Triennial Review Scoping Comments and Responses

Responses to comments received during the scoping request period (April 3 – May 15, 2013) for public input as part of the Triennial Review. The Surface Water Quality Bureau's ("SWQB") request for public input was announced via public website, emails to interested parties (>800 recipients), and public service announcements on Wednesday, April 3, 2013. The comment period closed on Wednesday, May 15, 2013.

The SWQB received comments from five entities. Many of these comments were also received during the 2009 Triennial Review/Revisions from the same parties. Summaries of comments received were prepared to allow for development of responses; however, the original comment letters and email comments are available at: http://www.nmenv.state.nm.us/swqb/Standards/TR2013/PublicCommentCompilation-2013TR.pdf

Comment 1: Department of Energy/Los Alamos National Labs ("DOE/LANS")- The DOE/LANS is considering the potential evaluation of Pueblo Canyon and associated drainages (Bayo, Rendija, and Guaje canyons) for listing as ephemeral waters in 20.6.4.97 New Mexico Annotated Code ("NMAC"), pursuant to Subsection C of 20.6.4.15 NMAC (no specific information was submitted with the comment).

SWQB Response 1: SWQB will review any work plans submitted by the DOE/LANS to conduct Use Attainability Analyses ("UAA") utilizing the application of the Hydrology Protocol pursuant to Subsection C of 20.6.4.15 NMAC.

Comment 2: DOE/LANS - The DOE/LANS may consider Comment: Development of site-specific water quality criteria for metals under Section 20.6.4.10 NMAC (no specific information was submitted with the comment).

SWQB Response 2: SWQB will review proposals for site specific water quality criteria pursuant to Subsection D of 20.6.4.10 NMAC.

Comment 3: PEABODY ENERGY- Exclude certain man-made ponds (livestock watering and wildlife habitat) and wetlands from primary or secondary contact uses.

SWQB Response 3: With this comment, Peabody has included a copy of a proposal that was considered but not adopted by the Water Quality Control Commission ("WQCC") during the 2009 Triennial Review for the reasons discussed below. The commenter has submitted no new information or data to support a broad, categorical exclusion for any of the types of waters listed in the proposal (i.e., man-made ponds, livestock watering and wetlands, etc.). The SWQB demonstrated to the commission during the 2009 Triennial Review why the proposal is overbroad, impractical, and may not protect existing or attainable uses. Further, the proposed exclusion would remove required Clean Water Act ("CWA") 101(a) beneficial uses for primary and secondary contact recreation (i.e., swimmable uses) from ponds or wetlands used for livestock watering or as wildlife habitat, and also from waters used for a variety of activities without conducting the necessary UAA demonstration that such uses are

unattainable. The types of waters to be excluded is extremely broad (e.g., surface water control, flood control and erosion control), and includes many surface waters of the state.

The appropriate process to determine the attainable uses and criteria for a category of waters is to perform a UAA process pursuant to Section 20.6.4.15 NMAC. The required regulatory mechanisms are in place to remove or change designated uses (e.g. primary and secondary contact) and associated criteria when appropriate.

In accordance with 20.6.4.15.A (1):

> **"**The commission may remove a designated use specified in Section 101(a)(2) of the federal CWA or adopt subcategories of a Section 101(a)(2) use requiring less stringent criteria only if a use attainability analysis demonstrates that attaining the use is not feasible because of a factor listed in 40 Code of Federal Regulation ("CFR") §131.10(g). Section 101(a)(2) uses, which refer to the protection and propagation of fish, shellfish and wildlife and recreation in and on the water, are also specified in Subsection B of 20.6.4.6 NMAC."

Comment 4: CITY OF LAS CRUCES - Stated that judicial proceedings (2008) prescribe that the lower Rio Grande River within city limits of Las Cruces is secondary contact recreation and asks the SWQB to revise Section 20.6.4.101 NMAC to reflect this.

SWQB Response 4: No documents (i.e., UAA) or judicial proceedings were provided to support a proposal to revise Section 20.6.4.101 NMAC.

Comment 5: CITY OF LAS CRUCES - Requests that the SWQB add a definition for 'drought flow' to describe surface water that's effluent dominated (provided language).

SWQB Response 5: The proposed language from the City of Las Cruces provides for effluent dominated streams and rivers where a permitted discharge is the primary source of water during dry conditions. While streams of this type certainly do exist in New Mexico it is unclear how the definition will add clarity on the application of water quality standards as the relevant issue is not the source of the water but the uses that water is able to support.

In addition, the water quality standards currently allow for a critical low flow to be determined based on annual, seasonal or monthly bases, in consideration of site specific conditions for developing point source discharge permits in order to meet narrative and numeric criteria (Section 20.6.4.11 NMAC). The default critical low flow (4Q3) in the water quality standards accounts for extreme low flow events in order to minimize excursions of the water quality standards. Such considerations include effluent dominated conditions.

Comment 6: FREEPORT-MCMORAN COPPER AND GOLD - The SWQB should consider amending Subsection D of 20.6.4.10 NMAC to allow for site-specific standards that account for irreversible man-induced conditions.

SWQB Response 6: The provision for site specific criteria in Subsection D of 20.6.4.10 NMAC allows for site specific criteria to be considered by the WQCC on a case by case

basis. The provision also references methodology in Paragraph (4) which could be applied in a UAA pursuant to Section 20.6.4.15 NMAC, such as under 40 CFR §131.10(g)(3) , which provides for changing a designated use that is not an existing use when "human caused conditions or sources or pollution prevent the attainment of the use and cannot be remedied". However, consistent with state water quality standards and federal standards regulations, site specific criteria must be demonstrated to be protective of existing and attainable use(s). If approved by the WQCC, site specific criteria are also subject to USEPA review and approval.

Comment 7: FREEPORT-MCMORAN COPPER AND GOLD - Supports temporary site-specific standards (comment letter included previously submitted draft language).

SWQB Response 7: In accordance with USEPA guidance, the SWQB has developed a draft provision to allow temporary criteria to be proposed, adopted by the WQCC, approved by USEPA and implemented for CWA purposes. The SWQB looks forward to receiving constructive input during the comment period for the public discussion draft.

Comment 8: FREEPORT-MCMORAN COPPER AND GOLD - Submitted nominating language for Outstanding National Resource Waters ("ONRW") that also states only perennial waters can be designated as ONRWs.

SWQB Response 8: According to the U.S. Geological Survey National Hydrography Dataset, ephemeral and intermittent streams make up approximately 59% of all streams in the United States (excluding Alaska), and over 81% in the arid and semi-arid Southwest (Arizona, New Mexico, Nevada, Utah, Colorado and California). These streams provide a wide array of ecological functions including forage, cover, nesting, and movement corridors for wildlife[1]. In short, ephemeral and intermittent stream systems comprise a large portion of southwestern watersheds, and contribute to the hydrological, biogeochemical, and ecological health of a watershed. Waters of exceptional ecological or recreational significance which are considered for designation as ONRWs should not be automatically excluded due to their ephemeral or intermittent hydrology. Therefore, the criteria for nominating an ONRW pursuant to Section 20.6.4.9 NMAC does not specify the hydrology as many naturally intermittent or ephemeral areas are essential to the ecological health of the water being considered.

Comment 9: FREEPORT-MCMORAN COPPER AND GOLD – The commenter questioned the application of wildlife habitat use to ephemeral waters.

SWQB Response 9: See response to Comment 8.

[1] Levick, L., J. Fonseca, D. Goodrich, M. Hernandez, D. Semmens, J. Stromberg, R. Leidy, M. Scianni, D. P. Guertin, M. Tluczek, and W. Kepner. 2008. The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest. U.S. Environmental Protection Agency and U. S. Department of Agriculture/Agricultural Research Station, Southwest Watershed Research Center, EPA/600/R-08/134, ARS/233046, 116 pp.

Comment 10: FREEPORT-MCMORAN COPPER AND GOLD – Add more specificity in the water quality standards to define how many samples must be collected using applicable protocols to make the water quality standards more scientifically defensible. Language was provided as an example.

> **B.** Compliance with chronic water quality criteria shall be determined from the arithmetic mean of the analytical results of THE LAST FOUR samples TAKEN AT LEAST 24-HOURS APART AND collected using applicable protocols. Chronic criteria shall not be exceeded more than once every three years.

SWQB Response 10: The SWQB agrees that determination of compliance should be based on the best available technical guidance and be scientifically defensible. However, the language submitted with this comment was considered by the WQCC during the 2009 Triennial Review but was not adopted. While the recommendation in principle may be appropriate for determining compliance with certain chronic criteria, such prescriptive language in the water quality standards about the number of required samples during a specified time period will likely not be applicable to every criterion, and could inadvertently impose unnecessary sampling requirements which affects dischargers and the State's monitoring program. This type of language is more appropriately contained in documents for implementation of water quality standards, such as the State's *Procedures for Implementing National Pollutant Discharge Elimination System ("NPDES") Permits in New Mexico – NMIP* document [2] or in a permit where the derivation of water quality effluent limits considers appropriate sampling frequencies and methods (i.e., compositing or in-situ grab samples) for the pollutant and the type of discharge.

Comment 11: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER – The commenter fears that 'temporary site specific standards' could be adopted before the WQCC has a chance to approve or disapprove; and thus would cause or contribute to WQS violations and wants the SWQB to circulate its proposal.

SWQB Response 11: The SWQB has developed a draft provision to allow temporary standards to be proposed and adopted by the WQCC, and implemented. Any proposals for a temporary standard must adhere to regulatory requirements in the provision. The petitioner is also required to follow the WQCC administrative procedures for water quality standards rulemaking, which includes the opportunity for public comments and a public hearing. Additionally, as currently proposed, a temporary standard is subject to USEPA's oversight approval under 40 CFR §131.21 before it can be used for actions conducted under the federal Clean Water Act.

Comment 12: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Wildlife, primary contact recreation and aquatic life criteria can be more stringent than USEPA's recommendations.

[2] Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico – NMIP, March 15, 2012, USEPA Region 6 Permits and New Mexico SWQB Permits Sections.

SWQB Response 12: The SWQB considers the most appropriate and scientifically defensible approach for developing and implementing criteria for New Mexico. In adherence to the Water Quality Act (New Mexico Statutes Annotated ("NMSA") 76-8-4 (C)), any criteria proposals must be based on the best available science, which includes but is not limited to consideration of the USEPA's criteria recommendations.

Comment 13: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Adopt water standards protection for acequias and ditch water, including *E. coli* and toxics.

SWQB Response 13: Acequias that are surface waters of the state have water quality standards, such as designated uses and criteria, which are assigned to them under Section 20.6.4.98 and 20.6.4.99 NMAC. These include protections for the primary contact recreation use (and corresponding *E. coli* criteria) and narrative criteria for toxics.

Comment 14: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Consider developing numeric biocriteria.

SWQB Response 14: As pointed out by the commenter, the narrative biocriteria in Subsection M, 20.6.4.13 NMAC were adopted by the WQCC during the 2009 Triennial Review and subsequently approved by the USEPA. The SWQB is currently developing and implementing protocols that apply the criteria. As the protocols for translating the narrative biocriteria are tested and demonstrated to support aquatic life uses, they will be considered for adoption into the Water Quality Standards ("WQS") as numeric criteria.

Comment 15: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - The SWQB must address climate change (it was mentioned that a proposal was submitted but withdrawn during the last Triennial).

SWQB Response 15: The SWQB acknowledges the potential impacts of climate change on New Mexico's water resources. While the comment focuses on changes in water supply, changes in water supply may potentially impact water quality. The current water quality standards provide the necessary level of protection for existing and attainable uses and this will remain even if the potential impacts of climate change are realized. However, it is not currently possible to determine what portion, if any, of a pollutant concentration in a water body is or will be the result of climate change.

See also the response to Comment 17.

Comment 16: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - General standard (statewide) for *E. coli* - instead of segment specific criteria for contact recreation.

SWQB Response 16: Standards for E. coli are applied statewide as a 'default' and in the case of segment specific standards the criteria are applied. Where necessary and appropriate, an evaluation of the designated and existing uses is conducted (e.g. UAA). It is not clear why this type of approach for the application of *E. coli* criteria is more suitable or necessary.

Comment 17: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - The WQCC is urged to ensure that water quality and water quantity are not artificially separated.

SWQB Response 17: SWQB understands and appreciates the connections between water quantity and quality – these issues are especially critical in the arid Southwest. However we also recognize that both the CWA section 101(g) and the New MexicoWater Quality Act ("WQA") put specific limitations on implementation of regulations to achieve water quality goals with respect to water quantity allocation and water rights. Specifically the WQA (74-6-12, Subsection C NMSA 1978) "does not grant to the commission or to any other entity the power to take away or modify the property rights in water, nor is it the intention of the Water Quality Act to take away or modify such rights." This limitation is also referenced in the Objectives of the Water Quality Standards (Subsection C of 20.6.4.6 NMAC). However, opportunities to address water quality and quantity issues exist within the context of the New Mexico regional water planning program, administered by the New Mexico Interstate Stream Commission ("ISC") (72-1-43 and 72-14-44 NMSA 1993). The linkages between water quantity and quality are components best addressed at a regional level due to the many variables in climate, water supply, water demand, and legal/institutional constraints to water resources management in New Mexico. The statutes and directives of the State Water Plan emphasize the inventory and promotion of the quantity and quality of the state's water resources. There is a focus in the Plan on the continued coordination of state, federal, and local programs to protect and restore the quantity and quality of the state's waters.

Likewise, the SWQB recognizes the natural flow regimes of streams include incidences of both high and low flow, such as during seasonal monsoons or periods of natural drought. During high flow events, there may be a trend of increased concentrations of pollutants, such as nutrients (e.g., phosphorus). Low flows typically concentrate the effects of water pollution resulting in higher in-stream concentration of pollutants. Whether this is due to the natural flow regime or to other influences, the SWQB has not ignored the fact that changes in stream flow may adversely impact water quality. For example, in accordance with Section 20.6.4.11 NMAC, the calculations used to derive water quality based permit limits are based on measurements of pollutant levels and critical flow at a particular site. When necessary, these limits are placed in permits and in TMDLs as pollution controls to meet criteria and protect designated uses. Water body segments with impairments attributed to low-flow conditions are identified in the Integrated Report ("IR") , and may also be eligible for CWA Section 319 Nonpoint Source Program funds from the USEPA. This provides opportunities to address flow condition-related impairments and make water quality improvements on a local or watershed level.

Comment 18: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Get rid of the Limited Aquatic Life Use – The use is ambiguous and could be abused to lower water quality standards. Suggest setting segment specific uses in rare cases where other aquatic life uses are not attainable. The Limited Aquatic Life Use is not appropriate for LANL.

SWQB Response 18: In accordance with 40 CFR §131.10(g) and Section 20.6.4.15 NMAC, the UAA process is the required analysis conducted to appropriately assign designated uses

less than those consistent with the Section 101(a)(2) of the CWA goals. The §101(a)(2) of the CWA states that, as an interim goal, water quality should provide for the protection and propagation of fish, shellfish and recreation in and on the water, wherever attainable.[3] Designated uses can be changed or removed with the appropriate analysis and documentation. For example, the results of a UAA that documents the presence of aquatic invertebrates (i.e., shellfish or insects) and/or amphibians, but finds support of fish populations is not existing or attainable, allows for the appropriate aquatic life use to be assigned, such as the Limited Aquatic Life Use. However, in addition to supporting the use change or removal, the UAA must include recommendations to support the highest existing and attainable use(s). Therefore, the required UAA reduces ambiguity by assigning the appropriate and attainable use(s) and the water quality (i.e., criteria) to supports the use(s). While the Limited Aquatic Life Use carries with it certain criteria pursuant to Subparagraph 7, Subsection H of 20.6.4.900 NMAC, this does not prevent the adoption of additional criteria needed to protect unique characteristics of resident aquatic life on a site specific or segment-specific basis (i.e., chronic criteria), if supported by the UAA.

Water body segments that are assigned less than uses consistent with the CWA §101(a) uses, such as the Limited Aquatic Life, are subject to review in accordance with 40 CFR §131.20 which requires they "shall be re-examined every three years to determine if any new information has become available. If such new information indicates that the uses specified in §101(a)(2) of the CWA are attainable, the state shall revise its standards accordingly". This requirement does not obligate the state to perform a new UAA or generate new data from the affected water body every three years. However, the responsibility of the state is to determine if there is available new information that indicates that the uses specified in §101(a)(2) of the CWA are attainable. This evaluation may or may not include the generation of new data specific to a listing as impaired. The SWQB evaluates available water quality and other information to assess aquatic life uses for these and other water bodies. In the case of LANL, the SWQB is not aware of any data indicating that the aquatic life use attainment in these segments has changed.

Comment 19: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Mixing Zones should be eliminated and if not, should be in line with USEPA's regulations.

SWQB Response 19: The commenter did not provide examples of where the water quality standards provisions for mixing zones is inconsistent with the USEPA's mixing zone guidance and policies, nor were any examples of noncompliance provided. These provisions (Subsections D and E of 20.6.4.11 NMAC) have been in place since November 12, 1991, and approved by the USEPA. They are based on and consistent with federal regulations, USEPA policies and the guidance provided in "Technical Support Document ("TSD") for Water Quality-Based Toxics Control (USEPA, March, 1991). In fact, the current provision contains more stringent requirements than the USEPA guidance allows. For example, a mixing zone for acute aquatic life, or zone of initial dilution, is prohibited (USEPA 1991 Technical Support Document; Subsection E of Subparagraph (2) of 20.6.4.11 NMAC). In accordance with Subsection E of Subparagraph (2) of 20.6.4.11, to protect designated aquatic

[3] This is sometimes referred to as the "fishable/swimmable where attainable" goal—but it should not connote that "fish" are only valuable for "fishing" or other human use.

life uses the acute criteria are met at the point of discharge, before entering state waters. Also, the development of mixing zones in lakes and reservoirs is prohibited in the water quality standards provision (Subsection E of Subparagraph (1) of 20.6.4.11 NMAC), even though allowed for in the USEPA's guidance.

Comment 20: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Develop nutrient limits.

SWQB Response 20: The SWQB, with the assistance of the USEPA and the U.S. Geological Survey ("USGS"), has refined protocols for use of threshold values for causal (concentrations of total nitrogen ("TN") and total phosphorous ("TP")) and response variables (e.g., dissolved oxygen, pH, and chlorophyll *a*) in a weight-of-evidence assessment to determine use impairment and to translate the narrative nutrient criterion into quantified endpoints. Given the diversity of New Mexico waters we believe this is the best approach to identify and address nutrient impaired waters.

Please also see the SWQB website for more information about nutrient thresholds at: http://www.nmenv.state.nm.us/swqb/Nutrients/

Comment 21: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Adopt a perchlorate standard of 1 ug/L for domestic water supply and the SWQB should develop perchlorate criteria for irrigation, wildlife habitat and livestock watering.

SWQB Response 21: The USUSEPA is evaluating the available science on health effects of perchlorate exposure and has committed to using the best available peer reviewed science and data to develop a drinking water recommendation. Consideration of a perchlorate criterion would follow the publication of the proposed recommendation (e.g. federal rule proposal) and also be evaluated by the SWQB in collaboration with the New Mexico Drinking Water Bureau.

Comment 22: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Pharmaceuticals and Personal Care Products ("PPCPs") – WQCC should adopt criteria for 'key PPCPs' detected in NM waters (sulfamethoxazole, loxacin, caffeine, DEET, TDCPP and tris (2-chlorethyl) phosphate). Also adopt criteria for hormones and plasticizers/endocrine disruptors. NMED should also base criteria (HH) on most vulnerable populations and consider criteria for pharmaceuticals and personal care products, including over 150 pollutants identified by USEPA.

SWQB Response 22: Recent concerns regarding PPCPs have made clear the need for further investigation into the potential adverse effects of these chemicals on human health and the environment. Many of the chemicals that make up PPCPs are not necessarily new and have been present in the environment, including in New Mexico's waters, but with advances in technology they are far more detectable. The lack of understanding about their particular health effects and the fact that PPCPs are comprised of thousands of chemical substances makes criteria development difficult at this time. However, the USEPA is investigating PPCPs and developing strategies to help protect the health of both the

environment and the public[4]. Among other issues considered in the need and approach for development of criteria for PPCPs, primary focus is on those chemicals that demonstrate a reasonable potential to adversely affect human health.

Comment 23: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Piscicides –NMED should look at the commenter's internal policy (on piscicide application).

SWQB Response 23: A side by side comparison was conducted of the commenter's policy and the requirements outlined in the water quality standards in Section 20.6.4.16 NMAC. While the requirements in Section 20.6.4.16 NMAC are applicable only to one group of pesticides, i.e., piscicides, they are considerably substantive and clear. SWQB recommends to those considering the application of pesticides to or near surface waters of the state that they should consult with USEPA in order to determine whether they should be covered under NPDES permitting requirements, in addition to adhering to Section 20.6.4.16 NMAC. In other words, it should be made clear that the commenter's policy is guidance, and following their policy does not exempt applicators from state and federal regulations.

Comment 24: AMIGOS BRAVOS/WESTERN ENVIRONMENTAL LAW CENTER - Public Water Supply Use[5] – adopt use-specific criteria for the public water supply designated use.

SWQB Response 24: The public water supply use defined in 20.6.4.7 NMAC applies to public water systems (as defined in 20.7.10 NMAC) required to be regulated under the federal Safe Drinking Water Act (SDWA) and New Mexico's Drinking Water Regulations (Section 20.6.10 NMAC) (NMSA § 74-1-12 and Section 74-1-13; 20.7.10 NMAC). The New Mexico Environment Department Drinking Water Bureau has primacy for the federal Safe Drinking Water Act ("SDWA"), which means it has the authority to implement and enforce the SDWA regulations for public water systems. The state of New Mexico has also passed state drinking water rules under the Environmental Improvement Act (NMSA 74) that incorporate the federal regulations and have additional requirements not covered by SDWA.

In terms of the water quality standards, the antidegradation provisions, general criteria (e.g., narratives) and numeric criteria for bacteria, temperature and pH assigned to the water body segment are linked specifically to the public water supply use. However, in accordance with Subsection F of 20.6.4.11 NMAC, the numeric and general criteria protections assigned to other uses in the segment are also applicable to the water body, and so protect the public water supply.

To set numeric drinking water standards, the USEPA uses a process similar to development of numeric water quality criteria recommendations. First, the USEPA identifies contaminants that may adversely affect public health and occur in drinking water with a

[4] According to the USEPA, to date scientists have found no evidence of adverse human health effects from PPCPs in the environment. See USEPA Website, http://www.epa.gov/ppcp/faq.html

[5] **"Public water supply"** means the use or storage of water to supply a public water system as defined by New Mexico's Drinking Water Regulations, 20.7.10 NMAC. Water provided by a public water system may need to undergo treatment to achieve drinking water quality.

frequency and at levels that pose a public health threat. These may be prioritized for further study, or to determine contaminants to potentially regulate. Second, for those contaminants the USEPA chooses to regulate, a level is set in drinking water below which there is no known or expected risk to health; these levels also include a margin of safety (e.g., they are set lower than the zero or known risk level). Third, the USEPA specifies a maximum contaminant level ("MCL") which is the maximum level allowed in a public water system. These levels are enforceable SDWA standards, and are set as close to the goals as feasible.

The SDWA defines feasible as the level that may be achieved with the use of the best technology, treatment techniques, and other means which the USEPA finds (after examination for efficiency under field conditions) are available, taking cost into consideration. When it is not economically or technically feasible to set a MCL, or when there is no reliable or economic method to detect contaminants in the water, the USEPA instead sets a required Treatment Technique which specifies a way to treat the water to remove contaminants.

Nonetheless, in some cases it may be necessary to consider adopting ambient water quality criteria on a segment specific basis as a preventative approach, to either reduce public water supply treatment costs, or to protect human health. The development of the appropriate numeric water quality criteria requires a thorough examination of the best available scientific information, USEPA guidance, applicable authorities and in this case, coordination with the appropriate state agencies to define and strengthen protections.