



**Nevada Conservation League
Education Fund**

February 28, 2020

Dave Simpson
Nevada Division of Environmental Protection
Bureau of Water Quality Planning
901 S. Stewart Street
Carson City, Nevada 89701
via email: dsimpson@ndep.nv.gov

Dear Mr. Simpson,

Thank you for the opportunity to comment on the *Draft Nevada 2016-2018 Water Quality Integrated Report* (“Draft IR”). I make these comments on behalf of Western Resource Advocates and the Nevada Conservation League Education Fund.

Western Resource Advocates protects the West’s land, air and water to ensure that vibrant communities exist in balance with nature. We envision a future in which the West will have clean water to support healthy communities and vital habitat for current and future generations of people and wildlife. WRA works with western states to establish and defend strong water quality standards so that communities and nature thrive.

The Nevada Conservation League Education Fund works to protect our climate, air, water, land, and health by translating conservation values into priorities that we actively promote so all Nevada’s communities can thrive. As the driest state in the nation, Nevadans have a keen awareness of the importance of clean water resources. NCLEF works to safeguard these resources so that Nevadans have clean drinking water, abundant recreation opportunities and scenic landscapes that are protected for future generations.

The Draft IR represents significant efforts undertaken by the Bureau of Water Quality Planning (BWQP) to monitor and assess the condition of Nevada’s waters. BWQP has presented its evaluation of the quality of Nevada’s waters in ways that help the public and decision makers focus on the challenges that face Nevada as it works to enforce its water quality standards and to improve and protect the quality of its streams, lakes and wetlands. In this context, we raise the following:

Prioritizing Impaired Waters and Developing Plans to Improve Water Quality

The Clean Water Act requires Nevada, as part of its Integrated Report, to “establish a priority ranking for [impaired] waters, taking into account the severity of the [pollution](#) and the uses to be made of such waters.” CWA § 303(d)(1)(a). Indeed, BWQP explains that a chief purpose of the Integrated Report is to “prioritize waterbodies and parameters that need attention[.]” Draft IR at 1. Yet, it appears that the agency has not undertaken this critical step. For example, in

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Attachment 3, the agency lists all impaired waters as being a low priority for the development of a TMDL.

Further, although BWQP acknowledges that it may develop and adopt other strategies for restoring water quality in impaired streams, lake and wetlands, it does not prioritize the 303(d) listed impaired waters or otherwise indicate to the public or decision makers which waters warrant immediate attention or how water quality will be restored in these ailing waters. We hope that BWQP will undertake this important process as it finalizes the 2016-2018 Integrated Report, thereby presenting to the public a list of priority impaired waters and strategies for improving water quality in these streams, lakes and wetlands.

The Draft IR correctly explains that developing and implementing TMDLs and watershed management plans are resource intensive and that other approaches for improving water quality, particularly when nonpoint sources are the likely cause of impairment, should be explored. *E.g.* ES-9 (noting that “watershed management plans” are “time-consuming” and involve “interagency coordination and participation by local stakeholders.”). Because improving the quality of Nevada’s waters is critical to the public welfare, the state’s economy, recreation, wildlife and aquatic ecosystems, we encourage BWQP to commit to implementing watershed plans and alternative strategies to improve the quality of Nevada’s waters as part of the final 2016-2018 Integrated Report.

Such watershed management plans and alternative approaches may be particularly effective to address certain impairments. As a general matter, BWQP clarifies in response to the National Long-Term 303(d) Vision, “NDEP has been contemplating appropriate means for implementing” alternative “direct-to-implementation” and other plans to improve water quality. Draft IR at 11. More specifically, BWQP concludes that stream restoration plans may be an effective way to address elevated water temperatures caused by destruction of riparian vegetation. Draft IR at ES-4. Similarly, according to BWQP, “[w]orking on strategies to reduce concentrations of total phosphorus would provide the greatest improvement in water quality across the state.” *Id.*

The Draft IR also points out that “[m]ost impairments in Nevada are the result of nonpoint source pollution, channel modification, or flow diversions.” Draft IR at 10. Again, Nevada’s water quality improvement planning concludes that the state should adopt alternatives to the TMDL process to reduce nonpoint source pollution and secure water quality improvements in the state’s impaired waters.

The Nevada Nonpoint Source Management Plan (Nonpoint Source Plan), approved by EPA in 2015, “formalizes Nevada’s approach for protecting and improving water quality throughout the state.” Draft IR at 9. Citing the 2012 Integrated Report, the Nonpoint Source Plan identifies the “nonpoint source pollutants causing impairments” as “phosphorus, iron, temperature, mercury in fish tissue, turbidity, E. coli, total dissolved solids and total suspended solids.” Nonpoint Source Plan at 17. The Nonpoint Source Plan then identifies and focuses on three strategies to reduce these sources and causes of water pollution: 1) the “implementation of bank stabilization, channel and riparian habitat restoration;” 2) “grazing management and urban runoff control projects;” and, 3) “environmental education to promote awareness and prevention of nonpoint

source pollution and affect behavior change for long term protection of Nevada’s water resources.” Nonpoint Source Plan at 17.

In its Nonpoint Source Plan, NDEP also commits to a “prioritization strategy” based on the National Long-Term 303(d) Vision that will systematically evaluate “303(d) listed waters to determine the best approach for addressing impairment, which may be a TMDL, TMDL implementation plan, watershed based plan or alternative approach such as straight to implementation.” Nonpoint Source Plan at 25. NDEP may pursue “alternative plans” for achieving water quality goals where “issues are relatively clearly defined and there are stakeholders that are interested in taking action to address the problem.” *Id.* at 26. “NDEP and partner agencies may utilize this approach when implementation needs are already known[.]” Nonpoint Source Plan at 26; *see also* Draft IR at ES-8 (explaining that alternative approaches “may be better suited to implement priority watershed or water actions that achieve the water quality goals of Nevada, including identifying and reducing nonpoint sources of pollution”).

Based on NDEP’s own analysis, we encourage BWQP to include in the final Integrated Report a prioritization of impaired waters coupled with strategies designed to address the particular parameter or parameters causing that impairment. *See* Draft IR at 11 (“The rationale for setting long-term priorities, and plans to develop future TMDLs and alternative restoration approaches or protection plans, includes evaluating which parameters cause the majority of impairments (see Table ES-1).”). Further, while we do not suggest that Nevada abandon the TMDL process, we hope that NDEP will take full advantage of effective strategies, including “alternative plans” to secure water quality improvements.

In particular, we suggest that NDEP take advantage of the legal and planning obligations of federal land managers to comply with Nevada Water Quality Standards. The Clean Water Act provides that federal agencies are required to comply with state and local water quality requirements to the same extent as nongovernmental actors. CWA § 313, 33 U.S.C. § 1323; *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1153 (9th Cir. 1998), *as amended on denial of reh’g* (May 13, 1998), *and overruled on other grounds by The Lands Council v. McNair*, 537 F.3d 981 (9th Cir. 2008) (holding that “[u]nder the Clean Water Act, all federal agencies must comply with state water quality standards, including a state’s antidegradation policy.”). This requirement applies both to point and nonpoint sources. *Oregon Nat. Desert Ass’n v. Dombeck*, 172 F.3d 1092, 1098 (9th Cir. 1998) (“Section 1323 plainly applies to nonpoint sources of pollution on federal land.”).

Importantly, the duty to comply with state water quality standards applies when federal land managers are permitting activities to be undertaken by third parties. *Idaho Sporting Congress v. Thomas*, 137 F.3d at 1153; *Save Our Cabinets v. United States Dep’t of Agric.*, 254 F.Supp.3d 1241, 1249 (D. Mont. 2017) (“Under the Clean Water Act Section 313, the Forest Service cannot authorize mining operations that do not comply with state and federal water quality regulations.”); *Center for Native Ecosystems v. Cables*, 509 F.3d 1310, 1332 (10th Cir. 2007) (holding that the Forest Service was required to comply with Wyoming water quality standards when the agency issued grazing permits).

As NDEP concludes, working with federal land managers to secure water quality improvements is especially warranted in Nevada. BLM manages about 68% of the land in Nevada and, as NDEP acknowledges, must comply with “water quality standards and other state rules and regulations established by NDEP.” Nonpoint Source Plan at 30-31. Similarly, the Forest Service manages about 10% of the land in Nevada – land which encompasses many of the headwaters in the state. *Id.* at 31. Like BLM, the Forest Service must comply with Nevada water quality standards. *Id.* The Forest Service has prioritized watersheds within the Forest for restoration and protection. *Id.*

As far back as 1999, NDEP recognized that federal land managers play a crucial role in protecting Nevada’s water quality:

Most streams originate and ground water recharge occurs within upper and middle portions of watersheds managed by the U.S. Forest Service and U.S. Bureau of Land Management. In the past 30 years, several resource and land use laws have been enacted directing these and other federal agencies (e.g., Natural Resources Conservation Service) to make watershed management a high priority.

1999 Nevada State Water Plan at 7-20. Accordingly, in the Nonpoint Source Plan, NDEP establishes as a priority establishing new partnerships to improve water quality and nonpoint source pollution reduction, including with the Forest Service. Nonpoint Source Plan at 5; *see also id.* at 7-14 (“[T]he Department should encourage and support the efforts of state, federal and local agencies in managing watersheds for protection and enhancement of a full complement of recreation values, in addition to the other natural resource conservation considerations.”).

Thus, as Nevada has already determined, the state should work with and encourage federal land managers to administer activities under their authority so that they do not impair water quality, including by protecting high quality waters on public lands. Because these agencies have obligations under the Clean Water Act and their organic acts and management planning duties to comply with Nevada water quality standards and to protect and restore watershed function, these agencies have access to alternative strategies to improve water quality that may lead to more immediate results. We hope that as BWQP prioritizes Nevada’s impaired waters and articulates and implements strategies to address impairments that it will focus on ways to ensure that federal land managers are fulfilling their obligations to comply with state water quality standards and restore watershed function and water quality.

Protecting High Quality Waters

The Draft IR acknowledges that some waterbody-specific numeric standards include “antidegradation requirements to maintain existing higher water quality.” Draft IR at 7.¹ These

¹ State antidegradation requirements are state water quality standards. The 1987 amendments to the Clean Water Act mandate that state water quality standards include an antidegradation policy, 33 U.S.C. § 1313(d)(4)(B), which requires “that state standards be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation.” *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology*, 511 U.S. 700, 705 (1994). To implement this

numeric standards have been incorporated into Nevada’s Water Quality Standards. *E.g.* NAC 445A.1336; 445A.1338; 445A.1342 & 445A.1344. More generally, Nevada law provides that “[a]ny surface waters of the State whose quality is higher than the applicable standards of water quality as of the date when those standards become effective must be maintained in their higher quality” unless the Commission determines that the lower quality is justifiable because of economic or social considerations. NRS 445A.565.1. With regard to nonpoint source pollution, Nevada law is also clear. Whether public or private, a project that would constitute a new or increased source of nonpoint source pollution must include “measures, methods of operation or practices...to prevent, eliminate or reduce water pollution from the source[.]” NRS 445A.565.2(b).

Thus, under Nevada law, a water would be deemed to be impaired – or not meeting state water quality standards – if it is subject to specific high quality water numeric standards and those standards are not being met. Yet, it is unclear whether when assessing such waters BWQS evaluates whether a water is complying with these numeric standards. Similarly, where a water was of high quality as of the date when Nevada’s water quality standards became effective, Nevada law requires that that high quality be maintained absent Commission determinations. NRS 445A.565.1. Again, the Draft IR does not explain if and how BWQP assesses whether this mandate is being fulfilled.

Without an evaluation of whether high quality water is being protected in Nevada’s waters, neither the public nor decision makers are in a position to carry out the purposes of the Integrated Report, which is to, *inter alia*, “[e]ducate and inform citizens and public officials about overall quality of Nevada’s surface waters” and “[d]etermine the extent to which the designated uses for all waterbodies are supported by comparing the data to water quality standards and other appropriate criteria and guidelines.” Draft IR at 1. Therefore, we urge BWQP to address its efforts to monitor high quality waters and to explain how it ensures that the Nevada water quality standards applicable to high quality waters are being met. We also ask that, based on adequate monitoring data and where conditions warrant, BWQP prioritize these waters and develop plans to improve their water quality.

Enforcing Nevada’s Narrative Standard

The narrative standards contained in NAC 445A.121 apply to all surface waters of the State and require waters to be “free from” various pollutants in sufficient levels so as to not be unsightly; interfere with any beneficial uses; create a public nuisance; be toxic to human, animal, plant, or aquatic life; or have any other adverse effects. NAC 445A.121.2 to .4; Draft IR at 7.

At the same time, BWQP states that there are waters in the state, including waters that flow out of the state or into a closed basin, “that do not have assigned uses and that are located in a watershed with waters that do not have standards.” Draft IR at 26. However, waters such as these are still waters of the state, are still protected by, at a minimum, Nevada’s narrative

requirement, EPA promulgated 40 C.F.R. § 131.12, the regulation that governs antidegradation. Section 131.12 requires states to “develop and adopt a statewide antidegradation policy and identify methods for implementing such policy.” 40 C.F.R. § 131.12(a).

standard, and may be critical to sustaining aquatic life or providing other services such as irrigation and recreation. Furthermore, Nevada’s narrative standard protects “any beneficial use of water.” NAC 445A.121.4. This indicates that while these waters may not have “assigned” uses, state law has defined their beneficial uses broadly to encompass **any** beneficial use that water can provide. It is these uses, then, that must be protected and restored if they are not being met.

The Draft IR further explains that “narrative data” was considered insufficient evidence to list a water as impaired where the water “did not have applicable criteria.” IR at 30. This suggests that Nevada will not enforce its narrative standard where a water is not also subject to a numeric standard. Such an approach essentially makes the narrative standard meaningless and leaves many of Nevada’s waters unprotected from pollution. Moreover, as BWQP explained, where, for example, other data are unavailable, it uses temperature data to determine if a water is meeting the aquatic life standard. Temperature is also an element of the narrative standard, suggesting that temperature readings could be used – perhaps in conjunction with other monitoring data – to determine if waters solely protected by Nevada’s narrative standard are supporting their beneficial uses – described by the rule as “any beneficial use of water – and otherwise meeting this core state standard.

Assessing and Protecting Waters of the State

The Draft IR clarifies that “[s]tate waters that are not ‘Waters of the U.S.’ are not included in the 2016-2018 Water Quality Integrated Report.” Draft IR at 13. BWQP also explains that only a fraction of the waters of the U.S. (WOTUS) were assessed in the Draft IR:

The miles of streams and acres of lakes and reservoirs, as well as the area of wetlands that were assessed as “Waters of the U.S.” are identified below. Of the typically perennial streams in Nevada, just over 40% were assessed. Almost 70% of lakes and reservoirs in Nevada were assessed, along with about 40% of wetlands.

Id. at 6.

It is important for the public and decision makers to understand how the assessments of WOTUS made in the Draft IR relate to the total “waters of the state,” as well as the total of waters of the state that are not WOTUS. After all, as discussed above, Nevada water quality standards apply to all waters of the state, *see* NRS 445A.415 (definition of waters of the state), and NDEP is obligated to administer and enforce these water quality standards. NRS 445A.445 (providing that the Director shall “[a]dminister and enforce the provisions of [NRS 445A.300](#) to [445A.730](#), inclusive, all regulations adopted by the Commission, and all orders and permits issued by the Department.”)

Despite this mandate, it appears that a majority of waters of the state are not addressed in the Draft IR. For example, BWQP explains that 90% of streams in Nevada are considered intermittent or ephemeral. Draft IR at 5. However, it appears that none of the intermittent or ephemeral streams was assessed in the Draft IR. *Id.* at 6. Also unclear is whether the figure for

total acres of wetlands in the state of 136,650 includes only WOTUS or, alternatively, whether it encompasses all wetlands that are waters of the state. *Id.* at 5.

In addition, the Draft IR explains that “NDEP accepts Corps- or EPA-approved [jurisdictional determinations] effective during the assessment period, on a case-by-case basis and did not include waters in the *2016-2018 Water Quality Integrated Report* that were specifically determined to be non-jurisdictional.” Draft IR at 31. Waters determined to be jurisdictional are WOTUS. Therefore, it may be that Nevada considers, or EPA has determined that **no** intermittent or ephemeral streams in Nevada are waters of the U.S. We ask that BWQP clarify whether any intermittent or ephemeral streams in the state are WOTUS.

Also unclear is whether BWQP has assessed the water quality of any of Nevada’s intermittent or ephemeral streams. Similarly, it is uncertain whether BWQP has conducted water quality monitoring or has other information that indicates whether any non-WOTUS wetlands or lakes and reservoirs are meeting state water quality standards.

To facilitate public understanding and good decision making, we encourage BWQP to quantify the acres and miles of waters of the state that the agency considers to be outside the scope of waters of the U.S. and to specify to what extent BWQP has monitoring data or other information that indicates whether these waters of the state are meeting state water quality standards. We also ask that BWQP clarify whether Nevada considers that all intermittent and ephemeral streams in the state are non-jurisdictional waters.

Making Beneficial Use Assessments

The Draft IR explains the process for assessing whether a water is meeting its beneficial uses as follows:

NDEP assumed that if a particular beneficial use was meeting standards for one parameter, then that beneficial use is fully supported; sufficient data for other parameters would be required to refute that presumption. For example, when data were only available for temperature (for protecting aquatic life), and there were no data for other parameters that had criteria for aquatic life; then support for aquatic life was assessed only on temperature data.

IR at 20. BWQP also clarifies that a water could be delisted based on a determination that is “meets the water quality standard in the current assessment cycle.” Draft IR at 45 (“As a general approach, similar data are needed to delist, as to list for, a parameter.”).

This method of determining whether a beneficial use is fully supported seems problematic. This is because such a finding could be based on a single parameter when in fact multiple parameters define whether a beneficial use is being met. For example, there are approximately 23 to 43 separate toxic material parameters that together establish if a water is meeting the aquatic life beneficial use. NAC 445A.1236.2. Similarly, for a water such as the Boulder Reservoir, which is typical of many other waters, there are five additional parameters – temperature, pH, dissolved oxygen, total phosphorous and total ammonia – that determine whether this reservoir is meeting

the aquatic life beneficial use. NAC 445A.1256. Thus, it appears that should water quality monitoring show measurements of a single parameter as being below the standard for aquatic life, it does not follow that the water is fully supporting aquatic life. After all, monitoring data, if it existed, could show that concentrations in the water were well above any of the other many aquatic life parameters.

Similar analysis applies to the delisting of a water. It appears that delisting to may be based on a single parameter where other monitoring data is not available. Yet, as suggested above, a single parameter does not establish that a water is fully supporting a particular beneficial use.

Based on these concerns, we ask that BWQP explain how often it relied on a subset of the relevant parameters to determine that a water is full supporting its beneficial uses. We also request that BWQP explain how its approach can be relied on to determine whether or not the quality of a water is fully supporting one or more of its designated beneficial uses.

Using Biological Data

The Draft IR acknowledges that nonpoint source pollution is the cause of most of the water quality impairment identified by the recent monitoring. Biological data is an important mechanism for assessing whether a water is supporting its beneficial uses. Indeed, biological data may address some of the concerns BWQP has identified in the Draft IR by providing a measure of the long-term health of an aquatic habitat. Such monitoring could help Nevada prioritize impaired waters and identify nonpoint sources of pollution adversely impacting water quality. The Draft IR explains that biological data “can only be used in concert with data for water chemistry” and that the data were “not used to determine whether beneficial uses were supported.” Draft IR at 24. While we agree that it may not be appropriate to determine that a water is supporting its beneficial uses on the basis of biological data alone, biological data could be used to establish that a water is not meeting state water quality standards. We urge BWQP to further develop its biological monitoring efforts and to use any biological monitoring data to prioritize impaired waters and to develop strategies for restoring the quality of Nevada’s waters.

Addressing Other Impairments

The Draft IR acknowledges that about half of the impaired lakes and reservoirs are impaired because of high concentrations of mercury in analyzed fish tissue. Draft IR at 39. “Mercury in fish was the most common impairment for wetlands.” *Id.* at 40. “Most of the mercury-impaired waters reflect legacy pollution from historical mining operations where mercury was used to amalgam gold during ore processing.” *Id.* at ES-7. Given the prevalence of mercury contamination in Nevada’s waters, it would be helpful to understand if tackling this water quality impairment should be a priority for Nevada.

Similarly, Table 15 indicates that arsenic contamination is responsible for the impairment of 51,734 acres of lakes and reservoirs and 26,152 acres of wetlands. Draft IR at 41. These acreages represent a significant proportion of the lakes and wetlands assessed in the Draft IR. Based on the extent of this contamination, we encourage NDEP to address arsenic contamination as part of its prioritization effort and to provide sufficient information to allow the public and

decision makers to consider whether, over the next several years, TMDLs, watershed plans or alternative approaches should be developed and implemented to address arsenic pollution.

Thank you again for this opportunity to comment on the Draft IR. We appreciate the time and effort that has been put into assessing the quality of many of Nevada's waters and into presenting this critical information to decision makers and the public. We hope that you will consider our input as you finalize the 2016-2018 Integrated Report.

A handwritten signature in black ink, appearing to read 'Joro Walker', with a large, stylized initial 'J'.

Joro Walker, General Counsel
WESTERN RESOURCE ADVOCATES