



Proposed Regulation R119-20

Proposed Regulations for Antidegradation Protection and Nevada's Extraordinary Ecological or Aesthetic Waters (EAWs)

*Water Quality Standards & Monitoring Branch
Bureau of Water Quality Planning*

September 2, 2021

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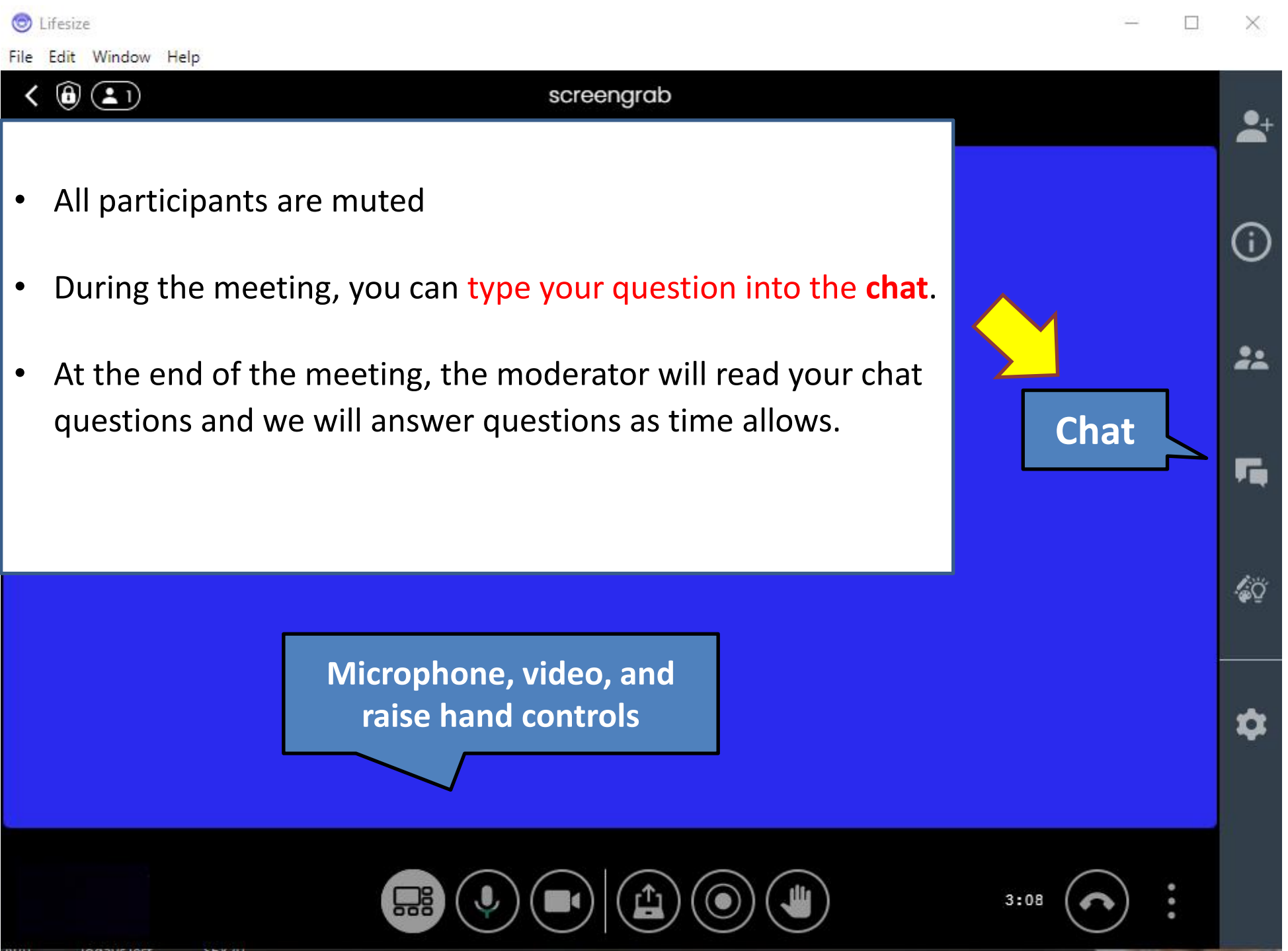
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- All participants are muted
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Proposed Regulations - Antidegradation

Sep 2, 2021 – NDEP BWQP presents the proposed regulation in this webinar. This kicks off the comment period.

Sep 9, 2021 – Technical Session #1

Sep 16, 2021 – Technical Session #2



NDEP Team for the Antidegradation Webinar

Bureau of Water Quality Planning (BWQP)

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*Presenters

Draft documents are available on NDEP's website:

<https://ndep.nv.gov/water/rivers-streams-lakes/water-quality-standards/current-and-past-actions/antideg>

This webinar will be recorded.



Antidegradation Requirements under the Clean Water Act

Requires states to have an **antidegradation protection program** and **implementation procedures** that:

- Ensure beneficial uses of the receiving water are maintained and protected.
- Limit degradation of higher water quality conditions, where quality of receiving water is better than the established water quality standards.
- Evaluate whether lowering water quality in a higher quality water can be avoided with cost-effective practicable alternatives, and if not, determine whether the lower water quality is justified based on economic and social considerations.

Antidegradation Requirements under the Clean Water Act

Requires states to have an **antidegradation protection program** and **implementation procedures** that:

- Assure that any required pollutant controls for existing point sources and cost-effective and reasonable BMPs for nonpoint sources required by state law will be achieved before allowing degradation of a higher quality water.
- Establish additional protection for surface waters with exceptional water quality, unique water quality characteristics, or important ecological, aesthetic, or recreational value.

BMPs = Best management practices

What does Nevada's antidegradation statute say?

NRS 445A.565 Protection of surface waters of higher quality; treatment of and control over discharges constituting new or increased sources of pollution.

1. Any 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**. No discharges of waste may be made which will result in lowering the quality of these waters unless it has been demonstrated to the Commission that the lower quality is justifiable because of economic or social considerations. This subsection **does not apply** to normal agricultural rotation, improvement or farming practices.

What does Nevada's antidegradation statute say?

NRS 445A.565 subsection 2.(a)

2. Any person who plans to discharge waste from any public or private project or development which would constitute a new or increased source of pollution to waters of the State whose quality is high **shall**, as part of the initial design of the project or development, provide:
 - (a) If the discharge will be from a **point source**, the highest and best degree of waste treatment available under the existing technology, consistent with the best practice in the particular field under the conditions applicable, and reasonably consistent with the economic capability of the project or development.

What does Nevada's antidegradation statute say?

NRS 445A.565 subsection 2.(b)

2. (b) If the discharge will be from a diffuse source, such measures, methods of operation or practices **as are reasonably calculated or designed** to prevent, eliminate or reduce water pollution from the source, under the circumstances pertaining to the particular place, in order to achieve control over water pollution which is **reasonably consistent** with the economic capability of the project or development.

What does Nevada's antidegradation statute say?



Upper Dixie Creek, Humboldt River Region



Catnip Reservoir, Northwest Region



East Fork Carson River, Carson River Region



Lake Tahoe, Truckee River Region

Proposed Regulation R119-20 consists of several sections:

Section 1 – Describes a special protected category for extraordinary **ecological or aesthetic waters (EAWs)** and a process for nominating waters as **EAWs**.

Section 2 – Describes structure of an antidegradation program that is based on “tiers” of protection, as required in 40 CFR 131.12

Section 3 – Describes procedural steps to implement antidegradation program during permitting of point-source discharges to surface water.

Section 1 - Ecological or Aesthetic Waters (EAWs)

A water that has a special or an outstanding characteristic relative to other State waters. An **EAW** would include one or more of the following:

- High water quality conditions or unique water quality characteristics.
- Ecological, aesthetic, or recreational value.
- Unique or special waterbody regardless of whether high water quality conditions exist.
- Located in a National or State park or Wilderness area.

Why “EAW”

EAW is proposed based on existing regulatory authority for setting beneficial uses on surface waters:

NAC 445A.112 Standards applicable to beneficial uses.

(i) Waters of extraordinary ecological or aesthetic value. The unique ecological or aesthetic value of the water must be maintained.

Lake Tahoe is only waterbody currently in NAC with this beneficial use designation.

An “Outstanding National Resource Water” (ONRW) is the Federal language used to designate a special water. Nevada uses “Ecological and Aesthetic Water” (EAW) to designate such.

Proposed EAW Process (Section 1 of R119-20)

- **EAW nomination submittal**
- **Agency consultation**
 - Review of rationale and information submitted by petitioner(s) to support EAW classification.
 - EAWs are nominated by Nevadans and will require a “high bar” for data, documentation, and information.
 - Determine whether additional information or documentation is required to support the nomination.

Proposed EAW Process (Section 1 of R119-20) continued

- **Public meetings and outreach**
 - Land management agencies, landowners, stakeholder and communities that may be affected.
 - Evaluation of stakeholder input and level of support and whether classification is compatible with existing uses.





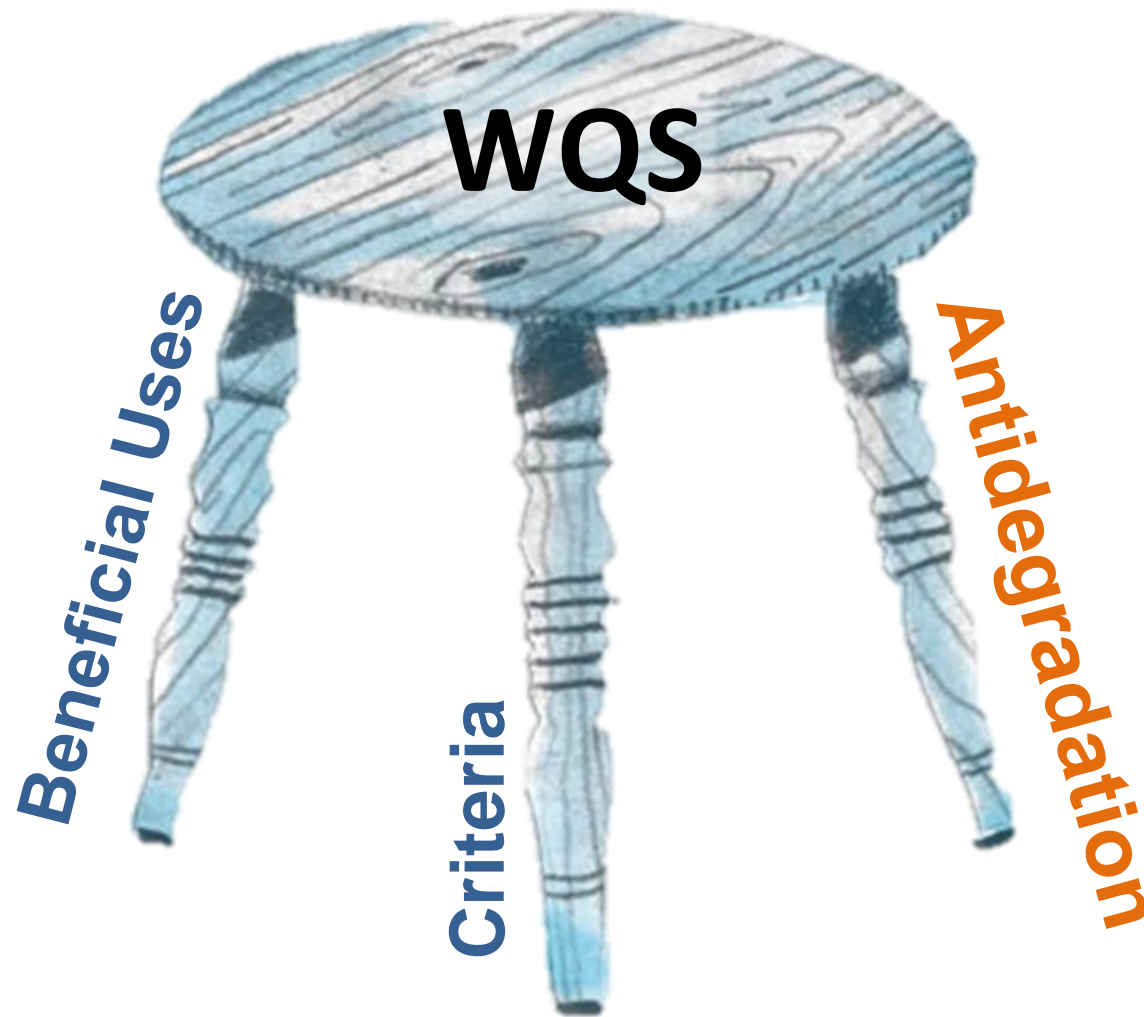
Proposed EAW Process (Section 1 of R119-20) continued

- **Formal rulemaking process**
 - Agency's proposed regulatory petition to recommend classification of nominated water as an EAW and proposed level of antidegradation protection.
 - Public workshops
- **Final determination and classification** by SEC at public hearing
- **Review** by Legislative Committee
- **Approval** by Secretary of State

EAWs are nominated by Nevadans and adopted by the State Environmental Commission (SEC) if the “high bar” for data and information is met.



States must establish WQS consistent with the statutory goals of the CWA



Clean Water Act: “...restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

Antidegradation requirements and methods for implementing those requirements are minimum conditions to be included in a State's WQS.

Water Quality Standards – 3 components

Proposed Regulation R119-20 consists of several sections:

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Section 2 – Describes **structure of an antidegradation program** that is based on **“tiers”** of protection, as required in **40 CFR 131.12**

Section 3 – Describes procedural steps to implement antidegradation program during permitting of point-source discharges to surface water.

Program Structure: Categories of Protection

Meets the requirements of **federal regulations** and **state statutes** to protect higher quality surface waters from degradation.

- Structure must satisfy NRS 445A.565 (state statute).
- Structure must satisfy 40 CFR 131.12 (federal regulation), which requires state antidegradation programs to adopt **categories of protection** based on water quality.



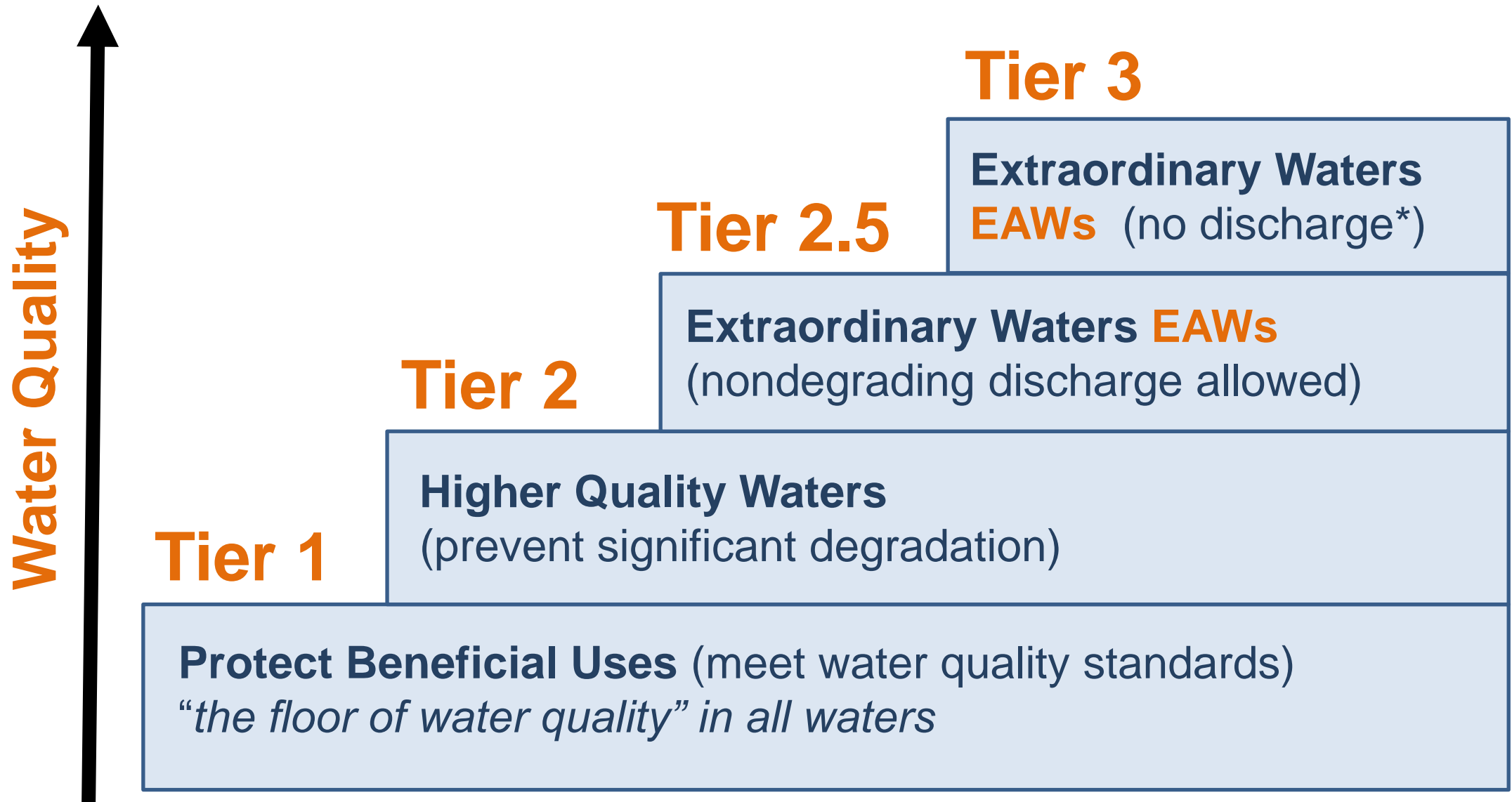
Program Structure: Categories of Protection (Tiers)

Categories designated as “Tiers” per 40 CFR 131.12

- **Tier 1** - protects water quality for beneficial uses of the water.
- **Tier 2** - protects higher quality waters where quality is better than levels needed to protect beneficial uses.
- ***Tier 2.5 (EAW)** - protects extraordinary waters, but allows nondegrading discharges.
- ***Tier 3 (EAW)** - protects extraordinary waters,* into which no discharges are allowed.

**Outstanding or Extraordinary waters are termed ecological or aesthetic waters (EAWs).*

Categories of Protection for Water Quality (Tiers)



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Section 3 – Describes **procedural steps to implement** antidegradation program.

- Q: **When** is the antidegradation program implemented?

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Section 2 – Describes structure of an antidegradation program that is based on “tiers” of protection, as required in 40 CFR 131.12

Section 3 – Describes **procedural steps to implement** antidegradation program.

- Q: **When** is the antidegradation program implemented?
- A: **During permitting of point-source discharges** to surface water.

Program Implementation

- Bureau of Water Quality Planning (**BWQP**) has prepared an *Antidegradation Implementation Procedures* document.
- Bureau of Water Pollution Control (**BWPC**) has prepared *Nevada's Antidegradation Permit Writers' Guidance*.
 - Describe how the program is implemented during the **process of permitting point-source discharges** to a surface water (i.e., the receiving water).
 - Existing surface-water discharge permits are “grandfathered in” unless a major modification is requested; then an antidegradation review would be performed at time of renewal.

Program Implementation

Offers consistency with Nevada's historical approach to antidegradation:
Requirements to maintain higher quality (**RMHQs**).

- RMHQs calculated using 5 years of quarterly data for each parameter.
- The 95th% of a parameter concentrations; value used in permitting the point-source discharge to surface water.

Provides flexibility for permitting discharges to higher quality surface waters that have no data or limited data.





Lamoille Creek, Ruby Mountains

Antidegradation and Tiers

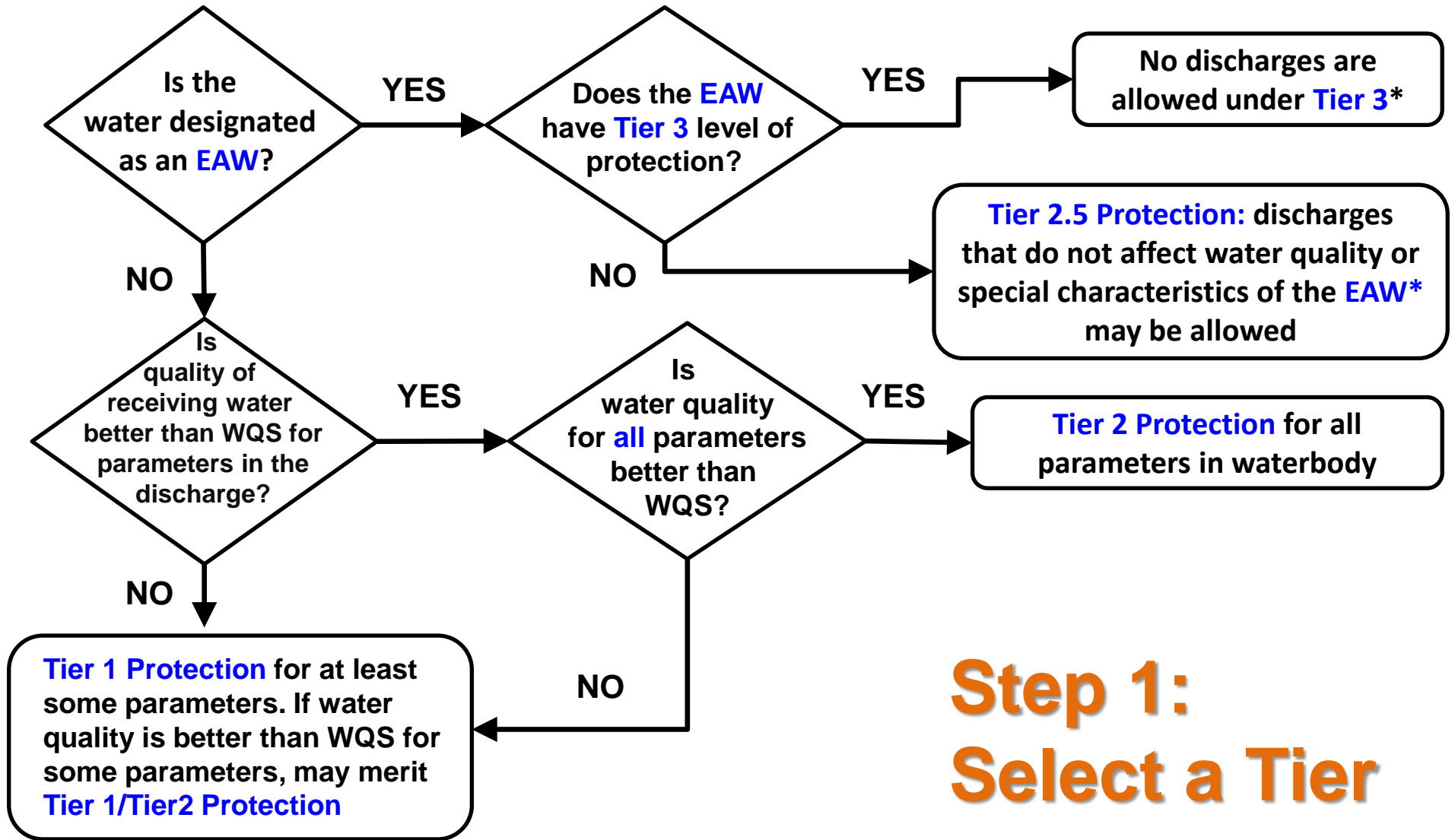
Flexibility

Limited amounts of data are available for many of Nevada's surface waters, especially for more remote alpine waters...

During the permitting process, in the absence of sufficient data, a water will be assumed to merit **Tier 2** protection for all parameters until demonstrated otherwise.

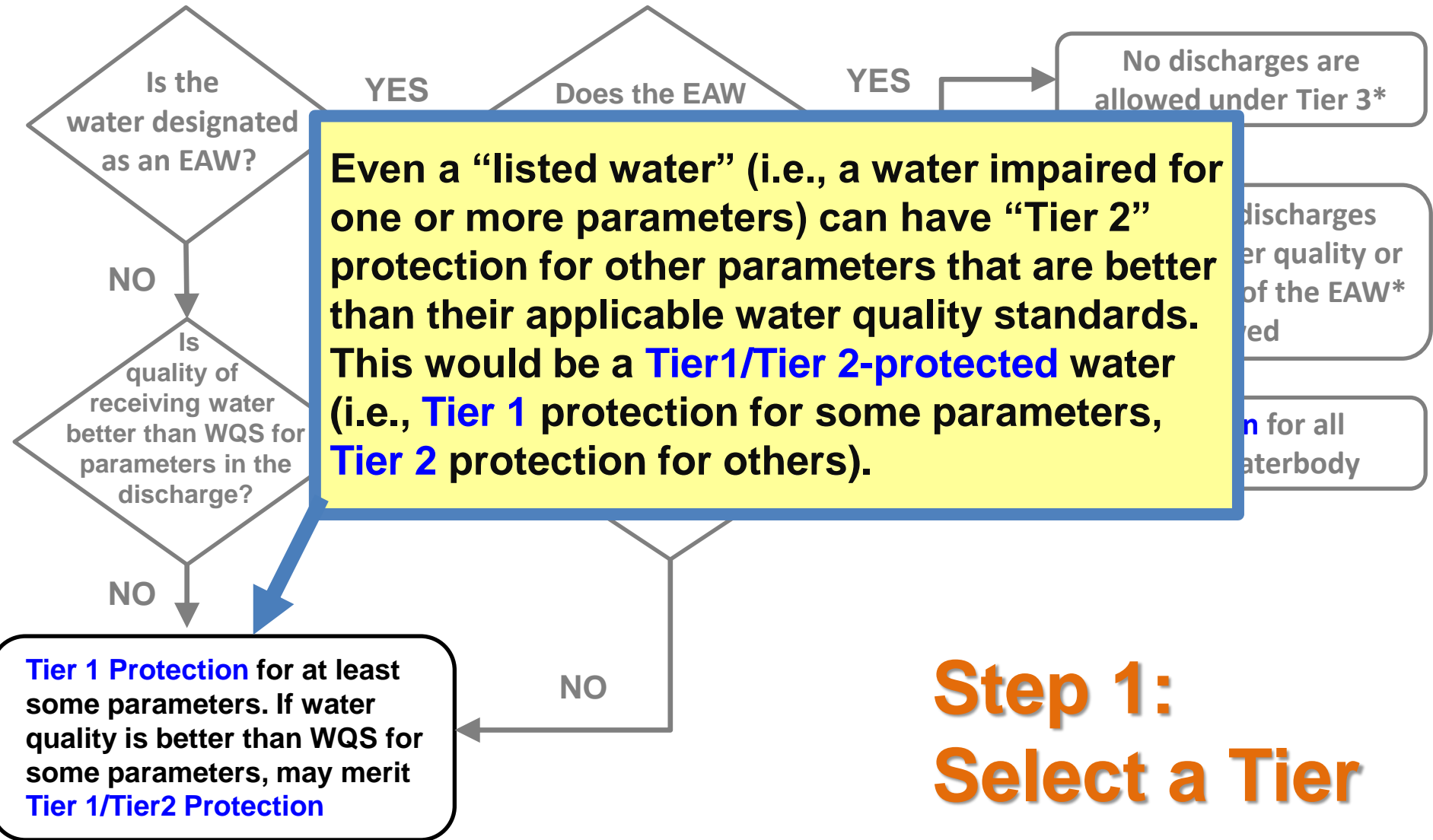
Program Implementation

- Bureau of Water Pollution Control (**BWPC**) has prepared *Nevada's Antidegradation Permit Writers' Guidance*.
 - Permit limits are written to WQS or RMHQs for the receiving water.
 - Historically, RMHQ values were used to fulfill the antidegradation requirement.
 - RMHQs currently exist for only a limited set of waters.
 - Flow charts show how a permit writer would implement the antidegradation program during the permitting process.
 - **Four main steps** in the antidegradation review during the permitting process for permitting a point-source discharge to surface water.



Step 1: Select a Tier

*An **Ecological or Aesthetic Water (EAW)** means a water recognized to have exceptional ecological, aesthetic, or recreational significance. EAWs are protected at a Tier 2.5 or Tier 3 level of protection, depending on how the EAW is designated.



Step 1: Select a Tier

STEP 1. DETERMINE PROTECTION TIER FOR RECEIVING WATERBODY

Tier 3

Tier 2.5

Tier 2

Tier 1

*No discharge
allowed in EAW

EAW characteristics
& quality defined.

Permitting proceeds with Tier 1
protection. Discharge limits set
to protect beneficial use
standards per NRS 445A.520.

STEP 2. IDENTIFY POLLUTANTS OF CONCERN

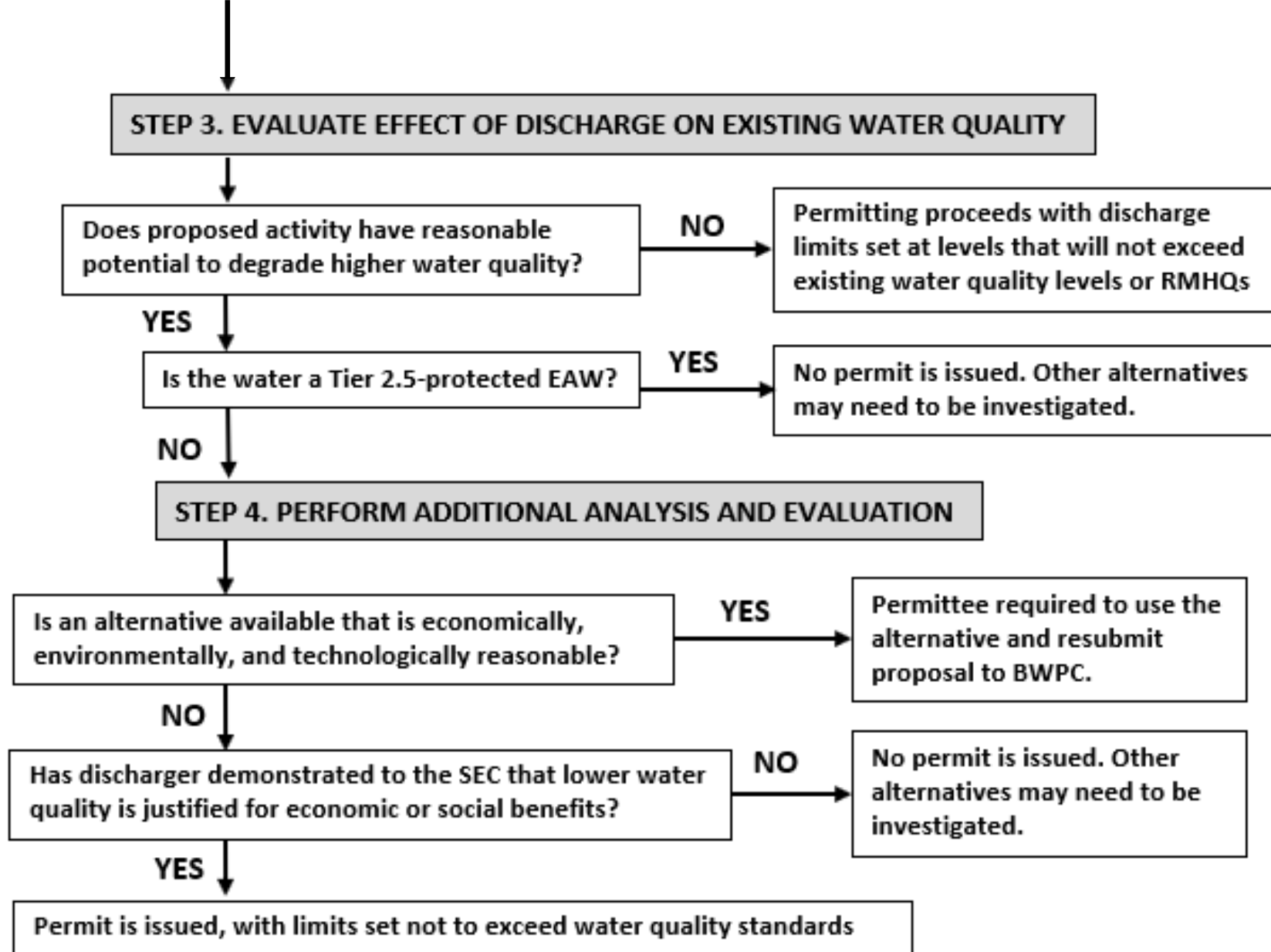
Is the existing quality of the receiving water better
than the beneficial-use criteria for any of the
pollutants expected in the discharge?
OR
Are there RMHQs for any pollutants in discharge?
OR
Is the water a Tier 2.5-protected EAW?
OR
Are data insufficient to assess water quality?

YES

NO

**Step 1 -
Select Tier
(Condensed)**

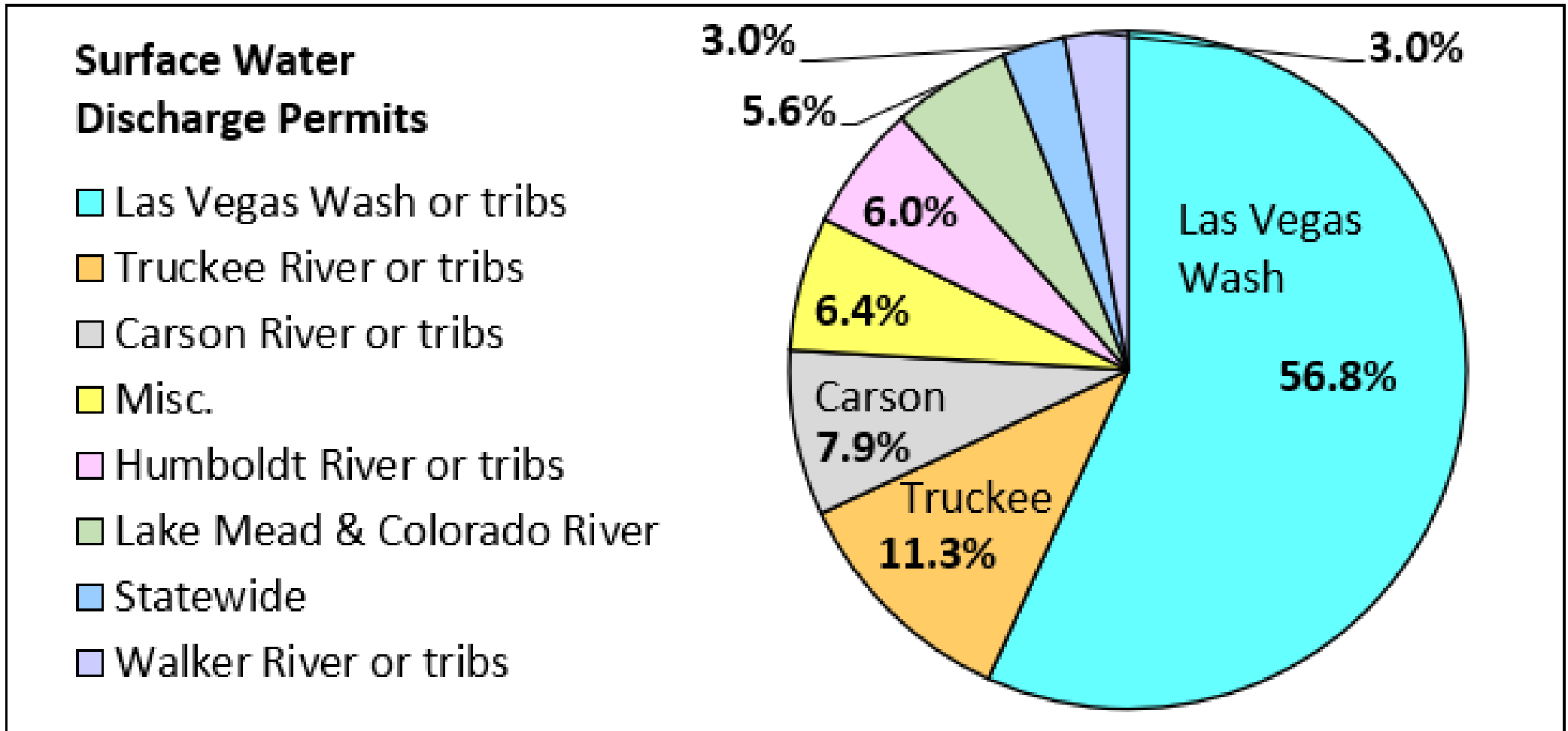
**Step 2 –
Identify
Pollutants
of Concern**



**Step 3 –
Evaluate
Effects of
Discharge**

**Step 4 –
Perform
Analysis &
Evaluation**

Where are surface water discharge permits in Nevada?



Based on evaluation of past SW permits (n=266), there should be data available for evaluating chemistry for most receiving waters to which surface-water discharge permits are requested.

What is the economic impact of proposed regulation?

- To the regulated community

- Antidegradation review analysis required as part of permit application for a surface water discharge (or for renewals with major modifications).
- If insufficient data are available, additional data collection may be required as a condition of issuing a **surface water discharge permit**.
 - Establishing an interim-baseline value (IBV) allows a discharge permit to be issued based on IBVs.
 - Typical analytical costs that may be incurred, range from \$200-\$800 per sampling event.

The need to collect additional data is evaluated on a case-by-case basis

What is the economic impact of proposed regulation?

- To the agency

- Increase in the number of SEC hearings.
- EAWs – The formal rule-making process for consideration of nominated waters will require additional staff time and resources.



What are the benefits of proposed regulation?

- Fulfilling **Clean Water Act** and other statutory requirements to maintain and protect higher quality waters.
- Protecting and enhancing outdoor recreation on Nevada's waters.
 - Direct benefits for outdoor recreation.
 - Protection of higher quality waters for all Nevadans.
 - Preservation of special waters (EAWs) for future generations.



Lake Tahoe

Summary of Proposed Antidegradation Regulations

- Complies with requirements of the Clean Water Act and other state and federal statutes
- Provides a process for antidegradation reviews for surface water discharge permits.
- Provides a flexible approach to develop “temporary RMHQs” (interim baseline values, IBVs) during the permitting process, so permit issuance is not delayed while RMHQs are developed.
- Protects special waters. EAWs are nominated by Nevadans and adopted by the State Environmental Commission if the “high bar” for data and information is met.

Nevada is one of the very last states to adopt antidegradation implementation procedures and protections for special waters (EAWs).



Sampling the Truckee River

Proposed Regulations – Antidegradation & EAWs

Sep 2, 2021 – NDEP BWQP presents the proposed regulation in a webinar. This kicks off the comment period.

Sep 9, 2021 – Technical Session #1

Sep 16, 2021 – Technical Session #2

Tentative schedule

Oct 13, 2021 – Formal workshop for the proposed regulation.

Oct 22, 2021 – Deadline for comments at **5:00 pm.**

Dec 17, 2021 – State Environmental Commission (SEC) hearing to present the regulation for adoption.



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Upper Dixie Creek, Humboldt River Region