#### REVISED PROPOSED REGULATION OF THE

#### STATE ENVIRONMENTAL COMMISSION

#### LCB File No. R146-24

October 27, 2025

EXPLANATION – Matter in *italics* is new; matter in brackets [omitted material] is material to be omitted.

AUTHORITY: §§ 1-26, NRS 445A.425 and 445A.520, as amended by section 20 of Assembly Bill No. 104, chapter 226, Statutes of Nevada 2025, at page 1407.

A REGULATION relating to water quality; revising provisions relating to standards of water quality; and providing other matters properly relating thereto.

# **Legislative Counsel's Digest:**

Existing law requires the State Environmental Commission to adopt regulations establishing water quality standards. (NRS 445A.425) Subject to certain exceptions, existing law further requires the Commission to establish water quality standards at a level designed to protect and ensure a continuation of the designated beneficial use or uses which the Commission has determined to be applicable to each stream segment or other body of surface water in the State. (NRS 445A.520, as amended by section 20 of Assembly Bill No. 104, chapter 226, Statutes of Nevada 2025, at page 1407) Existing regulations establish such water quality standards. (NAC 445A.11704-445A.2234)

Existing regulations set forth certain salinity standards, as adopted by the Colorado River Basin Salinity Control Forum in 2017, at the three lower main stem stations of the Colorado River. (NAC 445A.1233) Section 26 of this regulation repeals these standards. Section 1 of this regulation provides instead that the Commission adopts by reference the 2023 version of the salinity standards adopted by the Colorado River Basin Salinity Control Forum as the salinity standards for the portions of the Colorado River system in this State. Section 10 of this regulation makes the provisions of section 1 part of the standards for water quality for select bodies of water within the Colorado Region to clarify that the salinity standards only apply to specific portions of the Colorado Region. Sections 11-25 of this regulation make: (1) conforming changes to eliminate references to the repealed salinity standards; and (2) various changes to the standards of water quality for specific portions of the Colorado Region to conform to the standards adopted by section 1. Section 26 makes a conforming change to repeal the interpretation of a term made obsolete by the changes to the standards of water quality for specific portions of the Colorado Region to conform to the standards adopted by section 1.

**Sections 20-22 and 25** also revise certain terminology relating to standards of water quality for consistency with terminology used in similar provisions relating to standards of water quality.

Existing regulations set forth the designated beneficial uses and standards of water quality for the Squaw Creek Reservoir within the Black Rock Region of the State. (NAC 445A.1282, 445A.1288) **Sections 2 and 3** of this regulation provide instead that these designated beneficial uses and standards of water quality apply to the Granite Mountain Reservoir within the Black Rock Region of this State.

Existing regulations set forth the designated beneficial uses and standards of water quality for Rock Creek at Squaw Valley Ranch and Rock Creek below Squaw Valley Ranch within the Humboldt Region of the State. (NAC 445A.1432, 445A.1518, 445A.1522) **Sections 4-6** of this regulation provide instead that these designated beneficial uses and standards of water quality apply to Rock Creek at Willow Creek and Rock Creek below Willow Creek within the Humboldt Region of the State.

Existing regulations set forth the designated beneficial uses and standards of water quality for Squaw Creek within the Walker Region of the State. (NAC 445A.1882, 445A.1928) **Sections 7 and 8** of this regulation provide instead that these designated beneficial uses and standards of water quality apply to Mud Spring Creek within the Walker Region of the State.

Existing regulations establish standards of water quality for Schroeder Reservoir within the Colorado Region of the State. (NAC 445A.2182) **Section 26** repeals these standards. **Section 9** of this regulation makes conforming changes to eliminate references to Schroeder Reservoir.

Existing regulations set forth the standards of water quality for Beaver Dam Wash above Schroeder Reservoir within the Colorado Region. (NAC 445A.2178) **Section 24** of this regulation provides instead that these standards of water quality apply to Beaver Dam Wash within the State.

- **Section 1.** Chapter 445A of NAC is hereby amended by adding thereto a new section to read as follows:
- 1. The State of Nevada will cooperate with the other Colorado River Basin states and the Federal Government to support and carry out the conclusions and recommendations adopted April 27, 1972, by the Reconvened 7th Session of the Conference in the Matter of Pollution of the Interstate Waters of the Colorado River and its Tributaries.
- 2. The Commission hereby adopts by reference the "2023 Review Water Quality Standards for Salinity, Colorado River System," adopted by the Colorado River Basin Salinity Control Forum as the salinity standards for the portions of the Colorado River system in this State. The publication is available, free of charge, from the Division or at the Internet address <a href="https://www.coloradoriversalinity.org">https://www.coloradoriversalinity.org</a>.

# **Sec. 2.** NAC 445A.1282 is hereby amended to read as follows:

# 445A.1282 The designated beneficial uses for select bodies of water within the Black Rock Region are prescribed in this section:

					В	enef	icia	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Smoke Creek	From the California-Nevada state line to the Smoke Creek Desert.	X	X	X	X	X			X					NAC 445A.1286
Squaw  Creek   Granite  Mountain  Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1288
Negro Creek	From its origin to the first irrigation diversion, near the west line of section 28, T. 36 N., R. 23 E., M.D.B. & M.	X	X	X	X	X	X		X					NAC 445A.1292
	From its origin to the exterior border of the Summit Lake Indian Reservation.	X	X	X	X	X	X		X					NAC 445A.1296
Leonard Creek	From its origin to the first point of diversion, near the south line of section 12, T. 42 N., R. 28 E., M.D.B. & M.	Х	Х	X	X	X	X		X					NAC 445A.1298
Blik Cleek,	From its origin to its intersection with the south line of section 35, T. 45 N., R. 32 E., M.D.B. & M.	X	X	X	X	X	X		X					NAC 445A.1302
Bilk Creek at Bilk Creek	From its intersection with the south line of section 35, T. 45 N., R. 32 E., M.D.B. & M., to Bilk Creek Reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1304
Bilk Creek Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1306
Bottle Creek	From its origin to the first point of diversion, near the east line of section 23, T. 40 N., R. 32 E., M.D.B. & M.	X	X	X	X	X	X		X					NAC 445A.1308
Quinn River, East and South Forks	From their origin to the confluence of the East and South Forks, except for the length of the river within the exterior borders of the Fort McDermitt Indian Reservation.	X	X	X	X	X	X		X					NAC 445A.1312
Quinn River (the slough)	From the Oregon-Nevada state line in section 31, T. 48 N., R. 38 E., M.D.B. & M., to the confluence with the main tributary of the Quinn River at the south line of section 17, T. 47 N., R. 38 E., M.D.B. & M., except for the length of the river within the exterior borders of the Fort McDermitt Indian Reservation.	X	X	X		X		X	X					NAC 445A.1316
Irrigation Livestock	Irrigation Watering of livestock													

					В	enef	icial	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Contact	Recreation involving contact with the	e wa	iter											
Noncontact	Recreation not involving contact with	n th	e wa	ter										
Industrial	Industrial supply													
Municipal	Municipal or domestic supply, or bot	h												
Wildlife	Propagation of wildlife													
Aquatic	Propagation of aquatic life													
Aesthetic	Extraordinary ecological, aesthetic or	r rec	creat	iona	ıl va	lue								
Enhance	Enhancement of water quality													
Marsh	Maintenance of a freshwater marsh													

# **Sec. 3.** NAC 445A.1288 is hereby amended to read as follows:

445A.1288 The limits of this table apply to the entire body of water known as [Squaw]

Creek] Granite Mountain Reservoir. [Squaw Creek] Granite Mountain Reservoir is located in Washoe County.

# STANDARDS OF WATER QUALITY

# [Squaw Creek] Granite Mountain Reservoir

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic		Noncontact		Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X			
Aquatic Life Species of	of Concern		Tro	ut.									
Temperature - $^{\circ}$ C $\Delta$ T <sup>b</sup> - $^{\circ}$ C		$S.V. \le 20$ $\Delta T = 0$			*								
pH - SU		S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		S.V. ≥ 6.0			*								
Total Phosphorus (as P) - mg/L		S.V. ≤ 0.10			*	*							
Total Ammonia (as N) - mg/L		С			*								
Total Dissolved Solids - mg/L		S.V. ≤ 500						*					
E. coli - cfu/100 mL <sup>d</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*									

						В	enef	icial	Us	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Toxic Materials		e											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

# **Sec. 4.** NAC 445A.1432 is hereby amended to read as follows:

The designated beneficial uses for select bodies of water within the Humboldt 445A.1432 Region are prescribed in this section:

					В	enef	icia	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Humboldt River near Osino	From the upstream source of the main stem to Osino.	X	X	X	X	X	X	X	X				Warm-water fishery	NAC 445A.1436
Humboldt River at Palisade	From Osino to the Palisade Gage.	X	X	X	X	X	X	X	X				Warm-water fishery	NAC 445A.1438
Humboldt River at Battle Mountain	From the Palisade Gage to the Battle Mountain Gage.	X	X	X	X	X	X	X	X				Warm-water fishery	NAC 445A.1442
Humboldt River at State Highway 789	From the Battle Mountain Gage to where State Highway 789 crosses the Humboldt River.	X	X	X	X	X	X	X	X				Warm-water fishery	NAC 445A.1444
Humboldt River at Imlay	From where State Highway 789 crosses the Humboldt River to Imlay.	X	X	X	X	X	X	X	X				Warm-water fishery	NAC 445A.1446
Humboldt River at Woolsey	From Imlay to Woolsey.	X	X	X	X	X	X	X	X				Warm-water fishery	NAC 445A.1448
Humboldt River at Rodgers Dam	From Woolsey to Rodgers Dam.	X	X	X	X	X	X	X	X					NAC 445A.1452
Humboldt River at the Humboldt Sink	From Rodgers Dam to the Humboldt Sink.	X	X	X	X	X		X	X					NAC 445A.1454
The Humboldt Sink	The entire sink.	X	X	X		X		X	X					NAC 445A.1455
Humboldt River, North Fork and tributaries at the national forest boundary	From their origin in the Independence Mountain Range to the national forest boundary.	X	X	X	X	X	X	X	X					NAC 445A.1456

Refer to NAC 445A.122 and 445A.1282 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard. The water quality criteria for ammonia are specified in NAC 445A.118.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

					В	enei	icia	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Humboldt River, North Fork at Beaver Creek	From the national forest boundary to its confluence with Beaver Creek.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1458
Humboldt River, North Fork at the Humboldt River	From its confluence with Beaver Creek to its confluence with the Humboldt River.	X	X	X	X	X	X	X	X					NAC 445A.1462
Humboldt River, South Fork at South Fork Reservoir, including tributaries above Lee	From its origin to South Fork Reservoir, including its tributaries above Lee, except for the length of the river and the lengths of its tributaries within the exterior borders of the South Fork Indian Reservation.	X	X	X	X	X	X	X	X					NAC 445A.1464
South Fork Reservoir		X	X	X	X	X	X	X	X				Trout	NAC 445A.1465
Humboldt River, South Fork at the Humboldt River	From South Fork Reservoir to its confluence with the Humboldt River.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1466
Little Humboldt River	The entire length.	X	X	X	X	X	X	X	X					NAC 445A.1468
Little Humboldt River, North Fork at the national forest boundary	From its origin to the national forest boundary.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1472
Little Humboldt River, North Fork at the South Fork of the Little Humboldt River	From the national forest boundary to its confluence with the South Fork of the Little Humboldt River.	X	X	X	X	X	X	X	X					NAC 445A.1474
Little Humboldt River, South Fork at the Elko-Humboldt county line	From its origin to the Elko-Humboldt county line.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1476
Little Humboldt River, South Fork at the North Fork of the Little Humboldt River	From the Elko-Humboldt county line to its confluence with the North Fork of the Little Humboldt River.	X	X	X	X	X	X	X	X					NAC 445A.1478
Marys River, upper	From its origin to the point where the river crosses the east line of T. 42 N., R. 59 E., M.D.B. & M.	X	X	X	X	X	X	X	X					NAC 445A.1482
Marys River at the Humboldt River	From the east line of T. 42 N., R. 59 E., M.D.B. & M., to its confluence with the Humboldt River.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1484
Tabor Creek	From its origin to the east line of T. 40 N., R. 60 E., M.D.B. & M.	X	X	X	X	X	X	X	X					NAC 445A.1486
Maggie Creek Tributaries	From their origin to the point where they become Maggie Creek or the point of their confluence with Maggie Creek.	X	X	X	X	X	X	X	X					NAC 445A.1488

					В	enef	icia	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Maggie Creek at Jack Creek	From where it is formed by the Maggie Creek tributaries to its confluence with Jack Creek.	X	X	X	X	X	X	X					Trout	NAC 445A.1492
Maggie Creek at Soap Creek	From its confluence with Jack Creek to its confluence with Soap Creek.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1494
Maggie Creek at the Humboldt River	From its confluence with Soap Creek to its confluence with the Humboldt River.	X	X	X	X	X	X	X	X					NAC 445A.1496
Secret Creek at the national forest boundary	From its origin to the national forest boundary.	X	X	X	X	X	X	X	X					NAC 445A.1498
Secret Creek at the Humboldt River	From the national forest boundary to its confluence with the Humboldt River.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1502
Lamoille Creek at the gaging station	From its origin to gaging station number 10-316500, located in the NE 1/4 of section 6, T. 32 N., R. 58 E., M.D.B. & M.	X	X	X	X	X	X	X	X					NAC 445A.1504
Lamoille Creek at the Humboldt River	From gaging station number 10-316500, located in the NE 1/4 of section 6, T. 32 N., R. 58 E., M.D.B. & M., to its confluence with the Humboldt River.	X	X	X	X	X	X	X	X					NAC 445A.1506
J.D. Ponds	The entire area.	X	X	X	X	X	X	X	X					NAC 445A.1508
Denay Creek at Tonkin Reservoir	From its origin to Tonkin Reservoir.	X	X	X	X	X	X	X	X					NAC 445A.1512
Tonkin Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X					NAC 445A.1514
Denay Creek below Tonkin Reservoir	Below Tonkin Reservoir.	X	X	X	X	X	X	X	X					NAC 445A.1516
Rock Creek at  Squaw Valley   Ranch  Willow Creek	From its origin to Squaw Valley Ranch. Willow Creek.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1518
Rock Creek below  Squaw Valley   Ranch  Willow Creek	Below <del>[Squaw Valley Ranch.]</del> <i>Willow Creek</i> .	X	X	X	X	X	X	X	X					NAC 445A.1522
Willow Creek at Willow Creek Reservoir	From its origin to Willow Creek Reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1524
Willow Creek Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1526
North Antelope Creek	From its origin to its confluence with Antelope Creek.	X		X	X	X		X	X					NAC 445A.1527
Pole Creek	From its origin to the point of diversion of the Golconda water supply, near the north line of section 13, T. 35 N., R. 39 E., M.D.B. & M.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1528

					В	enef	icia	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Water Canyon Creek	From its origin to the point of diversion of the Winnemucca municipal water supply, near the west line of section 12, T. 35 N., R. 38 E., M.D.B. & M.	X	X	X	X	X	X	X					Trout	NAC 445A.1532
Martin Creek at the national forest boundary	From its origin to the national forest boundary.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1534
Martin Creek below the national forest boundary	From the national forest boundary to the first diversion in T. 42 N., R. 40 E., M.D.B. & M.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1536
Dutch John Creek	The entire length.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1538
Huntington Creek at the White Pine-Elko county line	From its origin to the White Pine-Elko county line.	X	X	X	X	X	X	X	X					NAC 445A.1542
Huntington Creek at Smith Creek	From the White Pine-Elko county line to its confluence with Smith Creek.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1544
Huntington Creek at the South Fork of the Humboldt River	From its confluence with Smith Creek to its confluence with the South Fork of the Humboldt River.	X	X	X	X	X	X	X	X					NAC 445A.1546
Green Mountain Creek at Toyn Creek	From its origin to its confluence with Toyn Creek.	X	X	X	X	X	X	X	X					NAC 445A.1548
Toyn Creek at Corral Creek	From its confluence with Green Mountain Creek to its confluence with Corral Creek.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1552
Toyn Creek at Green Mountain Creek	From its origin to its confluence with Green Mountain Creek.	X	X	X	X	X	X	X	X					NAC 445A.1554
Reese River at Indian Creek	From its origin to its confluence with Indian Creek, except for the length of the river within the exterior borders of the Yomba Indian Reservation.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1556
Reese River at State Route 722	From its confluence with Indian Creek to State Route 722 (old U.S. Highway 50), except for the length of the river within the exterior borders of the Yomba Indian Reservation.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1558
Reese River below State Route 722	North of State Route 722 (old U.S. Highway 50).	X	X	X	X	X	X	X	X					NAC 445A.1562
San Juan Creek	From its origin to the national forest boundary.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1564
Big Creek at the forest service campground	From its origin to the east boundary of the United States Forest Service's Big Creek Campground.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1566

					В	enef	icia	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Big Creek below the forest service campground	From the east boundary of the United States Forest Service's Big Creek Campground to the first diversion dam, near the west line of section 4, T. 17 N., R. 43 E., M.D.B. & M.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1568
Mill Creek	From its origin to the first point of diversion, near the south line of section 22, T. 29 N., R. 44 E., M.D.B. & M.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1572
Lewis Creek	From its origin to the first point of diversion, near the center of section 23, T. 30 N., R. 45 E., M.D.B. & M.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1574
Iowa Canyon Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1576
Starr Creek	From the confluence of Ackler and Herder Creeks to its confluence with the Humboldt River.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1578
Irrigation	Irrigation													
Livestock	Watering of livestock													
Contact	Recreation involving contact	et w	ith t	he w	ater									
Noncontact	Recreation not involving co	ntac	t wi	ith tl	ne w	ater								
Industrial	Industrial supply													
Municipal	Municipal or domestic supp	ly,	or bo	oth										
Wildlife	Propagation of wildlife													
Aquatic	Propagation of aquatic life													
Aesthetic	Extraordinary ecological, ac		etic	or re	ecrea	atior	nal v	alue	:					
Enhance	Enhancement of water qual													
Marsh	Maintenance of a freshwate	r m	arsh											

# **Sec. 5.** NAC 445A.1518 is hereby amended to read as follows:

445A.1518 The limits of this table apply to the body of water known as Rock Creek from its origin to [Squaw Valley Ranch.] its confluence with Willow Creek. This segment of Rock Creek is located in Elko County.

# STANDARDS OF WATER QUALITY

Rock Creek at [Squaw Valley Ranch] Willow Creek

						В	ene	ficia	l Us	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	X Irrigation	Aquatic	X Contact	Noncontact	X Municipal	Industrial	X Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X		X	X	X	X	X	X			
Aquatic Life Species of Co	oncern		Tro	ut.									
Temperature - °C ΔT <sup>b</sup> - °C		$S.V. \le 20$ $\Delta T = 0$			*								
pH - SU		S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		$S.V. \ge 6.0$			*								
Total Phosphorus (as P) - mg/L		$S.V. \leq 0.10$			*	*							
Nitrate (as N) - mg/L		S.V. ≤ 10						*					
Nitrite (as N) - mg/L		$S.V. \le 0.06$			*								
Total Ammonia (as N) - mg/L		c			*								
Total Suspended Solids - mg/L		$S.V.{\leq}25$			*								
Turbidity - NTU		S.V. ≤ 10			*								
Color - PCU		S.V. ≤ 75						*					
Total Dissolved Solids - mg/L		$S.V. \leq 500$						*					
Chloride - mg/L		1-hr Avg. ≤ 860 <sup>d</sup> 96-hr Avg. ≤ 230			*								
Sulfate - mg/L		S.V. ≤ 250						*					
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		$S.V.\!\geq 20$			*								
E. coli - cfu/100 mL <sup>e</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*									
Toxic Materials		f											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

## NAC 445A.1522 is hereby amended to read as follows:

The limits of this table apply to the body of water known as Rock Creek below 445A.1522 [Squaw Valley Ranch.] Willow Creek. This segment of Rock Creek is located in Elko, Eureka and Lander Counties.

# STANDARDS OF WATER QUALITY

Refer to NAC 445A.122 and 445A.1432 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The water quality criteria for ammonia are specified in NAC 445A.118.

One-hour and 96-hour average concentration limits may be exceeded only once every 3 years.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

# Rock Creek below [Squaw Valley Ranch] Willow Creek

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X	,		
Aquatic Life Species of C	Concern												
Temperature °C ΔT <sup>b</sup> - °C		$S.V. \le 34$ $\Delta T \le 3$			*								
pH - SU		S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		S.V.≥ 5.0			*								
Total Phosphorus (as P) - mg/L		S.V.≤ 0.33			*								
Nitrate (as N) - mg/L		S.V. ≤ 10						*					
Nitrite (as N) - mg/L		S.V. ≤ 1.0						*					
Total Ammonia (as N) - mg/L		С			*								
Total Suspended Solids - mg/L		S.V. ≤ 80			*								
Turbidity - NTU		S.V. ≤ 50			*								
Color - PCU		S.V. ≤ 75						*					
Total Dissolved Solids - mg/L		S.V. ≤ 500						*					
Chloride - mg/L		1-hr Avg. ≤ 860 <sup>d</sup> 96-hr Avg. ≤ 230			*								
Sulfate - mg/L		S.V. ≤ 250						*					
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥ 20			*								
E. coli - cfu/100 mL <sup>e</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		S.V.≤1,000		*									
Toxic Materials		f											

<sup>\* =</sup> The most restrictive beneficial use.

# **Sec. 7.** NAC 445A.1882 is hereby amended to read as follows:

The designated beneficial uses for select bodies of water within the Walker 445A.1882

Region are prescribed in this section:

X = Beneficial use.

a Refer to NAC 445A.122 and 445A.1432 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The water quality criteria for ammonia are specified in NAC 445A.118.

One-hour average concentration limits may be exceeded only once every 3 years.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30 day period.

percent of the samples collected within any 30-day period. The water quality criteria for toxic materials are specified in NAC 445A.1236.

		Ber	nefic	ial l	Jses	S								
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Walker River, West Fork at the state line	At the California-Nevada state line.	X	X	X	X	X	X	X	X				Mountain whitefish, rainbow trout and brown trout	NAC 445A.1886
Topaz Lake	At various points in Topaz Lake.	X	X	X	X	X	X	X	X				Rainbow trout, cutthroat trout, brown trout, kokanee salmon and silver salmon	NAC 445A.1888
Walker River, West Fork near Wellington	From the California-Nevada state line to near Wellington.	X	X	X	X	X	X	X	X				Mountain whitefish, rainbow trout and brown trout	NAC 445A.1892
Fork at the East	Near Wellington to its confluence with the East Fork of the Walker River near Nordyke Road.	X	X	X	X	X	X	X	X				Brown trout and rainbow trout	NAC 445A.1894
Sweetwater Creek	From the California-Nevada state line to its confluence with the East Fork of the Walker River.	X	X	X	X	X	X	X	X				Mountain whitefish, brown trout, brook trout and rainbow trout	NAC 445A.1896
Walker River, East Fork at the state line	At the California-Nevada state line.	X	X	X	X	X	X	X	X				Mountain whitefish, rainbow trout and brown trout	NAC 445A.1898
Walker River, East Fork at Bridge B- 1475	From the California-Nevada state line to Bridge B-1475.	X	X	X	X	X	X	X	X				Mountain whitefish, rainbow trout and brown trout	NAC 445A.1902
Walker River, East Fork at the West Fork of the Walker River	From Bridge B-1475 to its confluence with the West Fork of the Walker River near Nordyke Road.	X	X	X	X	X	X	X	X				Brown trout and rainbow trout	NAC 445A.1904
Walker River at the Walker River Indian Reservation	From the confluence of the East Fork of the Walker River and the West Fork of the Walker River to the exterior border of the Walker River Indian Reservation.	X	X	X	X	X	X	X	X				Channel catfish and largemouth bass	NAC 445A.1906
Walker River at Walker Lake	From the exterior border of the Walker River Indian Reservation to Walker Lake.	X	Х	х	х	X	X	X	X				Channel catfish, largemouth bass and, from February through June when an adequate flow exists, adult Lahontan cutthroat trout and adult rainbow trout	NAC 445A.1908

		Ber	nefic	ial l	Jses	3								
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Walker Lake	The entire lake.			X	Х	X			X				Tui chub, Tahoe sucker, and adult and juvenile Lahontan cutthroat trout	NAC 445A.1914
Desert Creek	From the California-Nevada state line to its confluence with the West Fork of the Walker River.	X	X	X	X	X	X	X	X				Brown trout, brook trout and rainbow trout	NAC 445A.1916
Mason Valley Wildlife Management Area - Bass, Crappie and North Ponds and Hinkson Slough	Hinkson Slough, Bass Pond, Crappie Pond and North Pond.	X	X	X	X	X	X	X	X				Trout	NAC 445A.1918
Mason Valley Wildlife Management Area	All surface water impoundments, excluding Hinkson Slough, Bass Pond, Crappie Pond and North Pond.	X	X	X	X	X	X	X	X					NAC 445A.1922
Cottonwood Creek	From its origin to the point of diversion of the Hawthorne Naval Ammunition Depot, near the north line of section 34, T. 9 N., R. 28 E., M.D.B. & M.	X	X	X	X	X	X		X					NAC 445A.1926
[Squaw] Mud Spring Creek	From its origin to the point of diversion of the Hawthorne Naval Ammunition Depot, near the north line of section 33, T. 9 N., R. 29 E., M.D.B. & M.	X	Х	X	X	X	X		X					NAC 445A.1928
Rose Creek	From its origin to the point of diversion of the Hawthorne Naval Ammunition Depot, near the north line of section 4, T. 8 N., R. 29 E., M.D.B. & M.	X	X	X	X	X	X		X					NAC 445A.1932
Corey Creek	From its origin to the point of diversion of the town of Hawthorne, near the west line of section 3, T. 7 N., R. 29 E., M.D.B. & M.	X	X	X	X	X	X		X					NAC 445A.1934
Irrigation	Irrigation													
Livestock	Watering of livestock													
Contact	Recreation involving contact	with	ı the	e wa	ter									
Noncontact	Recreation not involving con					ter								
Industrial	Industrial supply													
Municipal	Municipal or domestic supply	y, or	bot	h										
Wildlife	Propagation of wildlife													
Aquatic	Propagation of aquatic life													
Aesthetic	Extraordinary ecological, aes		ic or	rec	reat	iona	l val	lue						
Enhance	Enhancement of water quality												-	
Marsh	Maintenance of a freshwater	mar	sh											

# **Sec. 8.** NAC 445A.1928 is hereby amended to read as follows:

The limits of this table apply to the body of water known as [Squaw] Mud 445A.1928 **Spring** Creek from its origin to the point of diversion of the Hawthorne Naval Ammunition Depot, near the north line of section 33, T. 9 N., R. 29 E., M.D.B. & M. [Squaw] Mud Spring Creek is located in Mineral County.

#### STANDARDS OF WATER QUALITY

## **Squaw** Mud Spring Creek

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X		X			
Aquatic Life Species of Co.	ncern												
Temperature - $^{\circ}$ C $\Delta T^{b}$ - $^{\circ}$ C		$S.V. \le 20$ $\Delta T = 0$			*								
pH - SU		S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		S.V.≥6.0			*								
Total Phosphorus (as P) - mg/L		S.V.≤0.10			*	*							
Total Ammonia (as N) - mg/L		c			*								
Total Dissolved Solids - mg/L		S.V. ≤ 500						*					
E. coli - cfu/100 mL <sup>d</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*									
Toxic Materials		e											l 🗍

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.1882 for beneficial use terminology.

The water quality criteria for ammonia are specified in NAC 445A.118.

# **Sec. 9.** NAC 445A.2142 is hereby amended to read as follows:

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period. The water quality criteria for toxic materials are specified in NAC 445A.1236.

445A.2142 The designated beneficial uses for select bodies of water within the Colorado Region are prescribed in this section:

					В	enef	icia	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Colorado River below Davis Dam	Colorado River, from Davis Dam to the California-Nevada state line, except for the length of the river within the exterior borders of the Fort Mojave Indian Reservation.	X	X	X	X	X		X	X				Adult cold- water fishery	NAC 445A.2146
Lake Mohave	The entire lake.	X	X	X	X	X	X	X	X				Adult cold- water fishery	NAC 445A.2147
Colorado River below Hoover Dam	From Hoover Dam to Willow Beach.	X	X	X	X	X	X	X	X				Adult cold- water fishery	NAC 445A.2148
Lake Mead	Lake Mead, excluding the area covered by NAC 445A.2154, Inner Las Vegas Bay.	X	X	X	X	X	X	X	X				Warm-water fishery	NAC 445A.2152
Inner Las Vegas Bay	Lake Mead from the confluence of the Las Vegas Wash with Lake Mead to 1.2 miles into Las Vegas Bay.	X	X	X		X		X	X				Warm-water fishery	NAC 445A.2154
Las Vegas Wash at the Historic Lateral	From the confluence of Sloan Channel and Las Vegas Wash to the Historic Lateral. This segment encompasses the discharge from Clark County wastewater treatment plant, the City of Las Vegas wastewater treatment plant and the City of Henderson wastewater treatment plant.	X	х	X		X			X			X	Warm-water fish.	NAC 445A.2156
Las Vegas Wash at Lake Mead	From the Historic Lateral to its confluence with Lake Mead.	X	X	X		X			X			X	Warm-water fish.	NAC 445A.2158
Channels tributary to the Las Vegas Wash	Flamingo Wash, Sloan Channel, Duck Creek and Las Vegas Creek from the applicable origin to the confluence with the Las Vegas Wash. Pittman Wash from its origin to the confluence with Duck Creek. Tropicana Wash from its origin to the confluence with Flamingo Wash. Upper Las Vegas Wash from its origin to the confluence with Sloan Channel.					X			X					Section 1 of LCB File No. R115-22
Lake Las Vegas	The entire lake.		X	X	X	X			X				Warm-water fishery.	NAC 445A.2161
Virgin River at the state line	At the Arizona-Nevada state line, near Littlefield, Arizona.	X	X	X		X		X	X				-	NAC 445A.2162
Virgin River at Mesquite	From the Arizona-Nevada state line to Mesquite.	X	X	X		X		X	X					NAC 445A.2164

					В	enef	icia	l Us	es					
													Aquatic Life	Water Quality
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Species of Concern	Standard NAC Reference
Virgin River at Lake Mead	From Mesquite to the river mouth at Lake Mead.	X	X	X		X		X	X					NAC 445A.2166
Muddy River at the Glendale Bridge	From the river source to the Glendale Bridge, except for the length of the river within the exterior borders of the Moapa Indian Reservation.	X	X	X	X	X	X	X	X					NAC 445A.2168
Muddy River at the Wells Siding Diversion	From the Glendale Bridge to the Wells Siding Diversion.	X	X	X	X	X		X	X					NAC 445A.2172
Muddy River at Lake Mead	From the Wells Siding Diversion to the river mouth at Lake Mead.	X	X	X	X	X		X	X					NAC 445A.2174
Meadow Valley Wash	From the bridge above Rox to its confluence with the Muddy River.	X	X	X		X		X	X					NAC 445A.2176
Beaver Dam Wash	[Above Schroeder Reservoir.] Within the State of Nevada.	X	X	X	X	X	X	X	X					NAC 445A.2178
<del>[Schroeder</del> <del>Reservoir</del>	The entire reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.2182]
White River at the national forest boundary	From its origin to the national forest boundary.	X	X	X	X	X	X		X					NAC 445A.2184
White River at Ellison Creek	From the national forest boundary to its confluence with Ellison Creek.	X	X	X	X	X	X	X	X				Trout	NAC 445A.2186
Dacey Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X					NAC 445A.2188
Sunnyside Creek	From its origin to Adams McGill Reservoir.	X	X	X	X	X	X	X	X					NAC 445A.2192
Adams McGill Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X					NAC 445A.2194
Hay Meadow Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.2196
Nesbitt Lake	The entire lake.	X	X	X	X	X	X	X	X					NAC 445A.2198
Pahranagat Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X					NAC 445A.2202
Bowman Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X					NAC 445A.2204
Eagle Valley Creek	From its headwaters to Eagle Valley Reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.2206
Eagle Valley Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.2208
Echo Canyon Reservoir	The entire reservoir.	X	X	X	X	X	X	X	X				Trout	NAC 445A.2212
Clover Creek	From its origin to the point where it crosses the east range line of T. 4 S., R. 67 E., M.D.B. & M.	X	X	X	X	X	X	X	X				Trout	NAC 445A.2214
Irrigation	Irrigation													
Livestock	Watering of livestock													
	Recreation involving contact w	ith	the ·	vata	r									
	Recreation not involving contact w					r								
Industrial	Industrial supply	ci W	1111	.11C V	·aic									
Municipal	Municipal or domestic supply,	or h	oth											
Wildlife	Propagation of wildlife	OI U	oui											
Aquatic	Propagation of aquatic life													
1 iquatic	i ropagation of aquatic me													

					В	enef	icia	l Us	es					
Water Body Name	Segment Description	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	Aquatic Life Species of Concern	Water Quality Standard NAC Reference
Aesthetic	Extraordinary ecological, aesth	etic	or r	ecre	atio	nal v	valu	e						
Enhance	Enhancement of water quality													
Marsh	Maintenance of a freshwater m	arsh	1										•	

**Sec. 10.** NAC 445A.2144 is hereby amended to read as follows:

445A.2144 The standards for water quality for select bodies of water within the Colorado Region are prescribed in NAC 445A.2144 to 445A.2214, inclusive [...], and section 1 of this regulation.

**Sec. 11.** NAC 445A.2146 is hereby amended to read as follows:

445A.2146 The limits of this table apply to the body of water known as the Colorado River from Davis Dam to the California-Nevada state line, except for the length of the river within the exterior borders of the Fort Mojave Indian Reservation. This segment of the Colorado River is located in Clark County.

# STANDARDS OF WATER QUALITY

# Colorado River below Davis Dam

						В	enef	ĭcial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X			
Aquatic Life Species of Cor	ncern		Αdι	ılt c	old-v	wate	er fis	shery	<i>I</i> .				
Temperature - °C ΔT <sup>b</sup> - °C	$\Delta T = 0$	$S.V. \le 24$ $\Delta T \le 2$			*								
pH - SU		S.V. 6.5 - 9.0 ΔpH ± 0.5			*								
Dissolved Oxygen - mg/L		S.V. ≥ 5.0			*								
Total Phosphorus (as P) - mg/L	$A-Avg. \le 0.02$ $S.V. \le 0.03$	A-Avg. ≤ 0.05			*	*							

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Nitrate (as N) - mg/L	A-Avg. ≤ 1.1 S.V. ≤ 1.6	S.V.≤10						*					
Nitrite (as N) - mg/L		S.V. ≤ 0.06			*								
Total Ammonia (as N) - mg/L		c			*								
Total Suspended Solids - mg/L		S.V. ≤ 25			*								
Turbidity - NTU		S.V. ≤ 10			*								
Color - PCU		S.V. ≤ 75						*					
Total Dissolved Solids Salinity - mg/L		Flow weighted A-Avg. concentration $\leq 747^{d}$						*					
Chloride - mg/L		S.V. ≤ 400 <del>[d]</del>						*					
Sulfate - mg/L		S.V.≤500 <del> d </del>						*					
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥ 20			*								
E. coli - cfu/100 mLe		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL	A.G.M. ≤ 50 S.V. ≤ 100	S.V. ≤ 1,000		*									
Toxic Materials		f											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

- Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.
- Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard. The water quality criteria for ammonia are specified in NAC 445A.118.
- The salinity standards for the Colorado River system are specified in NAC 445A.1233.] As used for this parameter, flow weighted annual average concertation means the total annual salt load divided by the total annual streamflow. The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period. The water quality criteria for toxic materials are specified in NAC 445A.1236. 445A.1233.] As used for this parameter, flow

## **Sec. 12.** NAC 445A.2147 is hereby amended to read as follows:

The limits of this table apply to the body of water known as Lake Mohave, which extends from Willow Beach to Davis Dam. Lake Mohave is located in Clark County.

# STANDARDS OF WATER QUALITY

Colorado River: Lake Mohave

PARAMETER	REQUIREMENTS	WATER QUALITY	Beneficial Usesa
TAICHILILIC	REQUIREMENTS	WITTER QUILLIT	Deliciteiai Oses

	TO MAINTAIN EXISTING HIGHER QUALITY	CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	X Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X		X	X	X			
Aquatic Life Species of	Concern		Adı	ılt c	old-	wate	er fis	sher	у.				
Temperature -°C ΔT <sup>b</sup> - °C	$\Delta T = 0$	S.V. ≤24 ΔT ≤ 2			*								
pH - SU		S.V. 6.5 - 9.0 ΔpH± 0.5			*								
Dissolved Oxygen - mg/L		$S.V. \geq 5.0^{c}$			*								
Total Phosphorus (as P) - mg/L		$A-Avg. \le 0.05$			*	*							
Nitrate (as N) - mg/L		S.V. ≤ 10						*					
Nitrite (as N) - mg/L		$S.V. \leq 0.06$			*								
Total Ammonia (as N) - mg/L		d			*								
Total Suspended Solids - mg/L		S.V. ≤ 25			*								
Turbidity - NTU		S.V.≤10			*								
Color - PCU		S.V. ≤ 75						*					
<del>[Total Dissolved</del> <del>Solids]</del> <i>Salinity</i> - mg/L		Flow weighted A-Avg. concentration $\leq 747^{\circ}$						*					
Chloride - mg/L		S.V. ≤ 400 <mark>[e]</mark>						*					
Sulfate - mg/L		S.V. ≤ 500 <mark>[e]</mark>						*					
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		$S.V.\!\geq\!20$			*								
E. coli - cfu/100 mL <sup>f</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*									
Toxic Materials		g											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

#### Sec. 13. NAC 445A.2148 is hereby amended to read as follows:

The limits of this table apply to the body of water known as the Colorado River from Hoover Dam to Willow Beach. This segment of the Colorado River is located in Clark County.

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

Applies to the epilimnion when stratified, or average in water column during periods of nonstratification. The water quality criteria for ammonia are specified in NAC 445A.118.

<sup>1233.</sup> As used for this parameter, flow weighted annual average concertation means the total annual salt load divided by the total annual streamflow.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period. The water quality criteria for toxic materials are specified in NAC 445A.1236.

# STANDARDS OF WATER QUALITY

#### Colorado River below Hoover Dam

						Ве	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X			
Aquatic Life Species of Cor	ncern		Adı	ılt c	old-	wate	er fis	sher	y.				
Temperature - °C ΔT <sup>b</sup> - °C	$\Delta T = 0$	$S.V. \le 24$ $\Delta T \le 2$			*								
pH - SU		S.V. 6.5 - 9.0 ΔpH ± 0.5			*								
Dissolved Oxygen - mg/L		S.V. ≥ 5.0			*								
Total Phosphorus (as P) - mg/L	$A-Avg. \le 0.02$ $S.V. \le 0.033$	A-Avg. ≤ 0.05			*	*							
Total Nitrogen (as N) - mg/L	A-Avg. ≤ 1.0 S.V. ≤ 1.5				*	*							
Nitrate (as N) - mg/L		S.V. ≤ 10						*					
Nitrite (as N) - mg/L		S.V. ≤ 0.06			*								
Total Ammonia (as N) - mg/L		c			*								
Total Suspended Solids - mg/L		S.V. ≤ 25			*								
Chloride - mg/L		S.V. ≤ 400 <del>[d]</del>						*					
Sulfate - mg/L		S.V.≤500 <del>[d]</del>						*					
Turbidity - NTU		S.V. ≤ 10			*								
Color - PCU		S.V. ≤ 75						*					
[Total Dissolved Solids] Salinity - mg/L		Flow weighted A-Avg. concentration ≤ 747 <sup>d</sup>						*					
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥20			*								
E. coli - cfu/100 mL <sup>e</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL	$\begin{array}{c} A.G.M. \leq 50 \\ S.V. \leq 100 \end{array}$	S.V. ≤ 1,000		*									
Toxic Materials		f											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

**Sec. 14.** NAC 445A.2152 is hereby amended to read as follows:

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The water quality criteria for ammonia are specified in NAC 445A.118.

<sup>[</sup>The salinity standards for the Colorado River system are specified in NAC 445A.1233.] As used for this parameter, flow weighted annual average concertation means the total annual salt load divided by the total annual streamflow.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

445A.2152 The limits of this table apply to the body of water known as Lake Mead, excluding the area covered by NAC 445A.2154, Inner Las Vegas Bay. Lake Mead is located in Clark County.

# STANDARDS OF WATER QUALITY

#### Lake Mead

						Ве	enef	icial	Us	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	X Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X			
Aquatic Life Species of Cor	ncern		Wa	rm-v	vate	r fis	sher	y.		,	,		
Temperature $\Delta T^b$ - °C	$\Delta T = 0$	$\Delta T \leq 2$			*								
pH - SU	95% of S.V. samples $\leq 8.8$	S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		$S.V. \ge 5.0^{c}$			*								
Total Inorganic Nitrogen (as N) - mg/L	95% of S.V. samples $\leq 4.5$				*	*							
Nitrate (as N) - mg/L		S.V. ≤ 10						*					
Nitrite (as N) - mg/L		S.V. ≤ 1						*					
Total Ammonia (as N) - mg/L		d			*								
Chlorophyll a - μg/L	e				*	*							
Total Suspended Solids - mg/L		S.V. ≤ 25			*								
Turbidity - NTU	f	$S.V. \leq 25$			*								
Color - PCU	g							*					
<del>[Total Dissolved Solids]</del> <b>Salinity</b> - mg/L	Flow Weighted A Avg. Concentration ≤ 723 measured below Hoover Damh	Flow weighted A- S.V.] Avg. concentratio $n \leq \frac{110001}{723^h}$						*					
Chloride - mg/L		$S.V. \leq 400 \frac{\text{i}}{\text{i}}$						*					
Sulfate - mg/L		$S.V. \leq 500$						*					
E. coli - cfu/100 mL[j] i		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		≤ 200/400[k] <sup>j</sup>				*							
Toxic Materials		[ <u>]]</u>											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone. Applies to the epilimnion when stratified, or average in water column during periods of nonstratification. The water quality criteria for ammonia are specified in NAC 445A.118.

The requirements for chlorophyll a are:

- Not more than 1 monthly mean in a calendar year at Station LWLVB 1.85 may exceed 45µg/L. Station LWLVB 1.85 is located at the center of the channel at a distance of 1.85 miles into Las Vegas Bay from the confluence of the Las Vegas Wash with Lake Mead.
- The mean for chlorophyll a in summer (July 1-September 30) must not exceed 40 µg/L at Station LWLVB 1.85, and the mean for 4 consecutive summer years must not exceed 30 µg/L. The sample must be collected from the center of the
- channel and must be representative of the top 5 meters of the channel. Station LWLVB 1.85 is located at the center of the channel at a distance of 1.85 miles into Las Vegas Bay from the confluence of the Las Vegas Wash with Lake Mead.

  The mean for chlorophyll a in the growing season (April 1-September 30) must not exceed 16 µg/L at Station LWLVB 2.7 and 9 µg/L at Station LWLVB 3.5. Station LWLVB 2.7 is located at a distance of 2.7 miles into Las Vegas Bay from the confluence of the Las Vegas Wash with Lake Mead. Station LWLVB 3.5 is located at a distance of 3.5 miles into Las Vegas Bay from the confluence of the Las Vegas Wash with Lake Mead. miles into Las Vegas Bay from the confluence of the Las Vegas Wash with Lake Mead.
- The mean for chlorophyll a in the growing season (April 1-September 30) must not exceed 5  $\mu$ g/L in the open water of Boulder Basin, Virgin Basin, Gregg Basin and Pierce Basin. The single value must not exceed 10  $\mu$ g/L for more than 5 percent of the samples.
- Not less than two samples per month must be collected between the months of March and October. During the months when only one sample is available, that value must be used in place of the monthly mean.
- Turbidity must not exceed that characteristic of natural conditions by more than 10 NTU.
- Color must not exceed that characteristic of natural conditions by more than 10 PCU
- The salinity standards for the Colorado River system are specified in NAC 445A.1233
- he combination of this constituent with other constituents comprising TDS must not result in the violation of the TDS standards for Lake Mead and the Colorado River.
- As used for this parameter, flow weighted annual average concertation means the total annual salt load divided by the total annual streamflow.
- The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

  Based on a minimum of not learnth.
- Based on a minimum of not less than five samples taken over a 30-day period, the fecal coliform bacterial level must not exceed a log mean of 200 per 100 milliliters, nor must more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 milliliters.
- The water quality criteria for toxic materials are specified in NAC 445A.1236.
- The water quality criteria for toxic materials are specified in INAC 4438.1230.

  The Commission recognizes that at entrances of tributaries to Lake Mead, localized exceedance of standards may occur.

# **Sec. 15.** NAC 445A.2154 is hereby amended to read as follows:

445A.2154 The limits of this table apply to the body of water known as Inner Las Vegas Bay, consisting of Lake Mead from the confluence of the Las Vegas Wash with Lake Mead to 1.2 miles into Las Vegas Bay. Inner Las Vegas Bay is located in Clark County.

# STANDARDS OF WATER QUALITY

#### Inner Las Vegas Bay

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X		X		X	X			
Aquatic Life Species of Cor	ncern		Wa	rm-v	vate	r fis	hery	<b>y</b> .					
Temperature $\Delta T^b$ - $^{\circ}C$	$\Delta T = 0$	$\Delta T \leq 2$			*								
pH - SU	95% of S.V. samples $\leq 8.9$	S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		S.V. ≥ 5.0°			*								
Total Inorganic Nitrogen (as N) - mg/L	95% of S.V. samples $\leq 5.3$				*								

						Ве	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Nitrate (as N) - mg/L		S.V. ≤ 90			*								
Nitrite (as N) - mg/L		S.V. ≤ 5			*								
Total Ammonia (as N) - mg/L		d			*								
Total Suspended Solids - mg/L		S.V. ≤ 25			*								
Turbidity - NTU	e	S.V. ≤ 25			*								
Total Dissolved Solids - mg/L[f]		S.V. ≤ 3000	*										
E. coli - cfu/100 mL		A.G.M. ≤ 630					*						
Fecal Coliform No./100mL		$\leq 200/400 \frac{\text{g}}{\text{g}} f$					*						
Toxic Materials	·	<u>[h]</u> g											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.

- Applies to the epilimnion when stratified, or average in water column during periods of nonstratification.

  The requirement for water quality with regard to the concentration of total ammonia is provided pursuant to the provisions of NAC 445A.118. Data must be collected at Station LWLVB 1.2. Station LWLVB 1.2 is located at the center of the channel at a distance of 1.2 miles into Las Vegas Bay from the confluence of the Las Vegas Wash with Lake Mead.
- Turbidity must not exceed that characteristic of natural conditions by more than 10 NTU.
- The salinity standards for the Colorado River system are specified inNAC
- gh Any discharge from a point source into Las Vegas Wash must not exceed a log mean of 200 per 100 milliliters based on a minimum of not less than five samples taken over a 30-day period, nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 milliliters.
- [h] 8 The water quality criteria for toxic materials are specified in NAC 445A.1236.
- The Commission recognizes that water quality standards for the [inner] Inner Las Vegas Bay may be exceeded during storm and flash flood events. During these events, the beneficial use of noncontact recreation and the E. coli water quality criteria do not apply.

## **Sec. 16.** NAC 445A.2161 is hereby amended to read as follows:

The limits of this table apply to the entire body of water known as Lake Las 445A.2161

Vegas. Lake Las Vegas is located in Clark County.

## STANDARDS OF WATER QUALITY

# Lake Las Vegas

						В	enef	icia	l Us	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses				X	X	X	X			X			

						В	enet	ficia	l Us	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Aquatic Life Species of Co	oncern.		Wa	rm-v	vate	r fis	h.						
Temperature $\Delta T^b$ - °C		$\Delta T \le 2$			*								
pH - SU		S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		S.V.≥ 5.0°			*								
Chlorophyll a - μg/L		d			*	*							
Turbidity - NTU		S.V. ≤ 10 <sup>e</sup>			*								
Total Dissolved Solids - mg/L		S.V. ≤ 2000 <del>[f]</del>		*									
Fecal Coliform - No./100ml		S.V. ≤ 1,000		*									
E. coli - cfu/100 mL[g] f		G.M. ≤ 126 S.V. ≤ 410				*							
Toxic Materials		<del>[h]</del> g											

<sup>\* =</sup> The most restrictive beneficial use.

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

#### **Sec. 17.** NAC 445A.2162 is hereby amended to read as follows:

The limits of this table apply to the body of water known as the Virgin River at 445A.2162 the Arizona-Nevada state line, near Littlefield, Arizona. This segment of the Virgin River is located in Clark County.

## STANDARDS OF WATER QUALITY

## Virgin River at the state line

	S WATER QUALITY	Beneficial Uses <sup>a</sup>
--	-----------------	------------------------------

Average temperature in the epilimnion should not exceed 2°C above ambient temperature (i.e., temperature in epilimnion of

Applies to the epilimnion when stratified, or average in water column during periods of nonstratification. The seasonal average chlorophyll-a concentration within 0-2.5 m, April through September, should not exceed 15  $\mu$ g/L. Turbidity must not exceed that characteristic of natural conditions by more than 10 Nephelometric Turbidity Units (NTU).

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

The Commission recognizes that storm waters from Las Vegas Wash may enter Lake Las Vegas during storm and flash-flood

events and that localized exceedance of the standards may occur during such events.

	TO MAINTAIN EXISTING HIGHER QUALITY	CRITERIA TO PROTECT BENEFICIAL USES	Livestock	X Irrigation	Aquatic	Contact	Noncontact	Municipal	X Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X		X		X	X			
Aquatic Life Species of Cor	ncern												
Temperature - $^{\circ}$ C $\Delta T^{b} - ^{\circ}C$	$\Delta T = 0$	S.V. Nov-Jun $\leq$ 21 S.V. Jul-Oct $\leq$ 32 $\Delta$ T $\leq$ 2			*								
pH - SU		S.V. 6.5 - 9.0 ΔpH ± 0.5			*								
Dissolved Oxygen - mg/L		S.V. ≥ 5.0			*								
Total Phosphorus (as P) - mg/L	$\begin{array}{c} A\text{-}Avg. \leq 0.06 \\ S.V. \leq 0.1 \end{array}$	A-Avg. ≤ 0.1			*								
Total Nitrogen (as N) - mg/L	$S.V. \le 2.4$ $A-Avg. \le 3.2$				*								
Nitrate (as N) - mg/L		S.V. ≤ 90			*								
Nitrite (as N) - mg/L		S.V. ≤ 5.0			*								
Total Ammonia (as N) - mg/L		c			*								
Turbidity - NTU		S.V. ≤ 50			*								
Total Dissolved Solids - mg/L		d		*]									
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		$S.V.\!\geq\!20$			*								
E. coli - cfu/100 mL	_	A.G.M. ≤ 630					*						
Fecal Coliform - No./100 mL	A.G.M. ≤ 450 S.V. ≤ 1800	S.V. ≤ 1,000		*									
Toxic Materials		[e] d											

<sup>\* =</sup> The most restrictive beneficial use.

# **Sec. 18.** NAC 445A.2164 is hereby amended to read as follows:

The limits of this table apply to the body of water known as the Virgin River 445A.2164 from the Arizona-Nevada state line to Mesquite. This segment of the Virgin River is located in Clark County.

# STANDARDS OF WATER QUALITY

# Virgin River at Mesquite

PARAMETER REQUIREMENTS	WATER QUALITY	Beneficial Uses <sup>a</sup>
------------------------	---------------	------------------------------

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard. The water quality criteria for ammonia are specified in NAC 445A.118.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

	TO MAINTAIN EXISTING HIGHER QUALITY	CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X		X		X	X	·		
Aquatic Life Species of Cor	ncern												
Temperature - °C		S.V. Nov-Jun ≤ 21 S.V. Jul-Oct ≤ 32			*								
ΔT <sup>b</sup> - °C	$\Delta T = 0$	$\Delta T \leq 2$											Ш
pH - SU		S.V. 6.5 - 9.0 ΔpH ± 0.5			*								
Dissolved Oxygen - mg/L		$S.V. \ge 5.0$			*								
Total Phosphorus (as P) - mg/L		$A-Avg. \le 0.1$			*								
Total Nitrogen (as N) - mg/L	S.V. ≤ 0.9 A-Avg. ≤ 1.6				*								
Nitrate (as N) - mg/L		S.V. ≤ 90			*								
Nitrite (as N) - mg/L		$S.V. \leq 5.0$			*								
Total Ammonia (as N) - mg/L		c			*								
Turbidity - NTU		S.V. ≤ 50			*								
[Total Dissolved Solids - mg/L		d		*}									
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥ 20			*								
E. coli - cfu/100 mL		A.G.M. ≤ 630					*						
Fecal Coliform - No./100 mL	$A.G.M. \le 300$ $S.V. \le 550$	S.V. ≤ 1,000		*									
Toxic Materials		[e] d											

<sup>\* =</sup> The most restrictive beneficial use.

# **Sec. 19.** NAC 445A.2166 is hereby amended to read as follows:

The limits of this table apply to the body of water known as the Virgin River from Mesquite to the river mouth at Lake Mead. This segment of the Virgin River is located in Clark County.

# STANDARDS OF WATER QUALITY

Virgin River at Lake Mead

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard. The water quality criteria for ammonia are specified in NAC 445A.118.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

						Ве	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	X Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X		X		X	X			
Aquatic Life Species of Co.	ncern												
Temperature - $^{\circ}$ C $\Delta$ T <sup>b</sup> - $^{\circ}$ C	$\Delta T = 0$	S.V. Nov-Jun $\leq 21$ S.V. Jul-Oct $\leq 32$ $\Delta T \leq 2$			*								
pH - SU		S.V. 6.5 - 9.0 ΔpH± 0.5			*								
Dissolved Oxygen - mg/L		S.V. ≥ 5.0			*								
Total Phosphorus (as P) - mg/L		A-Avg. ≤ 0.1			*								
Total Nitrogen (as N) - mg/L	A-Avg. ≤ 2.9 S.V. ≤ 6.1				*								
Nitrate (as N) - mg/L		S.V. ≤ 90			*								
Nitrite (as N) - mg/L		S.V. ≤ 5.0			*								
Total Ammonia (as N) - mg/L		С			*								
Turbidity - NTU		S.V. ≤ 50			*								
Total Dissolved Solids - mg/L		d		*]									
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥ 20			*								
E. coli - cfu/100 mL		A.G.M. ≤ 630					*						
Fecal Coliform - No./100 mL	$A.G.M. \le 625$ $S.V. \le 1250$	S.V. ≤ 1,000		*									
Toxic Materials	·	<del>[e]</del>											

<sup>\* =</sup> The most restrictive beneficial use.

# **Sec. 20.** NAC 445A.2168 is hereby amended to read as follows:

445A.2168 The limits of this table apply to the body of water known as the Muddy River from the river source to the Glendale Bridge, except for the length of the river within the exterior borders of the Moapa Indian Reservation. This segment of the Muddy River is located in Clark County.

# STANDARDS OF WATER QUALITY

X = Beneficial use.

a Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

<sup>&</sup>lt;sup>c</sup> The water quality criteria for ammonia are specified in NAC 445A.118.

d IT he salinity standards for the Coloredo River system are specified in NAC 445A 1233

The water quality criteria for toxic materials are specified in NAC 445A.1236.

# Muddy River at the Glendale Bridge

						В	enef	icial	Us	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	X Livestock	Irrigation	Aquatic	Contact	X Noncontact	Municipal	X Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X			
Aquatic Life Species of Con	cern												
Temperature °C - Source Springs to Warm Springs Bridge		19≤ <del>[T]</del> <i>S.V.</i> ≤32											
Warm Springs Bridge to Glendale Bridge		15≤ <del>[T]</del> <i>S.V.</i> ≤30			*								
$\Delta T^{ m b}$	$\Delta T = 0$ [°C]	ΔT≤2 <mark>[°C]</mark>											
pH - SU		S.V. 6.5 - 9.0 ΔpH± 0.5 Max.			*								
Dissolved Oxygen - mg/L		S.V. ≥ 5.0			*								
Total Phosphorus (as P) - mg/L		$A-Avg. \le 0.1$			*	*							
Total Nitrogen (as N) - mg/L	A-Avg. ≤ 1.3 S.V. ≤ 1.4				*								
Nitrate (as N) - mg/L		$S.V. \le 10$						*					
Nitrite (as N) - mg/L		S.V. ≤ 1.0						*					
Total Ammonia (as N) - mg/L		С			*								
Turbidity - NTU		S.V. ≤ 50			*								
Color - PCU		S.V. ≤ 75						*					
<del>[Total Dissolved Solids - mg/L</del>		d						*}					
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥ 20			*								
E. coli - cfu/100 mL <del>[e]</del> <sup>d</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*									
Fluoride (as total recoverable) - mg/L		S.V. ≤ 2.6		*									
Toxic Materials		[ <u>f]</u> e											

<sup>\* =</sup> The most restrictive beneficial use.

# **Sec. 21.** NAC 445A.2172 is hereby amended to read as follows:

X = Beneficial use.

a Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The water quality criteria for ammonia are specified in NAC 445A.118.

The salinity standards for the Colorado River system are specified in NAC 445A.1233.
The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

The limits of this table apply to the body of water known as the Muddy River 445A.2172 from the Glendale Bridge to the Wells Siding Diversion. This segment of the Muddy River is located in Clark County.

## STANDARDS OF WATER QUALITY

# Muddy River at the Wells Siding Diversion

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X		X	X			
Aquatic Life Species of Cond	cern												
Temperature $^{\circ}$ C - $_{\Delta}$ T $^{b}$	$\Delta T = 0$ [°C]	15≤ <del>[T]</del> S.V. ≤30 ΔT≤2 <del>[°C]</del>			*								
pH - SU		S.V. 6.5 - 9.0 ΔpH±0.5 Max.			*								
Dissolved Oxygen - mg/L		S.V.≥5.0			*								
Total Phosphorus (as P) - mg/L		A-Avg. ≤0.3			*	*							
Nitrate (as N) - mg/L		S.V. ≤ 90			*								
Nitrite (as N) - mg/L		S.V. ≤ 5.0			*								
Total Ammonia (as N) - mg/L		С			*								
Turbidity - NTU		S.V. ≤ 50			*								
<del>[Total DissolvedSolids - mg/L</del>		d		*}									
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥ 20			*								
E. coli - cfu/100 mL[e] <sup>d</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*									
Fluoride (as total recoverable) - mg/L		S.V. ≤ 2.6		*									
Toxic Materials		[f] e											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

**Sec. 22.** NAC 445A.2174 is hereby amended to read as follows:

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The water quality criteria for ammonia are specified in NAC 445A.118.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

445A.2174 The limits of this table apply to the body of water known as the Muddy River from the Wells Siding Diversion to the river mouth at Lake Mead. This segment of the Muddy River is located in Clark County.

## STANDARDS OF WATER QUALITY

# Muddy River at Lake Mead

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	X Livestock	Irrigation	Aquatic	Contact	X Noncontact	Municipal	X Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X		X	X	·		
Aquatic Life Species of Cor	ncern					•			•				•
Temperature °C - ΔT <sup>b</sup>	ΔT = 0 <del> °Cb</del>	<del>T</del>   S.V. ≤ 32 ΔT ≤ 2 [°C]			*								
pH - SU		S.V. 6.5 - 9.0 ΔpH± 0.5 Max.			*								
Dissolved Oxygen - mg/L		S.V. ≥ 5.0			*								
Total Phosphorus (as P) - mg/L		A-Avg. ≤ 0.3			*	*							
Total Nitrogen (as N) - mg/L	A-Avg. ≤ 1.3 S.V. ≤ 1.8				*	*							
Nitrate (as N) - mg/L		S.V. ≤ 90			*								
Nitrite (as N) - mg/L		S.V. ≤ 5.0			*								
Total Ammonia (as N) - mg/L		С			*								
Turbidity - NTU		S.V. ≤ 50			*								
<del>[Total Dissolved Solids - mg/L</del>		<del>d</del>		*									
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥ 20			*								
E. coli - cfu/100 mL <del>[e] <sup>d</sup></del>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL	$A.G.M. \le 500$ $S.V. \le 1300$	S.V. ≤ 1,000		*									
Boron (as total recoverable) - mg/L		S.V. ≤ 2.0		*									
Fluoride (as total recoverable) - mg/L		S.V. ≤ 3.6		*									
Toxic Materials		[ <u>f]</u>											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

The water quality criteria for ammonia are specified in NAC 445A.118.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for terms.

# **Sec. 23.** NAC 445A.2176 is hereby amended to read as follows:

The limits of this table apply to the body of water known as the Meadow Valley Wash from the bridge above Rox to the Muddy River. The Meadow Valley Wash is located in Clark and Lincoln Counties.

# STANDARDS OF WATER QUALITY

# Meadow Valley Wash

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X		X		X	X			
Aquatic Life Species of Con-	cern												
Temperature - °C ΔT <sup>b</sup> - °C	ΔT = 0	S.V. Nov-Jun $\leq 21$ S.V. Jul-Oct $\leq 32$ $\Delta T \leq 2$			*								
pH - SU		S.V. 6.5 - 9.0 ΔpH± 0.5			*								
Dissolved Oxygen - mg/L		S.V. ≥ 5.0			*								Ш
Total Phosphorus (as P) - mg/L		A-Avg. ≤ 0.1			*								
Total Nitrogen (as N) - mg/L	A-Avg. ≤ 2.0 S.V. ≤ 3.3				*								
Nitrate (as N) - mg/L		S.V. ≤ 90			*								
Nitrite (as N) - mg/L		S.V. ≤ 5.0			*								
Total Ammonia (as N) - mg/L		c			*								
Turbidity - NTU		S.V. ≤ 50			*								
Total Dissolved Solids - mg/L		<del>d</del>		*}									
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V. ≥ 20			*								
E. coli - cfu/100 mL		A.G.M. ≤ 630					*						
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*									
Toxic Materials		[e] d											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The water quality criteria for ammonia are specified in NAC 445A.118.

standards for the Colorado Ri

The water quality criteria for toxic materials are specified in NAC 445A.1236.

# **Sec. 24.** NAC 445A.2178 is hereby amended to read as follows:

445A.2178 The limits of this table apply to the body of water known as the Beaver Dam Wash [above Schroeder Reservoir.] within the State of Nevada. The Beaver Dam Wash is located in Lincoln County.

# STANDARDS OF WATER QUALITY

## Beaver Dam Wash

					Beneficial Usesa												
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	X Irrigation	X Aquatic	X Contact	X Noncontact	X Municipal	X Industrial	Wildlife	Aesthetic	Enhance	Marsh				
Beneficial Uses			X	X	X	X	X	X	X	X	·						
Aquatic Life Species of Concern																	
Temperature - $^{\circ}$ C $\Delta T^{b}$ - $^{\circ}$ C	$\Delta T = 0$	S.V. Nov-Apr $\leq 13$ S.V. May-Jun $\leq 17$ S.V. Jul-Oct $\leq 23$ $\Delta T \leq 2$			*												
pH - SU		S.V. 6.5 - 9.0 ΔpH ± 0.5			*												
Dissolved Oxygen - mg/L		S.V. Nov-May ≥ 6.0 S.V. Jun-Oct ≥ 5.0			*												
Total Phosphorus (as P) - mg/L	$A-Avg. \le 0.01$ S.V. $\le 0.013$	A-Avg. ≤ 0.05			*	*											
Nitrate (as N) - mg/L	S.V. ≤ 0.22	S.V. ≤ 10.0						*									
Nitrite (as N) - mg/L		$S.V. \le 0.06$			*												
Total Ammonia (as N) - mg/L		С			*												
Total Suspended Solids - mg/L		S.V. ≤ 25			*												
Turbidity - NTU		S.V. ≤ 10			*												
Color - PCU		S.V. ≤ 75						*									
Total Dissolved Solids - mg/L		d						*}									
Alkalinity (as CaCO <sub>3</sub> ) - mg/L		S.V.≥ 20			*												
E. coli - cfu/100 mL <del>[e] <sup>d</sup></del>		G.M. ≤ 126 S.V. ≤ 410				*											
Fecal Coliform - No./100 mL		S.V.≤1,000		*													
Toxic Materials	-	<del>[f]</del> e															

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

<sup>&</sup>lt;sup>a</sup> Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

- Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- The water quality criteria for ammonia are specified in NAC 445A.118.
- The salinity standards for the Colorado River system are specified in NAC 445A.1233.

  The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.
- The water quality criteria for toxic materials are specified in NAC 445A.1236.

# **Sec. 25.** NAC 445A.2204 is hereby amended to read as follows:

The limits of this table apply to the entire body of water known as Bowman 445A.2204

Reservoir. Bowman Reservoir is located in Clark County.

## STANDARDS OF WATER QUALITY

## Bowman Reservoir

						В	enefi	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X			
Aquatic Life Species of Co	ncern												
Temperature - °C ΔT <sup>b</sup>		<del>[T]</del> S. V. ≤ 34 ΔT ≤ 3 <mark>°C]</mark>			*								
pH - SU		S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		S.V.≥ 5.0			*								
Total Phosphorus (as P) - mg/L		S.V.≤0.33			*								
Total Ammonia (as N) - mg/L		С			*								
<del>[Total Dissolved Solids - mg/L</del>		<del>d</del>						*}					
E. coli - cfu/100 mL[e] <sup>d</sup>		G.M. ≤ 126 S.V. ≤ 410				*							
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*									
Fluoride (as total recoverable) - mg/L		S.V. ≤ 2.6		*									
Toxic Materials		[ <del>[</del> ] e											

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.

The water quality criteria for ammonia are specified in NAC 445A.118.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

**Sec. 26.** NAC 445A.0865, 445A.1233 and 445A.2182 are hereby repealed.

#### **TEXT OF REPEALED SECTIONS**

445A.0865 "Flow weighted annual average concentration" defined. (NRS 445A.425) "Flow weighted annual average concentration" means a value calculated by:

- 1. Multiplying, not more than once each day during a 365-day period, the concentration of pollutants present in a sample of water by the rate of flow of the water at the location and time at which the sample is taken;
  - 2. Summing the amounts determined pursuant to subsection 1 during a 365-day period;
- 3. Dividing the sum determined pursuant to subsection 2 by the total number of days the concentration of pollutants is measured pursuant to subsection 1 during a 365-day period; and
  - 4. Dividing the amount determined pursuant to subsection 3 by the annual mean flow.

# 445A.1233 Cooperation regarding Colorado River; salinity standards. (NRS 445A.425, 445A.520)

1. The State of Nevada will cooperate with the other Colorado River Basin states and the Federal Government to support and carry out the conclusions and recommendations adopted April 27, 1972, by the Reconvened 7th Session of the Conference in the Matter of Pollution of the Interstate Waters of the Colorado River and its Tributaries.

2. Pursuant to the "2017 Review - Water Quality Standards for Salinity, Colorado River System," as adopted by the Colorado River Basin Salinity Control Forum, the flow weighted annual average concentrations for the calendar year for total dissolved solids in mg/L at the three lower main stem stations of the Colorado River are as follows:

# STANDARDS OF WATER QUALITY

#### Schroeder Reservoir

						В	enef	icial	Use	esa			
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh
Beneficial Uses			X	X	X	X	X	X	X	X			
Aquatic Life Species of Con-	cern		Tro	ut.									
Temperature - °C ΔT <sup>b</sup> - °C		$S.V. \le 20$ $\Delta T \le 3$			*								
pH - SU		S.V. 6.5 - 9.0			*								
Dissolved Oxygen - mg/L		S.V.≥ 6.0			*								
Total Phosphorus (as P) - mg/L		S.V. ≤ 0.33			*								
Total Ammonia (as N) - mg/L		С			*				·			·	
Total Dissolved Solids - mg/L		S.V. ≤ 500						*	·			·	

			Beneficial Uses <sup>a</sup>												
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY CRITERIA TO PROTECT BENEFICIAL USES	Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh		
E. coli - cfu/100 mL <sup>d</sup>		G.M. ≤ 126 S.V. ≤ 410				*									
Fecal Coliform - No./100 mL		S.V. ≤ 1,000		*											
Toxic Materials		e													

<sup>\* =</sup> The most restrictive beneficial use.

 <sup>\*=</sup> The most restrictive beneficial use.
 X = Beneficial use.
 a Refer to NAC 445A.122 and 445A.2142 for beneficial use terminology.
 b Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
 c The water quality criteria for ammonia are specified in NAC 445A.118.
 d The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.
 e The water quality criteria for toxic materials are specified in NAC 445A.1236.