

**PROPOSED REGULATION OF THE  
STATE ENVIRONMENTAL COMMISSION**

**LCB File No. R103-14**

August 4, 2014

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

AUTHORITY: §§1-4, NRS 445A.425 and 445A.520.

A REGULATION relating to water quality; revising certain water quality standards relating to South Fork Reservoir; and providing other matters properly relating thereto.

**Legislative Counsel’s Digest:**

The State Environmental Commission is required to establish water quality standards to protect and ensure the continued beneficial use of each stream segment and other body of surface water in this State. (NRS 445A.520) This regulation revises the water quality standards for South Fork Reservoir in Elko County.

**Section 1.** Chapter 445A of NAC is hereby amended by adding thereto a new section to read as follows:

*The limits of this table apply to the entire body of water known as South Fork Reservoir.  
South Fork Reservoir is located in Elko County.*

***STANDARDS OF WATER QUALITY***

***South Fork Reservoir***

<b><i>PARAMETER</i></b>	<b><i>REQUIREMENTS</i></b>	<b><i>WATER QUALITY</i></b>	<b><i>Beneficial Use<sup>a</sup></i></b>
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	<i>TO MAINTAIN EXISTING HIGHER QUALITY</i>	<i>STANDARDS FOR BENEFICIAL USES</i>	<i>Livestock</i>	<i>Irrigation</i>	<i>Aquatic</i>	<i>Contact</i>	<i>Noncontact</i>	<i>Municipal</i>	<i>Industrial</i>	<i>Wildlife</i>	<i>Aesthetic</i>	<i>Enhance</i>	<i>Marsh</i>
<i>Beneficial Uses</i>			X	X	X	X	X	X	X	X			
<i>Aquatic Life Species of Concern</i>			<i>Trout</i>										
<i>Temperature - °C <math>\Delta T^b</math> - °C</i>		<i>S.V. <math>\leq 20</math> <math>\Delta T = 0</math></i>			*	X							
<i>pH - SU</i>		<i>S.V. 6.5 - 9.0</i>	X	X	*	*		X	X	*			
<i>Dissolved Oxygen - mg/l</i>		<i>S.V. <math>\geq 6.0^c</math></i>	X		*	X	X	X		X			
<i>Total Phosphorus (as P) - mg/l</i>		<i>Avg. Jun- <math>\leq 0.04^d</math> Sep</i>			*	*	X	X					
<i>Total Nitrogen (as N) - mg/l</i>		<i>Avg. Jun- <math>\leq 0.52^d</math> Sep</i>			*	*	X	X					
<i>Nitrite (as N) - mg/l</i>		<i>S.V. <math>\leq 0.06</math></i>	X		*			X		X			
<i>Total Ammonia (as N) - mg/l</i>		<i>e</i>			*			X					
<i>Chlorophyll a - ug/l</i>		<i>Avg. Jun- <math>\leq 15^d</math> Sep</i>			*	*	X	X					
<i>Total Suspended Solids - mg/l</i>		<i>S.V. <math>\leq 25</math></i>			*								
<i>Turbidity - NTU</i>		<i>S.V. <math>\leq 10</math></i>			*								

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Beneficial Use <sup>a</sup>											
			Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	
Color - PCU		S.V. ≤ 75							*					
Secchi Depth - meters		Avg. Jun- ≥ 4.0 Sep			X	*	X	X						
Total Dissolved Solids - mg/l		≤ 500 or the 95th S.V. percentile (whichever is less)	X	X					*					
Chloride - mg/l		1-hour ≤ 230' Avg. 96-hour ≤ 860 Avg.	X		*				X		X			
Sulfate - mg/l		S.V. ≥ 250							*					
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		S.V. ≥ 20			*						X			
E. coli - No./100 ml		A.G.M. ≤ 126 S.V. ≤ 410				*	X							
Fecal Coliform -No./100 ml		S.V. ≤ 1,000	X	*				X	X		X			

\* = The most restrictive beneficial use.

X = Beneficial use.

<sup>a</sup> Refer to NAC 445A.122 and 445A.1432 for beneficial use terminology.

<sup>b</sup> *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>c</sup> *When reservoir is stratified, the dissolved oxygen criterion applies only to the epilimnion.*

<sup>d</sup> *June-September average for the entire reservoir within the upper meter of the water column. These nutrient criteria are considered attained if:*

*1 The chlorophyll a criterion is met regardless of the level of total phosphorus or total nitrogen; or*

*2 If chlorophyll a data are not available, both the total phosphorus and total nitrogen criteria are met.*

<sup>e</sup> *The ambient water quality criteria for ammonia are specified in NAC 445A.118.*

<sup>f</sup> *One-hour and 96-hour average concentration limits may be exceeded only once every 3 years.*

**Sec. 2.** NAC 445A.1432 is hereby amended to read as follows:

445A.1432 The designated beneficial uses for select bodies of water within the Humboldt

Region are prescribed in this section:

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference		
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh				
Humboldt River near Osino	From the upstream source of the main stem to Osino.	X	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	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	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	X					Warm-water fishery	NAC 445A.1444
Humboldt River at Imlay	From the Comus Gage to Imlay.	X	X	X	X	X	X	X	X	X					Warm-water fishery	NAC 445A.1446

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference		
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh				
Humboldt River at Woolsey	From Imlay to Woolsey.	X	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	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						NAC 445A.1456	
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	

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference			
		LIVESTOCK	IRRIGATION	AQUATIC	CONTACT	NONCONTACT	MUNICIPAL	INDUSTRIAL	WILDLIFE	AESTHETIC	ENHANCE	MARSH					
Humboldt River, South Fork <del>and</del> at <b>South Fork Reservoir, including</b> tributaries <del>at</del> above Lee	From <del>their</del> <i>its</i> origin to <b>South Fork Reservoir,</b> <b>including its tributaries</b> 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								NAC 445A.1464
<b>South Fork Reservoir</b>	<b>The entire reservoir.</b>	X	X	X	X	X	X	X	X						<b>Trout</b>	<b>Section 1 of this regulation</b>	
Humboldt River, South Fork at the Humboldt River	From <del>Lee</del> <b>South Fork Reservoir</b> to its confluence with the Humboldt River . <del>except</del> <del>for the length of the river</del> <del>within the exterior borders</del> <del>of the South Fork Indian</del> <del>Reservation.</del>	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							NAC 445A.1472	

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference		
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh				
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	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							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							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							NAC 445A.1486

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference		
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh				
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							NAC 445A.1488
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	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							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



Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference		
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh				
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							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							NAC 445A.1512
Tonkin Reservoir	The entire reservoir.	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	From its origin to Squaw Valley Ranch.	X	X	X	X	X	X		X							NAC 445A.1518
Rock Creek below Squaw Valley Ranch	Below Squaw Valley Ranch.	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							NAC 445A.1524

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference	
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh			
Willow Creek Reservoir	The entire reservoir.	X	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					NAC 445A.1528
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					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					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					NAC 445A.1538

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference		
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh				
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							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 the national forest boundary	From its origin to the national forest boundary.	X	X	X	X	X	X		X							NAC 445A.1548
Green Mountain Creek at Corral Creek	From the national forest boundary to its confluence with Corral Creek.	X	X	X	X	X	X	X	X					Trout		NAC 445A.1552
Toyn Creek	From its origin to the national forest boundary.	X	X	X	X	X	X		X							NAC 445A.1554

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference		
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh				
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							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							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							NAC 445A.1566

Water Body Name	Segment Description	Beneficial Uses											Aquatic Life Species of Concern	Water Quality Standard NAC Reference	
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh			
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						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						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														

Water Body Name	Segment Description	Beneficial Uses										Aquatic Life Species of Concern	Water Quality Standard NAC Reference
		Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance		
Livestock	Watering of livestock												
Contact	Recreation involving contact with the water												
Noncontact	Recreation not involving contact with the water												
Industrial	Industrial supply												
Municipal	Municipal or domestic supply, or both												
Wildlife	Propagation of wildlife												
Aquatic	Propagation of aquatic life												
Aesthetic	Waters of extraordinary ecological or aesthetic value												
Enhance	Enhancement of water quality												
Marsh	Maintenance of a freshwater marsh												

**Sec. 3.** NAC 445A.1464 is hereby amended to read as follows:

445A.1464 The limits of this table apply to the bodies of water known as the South Fork of the Humboldt River ~~and~~ *from its origin to South Fork Reservoir, including* its tributaries ~~from their origin to~~ *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. This segment of the South Fork of the Humboldt River and *its* tributaries ~~is~~ *are* located in Elko County.

### STANDARDS OF WATER QUALITY

Humboldt River, South Fork ~~and~~ *at South Fork Reservoir, including* tributaries ~~at~~ *above* Lee

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Beneficial Use <sup>a</sup>									
			Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Beneficial Use <sup>a</sup>											
			Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	
Beneficial Uses			X	X	X	X	X	X		X				
Aquatic Life Species of Concern														
Temperature - °C $\Delta T^b$ - °C		S.V. $\leq 20$ $\Delta T = 0$			*	X								
pH - SU		S.V. 6.5 - 9.0	X	X	*	*		X		*				
Dissolved Oxygen - mg/l		S.V. $\geq 6.0$	X		*	X	X	X		X				
Total Phosphorus (as P) - mg/l		S.V. $\leq 0.10$			*	*	X	X						
Total Ammonia (as N) - mg/l		<sup>c</sup>			*			X						
Total Dissolved Solids - mg/l		S.V. $\leq 500$ or the 95th percentile (whichever is less).	X	X				*						
E. coli - No./100 ml		A.G.M. $\leq 126$ S.V. $\leq 410$				*	X							
Fecal Coliform - No./100 ml		S.V. $\leq 1,000$	X	*			X	X		X				

\* = The most restrictive beneficial use.

X = Beneficial use.

<sup>a</sup> Refer to NAC 445A.122 and 445A.1432 for beneficial use terminology.

<sup>b</sup> 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>c</sup> The ambient water quality criteria for ammonia are specified in NAC 445A.118.

Sec. 4. NAC 445A.1466 is hereby amended to read as follows:

445A.1466 The limits of this table apply to the body of water known as the South Fork of the Humboldt River from ~~Lee~~ *South Fork Reservoir* to its confluence with the Humboldt River . ~~except for the length of the river within the exterior borders of the South Fork Indian Reservation.~~ This segment of the South Fork of the Humboldt River is located in Elko County.

### STANDARDS OF WATER QUALITY

#### Humboldt River, South Fork at the Humboldt River

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Beneficial Use <sup>a</sup>											
			Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	
Beneficial Uses			X	X	X	X	X	X	X	X	X			
Aquatic Life Species of Concern			Trout.											
Temperature - °C		S.V. ≤ 20			*	X								
ΔT <sup>b</sup> - °C		ΔT = 0												
pH - SU		S.V. 6.5 - 9.0	X	X	*	*		X	X	*				
Dissolved Oxygen - mg/l		S.V. ≥ 6.0	X		*	X	X	X		X				
Total Phosphorus (as P) - mg/l		S.V. ≤ 0.10			*	*	X	X						
Total Ammonia (as N) - mg/l		<sup>c</sup>			*			X						
Total Dissolved Solids - mg/l		S.V. ≤ 500 or the 95th percentile (whichever is less).	X	X					*					



PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	Beneficial Use <sup>a</sup>											
			Livestock	Irrigation	Aquatic	Contact	Noncontact	Municipal	Industrial	Wildlife	Aesthetic	Enhance	Marsh	
E. coli - No./100 ml		A.G.M. ≤ 126 S.V. ≤ 410				*	X							
Fecal Coliform - No./100 ml		S.V. ≤ 1,000	X	*			X	X		X				

\* = The most restrictive beneficial use.

X = Beneficial use.

<sup>a</sup> Refer to NAC 445A.122 and 445A.1432 for beneficial use terminology.

<sup>b</sup> 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>c</sup> The ambient water quality criteria for ammonia are specified in NAC 445A.118.