October 26, 2026

Via Comment Portal
and Email: (tmdl@azdeq.gov, white.zac@azdeq.gov)

Arizona Department of Environmental Quality
Water Quality Division
Surface Water Sampling & Source ID
Attn: Mr. Zachary White
1110 W. Washington St.
Phoenix, AZ 85007

Re: Comments on Draft Total Maximum Daily Load (TMDL) for Copper and Lead in the Upper Queen Creek Watershed (HUC 1505010004)

Dear Mr. White:

These comments are submitted by the below-listed signatories to the Arizona Department of Environmental Quality (ADEQ) regarding the draft Total Maximum Daily Load (TMDL) for copper and lead pollution (impairments) on the Upper Queen Creek Watershed published for public comment on September 18, 2026 (draft TMDL).[1] This draft TMDL covers three segments of Queen Creek, Arnett Creek, and an unnamed tributary to Queen Creek, UQ3.

The federal Clean Water Act (CWA) Section 303(d) requires ADEQ to identify impaired surface waters, then establish TMDL calculations to identify pollutant reductions and manage discharges to bring those surface waters back into compliance. ADEQ has documented that the water segments of Queen Creek have failed to meet federal water quality standards due to excessive dissolved copper since 2002, and lead since 2010.

ADEQ has not completed a TMDL on these impairments to date. While a draft TMDL was released in 2017, it was abruptly suspended with only a limited explanation. Many of the undersigned submitted comments to the 2017 TMDL, noting a wide range of inadequacies with the TMDL, including the ADEQ's apparent attempt to justify future discharges of water to Queen Creek by Resolution Copper, despite existing impairments for Copper. Our comments on that prior draft are attached (see **Attachment A**).

In 2023, the Arizona Mining Reform Coalition and four other plaintiffs filed a lawsuit in federal court due to ADEQ's multi-decade prolonged failure to complete a TMDL, a schedule, and credible plan for producing a TMDL on these impairments to Queen Creek waters.[2] *Arizona Mining Reform Coalition, et al. v. Guzman, et al.*, Case No. 2:23-cv-02038-SRB. In December

[1] ADEQ's Public Notice: https://azdeq.gov/node/11404
[2] *See* Press Release: "Lawsuit Launched Seeking EPA Pollution Limits for Arizona Creek Threatened by Copper Mine" (August 9, 2022).

2023, a Consent Decree was entered, directing that the long-overdue Queen Creek TMDL should be completed by particular deadlines (see **Attachment B**). The current draft TMDL was prompted because of this lawsuit. ADEQ does not acknowledge the Consent Decree in the draft TMDL or in its public notice, nor does ADEQ provide any explanation for the long delay in this TMDL process. It is evident from our detailed review of the TMDL history and background, that ADEQ has struggled for many years to reconcile the differences between naturally occurring background sources of copper and the hundreds of old mining operations across the basin. It also is evident that ADEQ has yet to fully address how the loading from these naturally occurring and historic mine sources can be reconciled with the potential for discharges from existing Resolution Copper Mine (RCM) AZPDES Permit No. AZ0020389.

COMMENTING ORGANIZATIONS

We wholly join in and support the comments of the San Carlos Apache Tribe on this draft TMDL dated October 6, 2026, and stand in solidarity with the San Carlos Apache Tribe on this important issue.

Arizona Mining Reform Coalition works in Arizona to improve state and federal laws, rules, and regulations governing hard rock mining to protect communities and the environment. AMRC works to hold mining operations to the highest environmental and social standards to provide for the long term environmental, cultural, and economic health of Arizona. Members of the Coalition include the Center for Biological Diversity, Concerned Climbers of Arizona, EARTHWORKS, Maricopa Audubon Society, Save the Scenic Santa Ritas, Grand Canyon Chapter of the Sierra Club, Sky Island Alliance, Tucson Audubon Society, and the Valley Unitarian Universalist Congregation, and a few other organizations.

The Center for Biological Diversity is a non-profit public interest organization with headquarters located in Tucson, Arizona, representing more than 1.5 million members and supporters nationwide dedicated to the conservation and recovery of threatened and endangered species and their habitats. The Center has a long-standing interest in projects of ecological significance undertaken in the National Forests of the Southwest, including mining projects.

The Sierra Club is America's largest and most influential grassroots environmental organization, with millions of members and supporters. In addition to protecting every person's right to get outdoors and access the healing power of nature, the Sierra Club works to promote clean energy, safeguard the health of our communities, protect wildlife, and preserve our remaining wild places and water through grassroots activism, public education, lobbying, and legal action. The Grand Canyon Chapter has long worked to protect Arizona's rivers and streams.

Earthworks is a national charitable organization dedicated to protecting communities and the environment from the impacts of hardrock mining, while pursuing responsible mineral supply chain solutions. Earthworks and our members in Arizona have long sought protections for Queen Creek from copper mining.

Concerned Citizens and Retired Miners Coalition is a group of citizens who: 1) reside in Superior, Arizona, or do not reside in Superior, Arizona, but are affiliated with relatives who are

residents; 2) are retired hard-rock miners who previously worked in the now non-operational mine in Superior, Arizona, and were displaced due to mine closure or personal disability; or 3) are individuals who are concerned that important U.S. public recreational land will be conveyed to a foreign mining company for private use.

TMDL OVERVIEW

The Clean Water Act (33 U.S.C. §§ 1251 *et seq.*) requires states to identify all polluted (impaired) waters within their boundaries, and then develop total maximum daily loads (TMDLs) for those impairments. The purpose of a TMDL is to determine the total amount of pollutants impairing a water body from all sources, then calculate the necessary reductions of that pollutant by each source to bring the water body back into compliance with water quality standards.

This calculation is legally required to include all existing or future sources of pollution from both point source and nonpoint sources. 40 C.F.R. Part 130.2(i). The mathematical formula is shown below:[3]

$$\mathbf{TMDL = \Sigma WLA + \Sigma LA + MOS}$$

Wasteload Allocations (WLA) are "the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution." 40 C.F.R. Part 130.2(h) (Emphasis added). Load Allocations (LA) are "the portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources." 40 C.F.R. Part 130.2(g) (Emphasis added). A Margin of Safety (MOS) is included to account for uncertainty.[4]

Once a TMDL is completed, a TMDL Implementation Plan is required under Arizona law which "explains how the allocations and any reductions in existing pollutant loadings will be achieved." A.R.S. § 49-234(G). In addition, the Plan "shall provide the time frame in which compliance with applicable surface water quality standards is expected to be achieved." A.R.S. § 49-234(H).

COMMENTS

While the undersigned appreciate ADEQ's efforts to finally fulfill its obligation under the Clean Water Act and Arizona law to complete a TMDL in this case, these efforts fall short of ADEQ's legal requirements under the Act. As discussed in greater detail below, our review reveals several fatal flaws in the methodologies used by ADEQ in preparing the TMDL, as well as material inaccuracies in ADEQ's analysis and the conclusions reached. Accordingly, because the draft TMDL fails to comply with the Clean Water Act and applicable laws, ADEQ should not finalize the TMDL as written, but rather, it should retract the draft TMDL to remedy these major errors, including reconsidering the appropriate limits for loading in the impaired reaches of these water bodies.

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[3] Source: https://www.epa.gov/tmdl/overview-total-maximum-daily-loads-tmdls
[4] *See* FN3.

1. The TMDL Will Not Lower Impairment Levels to Safe Limits

Existing Copper Impairments In Queen Creek Increased by Over 18,000%?

ADEQ's description of the existing pollution loads in these impaired waters is questionable and inconsistent with historical information. According to the 2017 draft TMDL, dissolved copper impairment in Queen Creek's waters ranged from 24.2 grams per day (g/d) to 101 g/d. Draft 2017 Queen Creek TMDL at 40. By contrast, the current draft TMDL now claims that existing impairment levels of dissolved copper in Queen Creek's waters range from 125.288 g/d to 19,051 g/d. *See* Draft TMDL, Tables 17-22, at 46-51 (figures converted from mg/d). The 2017 draft TMDL did not address lead impairments, but we are similarly concerned about the integrity of these existing pollution load figures.

Without additional explanation and factual information, ADEQ has failed to support its finding that existing copper pollutant loading in Queen Creek has increased by a factor of nearly two hundred when only minimal additional sampling was taken and most of which was not even used: "Additional data was taken for the 2023 to 2024 sampling effort, however, that data was not used due to not meeting QA/QC criteria." Draft TMDL at 33. "The bulk of water quality data were collected prior to 2014 with only occasional sampling events between 2014 and 2025." Draft TMDL at 13 (emphasis added); *see also* Queen Creek Watershed HSPF Modeling Report at 13 (2026). Thus, ADEQ noted that water quality calibration in the Queen Creek HSPF model "inherently focused on the 2007-2010 period because 78% of the data were collected in these years." RESPEC Memo to Resolution Copper, July 31, 2026 at 10 (obtained from ADEQ via public records request). In short, ADEQ has wholly failed to support its finding that existing copper pollutant loading in Queen Creek has increased by a factor of nearly two hundred. Surely this is not all attributable to "brake dust."

It is also entirely unclear what became of the more recent sampling ADEQ was purportedly gathering pursuant to the Consent Decree in *Arizona Mining Reform Coalition, et al. v. Guzman, et al.* Indeed, ADEQ reported to EPA in its Court Ordered Status Report at 2, June 15, 2026, that ADEQ collected one set of surface water samples from Queen Creek in January 2026. It later confirmed that additional sampling would be taking place. *See, e.g.,* Status Report at 3, December 15, 2025 ("ADEQ intends to continue surface water sampling in the Queen Creek Watershed . . . "). Status Report at 2-3, June 13, 2025 ("Weston completed surface water sampling in Queen Creek on May 7, 2025." And "ADEQ has informed the EPA that it intends to continue surface water sampling in the Queen Creek watershed beyond the sampling conducted by Weston, until the TMDLs are drafted, to continue to inform the modeling.). It is concerning and naturally suspicious to the undersigned that ADEQ is now silent about, and did not include, any sampling data from 2025-2026. If this sampling data existed, as ADEQ stated in the Court Ordered Status Reports, ADEQ's TMDL modeling was certainly not rerun to include any of this new data. ADEQ should either include this sampling or justify why this sampling was not used.

As noted above, ADEQ fails to explain or justify why existing pollution loads have supposedly increased by two hundred-fold. Surely a radical increase like this would warrant some analysis, justification and discussion in the draft TMDL, but ADEQ's materials remain silent on this account.

TMDL Mass Limits Increased By Over 3,000%?

In addition to the foregoing concerns, it is also noteworthy that the TMDL-imposed limits have also skyrocketed between the 2017 draft TMDL and the current draft. ADEQ's prior draft TMDL from 2017 proposed a mass-based TMDL level of 55 g/d (grams per day). The current draft TMDL appears to contain (buried deep within Tables 17-22 at pages 46-51 and never stated in the narrative and explanatory materials) mass-based TMDL loads which are exponentially larger than the 2017 proposal. These new proposed limits would allow up to 1,679 g/d (more than 1.6 kilograms) of dissolved copper into certain reaches of Queen Creek – over thirty times higher than what the draft 2017 TMDL proposed. This is inconsistent, in our view, with the purpose of the Clean Water Act and requirements of Arizona law.

The current draft TMDL also contains a concentration-based TMDL limit of 10.5 µg/L or 27.6 µg/L for dissolved copper depending on the designated waterbody use, and a limit of 15 µg/L for total lead. However – once again – ADEQ wholly fails to offer any explanation of the relationship between the mass-based and concentration-based limits. This should be rectified in a new TMDL. Moreover, these figures also require additional data to be properly compared by ADEQ or the public and yet, these data were neither provided nor explained by ADEQ. This results in the following questions (and unrectified ambiguities) in the TMDL, that is, which limit would ultimately apply – both or only one or the other? How are discharge volumes to be factored into these levels? These questions are never answered and ADEQ has not made itself available to publicly answer these questions.

In the most fundamental sense, ADEQ has failed to explain or justify how these large volumes of water, once discharged into Queen Creek (including under the RCM AZPDES), will not further impair the waters of Queen Creek in violation of Clean Water Act. *See* **Attachment A**. Setting a sky-high mass-based TMDL limit based on a questionably high impairment figures does not protect Queen Creek's waters. Thus, we are concerned that ADEQ's proposed actions here will enable high-volume dischargers to further impair the waters of Queen Creek – all without requiring any reductions.

2. The Draft TMDL Calculation Fails to Meet Applicable Legal Requirements

ADEQ deliberately ignored and excluded the RCM AZPDES, which is the largest individually-permitted point source discharger in the upper Queen Creek watershed, from the TMDL model analysis. "Neither of the Resolution Copper Mining outfalls are included in the model used for the TMDL analysis because they have not discharged for more than 10 years from either of the two outfalls. Instead of discharging at 002, treated water from this plant is pumped outside the watershed for irrigation purposes." Draft TMDL at 20. They "are set to zero load in the load-based charts". Draft TMDL at p.25-26. We are perplexed that ADEQ has concluded it can proceed with this TMDL without looking at all the available data including modeling the potential impacts by the largest permitted discharger in the watershed. The draft TMDL is also silent about whether (and if so – how) the RCM AZPDES data was included in any other aspect of the TMDL calculations.

RCM holds a AZPDES right now. It could discharge to Queen Creek at any time under this permit. Specifically, the current RCM AZPDES permit (renewed in 2024) permits the

discharge of at least 3.28 MGD from Outfall 002 into Queen Creek with no upper limit[5]. AZPDES No. AZ0020389, Final Permit Fact Sheet, September 25, 2024 at 3. While it is true that RCM voluntarily routes water off-site for irrigation, "[w]hen irrigation is not an available option, the treated water can be discharged through Outfall 002." *Id.* The current RCM AZPDES permit also permits the discharge of an unrestricted volume of overflow of treated water from the West Plant Site from storms exceeding 10-year 24-hour levels into Queen Creek from Outfall 001. *Id.* at 11. In this day and age of climate change, Super El Niños, and other unanticipated severe and extreme weather events ADEQ's decision to ignore this currently permitted potential discharge is unjustified and inconsistent with the purposes of the Clean Water Act.

Indeed, for many years, ADEQ has assured the public that a TMDL will include these discharges. We and many other commenters have repeatedly raised concerns about how RCM AZPDES and a forthcoming TMDL would be reconciled. In turn, ADEQ has repeatedly stated that a TMDL will incorporate these discharges. For example, ADEQ stated in 2024 while it was also working on this TMDL:

Is the receiving water on the 303(d) list?	Yes, the receiving water is listed as impaired for Copper (dissolved) (2002), lead (total) (2010), selenium (total) (2012). The TMDL has not yet been completed. The facility is an existing discharger and as such, the AZPDES copper permit limits will be evaluated and incorporated into the TMDL calculations.

Excerpt from AZPDES No. AZ0020389, Final Permit Fact Sheet, September 25, 2024 at 4 (highlights added).

ADEQ has made this same assurance many times before, including in 2016 (Final Permit Fact Sheet for RCM AZPDES renewal, November 21, 2016 at 3), and in 2010 (Summary and Response to Public Comment for RCM AZPDES renewal, September 13, 2010 at 14) ("*The facility is an existing discharger and as such, will be included in the TMDL*.") (Emphasis in original). It is now evident that ADEQ had no intention of keeping this promise.

Promise or not – ADEQ is legally required to include this data in its TMDL calculation. Federal regulations require that all individual wasteload allocation from existing or future point sources must be included in a TMDL calculation. 40 C.F.R. Part 130.2(h), Part 130.2(i). EPA guidance also specifies that TMDL is a calculation of loading "from all sources" including point, nonpoint, and background. *See* EPA Guidance for Water Quality-based Decisions: The TMDL Process at 19 (1991). Arizona law defines TMDL as "an estimation of the total amount of a pollutant from all sources". A.R.S. § 49-231(4). Simply put - there is no legal basis for ADEQ's decision to selectively exclude major permitted dischargers from its TMDL calculation. To decline to even model a known permitted source of discharge defies logic and basic scientific rigor. It also violates the Clean Water Act.

As ADEQ is well aware, RCM AZPDES is a point source. ADEQ also knows the facility is permitted to discharge from Outfall 001 and Outfall 002 into Queen Creek and may do so at any time. The Maricopa County Superior Court has also made this point: "Of course, the fact that

[5] 3.28 MGD is approximately 10.07 acre-feet per day.

[Resolution Copper] has refrained from discharging permitted waste water in the past is no guarantee that it will continue to do so in the future." Order, *San Carlos Apache Tribe, et al. v. Arizona, et al.* at 2, No. LC2019-000264-001 DT (March 25, 2021). So has the Arizona Supreme Court, which noted that while Resolution has sent treated wastewater to the irrigation district, "circumstances could change." Opinion, *San Carlos Apache Tribe v. State* at ¶ 17, No. CV-22-0290-PR (June 27, 2024).

Given ADEQ's longstanding commitments to consider the RCM AZPDES in its TMDL as required by the Clean Water Act, ADEQ's decision to do precisely the opposite calls the veracity of this entire TMDL process into question. ADEQ should retract and revise the draft TMDL to include all discharges permitted in the RCM AZPDES permit. This includes both Outfall 002, and the untreated stormwater overflow discharge allowed from Outfall 001 under the RCM AZPDES permit (which is unmentioned in the current draft TMDL). It should also rerun the model used for the TMDL analysis to include this data in order to properly understand all impacts. Without this, the TMDL calculation is not complete nor legally compliant, and cannot be relied upon to protect the waters of Queen Creek.

3. The Draft TMDL Imposed No Mandatory Reductions on Any Sources

Queen Creek is undeniably impaired. According to ADEQ's TMDL figures (questioned above), pollutants must be reduced by up to 99.5% for dissolved copper and up to 90.5% for lead for the waters to come back into compliance with water quality standards. Draft TMDL at 12, 43-44.

Yet ADEQ did not assign any mandatory copper or lead reductions to individual AZPDES permittees. Draft TMDL at 43. The only reductions are placed on nonpoint sources. Draft TMDL, Tables 17-22, at 46-51. This is unenforceable and cannot lead to any actual reductions in pollutant loading, since under Arizona law, reductions in loadings from nonpoint sources can only be voluntary. A.R.S. § 49-234(G). Despite not modeling any of the RCM AZPDES discharges in its TMDL calculation process, ADEQ has created an untenable scenario on the back end where all of the wasteload allocations (point sources) are awarded existing loads which are equal to allocated loads across the board – meaning none of them are required to make any reductions.

Essentially, ADEQ has assigned all of the necessary reductions on parties that cannot be required to act and exercised none of the authority it has over permittees, including the largest permitted discharger in the entire watershed. ADEQ cannot provide reasonable assurance to EPA, commenters, or the public that that reduction in pollutant loadings can ever occur. In such cases (as here), EPA directs that the entire load reduction must be assigned to point sources.

> "In order to allocate loads among both nonpoint and point sources, there must be reasonable assurances that nonpoint source reduction will in fact be achieved. Where there are not reasonable assurances, under the CWA, the entire load reduction must be assigned to point sources."

EPA Guidance for Water Quality-based Decisions: The TMDL Process at 15 (1991).

ADEQ has not done this. It has done the complete opposite – provided neither reasonable assurances nor assigned any load reductions on point sources.

ADEQ has previously exercised its authority to impose copper reductions in its approvals of the RCM AZPDES following completion of the TMDL. In the 2010 RCM AZPDES renewal, ADEQ stated:

E. REOPENER

1. This permit may be modified per the provisions of A.A.C. R18-9-B906, and R18-9-A905 which incorporates 40 CFR Part 122. This permit may be reopened based on newly available information; to add conditions or limits to address demonstrated effluent toxicity; or to implement

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any EPA-approved new Arizona water quality standard; or to re-evaluate reasonable potential (RP), if Assessment Levels in this permit are exceeded.

2. Bioassessment requirements in this permit may be reopened and modified in accordance with the requirements set forth at 40 CFR Parts 122 and 124 to reflect changes in Arizona's water quality standards regarding biological monitoring of receiving waters or formal adoption by rule of state bioassessment methodologies (or changes to those methodologies once formally adopted).

3. This permit shall be reopened when the Total Maximum Daily Load (TMDL) for this water segment (Headwaters to Superior WWTP) is completed. Within 60 days of EPA's approval of the final TMDL, the permittee shall submit a plan and schedule for timely compliance such that discharges conform to any applicable provision of the TMDL.

Excerpt from AZPDES No. AZ0020389, Final Permit, Part IV.E, December 6, 2010 at 21-22 (highlights added).

Although ADEQ deleted this provision from subsequent iterations of the RCM AZPDES permit with no notice, they have the authority and obligation to impose this requirement. Nevertheless, ADEQ is required by law to incorporate TMDLs into future discharge permit amendments or renewals. As EPA explains: "Under EPA's permitting regulations, water quality-based discharge limits in NPDES permits must be 'consistent with the assumptions and requirements' of wasteload allocations in EPA-approved TMDLs." EPA Overview of TMDLs, citing 40 C.F.R. 122.44(d)(1)(vii)(B).

As discussed in these comments, the current draft TMDL is fundamentally flawed. ADEQ must rescind and revise the draft TMDL to be legally compliant. A TMDL must properly include, model, and analyze of all impairment sources in the watershed – and this draft TMDL does not. Once a legal, protective TMDL is created, it must be incorporated into the RCM AZPDES permit and any future permitted point source dischargers.

4. Historic Mining and Background Sources Of Pollution Are Inappropriately Combined

ADEQ mischaracterizes the nature of nonpoint source pollution in the draft TMDL by including legacy mining sites located across the Queen Creek watershed. Draft TMDL at 19. In the draft TMDL, nonpoint source pollution is described as "primarily driven by stormwater

runoff eroding highly mineralized soils and legacy mining features over the previously documented mined land". Draft TMDL at 55. A large amount of dissolved copper pollutant loading in Queen Creek is attributed to this "undeveloped land." Table 13, Draft TMDL at 36. By ADEQ's own description, a portion of the "undeveloped land" is actually previously-disturbed historic mining land, not natural untouched land at all.

This erroneous conclusion undermines the value and scientific rigor of the TMDL. First, ADEQ only recently (this year) completed an effort to "identify potential [abandoned mine land] features on the landscape for further investigation." Draft TMDL at 57. This means that throughout the development of the draft TMDL, ADEQ has been entirely unaware of the actual location, scope or extent of potential abandoned mines in this watershed and there has yet to be an investigation of these identified abandoned mines by ADEQ. One or more of these abandoned mine lands could be (and likely are) point sources of discharge which should have been included in this TMDL as WLAs – and thus, be subject to mandatory reduction limits – and yet, ADEQ acknowledges that on this point, ADEQ is completely unaware.

For example, the historic Magma Copper Smelter contaminated the surrounding environment for many decades and although remediation efforts have been completed, ADEQ admits: "the total area that may have been affected in the watershed has not been determined." Draft TMDL at 25. It is difficult to understand how this draft TMDL could be prepared with such certainty, given this lack of understanding of legacy mining in this watershed.

Ultimately, this mischaracterization broadly sweeps contamination from old mines into the same category as naturally-occurring sources, then treats that whole category as largely beyond anyone's responsibility. To comply with Arizona law and the Clean Water Act and TMDL requirements, and to meaningfully address and require reductions in sources of pollutants to bring the waters into compliance, ADEQ must use its authority to appropriately assign reduction requirements equitably and fairly to all sources of pollution in the watershed.

5. Future Discharges May Violate Antidegradation Standards

Whenever the RCM AZPDES permittee discharges from Outfall 001 or Outfall 002 into Queen Creek, which it is currently permitted to do and may elect to do at any time, their discharge alone may violate water quality standards and the Antidegradation Policy at A.A.C. R18-11-107(B).[6] Under Tier 1 Antidegradation: "No degradation of existing water quality is permitted in a surface water where the existing water quality does not meet the applicable water quality standards."

As discussed previously, RCM AZPDES permit sets a daily maximum of 16 µg/L for dissolved copper in discharge from the outfalls. AZPDES No. AZ0020389, Final Permit, September 25, 2024 at 3-4. This is higher than the new TMDL numeric target of 10.5 µg/L for dissolved copper. ADEQ should, consistent with the Clean Water Act, require RCM to amend its

[6] Tier 1 Antidegradation Criteria apply to Queen Creek, as it is a surface water listed on the 303(d) list for the pollutant that resulted in the listing. A.A.C. R18-11-107.01(A)(1)(a).

AZPDES permit to reconcile this inconsistency and prohibit discharges under the permit which will violate antidegradation requirements.

6. The Implementation Plan Violates Arizona Law

Once completed, TMDLs must be implemented as required by law. A.R.S. § 49-234(G) requires in relevant part: "For each total maximum daily load, the department shall establish a TMDL implementation plan that explains how the allocations and any reductions in existing pollutant loadings will be achieved." TMDL implementation plans "shall provide the time frame in which compliance with applicable surface water quality standards is expected to be achieved." A.R.S. § 49-234(H). After a TMDL and implementation plan are adopted for a surface water, ADEQ is also required to review the status of that surface water "at least once every five years to determine if compliance with applicable surface water quality standards have been achieved." A.R.S. § 49-234(J). If not, ADEQ "shall evaluate" whether modification of the TMDL or TMDL implementation plan is required. *Id.*

ADEQ's Implementation Plan for this TMDL does not provide the legally-required time frame by which compliance is expected to be achieved. In fact, ADEQ appears to have zero expectation that compliance will ever be achieved, and thus the Implementation Plan fails to contain any actual compliance requirements. Rather it is entirely "non-binding" and "voluntary". Draft TMDL at 52. It "does not establish, schedule, or commit ADEQ to any new regulatory requirements, monitoring obligations, or permit modifications." Draft TMDL at 53. Rather than setting any monitoring requirements, ADEQ merely "encourages" sampling efforts by outside entities. Draft TMDL at 58. ADEQ has both the authority and the responsibility to administer the Clean Water Act in Arizona. ADEQ abdicates this responsibility in the TMDL. This violates the Clean Water Act and Arizona law and fails to protect the public and the environment.

Sadly, ADEQ appears to have gone to great lengths to find a way to avoid any accountability on the part of point source discharges, by cleverly categorizing all sources as non-point and by ignoring the largest permitted discharger in the watershed. This appears to be deliberately calculated to avoid ADEQ's obligations under the Clean Water Act, in an apparent attempt to satisfy the interests and needs of the mining community. While it is true that reductions in loadings from nonpoint sources are voluntary under A.R.S. § 49-234(G), this does not excuse ADEQ from its obligations under the Clean Water Act and Arizona law to establish a legally-compliant TMDL implementation plan. ADEQ has authority over point sources. ADEQ also has the means and authority to implement its own monitoring programs. It deliberately chose to exercise neither.

7. ADEQ Must Amend Individual AZPDES To Incorporate TMDL Limits

The concentration limits permitted in the RCM AZPDES permit provide for a dissolved copper daily maximum of 16 µg/L, with a monthly average of 7.95 µg/L, into Queen Creek (WBID 15050100-014A). This is higher than the current TMDL concentration limits of 10.5 µg/L and therefore discharges at these higher limits must be prohibited. Furthermore, because sampling is required only one time per month under the permit, calculating an average within a month is impossible. This means that at any given day during a period of discharge, the daily

maximum could well exceed the 16 µg/L limit and this may not be reflected in sampling information provided to ADEQ. In turn, this could wildly skew the reported monthly average concentration for copper (and other parameters) and in turn, result in a TMDL that fails to accurately represent the actual concentration of copper being loaded into Queen Creek on a daily basis.

EPA guidance requires that TMDL limits be incorporated into discharge permits. "Once allowable loadings have been developed … limits are incorporated into NPDES permits." EPA Guidance for Water Quality-based Decisions: The TMDL Process at 23 (1991).

ADEQ vaguely promises future actions in the draft TMDL. "AZPDES facilities identified in Table 10 will receive WLAs in the TMDL based on their currently permitted water quality-based effluent limitations (WQBEL) and design flow for the WWTP effluent or storm flows for the others." Draft TMDL at 20. In addition, ADEQ states that the RCM AZPDES discharges "will be regulated using concentration-based target limits set equal to the water quality standards. This guarantees that stormwater entering Queen Creek will not violate surface water standards." Draft TMDL at 43. When will this occur? It seems clear that AZPDES permits must be amended to include this information. Though, of course, as noted above the flawed draft TMDL must be significantly revised and its glaring errors corrected before this task can be completed, but once the TMDL has been properly completed this requirement must be met.

8. The Comment Period Is Inadequate & Public Hearings Should Have Been Held

When ADEQ previously published its draft TMDL on Queen Creek for public comment (not finalized), the comment period ran from September 27, 2017, and concluded 69 days later on December 5, 2017.[7] In addition, two public hearings were held on October 4, 2017 and November 13, 2017 "to discuss the draft TMDL report and to answer any questions from interested parties."[8]

ADEQ should have provided a longer time for public comment now, as they did previously on this project, due to the necessary review required for this complex and long-running topic. Furthermore, at least one virtual public hearing should have been held to discuss what has changed between the prior 2017 TMDL and the current TMDL and to answer questions by interested members of the public, not just to passively collect verbal public comments. ADEQ's failure to do this violates standards for public comment and participation and its duty on behalf of the State of Arizona to engage with affected members of the public on matters of import, such as this.

9. Materials for public comment were insufficient

During the 2017 draft TMDL public comment period, ADEQ provided a copy of the 2013 TMDL Modeling Report and three reference documents in addition to the draft TMDL for public

[7] ADEQ Public Notice URL: https://azdeq.gov/node/3490 (September 27, 2017), archived link
[8] ADEQ Public Notice PDF: http:/static.azdeq.gov/pn/pn_tmdl_queen_arnett.pdf (September 27, 2017), archived link

review and comment.[9] By contrast, ADEQ only provided a current TMDL Modeling Report long after the comment period had begun, and then only after directly questioned on the matter by interested public. A copy of the 80-page report was eventually provided on the current public notice webpage about one week before public comment deadline – very little time for thorough review and preparation of meaningful comments. This too violates standards for public comment and participation and ADEQ's duty on behalf of the State of Arizona to engage with affected members of the public.

10. Informal comment period was held with no public notice, including no notice to any of the five (5) plaintiffs in *Arizona Mining Reform Coalition, et al. v. Guzman, et al.*, Case No. 2:23-cv-02038-SRB.

It is our understanding that an "informal comment period" was held in late summer for stakeholders to ask questions and give comments about the draft TMDL report prior to a formal public comment period.[10] We received no notice of this informal comment period and only became aware of it as it concluded. It is unclear which "stakeholders" were invited to submit questions and comments about the draft TMDL. None of the plaintiffs in *Arizona Mining Reform Coalition, et al. v. Guzman, et al.* were invited as stakeholders to this informal comment period, despite having expressed ongoing interest in this TMDL.

Effectively, ADEQ gave certain stakeholders the benefit of a longer comment period, being able to ask questions about this current draft TMDL, but not others. This is fundamentally unfair and contrary to the public interest. ADEQ is plainly aware this draft TMDL is a matter of great public interest. In addition to being the subject of a federal lawsuit, comments were previously filed by multiple public agencies and many organizations. It is a matter of broad public interest and concern. We are disappointed by ADEQ's lackluster public engagement efforts on this iteration of the draft TMDL, and would expect better from a public agency working on a major project of broad public interest such as this one. Again, this violates ADEQ's obligations for public engagement as noted above.

CONCLUSION

The draft TMDL analysis continues to be fatally flawed. While we appreciate the opportunity to comment, we continue to have serious technical and legal concerns about the contents of this draft TMDL. ADEQ must rescind this draft TMDL and correct these critical problems in a way which protects the environment, public health, and the waters of Queen Creek. We expect that ADEQ will remedy these critical issues before it is presented to the EPA for finalization.

As previously requested, please include all signatories as interested parties on this topic, and direct all future public notices, announcements, and other related materials to us at the email addresses below.

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[9] See FN7.

[10] Email from Erin Jordan at ADEQ, Subject Re: Queen Creek TMDL, August 25, 2026.

Sincerely,

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Attachment A

Arizona Mining Reform Coalition – Center for Biological Diversity – Concerned Citizens & Retired Miners Coalition – Concerned Climbers of Arizona – Dragoon Conservation Alliance – Patagonia Area Resource Alliance – Save the Scenic Santa Ritas – Save Tonto National Forest – Sierra Club

December 5, 2017

Via Email: (palmer.kyle@azdeq.gov)

Arizona Department of Environmental Quality
Water Quality Division
Attn: Kyle Palmer
1110 W. Washington St.
Phoenix, AZ 85007

Re: Comments on Draft Total Maximum Daily Load (TMDL) analysis for three reaches of Queen Creek located near Superior, AZ

Dear Mr. Palmer:

These comments are submitted on behalf of the Arizona Mining Reform Coalition, Center for Biological Diversity, Concerned Citizens & Retired Miners Coalition, Concerned Climbers of Arizona, Dragoon Conservation Alliance, Patagonia Area Resource Alliance, Save the Scenic Santa Ritas, Save Tonto National Forest, and the Sierra Club, to the Arizona Department of Environmental Quality (ADEQ) regarding the draft Total Maximum Daily Load (TMDL) analysis for copper developed by the Arizona Department of Environmental Quality (ADEQ) for three reaches of Queen Creek, Arnett Creek, and two unnamed drainages located near Superior, Arizona.

1. COMMENTING ORGANIZATIONS

Arizona Mining Reform Coalition works in Arizona to improve state and federal laws, rules, and regulations governing hard rock mining to protect communities and the environment. AMRC works to hold mining operations to the highest environmental and social standards to provide for the long term environmental, cultural, and economic health of Arizona. Members of the Coalition include: Apache – Stronghold, Center for Biological Diversity, Concerned Citizens and Retired Miners Coalition, Concerned Climbers of Arizona, Dragoon Conservation Alliance, EARTHWORKS, Empire Fagan Coalition, Environment Arizona, Groundwater Awareness League, Maricopa Audubon Society, Save the Scenic Santa Ritas, Grand Canyon Chapter of the Sierra Club, Sky Island Alliance, Spirit of the Mountain Runners, Tucson Audubon Society, and the Valley Unitarian Universalist Congregation.

The **Center for Biological Diversity** is a non-profit public interest organization with headquarters located in Tucson, Arizona, representing more than 1.5 million members and supporters nationwide dedicated to the conservation and recovery of threatened and endangered

species and their habitats. The Center has long-standing interest in projects of ecological significance undertaken in the National Forests of the Southwest, including mining projects.

The **Concerned Citizens and Retired Miners Coalition** is a group of citizens who: 1) reside in Superior, Arizona, or do not reside in Superior, Arizona, but are affiliated with relatives who are residents; 2) are retired hard-rock miners who previously worked in the now non-operational mine in Superior, Arizona, and were displaced due to mine closure or personal disability; or 3) are individuals who are concerned that important U.S. public recreational land will be conveyed to a foreign mining company for private use.

Concerned Climbers of Arizona is an Arizona group that advocates for continued recreational access to climbing areas that are threatened by development or other forms of encroachment.

Dragoon Conservation Alliance is a grassroots coalition of southern Arizona landowners and decades-long activists working to protect their community and the Sonoran and Chihuahuan bioregions.

Patagonia Area Resource Alliance is a non-profit community watchdog organization that monitors the activities of mining companies, as well as ensures government agencies' due diligence, to make sure their actions have long-term, sustainable benefits to public lands and water resources in Patagonia and the State of Arizona.

Save the Scenic Santa Ritas is a non-profit organization that is working to protect the Santa Rita and Patagonia Mountains from environmental degradation caused by mining and mineral exploration activities. The current focus is on preventing the proposed open-pit copper mine in the Santa Ritas.

Save Tonto National Forest works to protect our National Forest and promote safe and responsible use by all groups of outdoor enthusiasts. We are based in Queen Valley, Arizona and have around 260 members concerned about the direction the Tonto National Forest is going.

Sierra Club is one of the nation's oldest and most influential grassroots organizations whose mission is "to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environments." Sierra Club has more than 2.4 million members and supporters with 60,000 in Arizona as part of the Grand Canyon (Arizona) Chapter. Our members have long been committed to protecting and enjoying the Tonto National Forest and have a significant interest in Queen Creek and other waters of the Tonto.

2. INTRODUCTION

Under section 303(d) of the Clean Water Act, states are required to identify their polluted waters and to establish a total maximum daily load for each pollutant in the water body. A TMDL analysis is then completed to establish baseline measurements of pollutant materials in those water bodies, and to identify potential reductions needed to attain standards.

Queen Creek Reach No. 15050100-014A, (headwaters to the Superior Wastewater Treatment Plant discharge), has been listed on Arizona's 303(d) list as impaired for dissolved copper since 2002. Reach No. 15050100-014B, (Superior Wastewater Treatment Plant discharge to Potts Canyon) has been listed as impaired for dissolved copper since 2004. Reach No. 15050100-014C (Potts Canyon confluence to the Whitlow Dam) has been listed as impaired for dissolved copper since 2010.[1] As a condition of these listings, ADEQ is required to prepare a TMDL analysis for Queen Creek to identify the amount of pollutants the water body can receive and still meet water quality standards. On October 4, 2017, a draft TMDL analysis was released for public comment.

The draft report raises more questions than it answers. In reading the report and the underlying record, we have serious concerns about the methodology used (including the computer models outlined), the report's conclusions, and the correctness of ADEQ's analysis.

For the reasons explained below, the TMDL prepared by ADEQ fails to comply with the Clean Water Act and applicable laws. ADEQ should not finalize the TMDL as presented, but rather, must pull the TMDL draft and reconsider what the appropriate limits are for loading in the impaired reaches of these water bodies, particularly in light of the pending Arizona Pollution Discharge Elimination Permit (AZPDES) proposed for issuance by ADEQ for the proposed Resolution Copper mine.

One of the biggest flaws in the analysis is ADEQ's decision to use only concentration based discharge limits on point sources that do not discharge to the creek continuously. The reliance on concentration based limits alone, with no mass limit, would allow a future discharger, for example Resolution Copper (should they move forward with plans to mine Oak Flat) to impair Queen Creek for copper by itself, without exceeding their permitted concentration limit.

3. GENERAL COMMENTS

The draft TMDL report recommendations would not lower TMDL levels to safe limits
From the draft Queen Creek TMDL, it is evident that ADEQ has struggled for many years to find a way to reconcile the differences between the naturally occurring background sources of copper with the anthropogenic sources found in the system stemming from the hundreds of old mining operations in the area, ultimately concluding that most of the copper loading originates in the upper reaches of Queen Creek and particularly from the Oak Flat basin. The draft TMDL report also states that current mining activities are not a major contributor to the impairment of Queen Creek for dissolved copper (Table 8, pages 28-29) and that "their complete removal will not impact the impairments predicted under the existing conditions scenario." In other words, if copper contributions from current mining activities are all set to zero, Queen Creek remains highly impaired for copper from the background sources theorized above. As discussed below, this same approach to modeling used by ADEQ can be used to demonstrate why the TMDL analysis prepared by ADEQ violates the requirements of the Clean Water Act, since it fails to

[1] This first reach is also impaired for lead (2010) and selenium (2012). Based on information available to us, the TMDL also does not appear to adequately address the loading factors for these impairments. *See* Arizona's 303(d) List of Impaired Waters.

include a mass based waste load allocation for dissolved copper stemming from discharges to Queen Creek approved by ADEQ in AZPDES Permit No. AZ0020389. [2]

Waste Load Allocation (WLA) for Resolution Copper

Under the Clean Water Act, ADEQ is required in the Queen Creek TMDL to list those permitted facilities found in the region that may contribute to loading in Queen Creek and to describe the type of waste-load allocations the facilities are permitted to meet. ADEQ takes the position that these facilities are required to meet either concentration-based limits (WQBELs) or mass-based limits. Under this analysis, ADEQ considers the Superior Wastewater Treatment Plant to be the only continuously discharging facility and, therefore, the only facility subject to a mass-based discharge limit.

The Resolution Copper mine received an AZPDES permit from ADEQ to discharge treated mine water to Queen Creek Outfall 002 and associated water on December 6, 2010. This permit was recently renewed with some modifications. Perhaps due to historical voluntary arrangements between Resolution Copper and New Magma Irrigation and Drainage District (NMIDD) that provided a means for Resolution to historically avoid discharges to Queen Creek by piping treated mine discharge water to agricultural fields located within the New Magma Irrigation & Drainage District (NMIDD), ADEQ has now misclassified Resolution Copper as a "non-continuous discharger" in the TMDL. This misclassification serves to conveniently justify (in ADEQ's view) ADEQ's decision to omit in its TMDL analysis the impacts that Resolution Copper's mass-based waste load allocation (WLA) will have on the receiving waters of Queen Creek, particularly vis-à-vis dissolved copper, despite the fact that Resolution Copper will be discharging five times as much water at Outfall 002 under its AZPDES permit as the Superior Wastewater Treatment Plant is capable of discharging. Indeed, Resolution Copper estimates a discharge volume of 3.6 MGD,[3] while the Superior Wastewater Treatment Plant's maximum discharge design capacity is 0.75 MGD.[4]

For reasons that are unsupported by the AZPDES permit, ADEQ concludes in the TMDL that Outfall 002 is not designed to discharge on a continuous basis (TMDL, p. 37). However, nowhere in the AZPDES permit materials does it specify that Resolution Copper has received a classification as a non-continuous discharger or that discharges from Outfall 002 are only allowed by ADEQ under the AZPDES permit on a non-continuous basis. In fact, the AZPDES permit itself makes clear that ADEQ has not imposed any discharge limit (by volume or by seasonality) for Outfall 002,[5] and it is completely silent about any maximum discharge design capacity.

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[2] ADEQ has notified the public of its intent to renew (as modified) Resolution Copper's AZPDES Permit No. AZ0020389. The permit, however, has not yet been issued in final form due to pending litigation by interested parties. Nevertheless, for purposes of these comments, we reference the most recent AZPDES permit, unless otherwise noted herein.

[3] *See* Response to Comments on AZPDES Permit No. AZ0020389, p. 18. ADEQ writes: "RCML noted the estimated maximum daily discharge from Outfall 002 is 3.6 MGD." http://static.azdeq.gov/pn/responses_resolution_cu.pdf

[4] *See* Draft Queen Creek TMDL, p. 36.

[5] *See* Draft AZPDES Permit for Resolution Copper, p. 5 (2016).

ADEQ appears to be using the discharge design capacity of Outfall 002 as a basis to conclude in the TMDL that Resolution will not be able to continuously discharge under their AZPDES permit; however, the basis for this conclusion (which is fundamental to its TMDL analysis) remains unclear. This should be clarified.

Also, while the 2010 AZPDES permit issued to Resolution Copper allowed for discharges to Queen Creek through Outfall 002, the permit required that all discharges be treated to reduce Total Dissolved Solid (TDS) using a Reverse Osmosis (RO) system to be constructed at the Mine Wastewater Treatment Plant. However, Resolution Copper never constructed the RO system. Accordingly, to the extent ADEQ's analysis is based upon a discharge design capacity that was reduced by an RO system as originally contemplated in the 2010 AZPDES permit, this would be factually incorrect, since that RO system was never built, and the RO requirement has been removed from the AZPDES permit. In fact, a letter from Resolution Copper to Mr. David Haag at ADEQ states regarding the discharge design of Outfall 002 "…the maximum flow rate for the discharge was based on the treatment design of the RO system." See Letter dated August 7, 2015 regarding an amendment to APP No. P-105823. In short, since there is no RO requirement in Resolution Copper's current AZPDES permit, ADEQ erred if it considered this standard in discussing the design of Outfall 002 in the TMDL.

Furthermore, in a memo to Resolution Copper prepared by SRK Consulting, Inc. regarding their AZPDES permit to discharge into Outfall 002, it states at page 2: "RCML would like the alternative to discharge through Outfall 002 during the winter months and potentially at all other times but has not discharged due to the inability to meet the 1200 mg/l TDS limit."[6] The SRK Consulting memo is silent about any inability to continually discharge based on design capacity. Further, the TDS limit in the AZPDES permit has since been raised, potentially removing any apparent obstacle to continuous discharge, assuming there ever was one.

It should also be noted, as discussed above, that Resolution Copper's arrangement to discharge water at NMIDD is a separate and independent relationship outside of ADEQ's control. That is, NMIDD may or may not agree at any given time, to accept Resolution Copper water for irrigation purposes. By the same token, Resolution Copper may choose solely of its own accord to discharge continuously to Queen Creek under its AZPDES permit or it may choose to instead pipe this water to NMIDD. None of these choices are under ADEQ control, since the permit itself allows for nothing short of continuous discharge. Thus, it would also be inappropriate and legally inaccurate for ADEQ to rely on this arrangement as the hinging point for classification of Resolution Copper Outfall 002 as a "non-continuous discharger" for the purposes of TMDL.

By relying on its conclusion that Resolution Copper is not a continuous discharger, ADEQ fails to consider mass-based limits which, based on the anticipated discharge volume, potentially violates the daily load limit on a daily basis, undermining the validity of the TMDL, and violating the Clean Water Act.

[6] *See* Memo dated June 26, 2015 from Patty McGrath at SRK Consulting to Casey McKeon at Resolution Copper Mining regarding AZPDES Permit No. AZ0020389; Revision of TDS Limit.

TABLE 1.b: Discharge Limitations and Monitoring Requirements for Outfall 002

Parameter	Maximum Allowable Discharge Limitations (6)		Monitoring Requirement (1)	
	Concentration Limits (µg/L)			
	Monthly Average	Daily Maximum	Monitoring Frequency	Sample Type (5)
Discharge Flow (MGD) (2)	Report	Report	Continuous	Metered
Cadmium (3)	50	100	1x/month	24-hr Composite
Copper (3)	8.5	17	1x/month	24-hr Composite
Iron	820	1640	1x/month	24-hr Composite
Lead (3)	2.7	5.4	1x/month	24-hr Composite
Mercury	1	2	1x/month	24-hr Composite
Selenium	2	3	1x/month	24-hr Composite
Zinc (3)	72.0	144	1x/month	24-hr Composite
Hardness($CaCO_3$) Discharge	Report (mg/L)	Report (mg/L)	1x/month	24-hr Composite
Hardness($CaCO_3$) Receving Water	Report (mg/L)	Report (mg/L)	1x/month	24-hr Composite
Total Supended Solids (TSS)	20 mg/L	30 mg/L	1x/month	24-hr Composite
pH (4)	Not less than 6.5 standard units nor greater than 9.0 standard units.		1x/month	24-hr Composite

As shown in Table 1.b., above, taken from the AZPDES Draft Permit, Resolution Copper's AZPDES permit provides for an average monthly discharge limit of 8.5 µg/L and a daily maximum limit of 17 µg/L, with a 1x/month monitoring frequency.[7] However with no mass limit calculated in the TMDL (regardless of continuous or non-continuous discharging status), **it is almost certain that Resolution Copper's daily discharges will exceed daily TMDL load limits for copper at water volumes far below what Resolution Copper has estimated it will discharge under its AZPDES permit to Outfall 002.**[8] This is likely to result in daily violations, even at relatively low discharge volumes. ***See Attachment A.***

Under Resolution Copper's own estimated maximum daily discharge of 3.6 MGD to Outfall 002 (or 13,627,482.42 Liters), the 55 grams/day TMDL limit would be exceeded by a factor of two. **In other words, the daily load of copper into Queen Creek would be 115.8 grams – more than twice the TMDL daily load impairment level of 55 grams per day.** If Resolution should discharge at the higher daily maximum concentration limit of 17µg/L, the daily discharge would then be some 420% of the TMDL impairment limit.

By declining to consider and regulate the mass-based limits in the TMDL for Resolution Copper, the largest permitted point-source discharger in the study area, ADEQ is not moving towards a non-impaired system, but rather, knowingly allowing Queen Creek, a water body already impaired for copper, to be further impaired. This violates the Clean Water Act and ADEQ's obligations to protect Arizona's waters.

Furthermore, it is also currently unclear how compliance with the AZPDES permit's maximum allowable discharge limit that allows for a **monthly average** concentration limit of 8.5 µg/L, could possibly be measured when sampling is reportedly only being done under the AZPDES **one time** per month (Table1.b). Information on how the "monthly average" is actually calculated

[7] *See* Table 1.b, taken from AZPDES Draft Permit No. AZ0020389.

[8] *See* Response to Comments on AZPDES Permit No. AZ0020389, p. 18. ADEQ writes: "RCML noted the estimated maximum daily discharge from Outfall 002 is 3.6 MGD."

in the AZPDES has not been provided, though it is difficult to understand how ADEQ can take an average from a single monthly measurement. [9] Based on this lack of available data, it appears possible that the monthly average for concentration limits under the permit for Outfall 002 may be being calculated on an annual basis (i.e. dividing by 12 months of sampling, regardless of whether discharge has occurred all 12 months). This is a critical question that must be clarified for purposes of the TMDL because if non-discharging months are being used to calculate the monthly average, then the results of these calculations can mask the existence of monthly discharges that exceed the TMDL daily load limits for copper.

EPA regulations require mass based limits

The Queen Creek draft TMDL report relies on the methods outlined in the 1991 EPA *Technical Support Document for Water Quality-based Toxics Control (*TSD) for calculating chronic and concentration-based (WQBEL) dissolved copper water quality standards. This *Technical Support Document* states that mass-based effluent limits are required by NPDES regulations (40 C.F.R. 122.45(f)) exempting pollutants which cannot be represented appropriately by mass and when applicable standards and limits are expressed in terms of other units of measurement. Other than these exceptions (which are not applicable here), 40 C.F.R. 122.45(f) requires that "all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass."

Also, it is important to understand that discharges through Outfall 002 are very likely to be under low flow (thus, low dilution) conditions. Additional pollutant quantity monitoring requirements are recommended in low dilution scenarios. At page 111, the *Technical Support Document* states: "At the extreme case of a stream that is 100 percent effluent, it is the effluent concentration rather than the effluent mass discharge that dictates the instream concentration. Therefore, EPA recommends that permit limits on both mass and concentration be specified for effluents discharging into waters with less than100-fold dilution to ensure attainment of water quality standards."

The 1991 "Technical Support Document For Water-Quality-based Toxics Control" that ADEQ cites in the TMDL has additional guidance requirements on implementing mass-based standards. It says (look at PDF pages 130 to 131, Section 5.7.1):

> "Mass-based effluent limits are required by NPDES regulations at 40 CFR 122.450. The regulation requires that all pollutants limited in NPDES permits have limits, standards, or prohibitions expressed in terms of mass with three exceptions, including one for pollutants that cannot be expressed appropriately by mass. Examples of such pollutants

[9] As noted above, the concentration limits permitted in the Discharge Limitations described in the AZPDES permit (Table 1.b.) provide for a daily maximum discharge of 17 µg/L, with an average monthly limit of 8.5 µg/L. However, because sampling is required **only one time per month** under the permit, calculating an average within a month is impossible. This means that at any given day during a period of discharge, the daily maximum could well exceed the 17 µg/L limit and this may not be reflected in sampling information provided to ADEQ. This, is turn, could wildly skew the reported monthly average concentration for copper (and other parameters) and in turn, result in a TMDL model that fails to accurately represent the actual concentration of copper being loaded into Queen Creek on a daily basis – destroying the validity of the analysis contained in the TMDL.

are pH, temperature, radiation, and whole effluent toxicity. Mass limitations in terms of pounds per day or kilograms per day can be calculated for all chemical specific toxics such as chlorine or chromium. Mass-based limits should be calculated using concentration limits at critical flows. For example, a permit limit of 10 mg/l of cadmium discharged at an average rate of 1 million gallons per day also would contain a limit of 38 kilograms/day of cadmium. Mass-based limits are particularly important for control of bioconcentratable pollutants. Concentration-based limits will not adequately control discharges of these pollutants if the effluent concentrations are below detection levels. For these pollutants, controlling mass loadings to the receiving water is critical for preventing adverse environmental impacts. However, mass-based effluent limits atone may not assure attainment of water quality standards in waters with low dilution. In these waters, the quantity of effluent discharged has a strong effect on the instream dilution and therefore upon the RWC. At the extreme case of a stream that is 100 percent effluent, it is the effluent concentration rather than the effluent mass discharge that dictates the instream concentration. Therefore, EPA recommends that permit limits on both mass and concentration be specified for effluents discharging into waters with less than 100 fold dilution to ensure attainment of water quality standards."

In addition, 40 C.F.R. Part §122.45 requires in part:

(e) Non-continuous discharges. Discharges which are not continuous, as defined in §122.2, shall be particularly described and limited, considering the following factors, as appropriate:

(1) Frequency (for example, a batch discharge shall not occur more than once every 3 weeks);

(2) Total mass (for example, not to exceed 100 kilograms of zinc and 200 kilograms of chromium per batch discharge);

(3) Maximum rate of discharge of pollutants during the discharge (for example, not to exceed 2 kilograms of zinc per minute); and

(4) Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 mg/1 zinc or more than 250 grams (1⁄4 kilogram) of zinc in any discharge).

(f) Mass limitations.

(1) All pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass except:

(i) For pH, temperature, radiation, or other pollutants which cannot appropriately be expressed by mass;

(ii) When applicable standards and limitations are expressed in terms of other units of measurement; or

(iii) If in establishing permit limitations on a case-by-case basis under §125.3, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment.

> (2) Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations.

The idea that RCC Outfall 002 isn't "designed to discharge on a continual basis" is something that never appeared in the AZPDES permit, but is relied upon by ADEQ in the TMDL to assign only a concentration-based WLA (and not a mass-based WLA). Please explain this descrepency.

2013 Modeling Report

The Queen Creek TMDL Modeling Report prepared by Louis & Berger (January 2013), which is the primary basis of the TMDL,[10] contains factually inaccurate information pertaining to the Resolution Copper AZPDES permit. It is both surprising and alarming that the 2013 Modeling Report has not been updated to reflect critical data related to the AZPDES for Resolution Copper. For example, the 2013 Modeling Report states, at page 4:

> According to the file and ADEQ Permits Staff, the facility is reportedly designed to contain all runoff up to and including the 100-year, 24-hour event. Thus, the RCC discharge point 001 is non-discharging in the range of storm magnitudes being simulated for the estimation of the copper and lead loads (Chapter 3). **RCC has proposed, and then withdrawn, an AZPDES permit application to discharge treated mine dewatering water to Queen Creek adjacent to their existing 001 outfall. At this point, there is no information that a future request to discharge this water is pending.** Currently, water is transported approximately 30 miles westerly of Superior via pipeline to an irrigation district. The water transfer currently occurs during the growing season only, reportedly **forcing RCC to halt mine dewatering during the winter months.** [Emphasis added].

As an initial matter, it is clear that the 2013 Louis & Berger report completely fails to take into account the fact that Resolution Copper has, in fact, been issued an AZPDES at least since 2010 that **allows** for treated mine to be discharge at Outfall 002 into Queen Creek. Which raises the question as to whether or not this model, which is plainly outdated, can be used to accurately predict the amount of dissolved copper being contributed by each modeling basin. Certainly, it does not consider the permitted contributions of the largest permitted project in the entire project watershed (Resolution Copper). Furthermore, it has been well documented and it is commonly known that Resolution Copper has not ceased mine dewatering during winter months, and that water is in fact seeping into Shaft #10 at inflow rate of up to 600 gpm.[11] It is not clear why this information has not been updated.

How was the overland flow from Oak Flat determined to be a major contributor copper?

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[10] The function of the model is to predict the amount of dissolved copper being contributed by each modeling basin utilizing both the sampling data and the meteorological data of the entire project watershed. TMDL at 14.

[11] *See* Fiscor, Steve. "Sinking America's Deepest Shaft: Development and Blast Applications for Resolution Copper's No. 10 Shaft" in Engineering & Mining Journal, April 2014.

Hardness
The Queen Creek draft TMDL incorporates hardness calculations (dissolved calcium and magnesium), but seems to point to controversy not only about the conclusions of the analysis, but also the underlying data. On page 14, the report states that hardness data supplied by ADEQ to the modeling team was discovered to have been "inaccurate." This raises a number of questions. For example, when were those inaccuracies discovered and how were they corrected? The January 2013 modeling report has been presented to the public as a final version of the report, and it has been posted alongside the draft Queen Creek TMDL report. Yet, the draft Queen Creek TMDL report brushes this off by stating on page 14: "The original total hardness values were not used in the modeling of the dissolved copper, and the updated values do not affect the modeling results." What errors in the prior data were being corrected? Additionally, what changed in the model, what was omitted and included and when? In fact, Matthew Bolt, a Life Scientist with EPA who has been reviewing ADEQ's Queen Creek TMDL, has specifically asked for an accounting of how the updated data in the current draft TMDL was reconciled with contradictory data presented in the original report's hardness table, and how those changes were made between the data, the modeling report, and the draft TMDL. (*See Email from Matthew Bolt sent July 13, 2017 at 6:12 p.m.)* It is unclear from the records we have reviewed on this matter, whether this accounting was ever provided to EPA. This should be clarified and, if necessary, addressed.

The draft should be revised to include the correct data.

Are Tables 3.4 and 3-6 (which we assume come from a 2013 final modeling report by the Louis Berger Group) available to the public?

ADEQ fails to identify polluters that should be required to clean up "legacy" pollution
The draft TMDL report states that Queen Creek and various tributaries are impaired for copper and that most of the copper loading originates in the upper reaches of Queen Creek and particularly from the Oak Flat modeling basin. ADEQ theorizes that the majority of copper comes from background sources although some comes from smelter deposition from older mining operations. The report concludes that there is no culpability in the smelter deposition of copper from any current dischargers to Queen Creek.

However, in an ADEQ internal ADEQ document titled Queen Creek Modeling Report Comments dated August 17, 2012, says,

- "Low soil Cu in Oak Flat area suggests this is not an NPS source area that can be remediated
    - The OF area is an issue- it has low Cu in the rock but is a major source of copper. Mine says it must be smelter fall out not natural background. We will need to explore this more. I asked LB to summarize the WQ and soil data for all of the tuff in the area."

Here it is clear that ADEQ learns that there is low natural background copper and a "mine" (Rio Tinto's Resolution Copper project?) says that the high levels of copper in the Oak Flat area is from smelter fallout.

The major (only?) smelter operating upwind from the Oak Flat area would have been the Magma smelter in Superior, Arizona. ADEQ asserts in numerous documents that Rio Tinto's Resolution

Copper operations have been an ongoing continuation of Magma's operations in the past (This is a position that we dispute. We maintain that the new Resolution Copper project is a new mine and a new operation.)

If ADEQ is correct that Rio Tinto's Resolution Copper project is a continuation of Magma Copper's older operations and if the "Mine" (Resolution Copper) admits that much of the copper loading at Oak Flat is from "smelter fall out," then it is clear that Rio Tinto is responsible for high levels of copper in the Queen Creek watershed downwind from the Magma smelter in Superior. Therefore, ADEQ should require that Rio Tinto clean up this "fall out" before they are allowed to add more copper loading to Queen Creek.

Effect of Resolution Copper dewatering of Oak Flat area on water levels in Queen Creek
Rio Tinto is currently dewatering (at the rate of at least 600 gallons per minute) from the Numbers 9 and 10 shafts at Oak Flat. This water is piped to Superior for minimal treatment and then piped to the New Magma Irrigation District near Phoenix. The water, taken from the Queen Creek watershed bypasses the impaired sections of Queen Creek.

What effect does this dewatering have on the impairment of Queen Creek from copper and other elements? What would happen if this dewatering ended and these 600 gallons per minute stream of water were to reenter Queen Creek? The draft report does not answer these questions.

4. COMMENTS ON SPECIFIC SECTIONS OF THE DRAFT TMDL REPORT

1.0 Introduction
Why has it taken so long for ADEQ to complete this process? It is our understanding that EPA regulations require state agencies to submit (and have approved) a schedule to establish TMDL standards for impaired streams every 2 years. Some sections of Queen Creek were listed as impaired in 2002.

Has data submitted by Resolution Copper Company (Rio Tinto) been independently verified?

Who was the contractor hired to do the modeling and does this contractor have any ties to regulated companies or other conflicting interests?

2.2 Climatic Setting
The data used for summer weather patterns in the Superior area seems to be outdated and underestimating current conditions. Should that be updated? Does the analysis consider the impacts of future climate change including generally higher temperature, continuing drought conditions, and more violent storms?

Where did the rainfall data come from? Did the data come from only a few locations, or did you use data from different points throughout the watershed? Would differences in rainfall amount in the subbasins affect your conclusions?

5.0 Modeling of the Data
Did ADEQ use the correct model?

Figure 5 of the draft shows that ADEQ did not include a number of the sub-basins in their modeling. Since some of the sub-basins not used in the modeling are quite large, the modeling exercise itself is fatally flawed. Why are some sub-basins not used? What rationale was used to choose the basins used? How were the "representative" basins chosen to assure that they are truly representative?

How does this affect the validity of entire analysis?

5.2 Hydrologic Calibration

This section points to one of the real problems of this analysis: That ADEQ is making assumptions not based on any data and tweaking the modeling to confirm their assumptions. How can you say, "Even though a large amount of data was collected at sites throughout the watershed, it was still not enough for statistical methods to be applicable"? You can't base an analysis like this on visual agreement of the results, you must have a rational and scientifically based rational for your assumptions.

Figure 6 does not support the draft reports conclusion that actual data matches simulated modeling. Was this a cherry-picked graph or do other sub-basins also show any kind of correlation? To us, Figure 6 does not show an acceptable visual agreement between observed and simulated flows.

5.3 Dissolved Copper Calibration of the Model

As with Figure 6, there is simply not enough data in Figure 7 to support ADEQ's conclusions.

6.2 Margin of Safety

The ADEQ MOS used is not nearly conservative enough. If Rio Tinto gets underway, the MOS should be much higher.

The TMDL report forecasts that the used portions of the already permitted WLA's will remain unused and therefore available as a MOS. This relies on a permittee not using their full allotment. Is there a better option?

7.0 Implementation

In general, this section needs a lot more definition of specific actions that much be performed. There needs to be projects with goals and timelines outlined in this section that will help reduce the illegal loading of copper in Queen Creek.

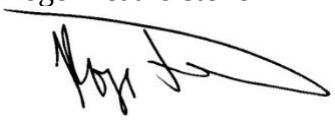
6. CONCLUSION

In conclusion, the draft Total Maximum Daily Load (TMDL) analysis for three reaches of Queen Creek located near Superior, AZ, is fatally flawed and its issuance would violate the CWA, Arizona law, and other applicable authorities. ADEQ should write a new draft that provides adequate protections for the environment, the public health and the waters of Arizona can be developed.

Please include the Arizona Mining Reform Coalition, Center for Biological Diversity, Concerned Citizens & Retired Miners Coalition, Concerned Climbers of Arizona, Dragoon Conservation Alliance, Patagonia Area Resource Alliance, Save the Scenic Santa Ritas, Save Tonto National Forest, and the Sierra Club, as interested parties and direct all future public notices and documents to us at the addresses below.

Sincerely,

Roger Featherstone



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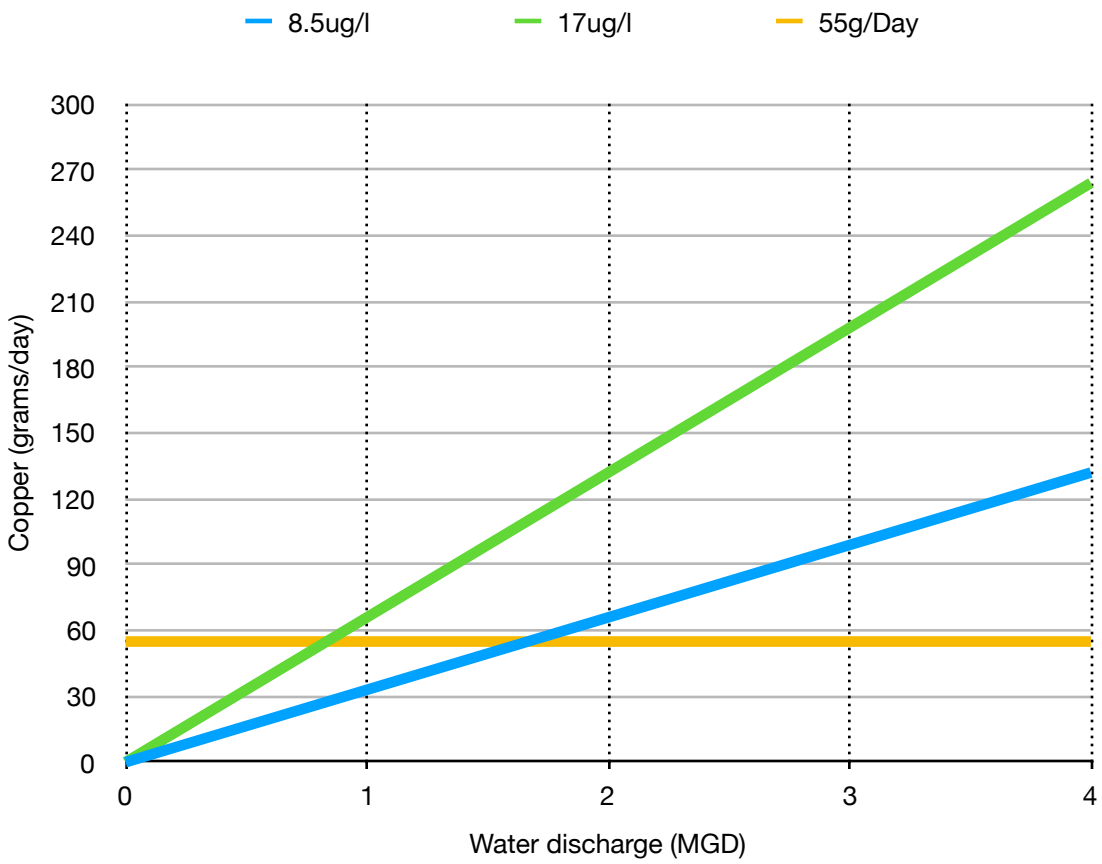
8.5ug/l
17ug/l
55g/Day
300
270
240
210
180
150
120
90
60
30
0
Copper (grams/day)
0
1
2
3
4
Water discharge (MGD)

Attachment B

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARIZONA

Arizona Mining Reform Coalition; Center for Biological Diversity; Earthworks; Concerned Citizens and Retired Miners Coalition; and Grand Canyon Chapter of the Sierra Club,

Plaintiffs,

v.

Martha Guzman, in her official capacity as Regional Administrator Environmental Protection Agency Region 9; **United States Environmental Protection Agency**; **Michael Regan,** in his official capacity as Administrator of the Environmental Protection Agency,

Defendants.

Case No. 2:23-cv-02038-SRB

CONSENT DECREE

WHEREAS, this Consent Decree is between Plaintiffs Arizona Mining Reform Coalition, Center for Biological Diversity, Earthworks, the Concerned Citizens and Retired Miners Coalition, and the Grand Canyon Chapter of the Sierra Club, and Defendants Martha Guzman, Regional Administrator of the United States Environmental Protection Agency ("EPA") Region 9, Michael Regan, Administrator of the EPA, and the EPA (collectively "EPA");

WHEREAS, Plaintiffs filed this lawsuit on September 27, 2023;

WHEREAS, Plaintiffs allege that the Arizona Department of Environmental Quality ("ADEQ") "constructively submitted" to EPA no Total Maximum Daily Load ("TMDL") for copper and lead in Queen Creek, and further allege that for this reason EPA has a

nondiscretionary duty under the Clean Water Act to approve or disapprove and, upon disapproval, establish a TMDL for Queen Creek, and that EPA has failed to meet this duty. 33 U.S.C. § 1313(d);

WHEREAS, the State of Arizona, under section 303(d)(1)–(2), of the Clean Water Act, 33 U.S.C. § 1313(d)(1)–(2), is required to identify its waters that are not meeting their applicable water quality standards (i.e., "impaired waters"), and to establish a TMDL for each pollutant causing such impairment in the water body;

WHEREAS, the Clean Water Act requires Arizona to submit TMDLs to EPA "from time to time" for EPA's approval or disapproval. 33 U.S.C. § 1313(d)(2);

WHEREAS, Queen Creek Reach No. 15050100-014A (headwaters to the Town of Superior Wastewater Treatment Plant discharge) has been listed as impaired on Arizona's latest 303(d) list of impaired waters (2020–2022) due to dissolved copper since 2002 and lead since 2010. Queen Creek Reach No. 15050100-014B (Town of Superior Wastewater Treatment Plant discharge to Potts Canyon) has been listed as impaired due to dissolved copper since 2004. Queen Creek Reach No. 15050100-014C (Potts Canyon confluence to the Whitlow Dam) has been listed as impaired due to dissolved copper since 2010;

WHEREAS, EPA recently approved ADEQ's 2020–2022 303(d) list of impaired waters (with portions disapproved for omitted waters not relevant here);

WHEREAS, the above-referenced reaches of Queen Creek are currently listed as impaired due to copper and, with respect to one reach, lead, because water quality standards applicable to these reaches are not being attained;

WHEREAS, in 2017, ADEQ published a notice of a Draft TMDL for Queen Creek;

WHEREAS, in September 2018, ADEQ notified the public that it had suspended work on the Draft TMDL in a public email with the subject: "Queen Creek TMDL Update: Project on Hold." The email stated that due to "technical issues needing to be addressed … ADEQ is suspending normal project activities until these issues can be completely resolved. Once resolved, we will provide an update and the TMDL project can move forward";[1]

[1] Email from ADEQ, communications@azdeq.gov, to interested parties titled "Queen Creek

WHEREAS, ADEQ has resumed work on Queen Creek TMDLs;

WHEREAS, EPA intends to offer technical assistance and have an active oversight role in ADEQ's work on the Queen Creek TMDLs;

WHEREAS, Plaintiffs and EPA agree that it is in the interest of the public, Plaintiffs, EPA, and judicial economy to resolve this matter without protracted litigation;

WHEREAS, Plaintiffs and EPA intend to resolve the claims identified in Plaintiffs' complaint without any admission of fact or law, and consider this Consent Decree to be a just, fair, adequate, and equitable resolution of the claims raised in this action;

WHEREAS, Plaintiffs and EPA, by entering into this Consent Decree, do not waive or limit any claim, remedy, or defense, on any grounds, related to any final EPA action;

WHEREAS, the Court, by entering this Consent Decree, finds that the Consent Decree is fair, reasonable, in the public interest, and consistent with the Clean Water Act.

IT IS ORDERED, adjudged and decreed that:

Jurisdiction and Venue

1. The Court has subject matter jurisdiction under 33 U.S.C. § 1365(a)(2) and 28 U.S.C. § 1331. Venue is appropriate under 28 U.S.C. § 1391(e).

Definition

2. For purposes of this Consent Decree, "TMDL" has the meaning provided at 40 C.F.R. § 130.2(i) as of the date of the entry of this Decree.

EPA's Obligations

3. Unless ADEQ submits, pursuant to 40 C.F.R. § 130.7, TMDLs for the following pollutant and reach combinations to EPA by January 31, 2027, EPA shall establish TMDLs on or before July 31, 2028 for Queen Creek covering:

– copper and lead in Queen Creek Reach No. 150500100-014A;

– copper in Queen Creek Reach No. 15050100-014B; and

– copper in Queen Creek Reach No. 15050100-014C.

TMDL Update: Project on Hold" (Sept. 27, 2018).

4. EPA is under no obligation to establish a TMDL pursuant to Paragraph 3 for any specific pollutant and reach combination listed in Paragraph 3 for which ADEQ submits a TMDL by January 31, 2027.

5. In fulfilling its obligations under this Consent Decree, EPA is under no obligation to establish TMDLs for any combination of pollutants and reaches of Queen Creek that do not require a TMDL consistent with section 303(d) of the Clean Water Act, 33 U.S.C. 1313(d), and its implementing regulations, including 40 C.F.R. § 130.7(b), or are removed from the Arizona 303(d) list consistent with the provisions of the Clean Water Act and EPA's implementing regulations.

6. Every six months until the termination of this Consent Decree, EPA shall file a status report with the Court describing the current status of ADEQ's and, if applicable, EPA's efforts at preparing TMDLs for Queen Creek, including tasks completed during the previous six-month reporting period and plans for the next six-month reporting period. The first such report is due six months after the Effective Date of this Consent Decree.

Plaintiffs' Obligations

7. If ADEQ submits a TMDL for Queen Creek to EPA under 33 U.S.C. § 1313(d)(2) under Paragraph 3 above, Plaintiffs agree that they will not object to EPA taking up to an additional 60 days beyond the statutory deadline in 33 U.S.C. § 1313(d)(2) to approve or disapprove that TMDL.

8. Plaintiffs agree that they will not object to EPA taking up to 12 additional months beyond the statutory deadline in 33 U.S.C. § 1313(d)(2) to establish a federal TMDL if EPA disapproves a TMDL submitted by ADEQ under Paragraph 3 above.

Complete Settlement

9. The Parties agree that this Consent Decree constitutes a complete settlement of all claims which were asserted, or could have been asserted, in the Complaint.

Modification

10. The deadlines established by this Consent Decree may be extended (a) by written stipulation of Plaintiffs and EPA with notice to the Court, or (b) by the Court upon motion

of EPA or Plaintiffs for good cause shown pursuant to the Federal Rules of Civil Procedure and upon consideration of any response by a non-moving party and any reply. Any other provision of this Consent Decree also may be modified by the Court following motion of an undersigned Party for good cause shown pursuant to the Federal Rules of Civil Procedure and upon consideration of any response by a non-moving Party and any reply.

11. The possibility exists that circumstances outside the reasonable control of EPA could delay compliance with deadlines stated in this Agreement. Such situations include, but are not limited to, a government shutdown/lapse in appropriations or a major environmental event requiring immediate and/or time-consuming response by EPA. Should a delay occur due to such circumstances, any resulting failure to meet the deadlines set forth herein shall not constitute a failure to comply with the terms of this Consent Decree, and any deadlines shall be extended one day for each day of the delay. EPA will provide Plaintiffs with notice as soon as is reasonably possible under the circumstances in the event that EPA invokes this term of the Consent Decree and will provide Plaintiffs with an explanation of EPA's basis for invoking the provisions of this Paragraph. Nothing in this Paragraph shall preclude EPA from seeking an additional extension of time through modification of this Consent Decree pursuant to Paragraph 10.

Costs

12. The deadline for filing a motion for costs of litigation (including attorney fees) for activities performed prior to entry of the Consent Decree is hereby extended until 90 days after this Consent Decree is entered by the Court. During this period, the Parties shall seek to resolve any claim for costs of litigation (including attorney fees), and if they cannot, Plaintiffs will file a motion for costs of litigation (including attorney fees) or a stipulation or motion to extend the deadline to file such a motion. EPA reserves the right to oppose any such request. The Court shall retain jurisdiction to resolve any requests for costs of litigation, including attorney fees.

13. The Court shall retain jurisdiction over this case after entry of this Consent Decree solely for purposes of resolving any requests for costs of litigation pursuant to Paragraph 12,

enforcing the terms and conditions of this Consent Decree, or modifying the terms of this Consent Decree pursuant to Paragraphs 10–11.

Limitations

14. The Parties agree that the EPA obligations in Paragraphs 3 through 6 are intended to culminate in establishment of TMDLs for the above-referenced reaches of Queen Creek for copper and, with respect to one reach, for lead. The Parties agree that the legal sufficiency or adequacy of the TMDLs, and EPA's discretion to approve or disapprove of the TMDLs, is not limited by this Consent Decree. Except as expressly provided herein, nothing in this Consent Decree is meant to change the obligations of EPA and Arizona under existing laws or regulations, or to change EPA's existing guidelines for review of TMDLs submitted to EPA for approval or disapproval. Plaintiffs reserve all rights to challenge any such approval or establishment under applicable law. Plaintiffs' sole remedy concerning any action taken by EPA pursuant to this Consent Decree is to seek judicial or administrative review of such action. Nothing in this Consent Decree shall be construed to limit any defense EPA may have to any future challenge or to confer jurisdiction on any court to review such action where it would otherwise be lacking.

15. Except as expressly provided herein, nothing in this Consent Decree shall be construed as an admission by any Party of any issue of fact or law.

16. No provision of this Consent Decree shall be interpreted as or constitute a commitment or requirement that EPA obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. §§ 1341, *et seq.*, or any other applicable federal statute.

Dispute Resolution

17. In the event of a dispute between Plaintiffs and EPA concerning the interpretation or implementation of any aspect of this Consent Decree, the disputing Party shall provide the other Party with a written notice outlining the nature of the dispute and requesting informal negotiations. The Parties shall meet and confer in order to attempt to resolve the dispute. If the Parties are unable to resolve the dispute within 30 business days after receipt of the notice, either Party may petition the Court to resolve the dispute.

18. No motion or other proceeding seeking to enforce this Consent Decree shall be properly filed unless the procedure set forth in Paragraph 17 has been followed, and the moving Party has provided the other Party with written notice received at least 10 business days before the filing of such motion or proceeding.

Notices

19. Any notices required or provided for by this Consent Decree shall be made in writing, via electronic mail, or if electronic mail is infeasible for whatever reason, by U.S. mail. In addition, to be effective, any such notice must be sent to the following:

For EPA:

Manager, Clean Water Act Section
Air, Toxics, Water & General Law Branch
Office of Regional Counsel
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Kimberly Wells
Attorney-Advisor
Office of Regional Counsel
U.S. EPA Region 9
75 Hawthorne Street, 12th Floor
San Francisco, CA 94105
wells.kimberly@epa.gov

Alec Mullee
Attorney-Advisor
Water Law Office
Environmental Protection Agency
WJC Building North, Room 1448K
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
mullee.alec@epa.gov

For DOJ:

Section Chief
United States Department of Justice
Environmental Defense Section

P.O. Box 7611
Washington, DC 20044
Overnight mail:
150 M Street NE
Washington, DC 20002

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Allison N. Henderson
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970-309-2008
ahenderson@biologicaldiversity.org

Effective and Termination Dates

20. This Consent Decree shall become effective upon the date of its entry by the Court (the "Effective Date").

21. This Consent Decree shall terminate upon any of the following: 1) EPA's establishment of TMDLs for the pollutant and reach combinations identified in Paragraph 3 for which ADEQ has not established TMDLs; or 2) EPA's approval of TMDLs established by ADEQ for the pollutant and reach combinations identified in Paragraph 3; or 3) the pollutant and reach combinations identified in Paragraph 3 are removed from Arizona's 303(d) list as described in Paragraph 5.

22. Upon termination of the Consent Decree, the Parties shall file the appropriate notice with the Court so that the Clerk may close the file.

Other Terms

23. This Consent Decree shall be binding upon the successors and assigns of the Parties. No assignment or delegation by a Party of its obligations under this Consent Decree will release the assigning Party without the prior written consent of the other Parties and the Court's approval.

24. Each Party represents and warrants that this Consent Decree has been negotiated in good faith and that it has sought and obtained any appropriate legal advice it deems necessary prior to entering this Consent Decree.

25. Each Party represents and warrants to each other Party that it has all necessary authorizations and all other actions have been taken such that execution, delivery and performance of this Consent Decree and all other actions taken or to be taken in connection with this Consent Decree have been fully authorized.

26. This Consent Decree embodies the entire agreement and understanding of the Parties with respect to the subject matter herein, and supersedes any and all prior agreements, arrangements and understandings entered into with respect to the subject matter herein. To the extent this Consent Decree references other documents, those documents are referenced for informational purposes only and are not thereby incorporated by reference into, and do not constitute a part of, this Consent Decree.

27. It is hereby expressly understood and agreed that this Consent Decree was jointly drafted by the Parties. Accordingly, the Parties hereby agree that any and all rules of construction to the effect that ambiguity is construed against the drafting Party shall be inapplicable in any dispute concerning the terms, meaning, or interpretations of this Consent Decree.

28. Nothing in this Consent Decree shall be construed to limit or modify any discretion accorded EPA by the Clean Water Act or by general principles of administrative law in taking the actions which are the subject of this Consent Decree, including the discretion to

alter, amend, or revise any final actions taken pursuant to this Consent Decree. EPA's obligation to perform each action specified in this Consent Decree does not constitute a limitation or modification of EPA's discretion within the meaning of this paragraph.

29. If for any reason the Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of any Party, and the terms of the proposed Consent Decree may not be used as evidence in any litigation between the Parties.

30. The undersigned representatives of Plaintiffs and EPA certify that they are fully authorized by the Party they represent to consent to the Court's entry of the terms and conditions of this Decree.

Dated this 15th day of December, 2023.

Susan R. Bolton
United States District Judge

Approvals:

For Plaintiffs:

/s/ Roger Flynn
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