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Protecting the Interior West's Land, Air, and Water

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Walt Baker
Executive Director
David Wham
Division of Water Quality
P.O. Box 144870
Salt Lake City, Utah 84114-4870
Via Email dwham@utah.gov
and US Mail

Re: Comments on the Proposed Water Quality Standards Amendments

Dear Walt and David,

Thank you for the opportunity to comment on the amendments to Utah's Water Quality Standards proposed by the Division of Water (DWQ). I submit these comments on behalf of FRIENDS of Great Salt Lake, Utah Waterfowl Association, Utah Rivers Council, League of Women Voters of Utah and League of Women Voters of Salt Lake (collectively "FRIENDS"). We hope that DWQ will thoroughly consider these comments as it considers its critical task of improving Utah's Water Quality Standards to protect Utah's waters, public and wildlife.

FRIENDS commends the DWQ for undertaking the Triennial Review as an important part of ensuring that our water quality standards are up to date. As you know, standards underlie all the important Clean Water Act tools that protect our rivers – from discharge permits to total maximum daily loads. As such, the Triennial Review is a critical piece of the strategy to keep Utah's rivers healthy, and we thank you for your work on this. We also greatly appreciate your efforts to include the public in the rule revision process.

Our comments on the proposed rule changes will focus on eleven main points:

- 1.) FRIENDS supports the establishment of a process for the triennial review;
- 2.) FRIENDS supports additional primary contact recreation designations;
- 3.) FRIENDS supports clarification of primary contact definition;
- 4.) FRIENDS supports the change in averaging time for dissolved oxygen;
- 5.) FRIENDS supports the retention of a maximum e coli criterion; but urges strengthening of the criterion;
- 6.) FRIENDS opposes the wholesale application of a 10 percent violating sample rule;
- 7.) FRIENDS opposes the removal of uses for the Great Salt Lake;
- 8.) FRIENDS opposes the segmentation of Great Salt Lake;

Colorado Office • 2260 BASELINE ROAD, SUITE 200 • BOULDER, CO 80302 • 303-444-1188 • FAX: 303-786-8054 • E-MAIL: INFO@WESTERNRESOURCES.ORG
Utah Office • 425 EAST 100 SOUTH • SALT LAKE CITY, UT 84111 • 801-487-9911 • FAX: 801-486-4233 • E-MAIL: UTAH@WESTERNRESOURCES.ORG
Nevada Office • 769 BASQUE WAY, SUITE 300 • CARSON CITY, NV 89706 • 775-841-2400 • FAX: 866-223-8365

www.westernresourceadvocates.org

- 9.) FRIENDS notes that the antidegradation changes are a step forward, but spells out its remaining grave concerns;
- 10.) FRIENDS opposes various other changes in beneficial use designations and the establishment of site-specific standards for TDS as failing to safeguard adequately Utah's waters; and,
- 11.) FRIENDS opposes mixing zones.

Support the addition of a process for the triennial review

We support the addition at R317-2-1C of a process for the triennial review. We believe this will make future standards reviews much smoother, and will encourage active public participation in the process. We thank the Division for proposing this addition, and request its inclusion in the final rule.

Support additional primary contact recreation designations

We support the addition of primary contact recreation (2A) use designations for segments of the Green, Colorado, and San Juan rivers. In addition, we encourage the Division to add the Dolores (under the Colorado River Basin header, but removed from the 2A heading) and segments of the Logan, the Weber, the Provo, the Jordan, and other rivers as outlined in the Utah Rivers Council's comments of February 6, 2007 under the heading "The Division's definition of primary contact recreation is far too limited and results in a lack of public health protection." We incorporate that section of their comments by reference, and request the Division consider the data presented there and add the relevant reaches to the 2A category.

Support clarification of primary contact definition

We support the Division's clarification of the definition of primary contact recreation (2A), with one qualifier. We request the removal of the word "frequent" from the definition. The separation between the use classes of primary and secondary contact recreation is not about frequency of use, but rather about the likelihood of immersion. Frequency of use is already addressed when establishing the appropriate criteria for the two use classes – for example, see "Support the retention of a maximum e coli criterion; but urge strengthening" below.

Support the change in averaging time for dissolved oxygen

We support the proposed change from a 1-day average minimum to a true single-sample minimum for dissolved oxygen. This change brings Utah into line with the protections provided in other states and, more importantly, better protects aquatic life if the monitoring protocol is appropriately designed to address the diurnal nature of dissolved oxygen concentrations. We request that any monitoring protocols utilized by the Division be updated to reflect the need to ensure minimum sampling is done at the times of days most likely to catch problem dissolved oxygen concentrations.

Support the retention of a maximum e-coli criterion; but urge strengthening

During the last proposed set of standards changes, the Division proposed removing the maximum allowable e-coli criterion altogether. This was opposed by some members of the conservation community. We thank the Division for reconsidering this change, and support the inclusion of the maximum e-coli criterion.

However, the Division should strengthen the proposed criterion, especially in light of the new allowance for a 10 percent violation of the standard. We request that the Division strengthen the maximum e-coli criteria to be more protective of public health. We ask that the Division revise the maximum allowable e-coli standard to use the EPA's recommendation for designated beach areas (235/100 ml) in primary contact rivers and lakes and the recommendation for lightly used areas (406/100 ml) or infrequently used areas (576/100ml) for secondary contact rivers and lakes.¹ These numbers are based on the "acceptable swimming-associated gastroenteritis rate" of 8 swimmers per 1,000, rather than the less-protective 10 swimmers by 1,000 currently used by the state for their secondary contact standard.

Oppose the wholesale application of a 10 percent violating sample rule

We oppose the addition in section 7.1 of language that allows up to 10 percent of samples to violate standards. This addition has no basis in science or the reality of water quality associated risks to humans and aquatic life. For example, the wholesale exemption does not contemplate the scale of exceedances (what if 10 storm-related samples show exceedances at 10 times the standard while 91 non-storm event samples show compliance?). In addition, the exemption does not contemplate the fact that exceedances for toxics, bioaccumulative pollutants, or parameters that impact human health are clearly not candidates for such an exemption.²

We understand that the Division is striving to ensure that single, truly outlying sampling results do not end up populating the 303(d) list with waters that aren't truly impaired. However, this is a completely inappropriate way to address this problem. Essentially, the Division has just changed every single one of its criteria to be less protective – in one fell swoop.

We request the Division remove this language from the standards, and instead work with U.S. EPA to develop a listing protocol that allows the Division to address outlier data points for purposes of 303(d) listing. This approach should take into account the extent of the exceedance, the extent of data available, the nature of the pollutant, and the threat of harm to humans and aquatic life.

Oppose the removal of uses for the Great Salt Lake

Use Attainability Analysis (UAA) does not meet 131.10(g) requirements

The Division proposes to remove currently designated uses for the Great Salt Lake – downgrading from primary recreation to secondary recreation in the proposed classes 5B, 5C, 5D and 5E and removing 3C and 3D from the "open water areas" of wildlife management areas.

U.S. EPA's rules for when a designated use may be removed are very clearly stated in 40 CFR 131.10 (g):

¹ US EPA, Office of Water. *Water Quality Criteria for Water 1986*. EPA 440/5-86-001. May 1, 1986.

² The relevant text does reference exempting parameters in one table from this exemption – table 2.14.5 "list of human health criteria (consumption)". However, the referenced table covers "site specific criteria for dissolved oxygen for Jordan River, Surplus Canal, and State Canal."

(g) States may remove a designated use which is not an existing use, as defined in Sec. 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:

- (1) Naturally occurring pollutant concentrations prevent the attainment of the use; or
- (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
- (3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
- (4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or
- (5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
- (6) Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

The Division's UAAs do not address ANY of the six factors listed in 131.10(g), so the downgrading of uses is not appropriate, or legal. In the case of the shift from primary to secondary, the Division claims that:

- 1.) People aren't swimming in the segments, stating a lack of shower facilities as its evidence. No evidence is presented to prove swimming is not occurring.
- 2.) E coli is not the recommended test organism in saline environments.

Again, neither of these claims addresses a 131.10(g) factor. The first claim may or may not be true (and we believe it is not), but is not relevant in any case. The second claim is true, but not relevant and simply indicates that the Division needs to apply the proper criteria – not remove the use.

Similarly, the 3C/3D removal argument seems to rely solely on the idea that the existing criteria associated with 3C/3D are not appropriate for saline environments. This may be true, but again only argues that the Division needs to do its duty and create appropriate criteria – not remove the use and its associated criteria. If the Division is concerned about the situation, the only proper course of action is to create a new use class *with associated appropriate criteria that are at least as protective as the current 3C/3D criteria*—in which case the Division wouldn't even be required to do a UAA.

In summary, the Division's UAA proposals do not meet the federal standards for removal of uses, so any removal as currently proposed will be unlawful. We request the Division preserve the currently designated uses on all areas of the Great Salt Lake.

Use Attainability Analysis may not remove an existing use

The proposed removal of the primary contact (2A) designation from the majority of Great Salt Lake is the removal of an existing use, which is clearly prohibited in regulation.

131.10(h) states:

(h) States may not remove designated uses if:

- (1) They are existing uses, as defined in Sec. 131.3, unless a use requiring more stringent criteria is added; or
- (2) Such uses will be attained by implementing effluent limits required under sections 301(b) and 306 of the Act and by implementing cost-effective and reasonable best management practices for nonpoint source control.

An existing use is defined at 131.3(e) as:

(e) Existing uses are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.

EPA's Water Quality Handbook goes on to clarify that a use is in existing use if 1.) the use has occurred in the relevant timeframe (i.e. since November 28, 1975) or 2.) the water quality was such that the use was supported during the timeframe, whether or not the use actually occurred:

"An "existing use" can be established by demonstrating that:

- fishing, swimming, or other uses have actually occurred since November 28, 1975; *or*
- that the water quality is suitable to allow the use to be attained....

An example of the latter is an area where shellfish are propagating and surviving in a biologically suitable habitat and are available and suitable for harvesting although, to date, no one has attempted to harvest them. Such facts clearly establish that shellfish harvesting is an "existing" use, not one dependent on improvements in water quality. To argue otherwise would be to say that the only time an aquatic protection use "exists" is if someone succeeds in catching fish."³

The Division presents no evidence at all to support the idea that the primary contact use is not, or has not been at any time since November 28, 1975, supported. In fact, anecdotal evidence supports that the relevant sections of the Lake have supported water quality that meet the criteria

³ U.S. EPA's Water Quality Handbook online version at:
<http://www.epa.gov/waterscience/standards/handbook/chapter04.html#section4>

for primary contact (i.e. water quality as good or better than the use designation's criteria for e. coli) and the relevant sections have actually supported swimmers.

In order to prove that primary contact recreation is not an existing use, the Division must present data in their UAA showing that use has NOT occurred at anytime since 1975 and data showing that the water quality has not been high enough to support that use at anytime since 1975 (i.e. the criteria for e coli has not been achieved).

In summary, the Division is illegally proposing to remove an existing use. We request the Division preserve the currently designated (and existing) primary contact designation for the entire Lake.

Oppose Segmentation of Great Salt Lake

FRIENDS strongly opposes segmentation of Great Salt Lake.

Initially, DWQ has been remiss in its obligation to designate protective water quality standards for Great Salt Lake, and this segmentation construct will further unlawfully delay that process for decades. As a result, the proposal is illegal and unacceptable.

EPA regulations require states to adopt narrative, numeric, and other forms of water quality criteria in order to protect uses fully. 40 C.F.R. §131.6, § 131.12. In particular, 40 C.F.R. § 131.12(a) requires states to adopt “sufficient parameters or constituents to protect the designated use.” Courts have indicated that numeric criteria are important because of the difficulty of translating purely narrative requirements into legally-enforceable requirements. *E.g., Natural Resources Defense Council v. EPA*, 915 F.2d 1314 (9th Cir. 1990). Moreover, in 1987, because of the failure of many states to adopt numeric water quality criteria for toxics, Congress adopted a specific amendment to the CWA mandating that states “shall adopt criteria for all pollutants listed pursuant to [section 307(a)(1)] for which criteria have been published under [section 304(a)], the discharge or presence of which in the affected waters could reasonably be expected to interfere with ... designated uses.” Further, this provision specifies that numeric criteria are required wherever available, or if not, criteria based on biological monitoring methods must be adopted. Consistent with this requirement, Utah has adopted numeric water quality criteria for toxics generally, but those criteria do not apply to Great Salt Lake – the exception being the recently proposed standard for selenium.

It is our understanding that, in the past, the state has not adopted numeric criteria for Great Salt Lake (for either toxic, conventional, or nonconventional pollutants) because of perceived differences in the appropriate criteria for a saline lake. However, EPA has published water quality criteria guidance under section 304(a) for estuarine, coastal and marine waters as well as for freshwater aquatic environments. While Great Salt Lake is more saline than coastal or marine waters, those guidance documents are instructive regarding the types of pollutants for which salinity is a legitimately distinctive feature, and regarding the manner in which criteria should be modified accordingly.

Whether or not DWQ’s assertion that *different* criteria are appropriate for GSL turns out

to be correct, such differences cannot justify inattention to the problem. It has been thirty years since states were required to comprehensively review and revise water quality standards under the 1972 CWA; and another fifteen years since Congress expressly required states to adopt numeric criteria for toxics. More than ten reviews have passed since enactment of the CWA and more than five triennial reviews have passed since the promulgation of the numeric criteria for toxic regulations were adopted. This serious omission in the state water quality standards of numeric standards for Great Salt Lake needs to be addressed immediately. The segmentation of the lake cannot be used as a vehicle to further delay what should have been completed long ago.

We understand that DWQ has expended significant resources and time to generate a numeric selenium standard for Great Salt Lake open waters. However, even this long over due standard will be restricted in application, leaving the rest of the lake unprotected from this insidious toxin. Moreover, the time and effort this standard required indicates that significant time will pass before other standards are finalized. To complicate and delay this process by maintaining that Great Salt Lake will require five times as many standards before the entire lake is protected by numeric standards is untenable.

Moreover, the segmentation of the lake is not ecologically sound – there is nothing about the water quality values of the lake that will be served by this segmentation. Indeed, different uses and associated water quality goals are not appropriate for different regions of the lake. Great Salt Lake is a highly interrelated ecosystem composed of chemically, physically, and biologically similar areas. Great Salt Lake is only appropriately managed as one unit because the same uses and associated water quality goals are appropriate and feasible for various “regions” of the lake.

This is particularly true of the lake’s wetlands. As you are well aware, the level of Great Salt Lake varies widely. Therefore, it makes no sense to somehow divorce the wetlands of the lake – which are often inundated by lake water – from the open waters of the lake. Moreover, the elevation chosen as the “boundary” between the lake and its wetlands is artificial, is not ecologically based and serves only to undermine what should be the ecological integrity of the lake. Management of Great Salt Lake must be focused on treated the lake as a whole, integrated and interrelated system. This approach must not be sidetracked by artificial segments that do not reflect wildlife use, recreation use and chemical and physical goals as articulated by current beneficial uses there.

Finally, segmentation of the lake and failure to adopt immediately water quality standards that protect the waters of the lake violate the public trust doctrine. In developing and implementing water quality standards for Great Salt Lake, DWQ must abide by the Public Trust Doctrine, which serves to protect sovereign lands for the benefit of the public. For purposes of sovereignty and in fact, Great Salt Lake is a navigable water. Utah v. United States, 403 U.S. 9, 10 (1971). When Utah was admitted to the Union, the state succeeded to the United States’ title to the beds of all navigable waters within its boundaries, including Great Salt Lake, under the equal footing doctrine. Id. at 9-10; see United States v. Alaska, 521 U.S. 1, 5 (1997) (“Ownership of submerged lands – which carries with it the power to control navigation, fishing, and other public uses of water – is an essential attribute of sovereignty.”).

These sovereign lands are afforded special status and protection under the Public Trust Doctrine, which “protects the ecological integrity of public lands and their public recreational uses for the benefit of the public at large.” National Parks and Cons. Ass’n v. Bd. of State Lands, 869 P.2d 909, 919 (Utah 1993). See Illinois Cent. R.R. v. Illinois, 146 U.S. 387, 455-56 (1892) (holding Public Trust Doctrine prevented Illinois legislature from divesting bed of Lake Michigan to private railroad); see also, e.g., Marks v. Whitney, 491 P.2d 374 (Cal. 1971); National Audubon Soc. v. Superior Court, 658 P.2d 709 (Cal. 1983); Wade v. Kramer, 459 N.E.2d 1025 (Ill. 1984); Save Ourselves, Inc. v. Louisiana Env’tl. Control Comm’n, 452 So.2d 1154 (La. 1984); Orion Corp. v. Washington, 747 P.2d 1062 (Wash. 1987); United States v. State Water Res. Control Bd., 182 Cal. App. 3d 82, 227 Cal. Rptr. 161 (1986).

DWQ’s proposal to segment the ecological integrity of Great Salt Lake, its failure to safeguard the quality of its waters through, among other measures, enforceable water quality standards that protect beneficial uses, and its failure to adopt an ecosystem based, holistic view of the lake as one of the most important habitats in the northern hemisphere violate the Public Trust Doctrine.

Antidegradation changes are a step forward, but grave concerns remain

We support the removal of several egregious “off-ramps”

The proposed rule removes several of the egregious off-ramps to the antidegradation review process. We thank the Division for their progress on this issue.

As background, the EPA antidegradation policy set forth at 40 C.F.R. 131.12, which establishes the *minimum* requirements for all state antidegradation policies, must apply to all state water bodies. “Tier I” of EPA’s regulation expressly provides that “existing instream uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.”⁴ “Tier II” of EPA’s regulation requires that levels of water quality higher than necessary to protect those uses must be maintained and protected, unless certain specific conditions are met (addressed further below), in *all* waters in which those conditions exist.⁵ While obviously water quality higher than necessary to protect existing and designated uses will not necessarily exist in all of Utah’s waters, the EPA regulation requires that antidegradation requirements must apply to all waters in which those conditions do occur. “Tier III” of EPA’s antidegradation regulation, by contrast, applies only with respect to specifically-identified waters, which are designated as “Outstanding National Resource Waters.”⁶ Thus, the current rule’s exclusion from Tier I and Tier II review of particular classes and categories of state waters (for example, waters designated for protection of nongame fish or wildlife or so-called “low-quality” fisheries under proposed 3.4 (b) (6) & (7)), does not comply with EPA’s mandatory regulation.⁷ All state waters must be

⁴ 40 CFR § 131.12(a)(1)

⁵ 40 CFR § 131.12(a)(2)

⁶ 40 CFR § 131.12(a)(3).

⁷ EPA’s intent to require Tier I and II antidegradation scrutiny for all water bodies, although clear on the face of EPA’s regulation, is confirmed in the regulatory preamble in which those rules were last issued. 48 Fed. Reg. 51400, 51403 (November 8, 1983). See, also, EPA. Questions and Answers on Antidegradation (“Questions and Answers”), at 4.

included in the antidegradation policy.⁸

For those reasons, we whole-heartedly support the removal of the following off-ramps:

The "3C/3D" exemption

This provision found at b(6) in the current rule represented an unjustifiable effort to exempt waters from antidegradation review, thereby violating EPA regulation and guidance. For example, immensely important and valuable waters such as the Farmington Bay Waterfowl Management Area, Fish Springs National Wildlife Refuge, and many other waterfowl areas are classified as 3C and 3D waters only. Under the current rule, these waters are improperly subject to decreases in water quality. Because of their significance, these waters should instead be protected by the most rigorous antidegradation review. Moreover, as a general matter, the CWA and the antidegradation regulations do not exempt waters deemed less valuable or less pristine, but instead apply to all waters.

In addition, it has come to our attention that the 3C class of waters has largely been used as a dumping ground for stream segments with larger dischargers on them (see for example Mill Creek's 3C stretch, Weber River's 3C stretch, etc.). This makes it all the more crucial that these segments not be exempted from antidegradation, as they are exactly the segments most likely to need protection.

For these reasons, we support the proposed removal of the 3C/3D antidegradation off-ramp.

Poor-quality fisheries off-ramp

For similar reasons, we support the removal of the b(7) off-ramp for poor fisheries. In addition to the arguments presented above for the 3C/3D off-ramp, this was a particularly meaningless section because the designations referenced in the text are not appropriate for regulatory use, and in fact were never used by the Division. Again, we support the removal of the poor-quality fisheries off-ramp.

Small volume off-ramp

We support the removal of the b(11) off-ramp for small volume/high dilution situations. The presumptive exemptions based on discharge to stream flow ratio in proposed 3.4(b)(11) were arbitrary and inappropriate. For example, this presumptive waiver does not take into account the toxicity of the proposed discharge or other variables that could render low-volume releases harmful.⁹ In addition, no "cap" was ever placed on this

⁸ EPA's Water Quality Standards Handbook – Second Edition also bears this out, defining high-quality waters as those, for any given parameter, "whose quality exceeds that necessary to protect the section 101(a)(2) [fishable/swimable] goals of the Act." Handbook at 4-7. The EPA then states that for all "high-quality waters" there must be an antidegradation review "before **any** lowering of water quality occurs" *Id.* (emphasis added).

⁹ Because of recent drought and increased withdrawals from Utah's waters, the 7Q10 data should be updated to include the past several years of information.

exemption, allowing continual encroachment on assimilative capacity. We support the removal of this off-ramp from the rule.

Melding of off-ramps b(2), b(4), and b(8)

We support the combination of these off-ramps into one for clarity's sake. More importantly, we support the clarification that these apply ONLY for the parameter of concern on the 303(d) list, in a TMDL or in the case of a fully utilized assimilative capacity.

However, **we note that as redrafted at b(3), the proposed language does not make clear that under b(3)(c) the approved TMDL must be for the parameter of concern** (as is the case in b(3)(a) and b(3)(b)). This is critical to ensuring that a parameter won't be off-ramped because some completely unrelated parameter was addressed in a TMDL (e.g. off-ramping an increase in chlorine because the segment has a TMDL for nickel).

Furthermore, we want to go on record as stating that these off-ramps are truly not relevant because the situations listed would already limit or stop altogether the type of activities contemplated. For example, where a TMDL is in place for the parameter of concern, no new discharges should be permitted under 40 C.F.R. 122.4(i), unless the resulting TMDL ensures offsetting reductions in discharges from other sources.¹⁰ Similarly, for a water listed on the 303(d) list for the parameter of concern or fully allocated for the parameter of concern, no permit may be issued that would "cause or contribute" to a violation of standards, so no permit could allow further degradation for that parameter (because it is already (in the case of the 303(d) listed segment or very nearly violating standards).¹¹

We support the addition of a cumulative "cap" to the de minimus off-ramp, but still oppose the use of de minimus

We support the fact that the rule proposal envisions an overall cap on the use of the de minimus off-ramp. Although we disagree with the de minimus off-ramp altogether and do not agree with the level (75 percent of the criteria) at which the cap was set, we do support the addition of a cumulative cap.

However, even with the addition of the "cap", the use of de minimus exemption is not acceptable. This categorical exemption is both arbitrary and impermissible under EPA's regulation, which prohibits all degradation in Tier I Waters and degradation in Tier II waters (all others) only where the specific requirements of 40 C.F.R. 131.12(a)(2) are met.

In addition, setting the cap at 75 percent of the criterion is unacceptable. This cap allows all but 25 percent of the assimilative capacity to be utilized before a discharger even has to consider

¹⁰ Of course, no new discharges should be allowed in a 303(d) water or water not meeting its beneficial uses relative to the parameter of concern before a TMDL is created. 40 C.F.R. § 131.12(a)(1).

¹¹ See 40 CFR 122.4(i).

alternatives. The 75 percent cap is higher than any other cap we've seen in states, and doesn't take into account the nature of toxics, carcinogens, bioaccumulative pollutants, etc.

For example, we understand this approach of using the criterion as the measuring stick was modeled on Montana's rule. Yet our cap is set at nearly twice that of Montana, and provides none of the safeguards. In Montana, for general pollutants 40 percent of the standard is the cap for significance determinations. For carcinogens any change is significant, so the cap is set at zero. For toxics, the cap is set at 15 percent of the lowest applicable standard.¹²

Assimilative capacity is a valuable public asset, and should not be given away without public discussion and a through review of alternatives. This is, in essence, the meaning of the antidegradation policy. The allowance for degradation provided in Tier II of EPA's policy (for purposes of "important economic and social development") was intended to apply only in "extraordinary circumstances," with a "very high" burden on the proposed discharger to justify the limited exception, after full satisfaction of public notice, comment and other requirements.¹³ To do an end-run around this entire vision of informed public debate about alternatives and social/economic factors related to degradation for fully 75 percent of a waterbody's assimilative capacity is simply not in compliance with the federal antidegradation policy. We are simply writing off 75 percent of the assimilative capacity for all of our rivers, lakes, and reservoirs.

Antidegradation implementation procedures

Lastly, much of the effort on antidegradation in this triennial review focused on exemptions. This was an appropriate area of focus as the exemptions have resulted in enormous loopholes in the program. However, concerns remain with how Level II antidegradation reviews will be conducted, and changes to that section of the regulation should be at the top of the Division's list of policy items to review in the next triennial review.

Issues will include the timing of antidegradation review (should be at the time a discharger is designing their facility in order to have a meaningful alternatives analysis), the how of the economic and social importance test (for example, the current rule does not take into account the economic costs of proposals related to loss of fisheries, tourism, community quality of life, etc.), how to address 404 permits, how to conduct antidegradation for general permits, and more. As we wrap up this triennial review, we request the Division add antidegradation Level II to the new list of items for consideration in the next triennial review.

Oppose various changes to beneficial use designations and the establishment of site-specific standards for TDS

Deletion of Beneficial Uses

While we support the designation of the lower Escalante (from Lake Powell to the confluence with Boulder Creek), we oppose the change in designation (by default) of the upper

¹² ARM 17.30.715

¹³ Questions and Answers at 7; *see also* Handbook at 4-7 (lowering quality of high-quality water can occur only if it is "necessary" to accommodate "important" development in the area).

Escalante – from the confluence with Boulder Creek to the headwaters – from 3A to 3B. If Utah wishes to delete a designated use (such as 3A), it must comply with certain regulatory requirements, including the preparation of a use attainability analysis. See 40 C.F.R. § 131.10(g). Without this analysis and adequate justification, the change in use designation is improper.

Similarly, we oppose the change in use designation for Saleratus Creek, from the confluence with the Bear River to Deseret Ranch High Ditch Diversion. If Utah wishes to delete a designated use, it must comply with certain regulatory requirements, including the preparation of a use attainability analysis. See 40 C.F.R. § 131.10(g). Without this analysis and adequate justification, the change in use designation is improper.

Site-Specific Water Quality Standards -- TDS

We oppose the establishment of site-specific numeric criteria for TDS for various water bodies at levels much higher than the typical standard for irrigation of 1200 mg/liter. Admittedly, the 1200 mg/liter standard is appropriate for irrigation (as opposed to stock watering), but there is nothing to suggest that water from these sources is not used for the irrigation of crops. As EPA regulations require, all water quality standards, including site-specific standards, must protect the designated uses and be based on sound scientific rationale. 40 C.F.R. § 131.11(a)(1). Moreover, “[f]or water with multiple use designations, the criteria shall support the most sensitive use.” *Id.*

Here, there is no adequate basis for the significant weakening of the standard for TDS and no determination that the designated use will be protected. In addition, EPA will approve site-specific criteria only if it is developed using appropriate procedures. Again, there is no evidence that appropriate procedures were followed.

By the same token, there is no indication that these high levels will not adversely effect designated uses for aquatic life. Several studies and EPA’s own analysis admits that high levels of TDS – levels less than those permitted by the proposed and current site-specific standards – will harm aquatic life. As a result, these standards do not protect beneficial uses.

High levels of TDS in these waters cannot be ascribed to geology. This is because human activity, such as oil and gas development, farming, road building, livestock farming and recreational vehicle use, is causing or contributing the high TDS levels in the waters at issue. For example, the TMDL for the Paria River admits that in the higher reaches of that water body, farming is a significant source of TDS. Yet, the proposed rule seeks to raise the TDS standard for that very reach. At the same time, various streams for which elevated levels of TDS will be sanctioned are Category I streams, subject to the highest levels of water quality protection. To allow these streams to be degraded by TDS is not in keeping with the anti-degradation policy.

Where increases in the standard for TDS are upstream of the Green River, adverse impacts to listed species are likely to result. Prior to approving such a standard, EPA would be required to consult with the U.S. Fish and Wildlife Service.

Finally, there is no indication that these site-specific TDS standards will be in keeping with the Colorado River Salinity Standards.

Site-Specific Water Quality Standards – DO

We oppose the proposed site-specific water quality standards for the Jordan River, Surplus Canal and State Canal. These waters are each classified as 3B – warm water fisheries – and therefore are to be protected as such. Yet, the proposed rule seeks to lower the dissolved oxygen 7-day average minimum for these waters below the accepted standard for 3B fisheries and make other changes that appear to jeopardize the health of the aquatic life in these important waters.¹⁴

Here, there is no adequate basis for the weakening of the standard for dissolved oxygen and no determination that the designated use will be protected. This is of particular concern because aquatic life is so sensitive to decreases in dissolved oxygen. In addition, EPA will approve site-specific criteria only if it is developed using appropriate procedures. Again, there is no evidence that appropriate procedures were followed.

Moreover, we are concerned that the site-specific standard forgoes a standard for a one-day average in favor of an instantaneous minimum. To be protective, an instantaneous minimum must be taken when dissolved oxygen levels are at their lowest – and there is no indication that such safeguards will be in place. We oppose the May through July instantaneous standard which is 10% lower than the standard one day average standard.

Finally, we are concerned that the standards for May through July and August through April do not accurately reflect when early and late life stages will be present in the waters at issue. In order to adequately protect the fisheries of these waters it is crucial that these timeframes predict the presence of early and late life stages.

Oppose the use of mixing zones

Utah's existing "mixing zone" policy allows extremely large portions of water bodies to be used for pollution dilution. Questions about the legality of *any* mixing zones currently are being raised at the national level. Even if mixing zones of some sort are permissible, however, several problems with Utah's mixing zone regulation should be revisited. First, the allowable sizes of mixing zones are excessive. Chronic mixing zones of up to 2,500 feet (nearly a half mile) and acute mixing zones of up to half of an entire stream width are allowed under existing R317-2-5. Moreover, there is no requirement for dischargers to demonstrate that the mixing zone is limited to the smallest practicable size necessary, through the use of the best available diffusion technology and other means. Second, and relatedly, the basic premise of the Utah regulation is inconsistent with the only plausible rationale for mixing zones. Where otherwise permissible, mixing zones are intended only to allow sufficient time for the effluent to mix

¹⁴ It is unclear whether under the proposed site-specific standard there is a 7-day average requirement for August through April. While none is listed, it could be assumed that, for the purposes of the 7-day average – the default is to the accepted standard for 3B fisheries.

completely with the receiving water. Utah's rule, however, allows mixing zones of whatever size is needed, up to the extremely large maximum limit, to ensure that standards are met. In essence, this policy simply ensures that virtually any discharge will meet standards at some point in the receiving water, after sufficient time for dilution (as opposed to mixing). Finally, R317-2-5.2 allows DWQ to limit individual mixing zones base on a range of factors, which appear to be entirely within DWQ's discretion. Mixing zones should be prohibited entirely for at least some of the listed factors, including biologically important areas (spawning or nursery areas or habitat for federally-listed threatened or endangered species; and state-listed species should receive the same protection), and zones of passage for migrating fish and other species. Equally fixed criteria could be developed to constrain the use of mixing zones based on the remaining factors, such as bioaccumulation, potential human exposure, and toxicity of the discharge.

Incorporating Certain EPA Comments by Reference

We hereby incorporate by reference the following EPA comments on the proposed WQS:

- Comments under the title "Revisions to Criteria Exceedance Frequencies for Water Quality Assessment Purposes (R317.2-7.1).
- Comments under the title "Revisions to Classifications for Waters of the State (R317.2-13) – Downgraded Aquatic Life Use Designation.
- Comments Regarding Individual Proposed TDS Criteria to the extent that the comments oppose individual criteria
- Comments regarding dissolved oxygen.

Thank you again for the opportunity to comment on the proposed amendments to the Water Quality Standards and for all you do to protect Utah's waters. Please let us know of any action you take relative to the rule amendment, including when and in what form DWQ submits the proposed rule changes to EPA.

/s/
JORO WALKER, Esq.
Director, Utah Office