



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**



Nevada Department of
**CONSERVATION &
NATURAL RESOURCES**

Public Workshop

Proposed Antidegradation Regulations

Regulatory Petition R113-22

January 25, 2024 1:30pm

Presented by

Bureau of Water Quality Planning
Bureau of Water Pollution Control

PRESENTATION OUTLINE

Introduction

Background

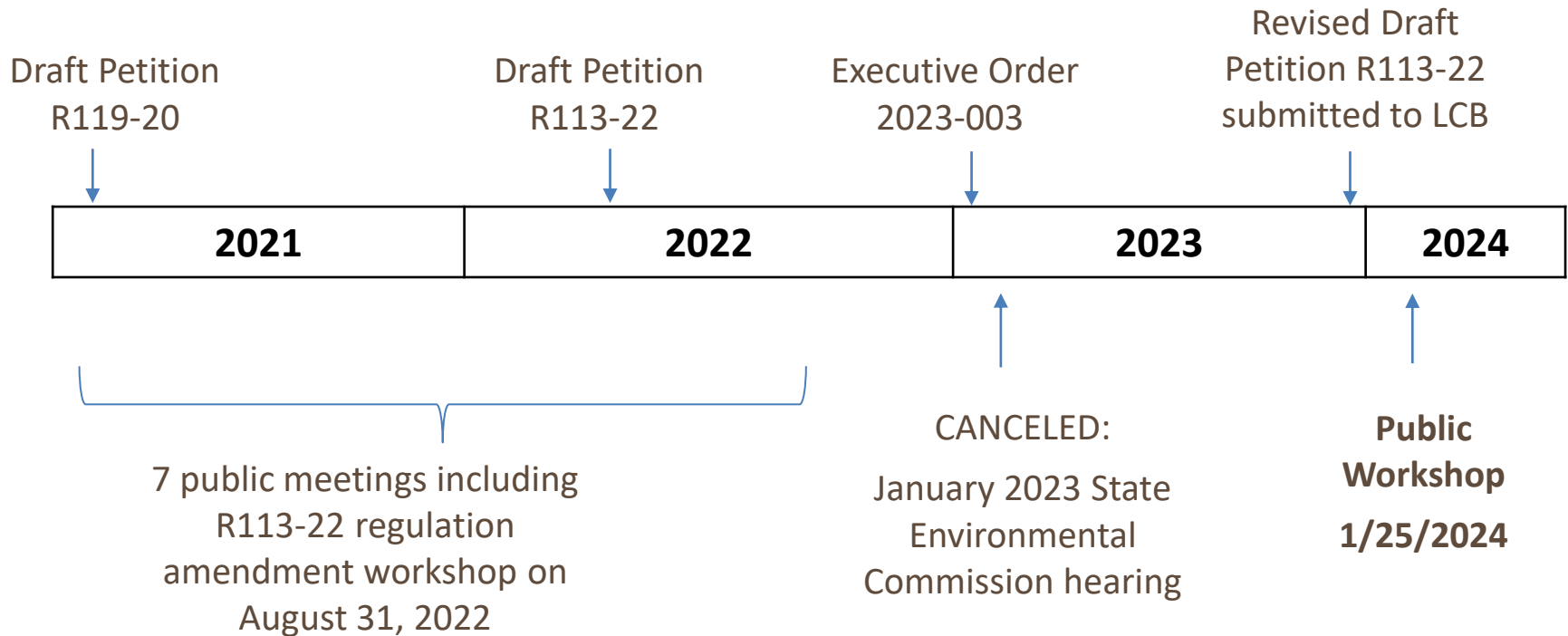
Regulation Overview

Antidegradation Review and Permitting Process

Regulation Approval Process & Timeline

INTRODUCTION

WHERE WE'VE BEEN



INTRODUCTION

Major Revisions from January 2023

- Excludes process for public to nominate **Extraordinary waters***
- Improved structure and flow; streamlined
- Describes processes/requirements to:
 - Assess if baseline water quality is better than assigned water quality standards
 - Allow project permitting to proceed in the interim of assessing baseline water quality (non-Extraordinary waters)

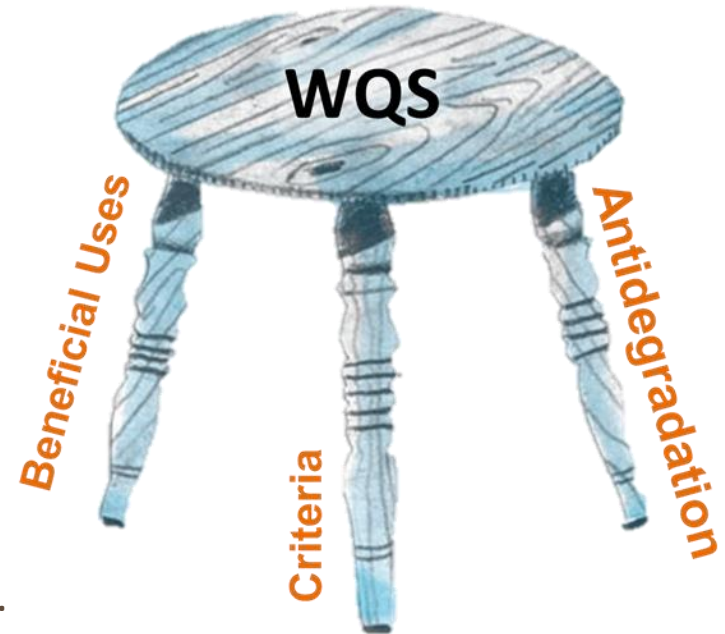
**Extraordinary waters are those that have been designated the beneficial use of extraordinary aesthetic, ecological, or recreational value*

REGULATION OVERVIEW

NEED AND PURPOSE

Regulatory Petition R113-22

- Antidegradation requirements and methods for implementing those requirements are minimum conditions to be included in a State's water quality standards.
- Antidegradation requirements protect existing uses and high quality/high value waters.
- Historically, Nevada implemented antidegradation by establishing Requirements to Maintain Existing Higher Quality (RMHQs).
- Nevada **must** adopt the "**tier**" structure required by the federal antidegradation policy ([40 CFR 131.12](#)).



REGULATION OVERVIEW

ANTIDEGRADATION REGULATION DEFINITIONS

Regulatory Petition R113-22

Definitions:

- **Parameter of concern** ([Section 3](#))
- **Baseline water quality** ([Section 4](#)): 20 samples, ~90 days apart, over 5+ years
- **Interim baseline value (IBV)** ([Section 5](#)): 8 samples, ~90 days apart, over 2+ years
- **Effluent-dominated water** ([Section 7](#)): 80% effluent for at least 300 days/year
- **Requirement to maintain existing higher quality (RMHQ)** ([Section 6](#))

REGULATION OVERVIEW

REQUIREMENTS TO MAINTAIN HIGHER QUALITY

RMHQs

STANDARDS OF WATER QUALITY Las Vegas Wash at the Historic Lateral

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Beneficial Uses ^a									
			Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance Marsh
Beneficial Uses			X	X	X		X			X		X
Aquatic Life Species of Concern			Warm-water fish. [†]									
Temperature $\Delta T^b - ^\circ C$	$\Delta T = 0$	$S.V. \leq 34^\circ$			*							
pH - SU		$S.V. 6.5 - 9.0$			*							
Dissolved Oxygen - mg/L		$S.V. \geq 5.0$			*							
Total Inorganic Nitrogen (as N) - mg/L	95% of S.V. samples ≤ 20				*							
Nitrate (as N) - mg/L		$S.V. \leq 90$			*							
Nitrite (as N) - mg/L		$S.V. \leq 5$			*							
Total Suspended Solids - mg/L		$S.V. \leq 135^c$			*							
Total Dissolved Solids - mg/L	95% of S.V. samples ≤ 1900	$S.V. \leq 3000$	*									
Fecal Coliform No./100 mL		d										*
E. coli - cfu/100 mL		A.G.M. ≤ 630					*					
Toxic Materials		e										

REGULATION OVERVIEW

NEVADA'S ANTIDEGRADATION REGULATION

Regulatory Petition R113-22

- The Bureau of Water Pollution Control (BWPC) issues point source discharge permits.
- Nevada's antidegradation regulation will be implemented during the process of permitting new or expanded point source discharges.
- Nevada's antidegradation regulation will adopt the "tier" structure required by the Federal antidegradation policy ([40 CFR 131.12](#)).
- Nevada's antidegradation regulations include exemptions for temporary water quality degradation for public health and safety concerns (Section 9).

REGULATION OVERVIEW

TIER 1 ANTIDEGRADATION PROTECTION

"Tier 1" means:

- Baseline water quality or interim baseline value, on a parameter-by-parameter basis, is not better than the water quality standards, or
- Is an effluent-dominated water.

Tier 1 antidegradation protection prohibits water quality degradation below the applicable water quality standard.

Tier 1 is defined in **Section 8** and discussed further in **Section 10**



REGULATION OVERVIEW

TIER 2 ANTIDEGRADATION PROTECTION

"Tier 2" means:

- Baseline water quality or interim baseline value (IBV), on a parameter-by-parameter basis is **better** than the water quality standards, or
- A requirement to maintain higher quality (RMHQ) has been established.



Tier 2 prohibits water quality degradation unless the degradation is justifiable based the economic and/or social importance of the proposed discharge.

Tier 2 is defined in **Section 8** and discussed further in **Section 11**

REGULATION OVERVIEW

TIER 2 - ANALYSIS OF ALTERNATIVES

Analysis of Alternatives (Section 14(e) and 15)

- Water quality for parameter of concern in the discharge is worse than the established RMHQ, baseline water quality, or IBV required by Tier 2, then the applicant must submit an analysis of alternatives to the Department.
- If no feasible alternative is identified, the applicant must submit a justification to the Department in accordance with Section 15.



REGULATION OVERVIEW

TIER 2 – ECONOMIC/SOCIAL JUSTIFICATION

Economic/Social Justification (Section 15)

- Water quality degradation must be justified based on the economic and/or social importance of the proposed discharge.
- State Environmental Commission public hearing

A permit may issued if the SEC determines that:

- The degraded water quality for the parameter of concern is justifiable because of economic or social considerations;
- The discharge will not result in the parameter of concern in the receiving water failing to meet the applicable water quality standards; and
- The discharge is consistent with the requirements set forth in chapter 445A of the NAC and the NRS.

REGULATION OVERVIEW

NAC 445A.122 - STANDARDS APPLICABLE TO BENEFICIAL USES

Waters of extraordinary ecological or aesthetic value

- The **unique** ecological or aesthetic value of the water must be maintained and protected.

Regulatory Petition R113-22 will update this beneficial use to:

Extraordinary ecological, aesthetic, or **recreational** value

- The **important** ecological, aesthetic, or **recreational** value of the water must be maintained and protected.

The SEC may designate surface waters with this beneficial use (**Section 12.1**)

The use of water as authorized under Title 48 of NRS is not affected (**Section 12.2**).

The SEC designates water bodies with this beneficial use as Tier 2.5 or Tier 3 (**Section 12.3**).

Currently, Lake Tahoe is the only water body with the Extraordinary* beneficial use in Nevada.

REGULATION OVERVIEW

TIER 2.5 ANTIDEGRADATION PROTECTION

"Tier 2.5" means:

- The beneficial use of “extraordinary aesthetic, ecological, or recreational value” has been designated by the SEC, and
- The SEC has designated a Tier 2.5 level of antidegradation protection to the water body.

Tier 2.5 prohibits water quality degradation, but non-degrading discharges may be allowed.

Tier 2.5 is defined in [Section 8](#) and discussed further in [Section 12.4](#)



REGULATION OVERVIEW

TIER 3 OF ANTIDEGRADATION PROTECTION

"Tier 3" means:

- The beneficial use of “extraordinary aesthetic, ecological, or recreational value” has been designated by the SEC.
- The SEC has designated a Tier 3 level of antidegradation protection to the water body.

Tier 3 prohibits water quality degradation. Tier 3 prohibits new or expanded discharges into the water body. New or expanded discharges upstream of the water body may be allowed.

Tier 3 is defined in **Section 8** and discussed further in **Section 12.5**



REGULATION OVERVIEW

ANTIDEGRADATION REVIEW & PERMITTING PROCESS

1. Determine if the discharge is subject to an antidegradation review.
 - a) Only applications for new or expanded point source discharges or new or modified zones of mixing.
2. If proposing to discharge into a Tier 3 water- this is not allowed.
3. If proposing to discharge upstream of a Tier 3 water or into or upstream of a Tier 2.5 water then the NDEP will proceed with determining the Parameters of Concern (POC) utilizing the application, other similar facilities, EPA guidance, water quality standards, etc.
4. NDEP will assess whether there is adequate existing data to establish baseline water quality for all the POCs.
 - a) If yes, NDEP can commence the antidegradation review process (skip to step 5).
 - b) If no, the permittee must submit a Sampling and Analysis Plan (SAP) for approval with 20+ samples over a period of five years.
 - i. When sampling is complete NDEP will establish baseline values for each parameter.

Continued ----->

REGULATION OVERVIEW

ANTIDEGRADATION REVIEW & PERMITTING PROCESS

5. If the proposed discharge is equal to or better than the established baseline values than no further analysis is needed and the permit may be issued. Permit limits for each parameter will be based on the most restrictive of either the baseline value or the water quality standard.
6. If any parameter of the proposed discharge is higher than the established baseline value, then the applicant must submit an analysis of alternatives to the Department for review by the SEC. If no feasible alternative is identified, the applicant must submit a justification to the Department in accordance with [Section 15](#).

REGULATION OVERVIEW

ANTIDEGRADATION REVIEW & PERMITTING PROCESS

If the waterbody has not been designated as a Tier 2.5 or Tier 3 then an antidegradation review must be performed to determine if any pollutants are subject to Tier 2 protection.

1. NDEP will proceed with determining the Parameters of Concern (POC).
2. NDEP will assess whether there is adequate existing data to establish baseline water quality for all the POCs.
 - a) If yes, NDEP can commence the antidegradation review process (skip to step 3).
 - b) If no, the permittee must submit a Sampling and Analysis Plan (SAP) for approval to establish baseline water quality (20 samples collected quarterly over a 5-year period).
 - c) After 2-years, NDEP may establish Interim Baseline Values (IBVs) for each parameter (based on 8+ samples) to allow for permitting process to move forward.
3. If the proposed discharge is equal to or better than the baseline water quality or established IBVs than no further analysis is needed and a permit may be issued. Permit limits for each parameter will be based on the most restrictive of either the baseline value (or IBV) or the water quality standard.
4. If any parameter of the proposed discharge is higher than the established baseline value or IBV, then the applicant must submit an analysis of alternatives to the Department for review by the SEC. If no feasible alternative is identified, the applicant must submit a justification to the Department in accordance with [Section 15](#).

REGULATION APPROVAL PROCESS AND TENTATIVE TIMELINE

Action	Timeframe
Written public comment (e-submittals preferred)	February 2, 2024
Public notice SEC hearing (45 days prior)	February 5, 2024
Final draft regulation posted to SEC website (30 days prior)	February 20, 2024
State Environmental Commission hearing	March 21, 2024
Legislative Commission review	June 2024
US Environmental Protection Agency approval	90 days upon submittal

WEBSITE LINK

Antidegradation regulation and associated materials are available at:

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



Submit written comments to:

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