolved oxygen for the Jordan River, Surplus Canal and State Canal.
Response: DWQ: The Jordan River site specific standard was developed over 20 years ago by EPA. Since the Surplus Canal and the State Canal are lower Jordan River water based upon these site specific studies, it is appropriate to classify this water the same as the source for these two water segments.

Western Energy Operating, LLC (E-mail from Paul M. Hannah, Operations Manager):

- Does the TDS rule apply to oil production activities in the Ashley Valley oil field?

Response: The proposed changes to TDS numeric standards do not affect the effluent limits that are already set in existing UPDES permits. However, when these permits are due for renewal or when we receive new permit applications, the effluent limits will be re-evaluated based on the TDS standards in effect at that time.