<u>Charter Question #1</u>: How can ADEQ define "good water quality" (R18-11-112(D)(3)) more clearly to avoid confusion in determining whether a water is eligible for OAW consideration?

Background

Good water quality is defined in A.A.C. R18-11-112(D)(3) as "surface water that has water quality that meets or is better than applicable surface water quality standards." The current "good water quality" language was adopted as part of the 2002 triennial review, but ADEQ explained in the preamble to that rulemaking that exceptional water quality (or water quality that is "consistently" better than water quality standards) has been one of the primary OAW designation criteria since the inception of the OAW program in 1981. <u>See</u> 8 Ariz. Admin. Reg. at 1365 & 1370 (March 29, 2002). The current OAW rule goes on to state that a surface water that is listed as impaired under R18-11-604(E) is ineligible for OAW classification.

The State of Arizona Water Quality Control Council, under the jurisdiction of the State Department of Health, published a Unique Waters policy in April 1981, with the stated intent of providing special protection to "high-quality waters which constitute an outstanding public resource and in designated waters of exceptional recreational or ecological significance". The 1981 Unique Waters policy provides anti-degradation protections consistent with the CWA Tier 3 classification. The 1981 Unique Waters policy defines high quality as water quality better than standards... "except during abnormal natural circumstances such as flooding" (emphasis added; Arizona Water Quality Control Council Unique Waters Policy, April 8, 1981). The 1981 policy also provides for removal of protected waters "through a process equivalent to" the steps followed to obtain designation as a unique water.

The name of the Unique Waters program was changed to Outstanding Arizona Waters (OAW) in 2008. Throughout its history, the program has emphasized the protection of waters that support exceptional recreational opportunities and/or are ecologically significant, or that are associated with listed threatened or endangered species. Rules governing Outstanding Arizona Waters designation have evolved since 1981. Until 2002, exceptional water quality was a criterion that could be used to support OAW protection, but was not necessary for designation. In fact, state standards currently posted on the EPA website "<u>Water Quality Standards Regulations: Arizona Implementation Guidelines for the State of Arizona Anti-degradation Standard</u>" address the issue of water quality thus: Part IV Tier 3 Procedures Section A (2) <u>Water Quality Requirements</u>. Outstanding water quality is not a prerequisite for Unique Waters designation. The only requirement is that the segment have outstanding value as an aquatic resource meeting the guidelines at R18-11-112. (https://www.epa.gov/wqs-tech/water-quality-standards-regulations-arizona#state)

The "good water quality" requirement which was added in 2002, has resulted in regulatory uncertainty regarding how to treat evidence of certain pollutants that comes to light after the designation.

Discussion:

Position A (Julia Fonseca & Colleen Filippone):

• The activities supported by riparian habitats, including perennial and intermittent rivers, lakes, streams, ponds and springs, draw hundreds of thousands of visitors and new residents to the State of Arizona annually, even as the waters themselves are disappearing due to drought and stresses associated with increasing population. Estimates are that Arizona has lost over 90% of its water-dependent habitats in

the last 100 years. Protection of the waters supporting the most significant and exceptional of these habitats is an investment in the economic vitality and quality of life in the State of Arizona for centuries to come.

- The imposition of the "good water quality" requirement in 2002 resulted in regulatory uncertainty regarding how to treat evidence of certain pollutants that comes to light after the designation. The additional complexity includes questions related to the timing, location and number of samples, discharge rates when the samples are collected, and uncertainty regarding how to treat evidence of certain regulated analytes, especially those that may or may not be of natural origin.
- Furthermore, extending the criterion of "good water quality" to include consideration of stormflows would raise questions about whether it is appropriate to evaluate the "first flush" of stormwater, grab sample after the peak flow has passed, or collect composite water quality throughout a storm event.
- EPA guidance recognizes that the water quality of waters of "exceptional ecological significance...may not be particularly high or...whose characteristics cannot be adequately described by these parameters (such as wetlands)" (Water Quality Standards Handbook <u>https://www.epa.gov/wqs-tech/water-qualitystandards-handbook</u>).
- Returning to the pre-2002 definition by striking the "good water quality" criterion would support ADEQ's philosophy of "radical simplicity" and it is consistent with the approaches adopted by the States of New Mexico and Wyoming.
- Site-specific standards provide the Director with the ability to protect Outstanding Arizona Waters, with
 more stringent standards if needed to support the values for which a water was nominated. The public
 interest in protecting water quality in valued waters as it exists is already recognized in Clean Water Act
 guidance that states that the water quality of waters of "exceptional ecological significance...may not be
 particularly high or...whose characteristics cannot be adequately described by these parameters (such as
 wetlands)" (Water Quality Standards Handbook https://www.epa.gov/wqs-tech/water-qualitystandards-handbook).
- As it currently stands, waters designated as impaired are ineligible for nomination as an OAW (R18-11-112 D3). This D3 provision alone is sufficient to eliminate from nomination, waters that do not comply with CWA guidance.
- Further complicating the concept of "good water quality" is the association of standards with designated uses, which may be removed or modified by the Director on the basis of one or more of several reasons including the presence of <u>naturally-occurring pollutants</u>, flow conditions or natural features, among others (R18-11-104 Section H). Aquatic and wildlife standards set to protect the most sensitive wildlife represent conservative levels and don't consider that a water body may support other critical species that are unaffected, or less sensitive to, the same pollutant.

Position B (Kathy Arnold):

- The notion of water quality that is "consistently" better than applicable standards, which as noted in the 2002 preamble has always been a bedrock of ADEQ's OAW designation approach, is inconsistent with the suggestion that water quality be ignored in OAW designations, or that it only be analyzed in certain flow conditions. With very limited exceptions (e.g., suspended sediment after storm events), Arizona's surface water quality standards apply in all flow conditions.
- While A.A.C. R18-11-602 is specifically related to TMDLs, that rule identifies specific sampling and data quality objectives that are intended to ensure that credible data is used when identifying waters as impaired. Until those standards are met, a water being evaluated for OAW status cannot be fully evaluated to determine if it is not impaired and therefore eligible for listing as an OAW. More broadly, in characterizing water quality for any purpose, and especially for possible OAW designation, adequate data quality and quantity is needed (e.g., data quality requirements would include Quality Assurance Plans, Sampling and Analysis Plans, appropriate field and lab QA/QC procedures, as well as the appropriate laboratory methods and quality control).

- To demonstrate good water quality for a particular parameter, the lab analyzing the sample must achieve detection limits that are equal to or lower than the most stringent applicable surface water quality standard for that parameter.
- Finally, all systems in Arizona have an ephemeral component, whether it is from a headwaters or a storm falling within a basin. ADEQ should not ignore that component when evaluating the water quality, as headwaters may contain pollutant loads that are not consistent with the basins or other tributaries. The system must be fully evaluated in all flow regimes before Tier 3 anti-degradation standards can be implemented effectively.
- Listing a water or segment as an OAW can have significant repercussions, and should only be done if the requisite good water quality has been clearly demonstrated (along with the other required criteria for designation). Moreover, because Tier 3 anti-degradation standards kick in once a segment is designated as an OAW, and those standards prohibit degradation of existing water quality, a robust data set is necessary to demonstrate what existing water quality is under all conditions. Without sufficient information on existing water quality, assessing whether there is degradation of that water quality may be difficult.
- Widespread OAW designations should not be used as a tool for land use control, putting ADEQ in the position of a statewide zoning agency.

Recommendations:

Position A (Fonseca & Filippone):

- 1) We have two proposals for modifying the rule:
 - a. Strike the requirement for "good water quality" entirely, or
 - b. Modify the rule to include the text in bold, as follows: The surface water has good water quality. For purposes of this subsection, "good water quality" means that the surface water has water quality that does not inhibit the values or uses of the surface water identified in subsection D(4)(a) and (b) at the time of its classification, based on available information. A surface water that is listed as impaired under R18-11-604(E) is ineligible for OAW classification, unless the pollutant responsible for the impairment does not inhibit the values or uses of the surface water identified in subsection D(4)(a) and (b).
- 2) ADEQ should: 1) tie the good water quality definition to the values or uses of the surface water identified in the nomination at the time of its classification, based on "the information available at the time of classification" by the Director, consistent with R18-11-112.C.4.
- 3) We oppose the idea of requiring stormwater data for an OAW nomination or classification. As referenced above, since the start of the OAW program, stormwater was explicitly excluded from meeting water quality standards. Imposing a requirement for the collection of new data on the proposer would impose a substantial burden on the public and other stakeholders.
- 4) Stormwater data in particular are costly, difficult or even dangerous to collect, could take years to decades to acquire, and introduce unnecessary complexity related to magnitude, timing and location of storm events, discharge rates, and sample collection. Due to their wide natural variability, stormwater data are also difficult to evaluate in a statistically rigorous framework unless the sample size is large.
- 5) ADEQ should pursue several avenues for establishing a baseline as it relates to anti-degradation. These include sampling within the existing state water quality monitoring program and/or coordination of state sampling with sampling by other public and private stakeholders.
- 6) We object to imposing a requirement for the collection of new data on the proposer.

Position B (Arnold):

The above discussions illustrate the requirements of the statutes and rules that require "good water quality" meet all standards regardless of flow regime. ADEQ should designate a water as an OAW with supportive sampling results that:

1) Are collected at a sufficient number of location to adequately characterize the entire reach of the stream proposed for designation;

2) are collected over a long enough period of time that they ensure water quality is consistently good enough to merit listing as an OAW (this includes reflecting the potential for seasonal variability in water quality);

3) Reflect water quality in and following storm events, which may differ from water quality at other times;

4) Include reasonably current data, to verify that good water quality is currently being achieved;

5) analyze a wide range of parameters to verify that all standards are being met (the range of parameters may differ by water, depending on factors such as current and historic land uses in the watershed, but sampling a wide range of parameters is essential because ADEQ assesses degradation on a pollutant-by-pollutant basis per A.A.C. R18-11-107(A)); and

6) If ADEQ decides that an OAW designation can be made based only on good water quality being present at certain flow conditions, then Tier 3 anti-degradation requirements should be evaluated only for those same flow conditions.

<u>Charter Question #2</u>: Once a water has become an OAW what action should be undertaken to ensure that it is being maintained and protected as a Tier 3 water under R18-11-107(D)?

Background (ADEQ):

Workgroup discussion on this topic focused on the relationship between Tier 3 protections and the establishment of baseline water quality. Some workgroup members reiterated points made relative to Charter Question 1 regarding the concept that waters should be able to be nominated as OAWs regardless of water quality if other high values as described in the rule are present. Other members noted that Tier 3 requirements would still apply in that scenario, and that in order to ensure that an OAW is maintained in accordance with those requirements baseline water quality must be established. No workgroup members offered to write up positions on this topic.

Discussion (ADEQ):

Potential solutions discussed, but not agreed on, included:

- ADEQ requiring that nominees provide enough data with the nomination to establish baseline water quality by which anti-degradation requirements could be measured
- ADEQ assuming responsibility for establishing the water quality baseline either upon nomination, or after an OAW has been designated. To account for the possibility of ADEQ not having sufficient resources and/or capacity to undertake this task, the Department should at a minimum prioritize what data is needed to establish baseline and put together a report that would allow other entities to conduct monitoring adequate to establish baseline water quality.
- Discovery of sources of degradation should trigger additional monitoring by ADEQ.
- ADEQ should share Best Management Practices recommendations with land managers/land owners.

Recommendations (ADEQ):

- OAWs should be protected following the criteria provided in R18-11-107.01(C).
- ADEQ should establish a schedule for monitoring OAWs post designation, perhaps with varying levels (eg. waters with known or suspected sources of degradation would be a higher priority for monitoring).

<u>Charter Question #3</u>: What actions should ADEQ take if data shows that water quality is degrading in or if impairment status is determined on a water that is listed as an OAW?

Background

OAWs are defined in A.A.C. R18-11-101(28) as outstanding state resource waters, and must be identified through a rulemaking process. See A.A.C. R18-11-112(A) & (G). OAWs are designated as part of the broader rulemaking to review (and revise as needed) state surface water quality standards that is required to be undertaken by states every three years (the "triennial review") under Clean Water Act ("CWA") § 303(c)(1), 33 U.S.C. § 1313(c)(1). The decision to classify a water or segment as an OAW is discretionary with ADEQ; ADEQ is not required to classify a water even if it satisfies the applicable criteria for qualifying as an OAW. A.A.C. R18-11-112(D).

OAWs are afforded the highest degree of protection available under state regulations. This is accomplished in two fashions. First, ADEQ may (but is not required to) adopt site-specific standards to protect existing water quality in an OAW, A.A.C. R18-11-112(B). Second, OAWs are automatically afforded the highest protection available under the state's anti-degradation provisions. Specifically, OAWs are classified as Tier 3 waters under the anti-degradation rules, A.A.C. R18-11-107(C). New or expanded point source discharges directly to OAWs are prohibited, A.A.C. R18-11-107.01(C)(2). Regulated discharges (defined in A.A.C. R18-11-101(35)) upstream of OAWs, or to tributaries of OAWs, must not degrade existing water quality in the downstream OAWs, although temporary impacts (less than 6 months in duration) may be allowed, A.A.C. R18-11-107.01(C)(3)-(4). The requirement to maintain existing water quality in waters constituting outstanding national resources is consistent with the federal requirements for state anti-degradation programs described in 40 C.F.R. § 131.12(a)(3).

Discussion:

Position A (Kathy Arnold):

As an initial matter, being able to measure degradation of existing water quality requires that ADEQ possess sufficient information on baseline water quality. The less baseline information ADEQ possesses, the harder it will be to assess whether an apparent lowering of water quality represents degradation from the baseline or merely natural variations in water quality (this problem is particularly acute if the original listing is based on limited water quality data). Similarly, it may be difficult to assess whether degradation of existing water is occurring based on one or a few samples. Adequate data is thus a critical component of assessing potential degradation.¹

If degradation is suspected based on water quality sampling or other reliable evidence, ADEQ should prioritize the water or segment for additional targeted sampling. All sampling should be conducted using reliable QA/QC. If a water is determined to be degraded after being identified as an OAW, ADEQ's response should vary based on the cause of the degradation. The range of responses would include: 1) If the degradation is caused by unpermitted regulated discharges or regulated discharges that violate conditions of an applicable permit, ADEQ's response should be to work to ensure that permits are obtained or that unauthorized discharges cease, and that permitted discharges comply with permit conditions; 2) If the degradation is caused by nonpoint sources or other causes that do not constitute regulated discharges as defined in A.A.C. R18-11-101(35), ADEQ

¹ For purposes of assessing impairment under the TMDL program, ADEQ has adopted rules on data sufficiency. See A.A.C. R18-11-601 et seq.

can work with the sources on a voluntary basis to try and address the causes of degradation if possible. However, ADEQ may have no direct regulatory control over the sources of degradation in this scenario. For example, changes in land use patters near an OAW may affect water quality even if there is no permit noncompliance or unauthorized discharges. This is a factor ADEQ takes into account in deciding whether to classify a water as an OAW (A.A.C. R18-11-112(F)(1)), but long term land use changes are difficult to predict, 3) If the degradation is caused by natural factors, ADEQ will not be able to address it in any regulatory manner; 4) If the degradation results in impairment sufficient to list an OAW as an impaired water, ADEQ should consider prioritizing the water for TMDL development. However, if the reduced water quality is caused primarily by some of the factors listed above that are outside ADEQ's regulatory control (natural conditions, non-point sources, land use changes), then the TMDL listing and subsequent implementation plan may not represent an effective mechanism for addressing causes of the impairment (although the TMDL process may in some cases still be useful as a means to gain more understanding of sources impacting the listed water).

In the last three scenarios listed above, ADEQ may need to consider declassifying the OAW if it no longer exhibits the requisite characteristics under A.A.C R18-11-112(D), ADEQ has no regulatory means to address the issue, and voluntary actions also do not appear to be sufficient. Nothing in the rules forbids ADEQ from declassifying an OAW. This would have to be evaluated on a case-by-case basis.

Position B (Julia Fonseca):

The purpose of an impairment finding is not to have the regulatory agency turn its back on the problem, but instead to focus additional effort on the affected watershed. The TMDL process is the primary effort ADEQ can engage in to improve the "health" of an impaired waterbody. A.R.S. §49-233 and R18-11-606(B) outline criteria for prioritizing impaired waters for TMDL development and implementation. Included on those lists are "Whether the water is accorded special protection under federal or state water quality law," when the water is classified under R18-11-112, when there is significant public interest and support for the development of a TMDL, and the surface water has "important recreational or economic significance to the public." Thus, an OAW would be given priority for action in TMDL development and an implementation plan that reduces discharges of pollutants responsible for the impairment.

Declassifying an OAW would mean lowering anti-degradation standards, eliminating the prohibition against direct discharges, and not prioritizing data collection and studies to define a TMDL. In other words, ADEQ would be throwing away its most potent tools to protect and restore water quality and allowing the problem to worsen. It does not make sense to do so. Declassifying due to impairment would also be contrary to the intent of the Clean Water Act, which is to restore biological, physical and chemical integrity. The Clean Water Act was created because the American people did not give up on their polluted streams, but looked for ways to improve water quality and restore uses that people once enjoyed.

Increased monitoring and TDMLs help define appropriate follow-up actions and locations to rectify the pollutant of concern. These might include: moratoria on certain nonpoint sources in certain locations, Water Quality Improvement Grant funding, WIFA funding, providing land owners/ managers with best management practices for control of the pollutant, requiring Individual Permits rather than General Permits for certain discharges, and engaging public attention for environmental protection efforts and for voluntary action.

To interpret the existing rule as requiring declassifying OAWs due to subsequent impairment would be viewed by many as capricious, given that ADEQ has never interpreted the rule this way. OAWs are nominated through a public process, and designated through rule-making. The process ensures careful consideration of economic impacts and concerns and values of local communities. Automatically declassifying an OAW because of an impairment designation would mean getting rid of public notices and

meetings, and denying others, including land managers, the opportunity to comment or bring forward additional information.

Declassifying an OAW due to impairment seems to be based on retroactively applying the requirement for "good water quality" for listing an OAW. It somehow implies that the impairment should have been known to ADEQ prior to the designation. If that is the argument, then those who believe in this approach should collect and submit their data, and / or appeal the decision at the time the water body in question was nominated to the OAW classification. The criterion that disqualifies new OAW designations on existing impaired streams was added in 2002, when environmental groups nominated Pinto Creek as an OAW. Many of the existing OAWs, including Oak Creek, were designated when there was no such prohibition, and no available data. It would be inconceivable to retroactively apply the criterion after ADEQ has deliberated on the available data, due to new data.

Another consideration is the fact that exceptional recreation or ecological values may persist despite the impairment. The value of an OAW for recreation, ecological significance, or support to endangered or threatened species may be unrelated to the specific pollutant for which impairment was determined. Declassifying in such an instance would throw the "baby out with the bathwater", and potentially for no cause in relation to the values for which the designation was granted.

If regulations provided for declassifying of an OAW because of an impairment that is detected, such a provision could incentivize polluters to intentionally discharge high levels of pollutants to a stream. Such an approach would allow them an avenue to keep ADEQ from imposing Tier 3 anti-degradation criteria.

Recommendations:

Position A (Kathy Arnold):

- 1) If degradation of an OAW is suspected based on sampling results or other reliable evidence, ADEQ should prioritize the water or segment for additional targeted sampling to the extent possible. Sampling should be conducted using reliable QA/QC.
- If water quality in an OAW is determined to be degraded based on reliable and sufficient sampling, then ADEQ's response should depend on the cause of the degradation. TMDL development will not be required in all cases; regulatory or voluntary actions may be sufficient in some cases. Declassifying a water as an OAW should also be an action ADEQ ultimately can take.
- 3) ADEQ should require sufficient information to determine "good water quality" as part of the nomination process for all flow regimes prior to designating a water an OAW. Considerations regarding the "ability to manage the surface water and its watershed to maintain and protect existing water quality" found in R18-11-112(F) is important in the initial evaluation of a proposed OAW.

Position B (Julia Fonseca):

- 1) An OAW should be given priority for action in TMDL development and an implementation plan that reduces discharges of pollutants responsible for the impairment.
- 2) ADEQ should not declassify an OAW water, for the following reasons:
 - a. An OAW should not be declassified due to water quality impairment because it would mean lowering anti-degradation standards, eliminating the prohibition against direct discharges, and not prioritizing data collection and studies to define a TMDL. In other words, ADEQ would be throwing away its most potent tools to protect and restore water quality. Delisting due to impairment would also be contrary to the intent of the Clean Water Act, which is to restore biological, physical and chemical integrity.
 - b. ADEQ should not interpret the existing rule as requiring declassifying of OAWs due to subsequent impairment. This would be viewed by many as capricious, given that ADEQ has never interpreted

the rule this way. Also, depending on the pollutant, there may be no impairment of the values for which the classification was made.

- c. OAWs are designated through rule-making. The existing process ensures careful consideration of economic impacts and concerns and values of local communities. Declassification due to an impairment would mean getting rid of public notices and meetings, and denying others, including land managers, the opportunity to comment or bring forward additional information.
- d. ADEQ should not declassify an OAW because of an impairment that is detected, such a provision could incentivize polluters to intentionally discharge high levels of pollutants to a stream.

Charter Question #4: Should ADEQ consider modifying the flow-regime based OAW eligibility requirements in this rulemaking? If so, what changes are recommended by the workgroup, and why?

Background

From 1981 to 2002, flow regime was not used to determine eligibility. In 2002, the rule was amended to refer to "perennial" water. In its 2002 triennial review, ADEQ was faced with 37 nominations to designate waters as OAWs. In response to these numerous nominations, ADEQ clarified that ADEQ has discretion to classify surface waters as OAWs even if waters meet the criteria identified under the OAW rule. 8 A.A.R. 1299 (March 29, 2002). ADEQ also explained that it was adding more specific eligibility criteria for OAW classifications because the current grounds for OAW classification were "broad and general" and failed to properly guide the exercise of the agency's discretion in making OAW decisions. In response to this concern, ADEQ specifically determined and justified the addition of three OAW eligibility requirements to the OAW rule, and explained that the criteria were modeled on similar requirements under the federal Wild and Scenic Rivers Act: (1) a surface water must be perennial; (2) a surface water must be in a free-flowing condition; and (3) a surface water must have good water quality.

Then in the 2009 standards, ADEQ changed the OAW flow requirement to include "intermittent" in addition to "perennial" waters. ADEQ stated in the preamble that "*The Department has concluded that there should be no prior restrictions on the eligibility of a surface water for consideration as an Outstanding Arizona Water based on flow regime. All surface waters should be eligible for nomination for Outstanding Arizona Water classification and a nomination for OAW classification should be considered on its merits. The Department is persuaded that prior restrictions of OAW eligibility based on flow may restrict consideration of intermittent waters that may qualify as OAWs because they are of exceptional recreational or ecological significance, essential to the maintenance and propagation of a threatened or endangered species or provide critical habitat for a T&E species." Although ADEQ's stated intention was not to limit eligibility, the definitions of perennial and intermittent that are used in the rule have had the effect of causing confusion. For instance, what to do with intervening ephemeral reaches that occur along streams that flow perennially or intermittently? In Arizona and other semi-arid areas, interrupted stream flow is a natural, regular and reoccurring feature and flowing segments are often separated by ephemeral reaches which vary in length between seasons and from year to year. This natural variability confounds arbitrary or permanent distinctions among perennial, intermittent and ephemeral waterbodies as defined in rule.*

ADEQ modified the OAW charter to consider the broader question of modifying the criteria by which the Director may classify a surface water as an OAW. No consensus was reached across the work group for flow regime, but three positions were identified: 1) drop D.1. altogether; 2) retain current D.1. wording; and, 3) limit OAW designation to perennial waters.

Discussion:

Position A (McFarlin, Fonseca and Mizell):

We recommend striking the D.1. flow requirement entirely. Retaining the definition as written requires use of monitoring data. But available monitoring data can underrepresent the true variability of flow regime over time and space, leading to later questions about whether the designation was appropriate. Using flow regime as a criterion provides an incentive to those who might de-water streams to remove the protections.

We discussed that drought, climate change, groundwater pumping, plant succession, wildfire, and alteration of the watershed by land use have historically resulted in changes in flow regime and will continue to do so. The year 2018 represents the 21st year of long-term drought in Arizona. Data from the University of Arizona's Tree Ring Laboratory confirms that this period of drought is unprecedented in the past 700 years. The Lab reports that drier winters and below average mountain runoff occurred for six consecutive years from 2010-2016. Drought affects both surface water and ground water. According to the US Geological Survey, "reduced groundwater levels due to drought or increased pumping during drought can result in decreased water levels and flows in lakes, streams and other water bodies. Natural wet and dry cycles result in streams that may be perennial one year and intermittent the next, or the next.

The natural and anthropogenic variability calls to question the usefulness of imposing the criterion during the designation process. It turns out that other Western states do not use flow regime as a criterion for their outstanding waters designations (see Bird and King, Wild Earth Guardians 2011).

D.1. is also unnecessary because stream flow is considered under D.4. If the flow regime is perennial or a typical mixed stream flow reflecting climatic variances, then this characteristic is part of the conditions in place which support 4.a and/or 4.b. The values for which an OAW has been or will be nominated require a set of conditions sufficient to support exceptional recreational or ecological significance and/or support for endangered and/or threatened species. The very presence of the exceptional values demonstrates the presence of a suitable flow regime, whatever it may be.

Position B (Lee Decker):

There is no clear legal justification in the federal Clean Water Act or its implementing regulations and guidance for requiring the designation of waters as "outstanding national resource waters" or ONRWs. In fact, in 1982, EPA proposed to revise its anti-degradation policy to remove protection for ONRWs on the basis that "the Clean Water Act does not provide for special designations of national resources waters." 47 Fed. Reg. 49239 (Oct. 29, 1982). Although EPA recognized that the Clean Water Act did not support its antidegradation policy for ONRWs, it ultimately kept such protections after reviewing public comments proposing to remove such protections. 48 Fed. Reg.51402 (Nov. 8, 1983). Consistent with EPA's recognition that the Clean Water Act does not provide for specific designations of ONRWs, the EPA Office of General Counsel concluded in 1989 (see https://www.epa.gov/sites/production/files/2014-10/documents/diamondoutstanding-memo.pdf) that States have discretion to make such designations and that EPA will not second guess such decisions. EPA's Water Quality Standards Handbook, Chapter 4, page 2 (2012) provides further support for this understanding in its discussion of the Tier 2½ anti-degradation approach that some States implement to avoid the negative effects of ONRW designations and the resulting Tier 3 anti-degradation requirements: "The supporting rationale that led to the development of the Tier 2½ concept was a concern by the States that the Tier 3 ONRW provision was so stringent that its application would likely prevent States from taking actions in the future that were consistent with important social and economic development on, or upstream, of ONRWs." This concern is a major reason that relatively few water bodies are designated as ONRWs.

The severe repercussions of ONRW designations and associated Tier 3 anti-degradation requirements are clearly noted in the NGO publication *Clean Waters, Wild Forests – A Citizen Manual for Designating Outstanding Waters in the Wild Forests of the Western United States* (Wild Earth Guardians Sept. 2011) ("Citizen Manual"). On page 8 of the manual is the following admission: While States and Tribes are required to include all tiers of water quality in their anti-degradation policies, they are given discretion with regards to actual designation of waters. States and Tribes, therefore, can choose not to designate any waters as ONRWs if they feel the EPA-imposed restrictions are too high. The manual further documents that as of 2011, several western states (i.e., Idaho, Nevada, North Dakota, South Dakota, Oregon, Utah, and Washington) had not designated any waters as ONRWs. In fact two of these state (i.e., Nevada and Utah) did

not even mention such water classifications in their respective water quality standards. Further, as of 2011, California had designated only two waters as ONRWs (i.e., Lake Tahoe and Mono Lake) and Montana and Wyoming both limited their ONRW designations to state waters contained within the boundaries of national parks and congressionally designated wilderness areas.

Unlike most other Western States, ADEQ has classified a substantial number of water segments (i.e., 22 to date) across Arizona as ONRWs, known in Arizona's surface water quality standards as outstanding Arizona waters or OAWs. *See* A.A.C. R18-11-112. In accordance with the federal anti-degradation policy, Arizona's surface water quality standards impose stringent Tier 3 anti-degradation requirements on waters classified as outstanding Arizona waters" (OAWs). Tier 3 anti-degradation requirements include a general prohibition against degradation as well as a specific prohibition against any new or expanded point-source discharges directly to an OAW. A.A.C. R18-11-107(D) & R18-11-107.01(C)(2). Such requirements also impose limitations on upstream discharges and land use. A.A.C. R18-11-107.01(C)(3). With respect to the requirement that a surface water must be perennial, ADEQ explained that "a surface water must flow continuously throughout the entire year" and that "[e]phemeral waters and intermittent surface waters are ineligible for [OAW] classifications."

When proposing changes to Arizona's water quality standards in 2008, ADEQ proposed to change the OAW flow requirement it had just established in 2002 to include "intermittent" in addition to "perennial" waters. 14 A.A.R. 1339, 1348 (April 25, 2008) (Notice of Proposed Rulemaking). Although the April 2008 proposal contained a preamble section describing changes to the OAW rules in A.A.C. R18-11-112, there was *no* explanation for the proposed flow regime change except for a statement that "Davidson Canyon contains perennial and intermittent reaches." 14 A.A.R. at 1288. ADEQ finalized its proposed April 2008 revisions in December 2008. In response to comments criticizing ADEQ's flip-flop on this issue, ADEQ stated: The Department has concluded that there should be no prior restrictions on the eligibility of a surface water for consideration as a [sic] [OAW] based on flow regime. All surface waters should be eligible for nomination for [OAW] classification and a nomination for OAW classification should be considered on its merits. 14 A.A.R. 4806-07 (Dec. 26, 2008).

Recommendations:

Position A (McFarlin, Fonseca, and Mizell):

We recommend striking the R18-11-112.D.1. flow requirement entirely.

Position B (Lee Decker):

Based on the above discussion, ADEQ should revise the eligibility criteria to allow OAW nominations and designations only for waters that have a perennial flow regime. The severe repercussions that result from OAW classification (i.e., implementation of Tier 3 anti-degradation requirements) should be limited to very narrow circumstances and maintaining a perennial flow regime requirement will ensure that the classification is applied narrowly by ADEQ and is not used to inappropriately restrict economic development including otherwise authorized land uses.