

DRAFT Nevada's Antidegradation Implementation Procedures

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*Jarbidge River above Jarbidge (Assessment Unit NV03-JR-13_00)
Tier 2 Protection for all Parameters*



Prepared by:
Nevada Division of Environmental Protection
Bureau of Water Quality Planning

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Acronyms and Abbreviations

7Q10	7-day high or low flow with a 10-year recurrence interval
AIP	Antidegradation implementation procedure
BMP	Best management practice
CFR	Code of Federal Regulations
Commission	State Environmental Commission (as used in regulations)
CPP	Continuing Planning Process
CWA	Clean Water Act
Division	Nevada Division of Environmental Protection (as used in regulations)
EAW	Ecological and Aesthetic Water
EPA	U.S. Environmental Protection Agency
IBV	Interim baseline value
MDL	Method detection limit
mg/L	Milligrams per liter
ML	Minimum level
MS4	Municipal separate storm sewer system
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NRS	Nevada Revised Statutes
PQL	Practical quantitation limit
RMHQ	Requirement to maintain existing higher quality
TDS	Total dissolved solids
TMDL	Total maximum daily load

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Nevada's Antidegradation Implementation Procedures

1.0 Introduction

An antidegradation policy to protect high-quality waters and maintain existing water quality constitutes an important component of state water quality programs. The goal of antidegradation is to protect existing in-stream water quality and preserve the unique attributes and in-stream conditions of high-quality waters that may be impossible to fully restore if degradation is allowed to occur. An antidegradation policy, along with beneficial use designations and numeric or narrative criteria to protect those uses, provides the fundamental structure of a state's water quality standards program.

The Nevada Division of Environmental Protection (Division) has developed an antidegradation policy with procedural guidance for policy implementation that would be applied on a statewide basis. This policy meets the statutory requirements of Nevada's water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565, and parallels federal antidegradation policy found at Title 40 in the Code of Federal Regulations (CFR) 131.12 (Appendix A contains these statutes from the NRS and CFR 131.12).

This document, *Nevada's Antidegradation Implementation Procedures (AIP)*, has been developed to provide guidance on the sequence of steps the Division would follow to evaluate whether a regulated discharge would degrade water quality in a receiving water. Regulated discharges include those that require a discharge permit, those covered under a general permit, or a Section 401 water quality certification pursuant to state or federal law. The information contained in this document is intended to provide guidance only and is not a substitute for the provisions of any other State laws, rules, or regulations. This AIP guidance includes:

- Procedure for determining baseline water quality of a receiving water;
- Process for identifying the antidegradation protection level (i.e., the "tier") for water quality parameters in the receiving water;
- Approach for evaluating whether water quality conditions in the receiving water will be degraded;
- Procedure for analysis of less-degrading or non-degrading alternatives when degradation of high water quality conditions is predicted;
- Process for nomination, and data and information requirements for nominating and classifying a surface water as an ecologic, aesthetic or recreational water (EAW); and
- Requirements for public notification and opportunity for comment for antidegradation reviews completed as part of the permitting process and for nomination and classification of EAWs.

2.0 Tiered Protection Levels

The Division's antidegradation policy is intended to maintain and protect water quality conditions in a surface water when a discharge into the waterbody is proposed. To implement this policy, it is necessary to identify antidegradation protection levels or tiers appropriate for each parameter in each receiving water. The state antidegradation rule, R113-22, delineates four tiers of protection. Implementation of the antidegradation policy involves applying these tiers on a parameter-by-parameter (i.e., pollutant-by-pollutant) basis. Each tier of protection has its own requirements for protecting existing water quality, as described below:

- **Tier 3** – Tier 3 protection provides the highest level of protection. This tier is reserved for a surface water or segment thereof, that has been classified as an EAW by the State Environmental Commission (Commission). Tier 3 protection per the State antidegradation rule prohibits any new or expanded discharge into the EAW, and to upstream tributaries to the EAW that would degrade water quality in the EAW or an important attribute of the classified water.

A Tier 3 protection level will not prohibit an existing point source discharge, including a discharge associated with a zone of mixing, that was authorized by the Division prior to classification of the water as an EAW. This exception would also be applicable to authorized discharges into upgradient waters to the EAW. At the time of permit renewal, as long as the authorized discharge rate, effluent limitations, and other permit conditions and requirements are maintained, and the permit holder does not request to expand the point-source discharge or modify the zone of mixing, the discharge will continue to be exempt from an antidegradation review. A Tier 3 protection level shall also not prohibit any activity authorized by the Division to restore or maintain the water quality or other attributes of the classified EAW.

Proposed activities and discharges that result in temporary or limited lowering of water quality will be allowed, when necessary, to accommodate public health and safety in the area which the EAW is located, for an emergency response to mitigate an immediate threat to public health or safety, or when the Division authorizes an activity or discharge that will result in restoration or maintenance of the water quality condition or characteristic, or ecological, aesthetic or recreational value of the EAW. Such activities and discharges must not be reoccurring, and the Division shall ensure that any controls necessary to minimize impacts to water quality and water quality values are implemented.

Tier 2.5 – This tier of protection, like Tier 3, is reserved for a surface water or segment thereof, that has been classified as an EAW by the Commission. Unlike Tier 3, this tier of protection does not preclude a new or expanded point source discharge into the EAW

where such discharges would not degrade the existing water quality or other attributes of the EAW. A Tier 2.5 protection level shall not prohibit point source discharges, including a discharge associated with a zone of mixing, that was authorized by the Division prior to classification of the water as an EAW. This exception would also be applicable to authorized discharges into upgradient waters to the EAW. At the time of permit renewal, as long as the authorized discharge rate, effluent limitations, and other permit conditions and requirements are maintained, and the permit holder does not request to expand the point source discharge or modify the zone of mixing, the discharge will continue to be exempt from an antidegradation review. A Tier 2.5 protection level shall also not prohibit any activity authorized by the Division to restore or maintain the water quality or other attributes of the classified EAW.

Proposed activities and discharges that result in temporary or limited lowering of water quality will be allowed, when necessary, to accommodate public health and safety in the area which the EAW is located, for an emergency response to mitigate an immediate threat to public health or safety, or when the Division authorizes an activity or discharge that will result in restoration or maintenance of the water quality condition or characteristic, or ecological, aesthetic or recreational value of the EAW. Such activities and discharges must not be reoccurring and the Division shall ensure that any controls necessary to minimize impacts to water quality and water quality values are implemented.

Waterbodies nominated as EAWs would be assigned a Tier 3 or Tier 2.5 antidegradation protection level by the Commission if the nominated water was classified as an EAW. The antidegradation protection level assigned would be based on the supporting information and data compiled to support classification of a nominated surface water as an EAW (See Section 6.0). The objective of a Tier 3 or Tier 2.5 antidegradation protection level assigned to an EAW is to prevent future degradation caused by new or increased sources of pollution from point-source discharges. New or expanded point source discharges upstream of an EAW (Tier 3 or Tier 2.5) are allowable if a demonstration can be made to the Division that the discharge will not impact water quality conditions in the downstream EAW or impact an attribute of the classified water. This demonstration will primarily rely on an antidegradation review analysis as described in Section 4.3, although an applicant would also have the option to use modeling to show that downstream water quality conditions in the EAW would not be impacted.

- **Tier 2** – This tier of protection applies to parameters in Nevada waters present at levels significantly better than the water quality standard or where a requirement to maintain higher quality (RMHQ) has been adopted for a parameter in the receiving water. Where the existing water quality level of a parameter in the receiving water is at least 25-

percent better than the most restrictive beneficial use standard, Tier 2 protection will apply to the parameter.

Tier 2 protection status requires protecting and maintaining existing high-quality conditions, unless an antidegradation review of reasonable alternatives does not identify a technically feasible and economical alternative, and an evaluation of social or economic considerations associated with the proposed discharge justifies a lowering of water quality. However, in no case may water quality be allowed to degrade to the point where it fails to meet water quality standards.

If an RMHQ does not exist for a parameter present at significantly better water quality conditions, the Division will develop an RMHQ value to provide Tier 2 protection. RMHQs will be established at the 95th percentile value of the water quality data set of at least 20 samples ideally collected on a quarterly basis over 5-years.

- **Tier 1** – This tier of protection applies to all surface waters as a minimum level of protection. Tier 1 protection requires that water quality standards be achieved. No further degradation of existing water quality is permitted in a receiving water where a parameter of concern does not meet applicable water quality standards.

When the receiving water is an effluent-dominated water, a Tier 1 level of protection will apply to such waters whose flow consists of greater than 80-percent wastewater effluent for at least 300 days of the year. Exceptions to a Tier 1 level of protection applying to a parameter in an effluent-dominated water would be if the parameter has an existing RMHQ or is regulated by a TMDL.

The antidegradation policy for waterbodies with Tier 1 protection is to maintain and protect existing and designated uses for a waterbody, as well as to specify the water quality criteria needed to protect such uses. Under Tier 1 protection, no point source discharges that cause impairment of the water (i.e., exceed the water quality standards) are allowed (NRS 445A.520).

Tier 1 and Tier 2 antidegradation protection levels are based on the corresponding level of a water quality parameter in the receiving water (i.e., protection is applied on a parameter-by-parameter basis), whereas Tier 3 or Tier 2.5 is an assigned level that precludes or limits future discharges into the EAW. Because the designation of an EAW may be based on ecological, aesthetic, or recreational values (i.e., an attribute other than high water quality conditions), an impaired (i.e., polluted) water could be designated as an EAW based on one of these other attributes. This means a receiving water that is a Tier 3 or Tier 2.5 EAW could have Tier 2 protection for some parameters with existing water quality better than water quality standards, and Tier 1 protection for other parameters that are not better than water quality standards.

2.1 Implementation of a Statewide Antidegradation Program

The Division will conduct an antidegradation review analysis when a permit application is submitted for a new or an expanded point source discharge to a surface water. The purpose of the antidegradation review is to evaluate whether the discharge has the potential to lower water quality conditions in the receiving water. Regulated discharges include point source discharges to receiving surface waters (National Pollutant Discharge Elimination System [NPDES] and State Water Pollution [WPC] Permits), discharges covered under general permits, and discharges regulated under federal permits that are subject to state water quality certification under Section 401 of the Clean Water Act (CWA).

Implementation of the proposed antidegradation program is intended to be forward-looking and will apply when new or expanded discharges to a surface water are proposed, and at the time of permit renewal if a major modification is proposed. Permit renewals that maintain existing permitted flow, the same effluent limitations, the same composition of the parameters in the discharge, and other conditions and requirements as the previous authorized permit will not be subject to antidegradation review. If a discharge permit has an approved zone of mixing, renewal of the zone of mixing will not be subject to antidegradation review provided the permittee does not propose to modify the authorized zone of mixing.

A permit renewal that involves a major modification or an expanded discharge would require that an antidegradation review be conducted of the modified discharge. Major modifications include the following:

- An increased limit of flow of the discharge authorized by the permit which results in an increase in the concentrations of the parameters of concern in the discharge,
- A change in the pollutant composition of the discharge requiring different effluent limitations,
- A relocation of the discharge outfall that represents a significant change based on an evaluation by Division,
- A substantial modification to the permitted facility that will result in new permit conditions or permits conditions that differ from the conditions in the existing permit,
- The Division receives new information which was not available when the existing permit was issued which would result in application of different permit conditions,
- A new zone of mixing, or
- Proposed modifications to a previously approved zone of mixing.

For new dischargers requesting a zone of mixing, an antidegradation review would be required to demonstrate that at the downstream edge of the mixing zone, the concentration of

parameters of concern in the discharge would meet the applicable antidegradation protection levels for parameters in the receiving water. The specifics of the antidegradation review for a zone of mixing request are discussed in *Nevada's Antidegradation Permit Writers' Guidance (NDEP 2020.)*

Changes to an authorized discharge stemming from the Division adopting a new water quality standard for a particular parameter of concern in the discharge or incorporating new analytical methods which expand the ability to detect constituents in the discharge would not be considered a major modification that would undermine the currently authorized discharge. Generally, when a new water quality standard is adopted or revised for a parameter of concern in the discharge, the permit limit for the parameter is amended during the permit renewal, unless there is a compelling reason to amend the permit limit prior to renewal. This would also be true if a new analytical method is certified for a parameter of concern that would result in a new permit limit. In both instances, an antidegradation review would be conducted specific to the parameter of concern, assuming that no other changes are proposed that would be considered an expansion of the existing discharge.

Discharges authorized by general permits will not be required to undergo an antidegradation review as part of the "notice of intent" submittal for coverage under the general permit. Instead, a categorical antidegradation review will be conducted when a new general permit is issued, or an existing general permit is renewed to ensure permit conditions and requirements meet antidegradation requirements. An overview of the antidegradation review procedure for general permits is contained in Section 5.0.

Antidegradation reviews for a storm water permit will focus on whether the permittee's storm water pollution prevention plan is effective in controlling pollutant levels in storm water discharges and protecting water quality. Further discussion of the antidegradation requirements for activities covered under storm water permits is contained in Section 5.0.

Antidegradation review requirements for Section 401 water quality certifications (WQCs) are highly dependent on the activity being regulated. Section 401 WQC antidegradation evaluations for regulated activities covered under federal license or permit will be made on a case-by-case basis and are discussed in more detail in Section 5.0.

Implementation of the Division's antidegradation program will require consultation, coordination, and cooperation between the Division and applicant/permittee to ensure that relevant issues are addressed early in the review process. The comprehensive antidegradation review analysis will require determination of baseline water quality, assessing projected impacts of the discharge, analyzing possible alternatives, and evaluating economic or social benefits, if applicable, prior to a decision being made by the Division and when required, by the Commission whether to issue a discharge permit. It is recommended that an applicant/permittee meet with the Division in a pre-application conference prior to submittal of

a permit application. Timely notification and early consultation with the Division will help ensure that issuance of permits can proceed without disruption to facility design, construction, or other activities planned by the applicant.

Public review is an important part of the permit review process, particularly if a discharge will be permitted into a high-quality waterbody that is assigned Tier 2 protection for some or all parameters. The antidegradation review, as well as decisions regarding authorizing a proposed discharge, will be open to public comment as part of the Division's permitting process. The Division must provide public notice and a 30-day public comment period for each draft permit in accordance with Nevada Administrative Code (NAC) 445A.234 and 40 CFR 124.10. The antidegradation review will determine the appropriate permit limits or conditions that must be set to satisfy antidegradation protection requirements.

2.2 Thermal Discharges

Thermal discharges into surface waters have not been a notable issue in the State. However, the proposed antidegradation approach and implementation would apply to prevent potential water quality impairments associated with thermal discharges, as required by Section 316 of the CWA.

3.0 Antidegradation Review Procedures

The antidegradation review for point source discharges will be based upon the assigned tier protection level and baseline water quality of the receiving water, applicable water quality standards, parameters of concern associated with the discharge and projected impact of the point source discharge on the quality of the receiving water. Antidegradation reviews will focus on the status of the receiving water, the chemistry of the discharge and the impact of parameters (pollutants) upon the receiving water. The antidegradation review shall be conducted on a parameter-by-parameter basis.

An antidegradation review will require applicants to identify parameters of concern reasonably expected to be in the discharge at measurable concentrations, estimated flow rates and expected effluent pollutant concentrations. A parameter of concern is a parameter with a water quality standard set forth in NAC 445A.11704 to 445A.2234, inclusive, and has been determined by the Division to be of concern to the receiving water.

3.1 Characterizing Receiving Waters to Determine Baseline Water Quality

The baseline water quality or existing water quality of a receiving water provides the yardstick against which predicted degradation associated with a regulated point source discharge is measured. The Division will use water chemistry data from its statewide water quality monitoring program—as well as quality data available from other agencies and organizations—

to the greatest extent possible to characterize baseline water quality. This characterization will show the level of antidegradation protection appropriate for parameters in the waterbody. If water chemistry data are limited or non-existent, collection of water chemistry samples to characterize ambient water quality conditions in the receiving water may be required before the Division can complete an antidegradation review. As previously mentioned, it is recommended that an applicant/permittee meet with the Division in a pre-application conference prior to submittal of a permit application. Timely notification and early consultation with the Division will help identify such situations as above and ensure that issuance of permits can proceed without disruption to facility design, construction, or other activities planned by the applicant.

The existing water quality levels in the receiving water will be assessed at the downstream control point for the segment of the receiving water as described in NAC 445A.1239 or at the downstream edge of an approved zone of mixing. Baseline concentrations of parameters of concern will be determined from the existing water quality data.

Receiving waters with baseline concentrations of individual parameters that are significantly better than the water quality standards will be considered “high quality” and the parameters in the waterbody will be subject to Tier 2 protection. The statistical approach used to set RMHQs will be followed to calculate the baseline concentrations of parameters in the receiving water when water quality is significantly better than the water quality standard levels and the water does not have existing RMHQs. Historically, the Division has used data from a minimum of 20 samples (e.g., five years of quarterly data) collected during non-extreme flow conditions to calculate the 95th percentile as the RMHQ value. For those waters that have RMHQs adopted for certain parameters, baseline water concentration of the parameter will be set at the RMHQ value.

If water chemistry data is limited for a receiving water, collection of additional water chemistry samples may be necessary to develop an RMHQ, if preliminary data shows that a parameter is present at a significantly better water quality level.

Determining baseline concentrations of parameters in an effluent-dominated water will not be necessary. Per the Division’s antidegradation policy, Tier 1 level of antidegradation protection would apply to parameters in such waters, unless an RMHQ has been promulgated or a TMDL has been approved for a particular parameter.

For lakes and reservoirs, the Division will consider seasonal impacts, water-level fluctuations, or other factors deemed important to establish the existing water quality conditions. Critical water levels of lakes and reservoirs will be determined on a case-by-case basis. The need for baseline water quality characterization will not be required for discharges authorized by general permits unless there are pollutants of concern reasonably expected in the discharge that might cause loss of a designated beneficial use or degradation of an EAW. Steps taken to conduct an antidegradation review during the permitting process are described below, in Section 3.2. More details are provided in *Nevada’s Antidegradation Permit Writers’ Guidance* (NDEP 2020)

3.2 Steps of an Antidegradation Review

The general steps taken to complete an antidegradation review are as follows:

- STEP 1 – Identify the parameters of concern (i.e., pollutants of concern) expected to be present in the proposed discharge at measurable concentrations.
- STEP 2 – Determine the baseline concentration in the receiving water for each parameter of concern in the point source discharge.
- STEP 3 – Determine the appropriate tier of antidegradation protection for each parameter of concern in the receiving water.
- STEP 4 – Evaluate whether the levels of parameters of concern in the proposed discharge are at levels equal to or less than the antidegradation tier protection levels for the parameters in the receiving waterbody and if higher water quality conditions will be maintained.
- STEP 5 – If Tier 2 protection levels cannot be met, perform additional analysis of alternatives and evaluation of social or economic importance factors to demonstrate why lowering of water quality conditions is necessary, subject to the permittee’s decision to do such to receive a discharge permit.

3.2.1 STEP 1. Identify Parameters of Concern (i.e., Pollutants of Concern)

The applicant or project proponent will be required to supply sufficient information and data related to the chemistry of the discharge to allow the pollutants of concern to be identified. Pollutants of concern are those pollutants reasonably expected to be present in the discharge at measurable concentrations that the Division has determined may adversely affect the water quality of the receiving water, and pollutants for which the receiving water is identified as impaired on the Division’s CWA Section 303(d) list.

For new discharges, effluent quality should be based on the anticipated effluent quality using all information available to a permittee or project proponent at the time of preparing a permit application and antidegradation review. It may be necessary to review information for facilities with similar types of processes and treatment systems to characterize the anticipated effluent quality from new facilities.

Certain parameters that may be present in a point source discharge will not be considered pollutants of concern for the purposes of an antidegradation review. For example, magnesium, calcium and potassium are essential nutrients, and silicon atoms are ubiquitous in clays and other aluminosilicate minerals. None of these constituents has water quality standards.

After identifying the pollutants of concern in the proposed discharge, the corresponding baseline concentration of the parameter in the receiving water would be determined using available water chemistry data for the waterbody. Available water chemistry data in the Division's water quality monitoring database will be used to establish baseline water quality and determine whether existing water quality conditions for pollutants of concern warrant Tier 2 protection.

3.2.2 STEP 2. Determine the Baseline Concentration for Parameters of Concern in the Receiving Water

The characterization of the chemistry of the receiving waterbody, as discussed in Section 3.1, will provide the chemistry data to determine the baseline concentration for the pollutants of concern in the receiving water.

The Division's most recent Water Quality Integrated Report will be used to determine whether the receiving water has been identified as an impaired waterbody (Category 4 or 5) on the CWA Section 303(d) List. Where the receiving water is identified as Category 4 or Category 5 for a parameter of concern, determining the baseline concentration of the parameter in the receiving water will not be necessary. For Category 4 parameters, which have an approved total daily minimum load (TMDL), the effluent permit limitation for these parameters of concern will be based on the TMDL waste load allocation. Where the receiving water is identified as Category 5 for a parameter of concern, the corresponding effluent permit limit would be based on the applicable water quality standard, and there would be no need to calculate a baseline concentration value for the parameter of concern.

Water quality parameters such as dissolved oxygen, temperature, and pH can vary considerably with time of day (i.e., there is a marked diurnal variation). For purposes of the antidegradation review, these parameters will not be considered pollutants of concern. Effluent permit limits for these parameters will be set at applicable water quality standard levels. As previously discussed, magnesium, calcium and potassium are essential nutrients and if present in a discharge will be regulated at the water quality standard level. Additionally, silica will not be considered a parameter of concern due to its ubiquitous presence in clays and other aluminosilicate minerals.

When a parameter of concern is expected to be present in a new or expanded discharge, but the water chemistry data indicate that the parameter is not present at a measurable concentration in the receiving water, the following values for censored data will be used:

- If sample result is censored at the method detection limit (MDL) (i.e., the MDL is used as the reporting limit) and are indicated as "not detected" at this level, the value of the MDL should be used as a proxy value for the non-detected result.

- If sample result is reported at a value greater than the MDL, but less than the quantitation limit (typically, the minimum level), the reported value should be used. (The sample result should be qualified by the laboratory as “estimated” and have an associated data qualifier; e.g., J-qualified).
- If sample result is censored at the quantitation limit (e.g., the quantitation limit is used as a reporting limit), a value of one-half the quantitation limit should be used as a proxy value for the non-detected result.

U.S. Environmental Protection Agency (EPA) guidance (EPA 1991, 1994, 1995, 2005) recommends using the minimum level¹ as the permit limit. Additionally, some states have regulations requiring the use of an ML or another quantitation limit be set as the permit limit (e.g., Ohio requires the practical quantitation limit [PQL]). The State of Nevada has not specified that quantitation limits (e.g., the ML), rather than detection limits (e.g., the MDL), must be used as permit limits. Clarification may be needed when baseline concentrations of trace metals or other trace constituents are less than quantitation limits.

3.2.3 STEP 3. Determine Tier Protection Level for Parameters of Concern

Based on the water quality of the receiving water and whether the baseline concentration of parameter is significantly better than corresponding water quality standard, the appropriate tier of antidegradation protection will be determined for each parameter of concern in the new or expanded point source discharge. As mentioned previously, because the antidegradation review analysis is conducted on a parameter-by-parameter basis, a receiving water may have some parameters assigned a Tier 2 protection level, while other parameters may be assigned a Tier 1 protection level. Determination of the antidegradation protection level to assign for each parameter of concern will be based on comparison of the parameter’s baseline concentration to the water quality standard.

Tier 2 protection will be provided for any parameter of concern in the receiving water with an existing RMHQ or a baseline concentration that is significantly better than the applicable water quality standard.

Parameters such as total dissolved solids (TDS), chloride and sulfate have water quality standards with relatively high numerical concentrations that support a beneficial use. For parameters such as these, RMHQs are usually not established at values less than 10 percent of the standard. For example, if the sulfate standard is 250 milligrams per liter (mg/L), the lowest RMHQ that will be established is 25 mg/L. (*Nevada’s Continuing Planning Process (CPP), 2004*). When such parameters are identified as parameters of concern, if an RMHQ has been

¹ The ML is the lowest level at which the entire analytical system must give a recognizable signal and an acceptable calibration point for the pollutant being analyzed.

developed and adopted, the Tier 2 protection level will be set at the existing RMHQ. If a RMHQ has not been developed, then for purposes of an antidegradation review, the Tier 2 protection level will be established at a value of not less than 10% of the water quality standard, even if the baseline concentration of the parameter in the receiving water is lower.

Tier 1 protection will be provided for any pollutant of concern in the receiving water with a baseline concentration that is the same or less than the applicable water quality standard. Tier 1 protection will be assigned to a pollutant of concern covered by a TMDL, if the receiving water is impaired for the parameter, or if the receiving water is an effluent dominated waterway.

Tributary Waters

If the receiving water is not a designated water named in NAC 445A.123 through 445A.2234, but is a tributary to such a water, the “tributary rule” (NAC 445A.1239) will be used to determine the water quality standards that would apply to the receiving water (tributary).

When the receiving water is not a designated water nor a tributary to such a water, the Division will assess existing aquatic life uses, existing recreational or aesthetic uses, agricultural uses, and other sensitive uses such as drinking water source, as well as the overall value of the waterbody from an ecological and public-use perspective, to determine what would be the appropriate beneficial uses and water quality standards for that water. Such undesignated or non-tributary waters would be evaluated based on criteria for those beneficial uses deemed appropriate for the water. This means that, for any parameter of concern where the baseline concentration exceeds a criterion value associated with the appropriate beneficial use, a Tier 1 protection level would be assigned to that parameter.

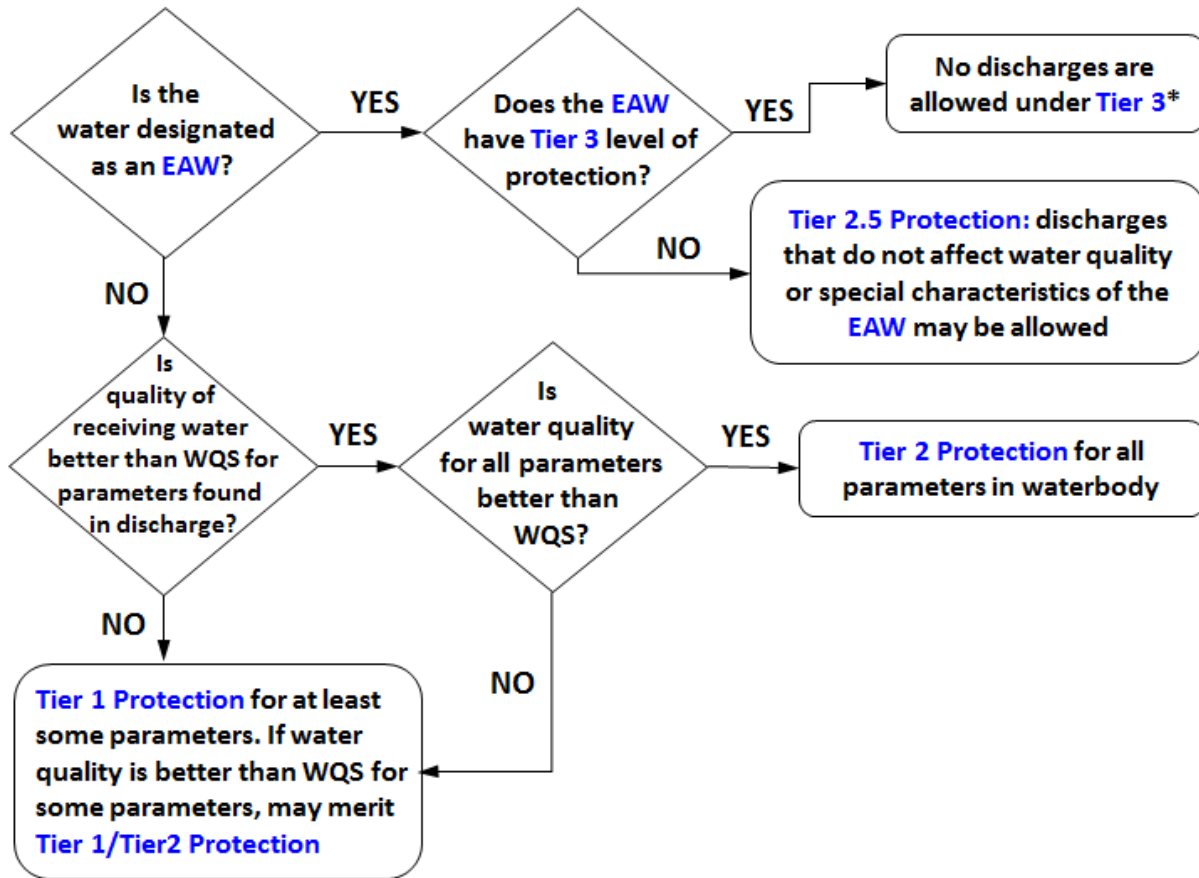
Tier 2.5 and Tier 3 Protection apply to surface waters that have been classified as EAWs. The distinction between these two tiers of protection is that the Tier 2.5 level allows for new or expanded point source discharges into the water if baseline (existing) water quality conditions are maintained and protected; whereas the Tier 3 level prohibits any new or expanded direct point source discharge into the water after it has been classified as an EAW. When the receiving water for a new or expanded point source discharge is a Tier 2.5 EAW, the same antidegradation review steps as described in this section would be followed. Baseline water quality information would be needed to determine the baseline concentrations of parameters of concern in the EAW. Tier 2 or Tier 1 protection would be assigned to the pollutants of concern as described above.

A Tier 3 or Tier 2.5 level of protection allows for a point source discharge upstream of an EAW if the antidegradation review demonstrates that the water quality of the downstream EAW will not be degraded. For such discharges, it will be necessary to evaluate the baseline water quality for both the upstream water (tributary) and the downstream EAW. The tier of

protection assigned to the parameters of concern will be based on the better water quality when comparing baseline values for both the upstream (tributary) water and the downstream EAW. If an RMHQ has been adopted for a pollutant of concern in the downstream EAW, maintaining this higher water quality condition would need to be accounted for when assigning the appropriate tier of protection for the parameter in the upstream discharge.

A decision flowchart for determining antidegradation protection levels is shown in **Figure 1**.

Figure 1. STEP 1 – Determining the Tier of Protection for Waterbody/Parameter Combinations



3.2.4 STEP 4. Evaluate the Effect of Discharge on the Receiving Water Quality

Statutory and regulatory requirements require that the effect of a point source discharge on the water quality conditions in a receiving water be evaluated at the point of discharge or at the downstream point of an approved zone of mixing. NRS 445A.565 does not authorize a “de minimis” exemption which would allow the Division to differentiate between discharges that will have an insignificant effect on water quality conditions from those that will have a significant impact. Pursuant to NAC 445A.296, an authorized mixing zone would include a downstream point (or boundary) designated by the Director where the parameters of concern

levels in the discharge would need to meet applicable tier protection levels for parameters in the receiving water.

This step of the antidegradation review process evaluates whether the parameter of concern levels in the point source discharge will meet their applicable tier protection levels in the receiving water. The antidegradation review must be comprehensive to include all parameters of concern projected to be present in the discharge at a measurable concentration but will evaluate each parameter on an individual basis.

If a parameter of concern in the receiving water is assigned a Tier 2 level of antidegradation protection, the point source discharge will not lower water quality conditions if the concentration of the parameter at the point of discharge or at the downstream edge of an approved mixing zone is the same or lower than the RMHQ value. A more detailed discussion of the procedural steps and supplemental information that will need to accompany a permit application with a requested a zone of mixing is contained in *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020).

For a receiving water in which a parameter of concern is assigned a Tier 1 protection level, the point source discharge would not cause degradation of water quality conditions if the concentration of the parameter at the point of discharge meets the water quality standard for the parameter. As previously discussed, if a TMDL exists for a pollutant of concern, the permit limit will be set based on the associated TMDL waste load allocation for the parameter.

A Tier 1 protection level will be assigned when the parameter of concern in the receiving water is an impairment (baseline concentration exceeds the water quality standard) and a TMDL has not been developed. A zone of mixing to meet a Tier 1 protection level (the water quality standard) would not be permissible for a new or expanded point source discharge when the receiving water is already impaired for the pollutant of concern.

Certain parameters, such as dissolved oxygen and alkalinity, are an exception to the rationale described above. Alkalinity and DO are "greater than" standards, meaning an increase in their levels in the receiving water is generally an improvement to water quality. In addition to these exceptions, acceptable values of pH lie within a range of values, and both increases or decreases may affect water quality conditions and will be evaluated on a case-by-case basis.

If the antidegradation review analysis completed by the Division demonstrates that the new or expanded point source discharge will not lower water quality conditions in the receiving water, no further analysis will be required to authorize the discharge. If the analysis indicates that the new or proposed point source discharge will cause degradation of water quality conditions in the receiving water, this does not mean that the discharge will not be allowed. Rather, the applicant or proponent seeking authorization for the discharge will need to submit to the Division additional information, as outlined in the next step of the antidegradation review process.

Where the new or expanded discharge is into a receiving water that is not a designated water named in NAC 445A.123 through 445A.2234, but is a tributary to such a water, the “tributary rule” (NAC 445A.1239) will be used to determine the water quality standards that would apply to the receiving water (tributary) and the appropriate tier level of antidegradation protection to set for the parameters of concern in the discharge. A similar evaluation as described above would be followed to evaluate the effect of the discharge on the tributary water quality conditions.

Similarly, a new or expanded discharge into a water that has been classified as an EAW with a designated Tier 2.5 level of antidegradation protection would follow the above procedural steps depending on the tier protection levels assigned to the parameters of concern. The tier protection levels would be based on concentrations of the parameters in the receiving Tier 2.5 EAW. The Division’s antidegradation policy stipulates that water quality conditions in the EAW with a designated Tier 2.5 protection level must be maintained and protected. Parameters of concern concentrations in the effluent at the point of discharge that did not meet Tier protection levels will be viewed as lowering water quality and will not be allowed.

A point source discharge upstream of an EAW (Tier 3 or Tier 2.5) is allowable if the antidegradation review analysis demonstrates that the water quality conditions in the downstream EAW will not be lowered. As explained in Section 3.2.3, when such is proposed, it will be necessary to evaluate the baseline water quality for both the upstream water (tributary) and the downstream EAW. The tier of protection assigned to each parameter of concern will be based on the more stringent parameter baseline concentration: the upstream (tributary) water or the downstream receiving water (EAW). The evaluation of the discharge may require that the concentration of a parameter of concern in the effluent meet the baseline concentration of the parameter in the upstream tributary rather than the downstream EAW.

When the antidegradation review analysis demonstrates that a new or expanded point source discharge would not lower water quality conditions in the receiving water, effluent permit limits for the pollutant of concern would set at the respective antidegradation tier protection values to maintain water quality conditions.

3.2.5 STEP 5. Additional Analysis and Evaluation

This next step in the antidegradation review process would only be conducted if a new or expanded discharge is predicted to not meet Tier 2 protection levels for parameters of concern in the receiving water, and the project proponent or permittee desires to pursue an exemption from meeting the Tier 2 protection effluent limits. The Division will work with the applicant to evaluate alternatives to reduce degradation. If lowering of existing water quality cannot be reasonably avoided, the applicant may present a justification that the proposed activity is necessary to accommodate important economic or social benefits in the area where the proposed project will be located. This step of the antidegradation review determines whether

the economic or social benefit to be gained from the proposed activity justifies lowering the higher water quality conditions.

NRS 445A.565 allows lowering of higher water quality conditions only after important social or economic benefits have been demonstrated by the applicant, and the Commission has agreed that lowering the quality of the receiving waterbody is necessary for economic or social benefits. Here, the Commission must weigh the balance between degradation and economic or social improvements in deciding. In allowing such degradation, the Commission will ensure that the quality of the receiving waterbody is not reduced below water quality standard levels necessary to protect existing beneficial uses. Sections 7.1 through 7.3 of *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020) provide more details on evaluating alternatives and justifying social or economic benefits.

3.2.5.1 *Alternative Analysis*

Before the Division continues with review of a permit application that is predicted to cause degradation of water quality, the project proponent or permit applicant will be required to evaluate whether any less-degrading alternatives are available. This alternative analysis focuses on alternatives directly related to protecting water quality that are economically, environmentally, and technologically reasonable. Alternative pollution-reduction strategies, such as different treatment techniques, different discharge locations, process changes that would improve discharge quality, or a non-discharge alternative would need to be evaluated. The overall goal of this analysis is to identify whether a less-degrading alternative, based on the above, could be reasonably and economically implemented to reduce the levels of the parameters of concern in the discharge to corresponding levels in the receiving waterbody with Tier 2 protection. Section 7.2 of *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020) provides details on conducting an alternatives analysis.

Additional treatment steps to discharge less pollution are usually going to cost more and therefore raise the question of whether it is reasonable for a project proponent to be required to implement more costly pollution-control alternatives. The analysis may result in identification of multiple reasonable alternatives. As noted in Section 7.2 of *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020), alternatives may include, but are not limited to, the following:

- Pollution prevention.
- Improved operation and maintenance of the existing treatment system.
- Alternative treatment technologies, including advanced or innovative biological, physical, and/or chemical treatment.
- Collection system improvements.
- Recycling/reusing wastewater.
- Land application.
- Regionalization.

- Groundwater recharge.
- Seasonal or controlled discharges to avoid critical periods.
- Relocation or reconfiguration of the outfall or diffuser.
- Reduction in the scope of the proposed activity.
- An alternative that does not result in the discharge.

The alternative analysis should be comprehensive and consider the following in evaluating less-degrading alternatives, specified in the sections of *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020) referenced parenthetically below:

- Amount of degradation reduced (Section 7.2.2).
- Cost-effectiveness of pollutant removal (Section 7.2.3).
- Cost of pollution reduction versus overall environmental gain (Section 7.2.4).
- Affordability of alternatives (Section 7.2.5).

If the alternative analysis indicates that a more reasonable alternative could be implemented rather than allowing the lowering of water quality conditions to occur, the Division will work with the project proponent to revise the permit application based on the revised project design.

If the alternative analysis does not identify a technologically feasible and economical alternative that would not result in the lowering of water quality conditions in the receiving water, a project justification as described in the next section must be prepared and submitted to the Division for the approval by the Commission.

Whenever a new project is being planned, alternative analysis is standard engineering practice during project design. The alternative analysis requirement of the antidegradation review is not intended to place an additional burden placed on the project proponent or permittee. Projects that require a CWA 404 permit are already subject to U.S. Army Corps of Engineers and EPA requirements to consider alternatives. If a project is subject to federal National Environmental Policy Act (NEPA) requirements, a detailed alternative analysis evaluation is conducted during the NEPA process. Any alternative analysis completed as a requirement of other permitting activities may be acceptable, subject to Division approval, for antidegradation review purposes.

3.2.5.2 Justification of Social or Economic Importance

If the evaluation of alternatives indicates that degradation of the receiving water is unavoidable and changing project design is not feasible, the permit applicant or project proponent will be required to develop a project justification demonstrating that the lowering of water quality conditions is necessary to accommodate important social or economic development in the area where the waterbody is located. This justification is then submitted to the Division. The social or economic justification must show that the social or economic benefits that will result from an activity are important to the affected community. Section 7.3 of *Nevada's Antidegradation*

Permit Writers' Guidance (NDEP 2020) provides additional details of what factors may be considered to develop a justification.

The following steps are recommended in EPA guidance and reference documents to show social or economic justification; sections referenced from *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020):

- Identify the affected community (Section 7.3.1).
- Describe the important social or economic development that will result from the project or activity (Section 7.3.2).
- Determine the overall environmental, social, and economic benefits in comparison to the degradation of water quality that will result (Section 7.3.3).

A project that is socially justified is one that is important to the social development of the local community in at least one aspect (e.g., population growth or job growth), or results in improvements of important community service needs (e.g., construction of new wastewater treatment plant, public water supply project, or improved transportation infrastructure). An economically justified project will promote economic development of the local community. A more in-depth analysis would be required to show the economic importance than a social justification and would cover how the costs associated with water quality degradation are offset by benefits to the community. A simplified cost-benefit analysis may be required.

The Division will evaluate the submitted information to determine whether the discharge associated with the proposed project is important from an economic or social perspective to justify continuing with the permitting process. When information provided in the applicant's justification is not sufficient to determine the social or economic benefits or environmental impacts associated with the proposed activity, additional information may need to be submitted.

During this evaluation, the Division will give precedence to any land-use determinations made by local governments or land-use planning authorities that may contradict the land use associated with the project. The evaluation will also consider any information and comments submitted during the public notification period by the public or affected stakeholders that are contrary to the social or economic justification submitted by the applicant or project proponent. Public comments submitted to the Division will be made available and discussed during the Commission hearing. Additional public input may be solicited at other points in the permit development process, if deemed appropriate by the Division.

3.2.5.3 *State Environmental Commission Hearing*

For the purposes of NRS 445A.565, the Commission will hold a public hearing to consider the justification based on the economic or social importance of a proposed discharge that demonstrates why the lowering of water quality conditions is necessary, and if an analysis of alternatives has been conducted to evaluate reasonable and practicable alternatives that would prevent degradation or result in less degradation. During the hearing, the Commission may approve issuance of a permit by the Division that will result in the degradation of water quality for a pollutant of concern in the receiving water that has been designated as having a Tier 2 level of antidegradation protection if the Commission determines that:

- The degraded water quality is justifiable because of important economic or social factors;
- The highest and best degree of waste treatment available under existing technology that is reasonably consistent with the economic capability of the project or development is used to prevent or reduce degradation of the water quality in the receiving water; and
- All cost effective and reasonable best management practices for diffuse source pollution control required in accordance chapter 445A of NRS are achieved to prevent or reduce the impacts to the water quality of the parameter of concern in the receiving water.

Pursuant to NRS 445A.520, if the Commission approves issuance of the permit that will result in degradation of water quality conditions, the lower effluent limits that the Commission would approve would, at a minimum, be set at water quality standards to protect the designated beneficial uses of the waterbody.

Approval of a less restrictive effluent limit for parameter in a new or expanded discharge to water classified as an EAW and assigned a protection level of Tier 2.5 is not allowed. No lowering of water quality conditions can result from a point source discharge into a Tier 2.5 EAW.

3.2.5.4 *Documentation of Antidegradation Review Findings and Public Input Process*

The federal rules on antidegradation (40 CFR 131.12(a)(2)(i)) specify that states must involve the public in any decisions pertaining to when Tier 2 protection is (or is not) provided, and the factors considered in the decision. This requirement is to be met by including an antidegradation discussion in the fact sheet issued for each discharge permit for which public input is solicited. If the discharge is determined not to lower water quality conditions for a water quality parameter with Tier 2 protection, sufficient evidence will be presented in the fact sheet to support the finding.

In cases where Commission approval of a discharge permit limit projected to lower water quality conditions, a public hearing would be held for the Commission to decide whether sufficient evidence and justification warrants less restrictive permit limits be approved. Public comments on the proposed action would be considered during the Commission hearing.

A summary of the antidegradation review analysis is shown in Figure 2.

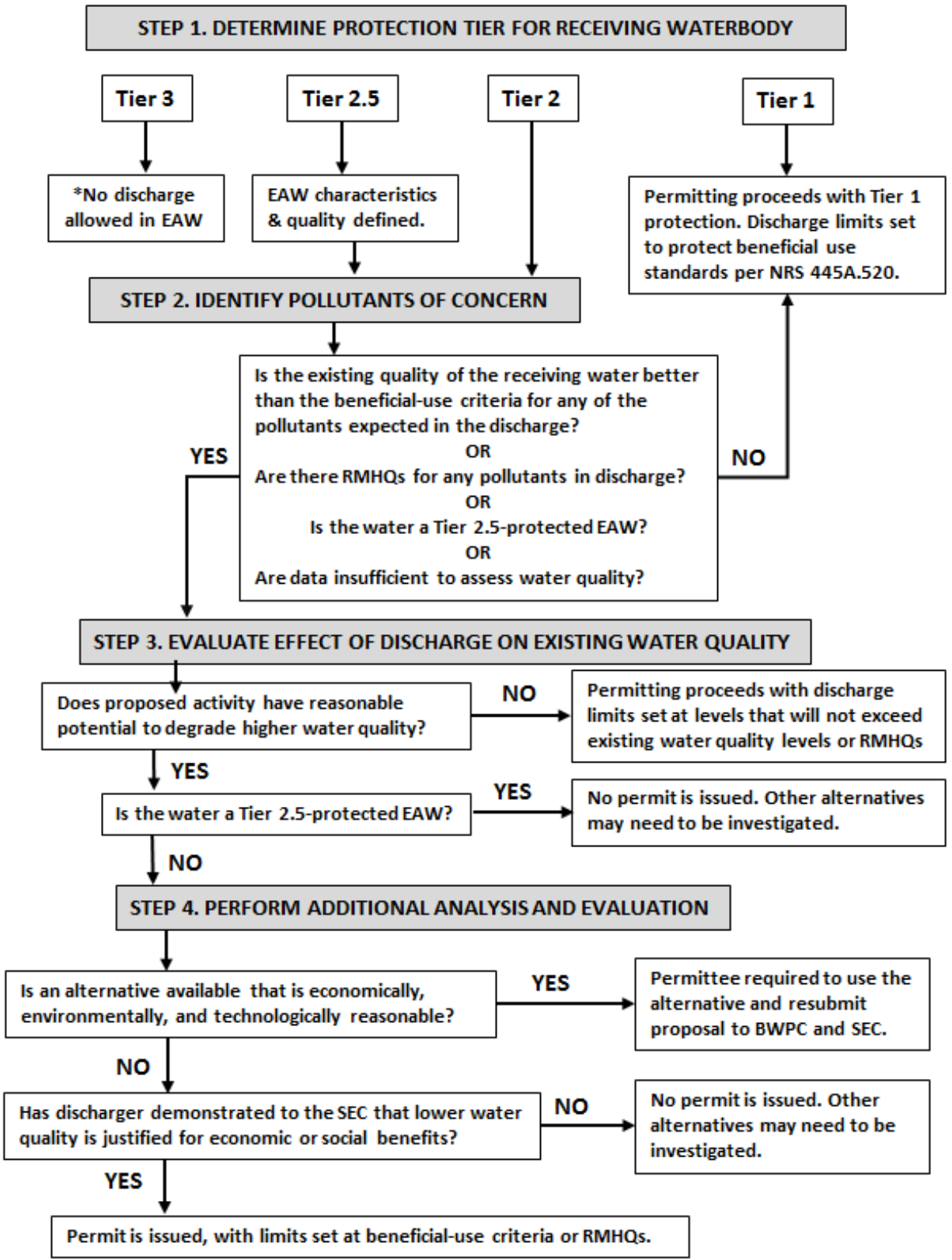


Figure 2. STEPS 1 through 4 to Follow when Evaluating a Discharge Permit Application

4.0 Antidegradation Policy: General Permits, Stormwater and MS4 Permits and 401 Certifications

Specific details for performing antidegradation reviews for general permits and stormwater permits are provided in the *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020).

4.1 General Permits

General permits are issued to address a class of discharges where standardized permit conditions and limitations ensure that the permitted discharges will meet water quality standards. Antidegradation reviews for discharges authorized by general permits will occur for the entire class of general permittees when the general permit is issued or may be required by the Division in cases where the impact from a discharge on the quality of the receiving water may result in degradation of water quality conditions. Antidegradation reviews will focus on pollutants of concern that may contribute to water quality impairment.

Dischargers who submit a notice of intent for coverage under a general permit will be presumed to be meeting the antidegradation requirements if they comply with permit conditions and any requirements deemed necessary by the Division to minimize lowering of water quality conditions. However, if a discharger submits a notice of intent for coverage under an issued general permit and the discharge will be to a receiving water with Tier 2 protection levels for certain water quality parameters, the Division may require the discharger to undertake additional control measures such as additional monitoring, more frequent site visits and more rapid stabilization of exposed areas to minimize degradation or may require the discharger to obtain an individual permit.

When a general permit is renewed, the Division will evaluate whether the terms or conditions of the current permit are protective of water quality for the class of discharges covered by the permit. If necessary, permit conditions and requirements may be modified during the renewal to ensure that discharges minimize any lowering of water quality conditions and comply with antidegradation requirements.

The general permits for stormwater discharges require a different approach to ensure degradation of water quality is avoided. Compliance with terms of the general permits—in particular, the implementation of stormwater runoff controls to minimize stormwater effects on the water quality of receiving waters—is required to maintain authorization to discharge under the general permit. During reissuance of these General Permits, new and innovative control measures that have demonstrated to be effective in removing contaminants from stormwater runoff may be incorporated into the permits as best management practices (BMPs) to protect water quality. Section 8 in *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020) discusses permits, including stormwater and general permits.

If a notice of intent is filed for coverage under a stormwater general permit that involves an EAW, the Division will determine whether the activity or proposed discharge is short term in nature and the resulting water quality impacts are temporary. Short-term impacts to water quality conditions in EAWs will be evaluated from the perspective of whether the activity is necessary and whether water quality will return to prior conditions after the activity.

4.2 MS4 Permits

An individual stormwater permit for a municipal separate storm sewer system (MS4) meets antidegradation requirements if the permittee complies with all permit conditions, including development of a stormwater management plan outlining the controls to be implemented to reduce the level of parameters in stormwater discharges to the maximum extent practicable. The MS4 Permits are designed to (1) reduce and eliminate stormwater pollution and (2) incorporate a systematic process for continually improving management policies and practices to minimize discharge of pollutants to the MS4 through the installation, implementation, and maintenance of stormwater control measures. Section 8.2 of *Nevada's Antidegradation Permit Writers' Guidance* (NDEP 2020) discusses more on MS4 permits.

4.3 401 Certifications

The Division issues 401 Water Quality Certifications for Federal Dredge and Fill 404 Permits. For 401 Certifications, the permittee submits the 404 permit application, site maps, and a list of the BMPs to be used in the project. The 404 application includes an alternative analysis. BMPs are an integral part of the project to protect water quality conditions during project work. If the proposed project involves a Tier 2-protected water, the Division will evaluate if the project causes lowering of water quality conditions. The 401 certification may include additional conditions to ensure that the lower water quality is either temporary or insignificant.

5.0 Waters of Extraordinary Ecological, Aesthetic or Recreational Value - EAWs

EAWs would be “special” surface waters within the State that would be approved by the Commission for special protection against degradation under the Nevada’s Water Pollution Control Regulations (Standards for Water Quality) and the federal CWA. An EAW classification would afford the highest level of protection against degradation for a surface water under the State of Nevada’s Water Quality Standards. Classification of a surface water as an EAW would prevent new or expansion of existing point source discharges to the waterbody.

Surface waters that would be considered candidates for classification as an EAW would have extraordinary or exceptional characteristics relative to other State of Nevada surface waters, including one or more of the following:

- (a) the surface water is in a relatively pristine condition, largely absent of human sources of degradation, and of high quality; or
- (b) the water has important ecological, aesthetic or recreational value; or
- (c) the water has a unique water quality characteristic or is an exceptional and rare example of its type regardless of whether the water is considered high quality.

Nevada's Water Quality Standards establish designated beneficial uses for surface waters, set criteria to protect those uses, and establish provisions to preserve water quality. EAWs would be subject to the same water quality criteria as other water with the same designated uses with the exception that a beneficial use of "Waters of extraordinary ecological, aesthetic or recreational value" would be assigned to an EAW. This special beneficial use assigned to an EAW would in effect provide additional protection aimed at protecting and preserving the water quality or the attribute of the classified water. Lowering of water quality conditions is not allowed in an EAW except under very limited circumstances. Where water quality exceeds the standards, that higher water quality must be protected.

The designation or classification of a surface water as an EAW would be a formal regulatory rulemaking action and would be decided upon by the Commission.

5.1 Nomination Process

Any person may nominate a surface water for classification as an EAW by filing a petition with the Commission per NAC 445B.886. The following information will be required to support classification of the nominated surface water as an EAW:

Note: The nominating party has the burden of establishing the basis and providing the supporting information, to the extent that it is available, for classifying a surface water as an EAW.

- Name and geographic location of the surface water including upstream and downstream boundaries.
- A rationale explaining the reason for the nomination, the extraordinary or exceptional characteristic that support classification as an EAW, and why existing protection levels (water quality standards including antidegradation protection as a non-EAW) are not sufficient.
- Adequate and representative water chemistry data that supports the nomination and demonstrates that the water quality is significantly better than the applicable standard for water quality or the existence of another attribute (i.e., unique water quality characteristic, important ecological, aesthetic or recreational value). This water

chemistry data will be used to demonstrate higher water quality conditions if the nomination of the surface water is based on “pristine water condition” and also establish the baseline water quality conditions that will be maintained and protected once the surface water is classified as an EAW.

- An evaluation of any existing and pending permitted water withdrawals from and discharges into the surface water, and any future uses of the surface water described in local, regional, state, and federal water planning and management plans.
- Discussion on the compatibility of the classification with any preexisting or preauthorized land use activities on lands adjacent to the surface water which must include historical irrigation practices, livestock grazing and any other agricultural activities.
- A summary of the social and economic benefits and impacts associated with the classification to the local community and surrounding land users.
- Summary of public outreach and communication efforts within the local community and surrounding area conducted by the nominating party, including level of support and any letters or statements from stakeholders, landowners or federal, state or local governmental agencies.

A petition filed with the Commission to nominate and classify a surface water as an EAW should include the supporting information described above. This information is intended to substantiate the nomination and to ensure that a complete regulatory petition package is prepared for consideration by the Commission. This level of information will establish a complete administrative record for the public to review and upon which the Commission can make an informed decision.

Resources and links to information sources to help a nominating party obtain and compile the supporting information for an EAW nomination and for planning outreach discussions with land management agencies, local government and stakeholders are included in Attachment 1 of this document.

The Commission will notify the person within 30 days after receiving the petition whether proceedings will be initiated to adopt a regulation classifying the nominated surface water as an EAW or deny the petition with reason(s) provided for the denial in the notification.

5.2 Formal Rulemaking Process

As with any change to the State’s Water Quality Standards, a regulatory action to classify an EAW will follow established administrative rulemaking procedures which includes public notice of the draft regulation and providing ample opportunities for stakeholder and interested parties

to provide comment and discussion. Information gathered to support adoption of a regulation to classify an EAW would be made available for review and comment during local community and stakeholder outreach meetings and public workshops.

A public hearing before the Commission would be held for the Commission to decide on whether to adopt the draft regulation and grant EAW status to the nominated surface water. If the nominated water is adopted as an EAW, the Commission will assign a Tier 3 or Tier 2.5 level of antidegradation protection for the water based on the supporting information provided with the nomination petition.

The classification of a surface water as an EAW shall not prohibit use of the water as authorized under title 48 of NRS or affect any rule, regulation or order of the State Engineer, nor will it prohibit or alter any activities that are authorized under a state or federal permit related to the management and maintenance of structures and devices in and on the water. Classification of a surface water as an EAW does not entitle an appropriator of water to require that the source of the water meets his or her specific requirements for water quality or restrict or alter any existing land uses, including without limitation, historical irrigation practices or agricultural and grazing activities adjacent to the nominated water. Additionally, an EAW classification should not prohibit or impair any property rights or any land use activities authorized under a state or federal permit occurring on any federal managed land adjacent to the nominated water.

Nomination of a surface water for an EAW designation will not deter any pending permits from being issued, including pending discharges to upgradient waters. Authorized discharges into the nominated EAW and upgradient waters will not be affected, provided there are no increases in the discharge or changes in the composition of the discharge after designation of the water as an EAW.

The nominating party for an EAW designation must be able to demonstrate to the Commission that an EAW nominated water will meet the above requirements.

The current links to the **Nevada State Environmental Commission** (Commission) website are as follows:

<https://Commission.nv.gov/participate/forms-and-documents/>

https://Commission.nv.gov/uploads/documents/Commission_form1_writable.pdf

6.0 References

NDEP, 2020. *Nevada's Antidegradation Permit Writers' Guidance*. Bureau of Water Pollution Control. June.

NDEP, 2004. *Nevada's Continuing Planning Process*. Bureau of Water Quality Planning.

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Attachment 1

EAW Nomination – Sources for Information and Outreach





EWA Nomination – Sources for Information and Outreach

Water Quality Data

- NDEP: [Nevada Division of Environmental Protection | NDEP](#)

NDEP Public Viewer

Shows monitoring station ID's, station type, organization, state, coordinates, station links, sampling data

Public Viewer: [WQX Spatial Viewer - Nevada Division of Environmental Protection](#)

- EPA: <https://www.epa.gov/nv>

Water Quality Portal (WQP)

Provides public access and retrieve water quality monitoring data:

<https://www.epa.gov/waterdata/water-quality-data>

Water Appropriations and Uses

- Nevada Division of Water Resources: <https://water.nv.gov/waterrights.aspx>

Water Planning and Water Resource Publications

- Nevada Division of Water Resources: <https://water.nv.gov/>

Water Authority

- [Humboldt River Basin Water Authority: https://hrbwa.com/](https://hrbwa.com/)
- [Truckee Meadows Water Authority: https://tmwa.com/](https://tmwa.com/)
- [Southern Nevada Water Authority: https://www.snwa.com/](https://www.snwa.com/)
- [Central Nevada Regional Water Authority: https://cnrwa.com](https://cnrwa.com)

Discharge Permit Information

- NDEP-Bureau of Water Pollution Control: <https://ndep.nv.gov/water/water-pollution-control>

NDEP GIS Web Maps

These web maps show GIS information related to:

Surface water bodies; Permitted point-source discharges; and BWQP Water Quality Sampling Locations.

- Web map: [NDEP GIS Web Maps \(nv.gov\)](#)
-

Land Use Management and Planning Agencies

- Bureau of Land Management: <https://www.blm.gov/>
[BLM Resource Management Plans: https://www.blm.gov/programs/planning-and-nepa/plans-in-development/nevada](https://www.blm.gov/programs/planning-and-nepa/plans-in-development/nevada)
- U.S Forest Service: <https://www.fs.usda.gov/>
- Truckee Meadows: <https://tmrpa.org/>
- Lake Tahoe: <https://www.trpa.gov/>
- Nevada Division of State Lands: <http://lands.nv.gov/land-use-planning/state-land-use-planning-agency>
- Southern NV: <https://www.snrpc.org/>

Nevada County Governments

- Washoe County: <https://www.washoecounty.gov/index.php>
- Storey County: <https://www.storeycounty.org/>
- Douglas County: <https://www.douglascountynv.gov/>
- Lyon County: <https://www.lyon-county.org/>
- Mineral County: <http://mineralcountynv.us/>
- Esmeralda County: <https://www.accessesmeralda.com/>
- Ny County: <https://www.nyecountynv.gov/>
- Clark County: <https://www.clarkcountynv.gov/>
- Lincoln County: <https://lincolncountynv.org/>
- White Pine County: <https://www.whitepinecounty.net/>
- Elko County: <https://www.elkocountynv.net/>
- Humboldt County: <https://www.humboldtcountynv.gov/>
- Pershing County: <https://www.pershingcountynv.gov/>
- Churchill County: <https://www.churchillcountynv.gov/>
- Lander County: <https://www.landercountynv.org/>
- Eureka County: <http://www.co.eureka.nv.us/>
- Carson County: <https://www.carson.org/>

EPA Approved Watershed Plans

- Carson River Watershed Adaptive Stewardship Plan: <https://www.cwsd.org/wp-content/uploads/2017/12/Final-CRWASP-2017-Update-Plan-Part-1.pdf>
- Action Plan for The Las Vegas Wash Comprehensive Adaptive Management Plan: <https://www.lvwash.org/assets/pdf/resources-wash-camp00.pdf>
- The Lake Tahoe TMDL Implementation Plan: https://ndep.nv.gov/uploads/documents/LTTMDL_NDEP_Final.PDF
- Truckee River Watershed Plan: <https://washoecountycleanwater.org/>

Clean Water Act Section 208 Water Quality Management Plans

- Clark County: [Clark County 208 Area-Wide Water Quality Management Plan \(clarkcountynv.gov\)](#)
 - Washoe County: [Washoe County 208 Water Quality Management Plan Final - 2007.pdf \(wrwc.us\)](#)
 - TRPA: [Final-U.S.-EPA-Adopted-Lake-Tahoe-208-WQMP_2013.06.19.pdf \(trpa.gov\)](#)
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- CWSD: [Search Results for “water quality management plan” – Carson Water Subconservancy District \(cwsd.org\)](#)
- NDEP-BWQP: 208 Plan for Non-Designated Area of Nevada

Stakeholders

- U.S Fish and Wildlife Service: <https://www.fws.gov/>
 - Nevada Department of Wildlife: <https://www.ndow.org/>
 - Trout Unlimited: <https://www.tu.org/>
 - Nature Conservancy: <https://www.nature.org/en-us/>
 - Nevada Farm Bureau: <https://www.nvfb.org>
 - [Nevada Department of Conservation and Natural Resources](#)
 - Nevada Division of State Parks
 - Nevada Division of Outdoor Recreation
 - Nevada Conservation Districts Program
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Attachment 2

40 CFR 131.12



Attachment 2 – Federal Antidegradation Policy

40 CFR § 131.12 Antidegradation Policy.

- (a) The State shall develop and adopt a statewide antidegradation policy. The antidegradation policy shall, at a minimum, be consistent with the following:
- (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
 - (2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.
 - (i) The State may identify waters for the protections described in paragraph (a)(2) of this Section on a parameter-by-parameter basis or on a waterbody-by-waterbody basis. Where the State identifies waters for antidegradation protection on a waterbody-by-waterbody basis, the State shall provide an opportunity for public involvement in any decisions about whether the protections described in paragraph (a)(2) of this Section will be afforded to a water body, and the factors considered when making those decisions. Further, the State shall not exclude a water body from the protections described in paragraph (a)(2) of this Section solely because water quality does not exceed levels necessary to support all of the uses specified in Section 101(a)(2) of the Act.
 - (ii) Before allowing any lowering of high water quality, pursuant to paragraph (a)(2) of this Section, the State shall find, after an analysis of alternatives, that such a lowering is necessary to accommodate important economic or social development in the area in which the waters are located. The analysis of alternatives shall evaluate a range of practicable alternatives that would prevent or lessen the degradation associated with the proposed activity. When the analysis of alternatives identifies one or more practicable alternatives, the State shall only find that a lowering is necessary if one such alternative is selected for implementation.
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- (3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.
 - (4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with Section 316 of the Act.
 - (b) The State shall develop methods for implementing the antidegradation policy that are, at a minimum, consistent with the State's policy and with paragraph (a) of this Section. The State shall provide an opportunity for public involvement during the development and any subsequent revisions of the implementation methods, and shall make the methods available to the public.
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