

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: UPPER SOUTH PLATTE RIVER			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description				mg/l	µg/l				
1a. Mainstem of the South Platte River from the source of the South and Middle Forks to the inlet of Cheesman Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C summer=April-Oct D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5 - 9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
1b. All tributaries to the South Platte River, including wetlands within the Lost Creek and Mt. Evans Wilderness Areas.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2a. All tributaries to the South Platte River system, including all wetlands from the headwaters of the South and Middle Forks to a point immediately below the confluence with Tarryall Creek except for specific listings in Segment 1b, 2b and 2c.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2b. Mainstem of Mosquito Creek from the confluence with South Mosquito Creek to its confluence with the Middle Fork of the South Platte River.	UP	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ch)=220	
2c. South Mosquito Creek from the source to confluence with Mosquito Creek and No Name Creek from the source to the confluence with South Mosquito Creek.	UP	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ch)=280	
3. All tributaries to the South Platte River, including all wetlands from a point immediately below the confluence with Tarryall Creek to a point immediately above the confluence with the North Fork of the South Platte River, except for specific listings in Segment 1b.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4. Mainstem of the North Fork of the South Platte River, including all tributaries and wetlands from the source to the confluence with the South Platte River, except for specific listings in Segments 1b, 5a, 5b, and 5c.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.= 6.0 mg/l D.O.(sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
5a. Mainstem of Geneva Creek from the source to the confluence with Scott Gomer Creek.		Aq Life Cold 1 Recreation E Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH = 3.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ch)=2 CrIII(ch)=100 CrVI(ch)=25 Cu(ch)=18(dis)	Fe(ch)=1200 Pb(ch)=4 Mn(ch)=530(dis) Hg(ch)=0.05 Ni(ch)=50	Se(ch)=4.6 Ag(ch)=1 Zn(ch)=190(dis)	All Metals Trec unless otherwise noted.

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REGION: 3 AND 4  BASIN: UPPER SOUTH PLATTE RIVER	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
				mg/l	µg/l				
Stream Segment Description									
5b. Mainstem of Geneva Creek from the confluence with Scott Gomer Creek to the confluence with the North Fork of the South Platte River; all tributaries of Geneva Creek including wetlands from source to confluence with the North Fork of the South Platte River.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
5c. Mainstem of Gooseberry Gulch and all tributaries from source to Sunset Trail.		Aq Life Cold 2 Recreation U Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification: NH <sub>3</sub> (ac/ch)=Existing Quality (Type iii). Expiration date of 12/31/2011.
5d. Mainstem of Gooseberry Gulch and all tributaries from Sunset Trail to confluence with Elk Creek.		Aq Life Cold 2 Recreation U Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O. (sp) =7.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
6a. Mainstem of the South Platte River from the outlet of Cheesman Reservoir to the inlet of Chatfield Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
6b. Chatfield Reservoir		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CLL) °C April-Dec T <sub>(WAT)</sub> =23.5°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml P(Tot)=0.030 mg/l chlorophyll = 10 µg/l measured through samples that are representative of the mixed layer during July-Sept, with an allowable exceedance frequency of 1in 5 yrs.	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	See section 38.6(4) for P(Tot) and Chlorophyll assessment thresholds.
6c. Deleted.									
7. All tributaries to the South Platte River, including all wetlands from a point immediately below the confluence with the North Fork of the South Platte River to the outlet of Chatfield Reservoir except for specific listings in Segments 8, 9, 10, 11, 12, and 13.		Aq Life Cold 2 Recreation E Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS Cr III(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

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REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: UPPER SOUTH PLATTE RIVER			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description				mg/l	µg/l				
8. Mainstems of East and West Plum Creek from the source to the boundary of National Forest lands, including all tributaries and wetlands within the Plum Creek drainage which are on National Forest Lands, except for the specific listing in Segment 9.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
9. Mainstem of Bear Creek, including all tributaries and wetlands from the source to the inlet of Perry Park Reservoir (Douglas County).		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
10a. Mainstems of East Plum Creek, West Plum Creek, and Plum Creek from the boundary of National Forest lands to Chatfield Reservoir, mainstems of Stark Creek and Gove Creek from the boundary of National Forest lands to their confluence.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-I) °C D.O.= 5.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Cu (ac/ch) = TVSx2.4 on East Plum Creek and Plum Creek below the Plum Creek Wastewater Authority Discharge. (Type iii). Expiration date of 12/31/2014. NH <sub>3</sub> (ac)=TVS(old); NH <sub>3</sub> (ch)=0.06 mg/l (Type i). Expiration date of 12/31/2011.
10b. Deleted.									
11a. All tributaries to the East Plum Creek system, including all wetlands which are not on national forest lands.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
11b. All tributaries to the West Plum Creek system, including all wetlands, which are not on national forest lands, except for specific listings in Segments 9 and 12.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification: NH <sub>3</sub> (ac)=TVS(old); NH <sub>3</sub> (ch)=0.06 mg/l (Type i). Expiration date of 12/31/2011.
12. Mainstem of Garber Creek and Jackson Creek from the boundary of National Forest lands to the confluence with West Plum Creek.		Aq Life Warm1 Recreation E Water Supply Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
13. Mainstem of Deer Creek, including the North and South Forks, from the source to Chatfield Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

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REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: UPPER SOUTH PLATTE RIVER				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
14. Mainstem of the South Platte River from the outlet of Chatfield Reservoir to the Burlington Ditch diversion in Denver, Colorado.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-I) °C summer=14 Feb-Nov D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis)	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=190(dis) Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Cu(ac/ch)=TVSx2.7 (Type iii). Applies below the confluence with Marcy Gulch. Expiration date of 12/31/2014. T=current conditions (Type iii). Expiration date of 12/31/2014. Se(ac/ch)=current conditions (Type iii). Expiration date of 12/31/2013.
15. Mainstem of the South Platte River from the Burlington Ditch diversion in Denver, Colorado, to a point immediately below the confluence with Big Dry Creek.		UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-I) °C D.O.* pH = 6.5-9.0** E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =1.0 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis)	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=400(dis) Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	*See attached table for site-specific Dissolved Oxygen and Ammonia standards. **pH=6.0-9.0 from 64 <sup>th</sup> Ave. downstream 2 miles. Temporary modifications: NH <sub>3</sub> (ac)=TVS(old); NH <sub>3</sub> (ch)=0.10 mg/l (Type i). Expiration date of 12/31/2014. Cu(ac/ch)=TVSx2.3 (Type iii). Expiration date of 12/31/2014. T=current conditions (Type iii). Expiration date of 12/31/2014.
16a. Mainstem of Sand Creek from the confluence of Murphy and Coal Creek in Arapahoe County to the confluence with the South Platte River.			Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac)=TVS Se(ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Se(ch)= current condition (Type iii) Expiration date of 12/31/2014. NH <sub>3</sub> (ac)=TVS(old); NH <sub>3</sub> (ch)=0.10 mg/l (Type i). Expiration date of 12/31/2011.  Cu (ac/ch) = TVSx2.6 below the Sand Creek Water Reuse Facility outfall. (Type iii). Expiration date of 12/31/2014.
16b. Aurora Reservoir.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
16c. All tributaries to the South Platte River, including all wetlands, from the outlet of Chatfield Reservoir, to a point immediately below the confluence with Big Dry Creek, except for specific listings in the subbasins of the South Platte River, and in Segments 16a, 16d, 16e, 16f, 16g, and 16h.		UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100 (Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: UPPER SOUTH PLATTE RIVER			PHYSICAL and BIOLOGICAL	INORGANIC	METALS					
Stream Segment Description				mg/l	µg/l					
16d. Second Creek from the source to the O'Brian Canal.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-IV) °C D.O. (ch)=3.3 mg/l <sup>1</sup> pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	<sup>1</sup> 15 <sup>th</sup> percentile of D.O. measurements collected between 6:30 a.m. and 6:30 p.m.	
16e. Third Creek from the source to the O'Brian Canal.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-IV) °C D.O. (ch)=4.0 mg/l <sup>1</sup> pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	<sup>1</sup> 15 <sup>th</sup> percentile of D.O. measurements collected between 6:30 a.m. and 6:30 p.m.	
16f. Barr Lake Tributary from the source to the Denver Hudson Canal.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-IV) °C D.O. (ch)= <sup>1</sup> pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	<sup>1</sup> When water is present, D.O. concentrations shall be maintained at levels that protect classified uses.	
16g. Marcy Gulch, including all wetlands from the source to the confluence with the South Platte.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Cu (ac/ch) = TVSx2.4 below the Centennial Wastewater Treatment Facility outfall. (Type iii). Expiration date of 12/31/2014.  T=current conditions (Type iii). Expiration date of 12/31/2014.  Se(ac/ch) = current conditions (Type iii). Expiration Date of 12/31/2015	
16h. Mainstem of West Toll Gate Creek, including all tributaries and wetlands, upstream of the confluence with East Toll Gate Creek. Mainstem of East Toll Gate Creek, including all tributaries and wetlands, upstream of the confluence with West Toll Gate Creek. Mainstem of Toll Gate Creek, downstream of the confluence of East and West Toll Gate Creeks, to the confluence with Sand Creek.		Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Ag(ac/ch)=TVS Zn(ac/ch)=TVS West Toll Gate Creek Se(ch)=50.6 Se(ac)=119.2 East Toll Gate Creek Se(ch)=14.3 Se(ac)= 15.9 Toll Gate Creek Se(ch)=26.5 Se(ac)=29.5	Fish Ingestion Standards  See section 38.6(4) for selenium assessment locations.	
17a. Washington Park Lakes, City Park Lakes, Rocky Mountain Lake, Berkely Lake.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS		
17b. Sloan's Lake.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS		

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: UPPER SOUTH PLATTE RIVER  Stream Segment Description	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC  mg/l		METALS  µg/l			
17c. Bowles Lake, a.k.a. Patrick Reservoir or Bow Mar Lake.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	Al(ac/ch)=TVS As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
18. Lakes and reservoirs within the boundaries of the Lost Creek and Mt. Evans Wilderness areas.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
19. Lakes and reservoirs in the South Platte River system from headwaters to Chatfield Reservoir, except for specific listings in Segment 18. Includes Antero, Spinney Mountain, Elevenmile, Cheesman, and Strontia Springs.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C Antero Reservoir April-Dec T <sub>(WAT)</sub> =19.6°C Spinney Mt Reservoir April-Dec T <sub>(WAT)</sub> =20.2°C Elevenmile Reservoir April-Dec T <sub>(WAT)</sub> =19.8°C Cheesman Reservoir April-Dec T <sub>(WAT)</sub> =21.9°C Strontia Springs Res April-Dec T <sub>(WAT)</sub> =22.6°C Platte Canyon Res Mar-Dec T <sub>(WAT)</sub> =25.0°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
20. Lakes and reservoirs in the Plum Creek system within National Forest boundaries; and lakes and reservoirs in the Bear Creek drainage between the National Forest boundary and to the inlet of Perry Park Reservoir (Douglas County).		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
21. Lakes and reservoirs in the Plum Creek system except for specific listings in Segment 20.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02-0(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
22. Lakes and reservoirs in watersheds tributary to the South Platte River from the outlet of Chatfield Reservoir to a point immediately below the confluence with Big Dry Creek, except for specific listings in the subbasins of the South Platte River, and in Segments 16b, 17a, 17b, 17c, and 23.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 S <sub>04</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards

## REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: UPPER SOUTH PLATTE RIVER  Stream Segment Description	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS	
			PHYSICAL and BIOLOGICAL	INORGANIC  mg/l	METALS  µg/l					
23. Lakes and reservoirs in watersheds tributary to the Upper South Platte River and within the City and County of Denver, except for specific listings in the other subbasins of the South Platte River and in Segments 17a and 17b..		Aq Life Warm 2 Recreation E Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards	

## UPPER SOUTH PLATTE RIVER SEGMENT 15

### Site-Specific Minimum Dissolved Oxygen and Ammonia Standards

#### UNDERLYING STANDARDS

##### Dissolved Oxygen

###### Early Life Stage Protection Period (April 1 through July 31)

1-Day<sup>1,5,6</sup> 3.0 mg/L (acute)

7-Day Average<sup>1,2,4</sup> 5.0 mg/L

###### Older Life Stage Protection Period (August 1 through March 31)

1-Day<sup>1,5</sup> 2.0 mg/L (acute)

7-Day Mean of Minimums<sup>1,3</sup> 2.5 mg/L

30-Day Average<sup>1,2</sup> 4.5 mg/L

#### TEMPORARY MODIFICATION

During the period until October 31, 2001, the Segment 15 dissolved oxygen standards from 88<sup>th</sup> Avenue north to the end of the Segment shall be the currently existing ambient conditions as monitored in 1992, 1993, and 1994 by the Division and by the Metro District. Beginning November 1, 2001, the standards shall apply to all sections of Segment 15 south of the Brighton Ditch diversion. The standards north of the Brighton Ditch diversion shall continue to be the ambient conditions existing in 1992, 1993, and 1994. Beginning November 1, 2004, the standards shall apply to all sections of Segment 15.

Refer to Section 38(6)(4)(c) for Dissolved Oxygen assessment locations.

#### Footnotes

1. For the purposes of determining compliance with the standards, dissolved oxygen measurements shall only be taken in the flowing portion of the stream at mid-depth, and at least six inches above the bottom of the channel. All sampling protocols and test procedures shall be in accordance with procedures and protocols approved by the Division.



2. A minimum of four independent daily means must be used to calculate the average for the 7-Day Average standard. A minimum of eight independent daily means must be used to calculate the average for the 30-Day Average standard. The four days and the eight days must be representative of the 7-Day and the 30-Day periods respectively. The daily means shall be the mean of the daily high and low values. In calculating the mean values, the dissolved oxygen saturation value shall be used in place of any dissolved oxygen measurements which exceed saturation.
3. The 7-Day Mean minimum is the average of the daily minimums measured at the location on each day during any 7-Day period.
4. North of the Lupton Bottoms Ditch diversion, the ELS 7-Day average standards for the period July 1 – June 31 shall be 4.6 mg/L.
5. During a 24 hour day dissolved oxygen levels are likely to be lower during the nighttime when there is no photosynthesis. The dissolved oxygen levels should not drop below the acute standard (ELS acute standard of 3.0 mg/L or the OLS standards of 2.0 mg/L). However, if during the ELS period multiple measurements are below 3.0 mg/L during the same nighttime period, the multiple measurements shall be considered a single exceedance of the acute standard. For measurements below 2.0 mg/L during either the ELS or the OLS periods, each hourly measurement below 2.0 mg/L shall be considered an exceedance of the acute standards.
6. In July, the dissolved oxygen level in Segment 15 may be lower than the 3.0 mg/L acute standard for up to 14 exceedances in any one year and up to a total of 21 exceedances in three years before there is a determination that the acute dissolved oxygen standards is not being met. Exceedances shall be counted as described in Footnote 5.

Ammonia:

Early Life Stage Protection Period (April 1 through July 31)

Ammonia	<p>Warm Water = (mg/l as N)Total</p> $acute = \frac{0.411}{1 + 10^{7.204 - pH}} + \frac{58.4}{1 + 10^{pH - 7.204}}$ $chronic (Apr 1 - July 31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * MIN \left( 2.85, 1.45 * 10^{0.028(25 - T)} \right)$ $chronic (Aug 1 - Mar 31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * 1.45 * 10^{0.028 * (25 - MAX(T, 7))}$
NH <sub>3</sub> = old TVS	Warm Water Acute = 0.62/FT/FP/2 <sup>(4 old)</sup> in mg/ (N)

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: CHERRY CREEK				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
1. Mainstem of Cherry Creek from the source of East and West Cherry Creek to the inlet of Cherry Creek Reservoir.			Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis)	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
2. Cherry Creek Reservoir.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Season mean chlorophyll a = 18 µg/l measured in the upper three meters of the water column for the months of July through September with an exceedance frequency of once in five years.	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
3. Mainstem of Cherry Creek from the outlet of Cherry Creek Reservoir to the confluence with the South Platte River.			Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis)	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
4. All tributaries to Cherry Creek, including all wetlands, from the source of East and West Cherry Creeks to the confluence with the South Platte River.		UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification: NH <sub>3</sub> (ac)=TVS(old); NH <sub>3</sub> (ch)=0.10 mg/l (Type i). Expiration date of 12/31/2011.
5. Lakes and reservoirs in the Cherry Creek system from the source of East and West Cherry Creeks to the confluence with the South Platte River, except for specific listings in Segments 2 and 6.			Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02- 10(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
6. Lakes and reservoirs in watersheds tributary to Cherry Creek within the City and County of Denver.			Aq Life Warm 2 Recreation E Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: BEAR CREEK	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC  mg/l		METALS  µg/l			
Stream Segment Description									
1a. Mainstem of Bear Creek from the boundary of the Mt. Evans Wilderness area to the inlet of Evergreen Lake.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
1b. Mainstem of Bear Creek from Harriman Ditch to the inlet of Bear Creek Reservoir.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C April-Oct T <sub>(WAT)</sub> =19.3 °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
1c. Bear Creek Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CLL) °C April-Dec T <sub>(WAT)</sub> =23.3°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Mean chlorophyll = 10 µg/l and mean total phosphorus = 32 µg/l measured through collection of samples that are representative of the mixed layer during summer months (July, August, September) and with an exceedance frequency of once in five years.	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: Chlorophyll and total phosphorus equal to existing conditions (Type iii). Expiration date of 12/31/2014.
1d. Evergreen Lake.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CLL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
1e. Mainstem of Bear Creek from the outlet of Evergreen Lake to the Harriman Ditch.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C April-Oct T <sub>(WAT)</sub> =19.3 °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: BEAR CREEK				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
2.	Mainstem of Bear Creek from the outlet of Bear Creek Reservoir to the confluence with the South Platte River.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
3.	All tributaries to Bear Creek, including all wetlands, from the source to the outlet of Evergreen Lake. Except for specific listings in Segment 7.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4a.	All tributaries to Bear Creek, including all wetlands, from the outlet of Evergreen Lake to the confluence with the South Platte River, except for specific listings in Segments 5, 6a, and 6b.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Water + Fish Standards
4b.	Deleted.									
4c.	Deleted.									
5.	Swede, Kerr, Sawmill, Troublesome, and Cold Springs Gulches, and mainstem of Cub Creek from the source to the confluence with Bear Creek.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
6a.	Turkey Creek system, including all tributaries and wetlands, from the source to the inlet of Bear Creek Reservoir, except for specific listings in Segment 6b.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
6b.	Mainstem of North Turkey Creek, from the source to the confluence with Turkey Creek.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
7.	Mainstem and all tributaries to Bear Creek, including wetlands, within the Mt. Evans Wilderness Area.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
8.	Lakes and reservoirs in the Bear Creek system from the sources to the boundary of the Mt. Evans Wilderness area.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: BEAR CREEK	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
	Stream Segment Description			mg/l	µg/l				
9. Lakes and reservoirs in the Bear Creek system from the boundary of the Mt. Evans Wilderness area to the inlet of Evergreen Lake.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
10. Lakes and reservoirs in drainages of Swede Gulch, Sawmill Gulch, Troublesome Gulch, and Cold Springs Gulch from source to confluence with Bear Creek.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
11. Lakes and reservoirs in the Bear Creek system from the outlet of Evergreen Lake to the confluence with the South Platte River, except as specified in Segments 1c, 10, and 12; includes Soda Lakes.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Water + Fish Standards
12. Lakes and reservoirs in the Turkey Creek system from the source to the inlet of Bear Creek Reservoir.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: CLEAR CREEK			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description				mg/l	µg/l				
1. Mainstem of Clear Creek, including all tributaries and wetlands, from the source to the I-70 bridge above Silver Plume.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2a. Mainstem of Clear Creek, including all tributaries and wetlands, from the I-70 bridge above Silver Plume to a point just above the confluence with West Fork Clear Creek,except for specific listings in Segments 3a and 3b.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 SO <sub>4</sub> =WS Cl=250	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch) = TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)  Zn(ac)= 0.978e <sup>(0.8537[ln(hardness)]+1.9467)</sup> Zn(ch)= 0.986e <sup>(0.8537[ln(hardness)]+1.8032)</sup>	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr)	Temporary modifications: Zn(ch)=353 µg/l (dis), Zn(ac)=586 µg/l (dis), (Type i) Cd(ch)=1.54(dis) (type iii) Expiration date of 7/01/2014.
2b. Mainstem of Clear Creek, including all tributaries and wetlands, from the confluence with West Fork Clear Creek to a point just below the confluence with Mill Creek, except for specific listings in Segments 4 through 8.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 SO <sub>4</sub> =WS Cl=250	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch) = TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac)=TVS Zn(ch)=TVS	
2c. Mainstem of Clear Creek, including all tributaries and wetlands, from a point just below the confluence with Mill Creek to a point just above the Argo Tunnel discharge, except for specific listings in Segments 9a, 9b, and 10.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 SO <sub>4</sub> =WS Cl=250	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS (tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch) = TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)  Zn(ac)= 0.978e <sup>(0.8537[ln(hardness)]+1.9467)</sup> Zn(ch)= 0.986e <sup>(0.8537[ln(hardness)]+1.8032)</sup>	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr)	Temporary modifications: Cu(ch)=11.4 µg/l (dis), (Type iii) Expiration date of 7/01/2014.
3a. Mainstem of South Clear Creek, including all tributaries and wetlands, from the source to the confluence with Clear Creek, except for the specific listings in Segments 3b and 19.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr)	
3b. Mainstem of Leavenworth Creek from source to confluence with South Clear Creek.	9/30/00 Baseline does not apply	Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10 (Trec) As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)  Zn(ac)= 0.978e <sup>(0.8537[ln(hardness)]+1.9467)</sup> Zn(ch)= 0.986e <sup>(0.8537[ln(hardness)]+1.8032)</sup>	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr)	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: <b>CLEAR CREEK</b>	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC  mg/l		METALS  µg/l			
Stream Segment Description									
4. Mainstem of West Clear Creek from the source to the confluence with Woods Creek.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
5. Mainstem of West Clear Creek from the confluence with Woods Creek to the confluence with Clear Creek.		Aq Life Cold 1 Recreation E Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05	As(ac)=340 As(ch)=7.6(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS  Zn(ac)=e <sup>(0.8404[ln(hardness)]+1.8810)</sup> Zn(ch)=e <sup>(0.8404[ln(hardness)]+1.5127)</sup>	Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr)	
6. All tributaries to West Clear Creek, including all wetlands, from the source to the confluence with Clear Creek, except for specific listings in Segments 7 and 8.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
7. Mainstem of Woods Creek from the outlet of Upper Urad Reservoir to the confluence with West Clear Creek, including Lower Urad Reservoir.	UP	Aq Life Cold 2 Recreation N	T=TVS(CS-I/CL)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.0-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 NO <sub>2</sub> =0.05	$WQS_{WC} = ((Q_{WC} + Q_{WFCC}) \times WQS_{WFCC} - (Q_{WFCC} \times C_{WFCC})) / Q_{WC}$ $WQS_{WC}$ = Water Quality Standards for Woods Creek $Q_{WC}$ = Flow for Woods Creek $Q_{WFCC}$ = Flow for West Fork Clear Creek $WQS_{WFCC}$ = Water Quality Standards for West Fork Clear Creek $C_{WFCC}$ = Ambient Concentration in West Fork Clear Creek			Standards shall be applied using the Segment 7 equation.
8. Mainstem of Lion Creek from the source to the confluence with West Clear Creek.	UP	Aq Life Cold 2 Recreation E	T=TVS(CS-I)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 3.0-9.0 E.Coli=126/100ml						
9a. Mainstem of the Fall River, including all tributaries and wetlands, from the source to the confluence with Clear Creek.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: Cu(ch)=9.6 µg/l (dis), (type iii) Expiration date of 7/01/2014.
9b. Mainstem of Trail Creek, including all tributaries and wetlands from the source to the confluence with Clear Creek.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 SO <sub>4</sub> =WS NO <sub>3</sub> =10 Cl=250	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac)=TVS Zn(ch)=200	
10. Mainstem of Chicago Creek, including all tributaries and wetlands, from the source to the confluence with Clear Creek, except for specific listings in Segment 19.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: <b>CLEAR CREEK</b>				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
11.	Mainstem of Clear Creek from a point just above the Argo Tunnel discharge to the Farmers Highline Canal diversion in Golden, Colorado.	UP	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ch)=17	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)  Zn(ac)= 0.978e <sup>(0.8537[ln(hardness)]+1.9467)</sup> Zn(ch)= 0.986e <sup>(0.8537[ln(hardness)]+1.8032)</sup>	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr)	Temporary modification: Cd(ch)=1.42 µg/l (dis), (type iii) Expiration date of 7/01/2014.
12.	All tributaries to Clear Creek, including all wetlands, from the Argo Tunnel discharge to the Farmers Highline Canal diversion in Golden, Colorado, except for specific listings in Segments 13a and 13b.	9/30/00 Baseline does not apply	Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec)Cr VI(ac/ch)=TVSCu(ac /ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
13a.	Mainstem of North Clear Creek, including all tributaries and wetlands, from its source to its confluence with Chase Gulch. and Four Mile Gulch, including all tributaries and wetlands, from their sources to their confluence with North Clear Creek and Eureka Gulch, including all tributaries and wetlands, from its source to its confluence with Gregory Gulch.	9/30/00 Baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS (CS-I)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
13b.	Mainstem of North Clear Creek including all tributaries and wetlands from a point just below the confluence with Chase Gulch to the confluence with Clear Creek, except for the specific listings in Segment 13a.	UP	Aq Life Cold 2 Recreation E Agriculture	T=TVS (CS-I)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05	As(ac)=340 As(ch)=100 (Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS	Cu(ch)=64 Fe(ch)=5400(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ch)=740	Temporary modifications: Cd(ch)=4.7 µg/l (dis), Mn(ch)=3841 µg/l (dis), Zn(ch)=1582 µg/l (dis), Fe(ch)=7941 (Trec), T=current condition (type iii ) Expiration date of 7/01/2014.
14a.	Mainstem of Clear Creek from the Farmers Highline Canal diversion in Golden, Colorado to the Denver Water conduit #16 crossing.	UP	Aq Life Warm 2 Recreation N Water Supply Agriculture	T=TVS (WS-II)°C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac)=TVS Mn(ch)=244 Hg(ch)=0.01(tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVSx 1.57*	Temporary modifications: Cu(ac/ch)=TVSx3.66*, T=current condition (type iii) Expiration date of 12/31/2014.
14b.	Mainstem of Clear Creek from the Denver Water conduit #16 crossing to a point just below Youngfield Street in Wheat Ridge, Colorado.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS (WS-II)°C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac)=TVS Mn(ch)=244 Hg(ch)=0.01(tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVSx 1.57*	Temporary modifications: Cu(ac/ch)=TVSx3.66*, T=current condition (type iii) Expiration date of 12/31/2014.
15.	Mainstem of Clear Creek from Youngfield Street in Wheat Ridge, Colorado, to the confluence with the South Platte River.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II)°C D.O.=5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVSx 1.57*	Aquatic life warm 1 goal qualifier.  Temporary Modifications: Cu(ac/ch)=TVSx3.66*, T=current condition (Type iii) Expiration date of 12/31/2014.

\* TVS x (times) the FWER (final water effect ratio) = site-specific standard or value of temporary modification.



# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: CLEAR CREEK				PHYSICAL and BIOLOGICAL	INORGANIC  mg/l	METALS  µg/l				
Stream Segment Description										
16a.	Mainstem of Lena Gulch including all tributaries and wetlands from its source to the inlet of Maple Grove Reservoir.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac)=TVS Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
16b.	All tributaries to Clear Creek from the Farmers Highline Canal diversion in Golden, Colorado to the confluence with the South Platte River, except for specific listings in Segments 16a, 17a, 17b, 18a and 18b.	UP	Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-II)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
17a.	Arvada Reservoir.	UP	Aq Life Cold 2 Recreation N Water Supply Agriculture	T=TVS(CLL)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Water + Fish Standards
17b.	Mainstem of Ralston Creek, including all tributaries and wetlands, from the source to the inlet of Arvada Reservoir.		Aq Life Cold 2 Recreation U Water Supply Agriculture	T=TVS(CS-II)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Water + Fish Standards
18a.	Mainstem of Ralston Creek, including all tributaries and wetlands, from the outlet of Arvada Reservoir to the confluence with Clear Creek.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
18b.	Mainstem of Leyden Creek and Van Bibber Creek from their source to their confluence with Ralston Creek. Mainstem of Little Dry Creek from its source to its confluence with Clear Creek.	UP	Aq Life Warm 2 Recreation N Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
19.	All tributaries to Clear Creek, including wetlands, within the Mt. Evans Wilderness Area.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =250	As(ac)=340 As(ch)=0.02Trec Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
20.	Lakes and reservoirs in the Clear Creek system that are within the boundary of the Mt. Evans Wilderness Area.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =250	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: <b>CLEAR CREEK</b>	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
	Stream Segment Description			mg/l	µg/l				
21. Lakes and reservoirs in the Clear Creek system from sources to the Farmer's Highline Canal diversion in Golden, CO., except as specified in Segments 7, 20, 22 and 25. Upper Long Lake.	9/30/00 baseline does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
22. Lakes and reservoirs in the North Clear Creek drainage from a point just below the confluence with Chase Gulch to the confluence with Clear Creek.	9/30/00 baseline does not apply	Aq Life Cold 1 Recreation E Agriculture	T=TVS (CL)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05	As(ac)=340 As(ch)=7.6(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
23. Ralston Reservoir		Aq Life Cold 2 Recreation U Water Supply Agriculture	T=TVS(CLL)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec)Cr VI(ac/ch)=TVSCu(ac /ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
24. Lakes and reservoirs in the Clear Creek system from the Farmers Highline Canal diversion in Golden, Colorado to the confluence with the South Platte River, except for specific listings in Segment s 17a, 21 and 23.		Aq Life Warm 1 Recreation U Water Supply Agriculture	T=TVS(WL)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS Zn(ac/ch)=TVS	
25. Guanella Reservoir		Aq Life Cold 1 Recreation E Agriculture	T=TVS (CL)°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05	As(ac)=340 As(ch)=7.6(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: BIG DRY CREEK			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description				mg/l	µg/l				
1. Mainstem of Big Dry Creek, including all tributaries and wetlands, from the source to the confluence with the South Platte River, except for specific listing in Segments 4a, 4b, 5 and 6.	UP	Aq Life Warm 2 Recreation P Agriculture	T=TVS(WS-I)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=205/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =4.5	As(ac)=340 As(ch)=100(Trec) Be(ch)=100 Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS 4/1 thru 10/31: Se(ch)=7.4* Se(ac)=TVS* 11/1 thru 3/31: Se(ch)=15* Se(ac)=19.1*	Temporary modifications: NH <sub>3</sub> (ac)=TVS(old); NH <sub>3</sub> (ch) = 0.10 mg/l (Type i). Expiration date of 12/31/2011. *Refer to Section 38.6(4)(d).
2. Standley Lake.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chl a=4.0 µg/l* See ** below for narrative standard.	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Be(ch)=4 Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	See attached Table 2 for additional standards for segment 2. *Refer to Section 38.6(4)(e).
** The trophic status of Standley Lake shall be maintained as mesotrophic as measured by a combination of common indicator parameters such as total phosphorus, chlorophyll a, secchi depth, and dissolved oxygen.									
3. Great Western Reservoir.	UP	Aq Life Warm 2 Recreation N Water Supply Agriculture	T=TVS(WL)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =2.7	As(ac)=340 As(ch)=100(Trec) Be(ch)=100 Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	See attached Table 2 for additional standards for segment 3. Temporary modification: NH <sub>3</sub> (ac)=TVS(old); NH <sub>3</sub> (ch) = 0.10 mg/l (Type i). Expiration date of 12/31/2011.
4a. Mainstem and all tributaries to Woman and Walnut Creeks from sources to Standley Lake and Great Western Reservoir except for specific listings in Segments 4b and 5.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-I)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10	As(ac)=340 As(ch)=0.02-10(Trec) Be(ch)=4 Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	See attached Table 2 for additional standards for segment 4a.
4b. North and South Walnut Creek and Walnut Creek, from the eastern edge of the Central Operable Unit on Rocky Flats Property to Indiana Street and North Walnut Creek from its source to the western edge of the Central Operable Unit..	UP	Aq Life Warm 2 Recreation P Water Supply Agriculture	T=TVS(WS-II)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=205/100 ml	Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002 B=0.75	NO <sub>2</sub> =0.5 NO <sub>3</sub> =10	As(ac)=340 As(ch)=0.02-10(Trec) Be(ch)=4 Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	See attached Table 2 for additional standards for segment 4b.
5. North Walnut Creek from the western edge of the Central Operable Unit and South Walnut Creek from its source, including all tributaries, lakes, reservoirs and wetlands, to the eastern boundary of the Central Operable Unit and Pond C-2 on Woman Creek.	UP	Aq Life Warm 2 Recreation N Water Supply Agriculture	T=TVS(WS-II/WL)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10	As(ac)=340 As(ch)=0.02-10(Trec) Be(ch)=4 Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	See attached Tables 2 and 3 for additional standards and temporary modifications for seg 5. Goal qualifier for all use classifications, expires 12/31/09.
6. Upper Big Dry Creek and South Upper Big Dry Creek, from their source to Standley Lake.	UP	Aq Life Warm 2 Recreation N Water Supply Agriculture	T=TVS(WS-I)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
7. Lakes and reservoirs in the Big Dry Creek system from the source to the confluence with the South Platte River, except for specific listings in Segments 2, 3, and 5.		Aq Life Warm 2 Recreation P Water Supply Agriculture	T=TVS(WL)°C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=205/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Be(ch)=100 Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: BOULDER CREEK				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
1. All tributaries to Boulder Creek, including all wetlands, within the Indian Peaks Wilderness Area.		OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2a. Mainstem of Boulder Creek, including all tributaries and wetlands, from the boundary of the Indian Peaks Wilderness Area to a point immediately below the confluence with North Boulder Creek, except for the specific listings in Segment 3.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2b. Mainstem of Boulder Creek, including all tributaries and wetlands, from the a point immediately below the confluence with North Boulder Creek to a point immediately above the confluence with South Boulder Creek.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
3. Mainstem of Middle Boulder Creek, including all tributaries and wetlands, from the source to the outlet of Barker Reservoir, except for specific listings in Segment 1.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4a. Mainstem of South Boulder Creek, including all tributaries and wetlands, from the source to the outlet of Gross Reservoir.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4b. Mainstem of South Boulder Creek, including all tributaries and wetlands, from the outlet of Gross Reservoir to South Boulder Road, except for specific listings in Segments 4c and 4d.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4c. Mainstem of Cowdrey Drainage from the source below Cowdrey Reservoir #2 to the Davidson Ditch.		UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
4d. Mainstem of Cowdrey Drainage from immediately downstream of the Davidson Ditch to the confluence with South Boulder Creek.		UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: BOULDER CREEK				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
5. Mainstem of South Boulder Creek from South Boulder Road to the confluence with Boulder Creek.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
6. Mainstem of Coal Creek, including all tributaries and wetlands, from the source to Highway 93.			Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
7a. Mainstem of Coal Creek from Highway 93 to Highway 36 (Boulder Turnpike).		UP	Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
7b. Mainstem of Coal Creek from Highway 36 to the confluence with Boulder Creek.			Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.06 (Type i). Expiration date of 12/31/2011.
8. All tributaries to South Boulder Creek, including all wetlands from South Boulder Road to the confluence with Boulder Creek and all tributaries to Coal Creek, including all wetlands from Highway 93 to the confluence with Boulder Creek.		UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 Cl=250 SO <sub>4</sub> =250	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Se(ch)=12.2 µg/l (dis). (Type iii). Expiration date of 12/31/2014.
9. Mainstem of Boulder Creek from a point immediately above the confluence with South Boulder Creek to the confluence with Coal Creek.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis)	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Cu (ac/ch)=Current Condition. (Type iii). Expiration date of 12/31/2014. NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.06 (Type i). Expiration date of 12/31/2011
10. Mainstem of Boulder Creek from the confluence with Coal Creek to the confluence with St. Vrain Creek.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.06 (Type i). Expiration date of 12/31/2011.
11. All tributaries to Boulder Creek, including all wetlands from a point immediately above the confluence with South Boulder Creek to the confluence with St. Vrain Creek, except for specific listings in Segments 5, 7a and 7b.		UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
12. Deleted.										

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: BOULDER CREEK			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description				mg/l	µg/l				
13. All lakes and reservoirs tributary to Boulder Creek that are within the boundary of the Indian Peaks Wilderness Area.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
14. All lakes and reservoirs tributary to Boulder Creek from the source to a point immediately above the South Boulder Creek confluence, except as specified in Segment 13. This segment includes Barker Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
15. All lakes and reservoirs tributary to South Boulder Creek from the source to Highway 93. All lakes and reservoirs tributary to Coal Creek from the source to Highway 93. This segment includes Gross Reservoir.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C Gross Reservoir April-Dec T <sub>(WAT)</sub> =19.4°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02- 10(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
16. All lakes and reservoirs tributary to South Boulder Creek system from Highway 93 to the confluence with Boulder Creek. All lakes and reservoirs tributary to Coal Creek system from Highway 93 to the confluence with Boulder Creek.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02- 10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
17. All lakes and reservoirs tributary to Boulder Creek from a point immediately below the confluence with South Boulder Creek to the confluence with St. Vrain Creek, except as specified in Segments 15 and 16.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02- 10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: ST. VRAIN CREEK			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description				mg/l	µg/l				
1. All tributaries to St. Vrain Creek, including all wetlands, which are within the Indian Peaks Wilderness Area and Rocky Mountain National Park.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2a. Mainstem of St. Vrain Creek, including all tributaries and wetlands, from the boundary of the Indian Peaks Wilderness Area and Rocky Mountain National Park to the eastern boundary of Roosevelt National Forest.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2b. Mainstem of St. Vrain Creek, including all tributaries and wetlands, from the eastern boundary of Roosevelt National Forest to Hygiene Road.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: Cu(ch)=6.0 µg/l (dis). (Type iii). Expiration date of 12/31/2014.
3. Mainstem of St. Vrain Creek from Hygiene Road to the confluence with the South Platte River.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.06 (Type i). Expiration date of 12/31/2011.
4a. Mainstem of Left Hand Creek, including all tributaries and wetlands, from the source to a point immediately below the confluence with James Creek, except for specific listings in Segment 4b.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4b. Mainstem of James Creek, including all tributaries and wetlands, from the source to the confluence with Left Hand Creek.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4c. Mainstem of Left Hand Creek, including all tributaries and wetlands, from a point immediately below the confluence with James Creek to Highway 36.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
5. Mainstem of Left Hand Creek, including all tributaries and wetlands from Highway 36 to the confluence with St. Vrain Creek.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: <b>ST. VRAIN CREEK</b>	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC  mg/l		METALS  µg/l			
Stream Segment Description									
6. All tributaries to St. Vrain Creek, including wetlands from Hygiene Road to the confluence with the South Platte River, except for specific listings in the Boulder Creek subbasin and in Segments 4a, 4b, 4c and 5.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WL-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100 Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Se(ch)=6.6µg/l (dis). (Type iii). Expiration date of 12/31/2015. NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.10 (Type i). Expiration date of 12/31/2011.
7. Boulder Reservoir, Coot Lake, and Left Hand Valley Reservoir.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
8. All lakes and reservoirs tributary to St. Vrain Creek that are within the boundary of the Indian Peaks Wilderness Area and Rocky Mountain National Park.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
9. All lakes and reservoirs tributary to St. Vrain Creek from sources to Hygiene Road, including Button Rock Reservoir, except as specified in Segment 8.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
10. All lakes and reservoirs tributary to Left Hand Creek from sources to Highway 36.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
11. Barbour Ponds.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
12. All lakes and reservoirs tributary to Left Hand Creek from Highway 36 to the confluence with St. Vrain Creek, except as specified in Segment 7.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
13. All lakes and reservoirs tributary to St. Vrain Creek from Hygiene Road to the confluence with the South Platte River, except as specified in Segments 7, 10, 11 and 12.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10 (Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	



# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: MIDDLE SOUTH PLATTE RIVER			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description				mg/l	µg/l				
1a. Mainstem of the South Platte River from a point immediately below the confluence with Big Dry Creek to the confluence with St. Vrain Creek.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.* pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVSx2.2	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	*See attached table for site-specific Dissolved Oxygen and Ammonia standards. Temporary modifications: Se(ch)=6.9 µg/l (dis). (Type iii). Expiration date of 12/31/2014. NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.10 (Type i). Expiration date of 12/31/2014.
1b. Mainstem of the South Platte River from a point immediately below the confluence with St. Vrain Creek to the Weld/Morgan County Line.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards
2. Deleted.									
3a. All tributaries to the South Platte River, including all wetlands, from a point immediately below the confluence with Big Dry Creek to the Weld/Morgan County line, except for specific listings in the subbasins of the South Platte River, and in Segments 3b, 5a, 5b, 5c, and 6.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards Temporary modifications: NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.10 (Type i). Expiration date of 12/31/2011.
3b. Hayeshmount Tributaries including the Upper Hayeshmount Tributary from the source to the confluence with Box Elder Creek and the Lower Hayeshmount Tributaries from the source to the Denver Hudson Canal.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-IV) °C D.O. (ch)= pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	When water is present, D.O. concentrations shall be maintained at levels that protect classified uses.
4. Barr Lake and Milton Reservoir.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards Temporary modification: pH= existing quality (Type iii). Expiration date of 12/31/2014.
5a. Mainstem of Lone Tree Creek from the source to the confluence with the South Platte River.		Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
5b. Mainstem of Boxelder Creek from the confluence with Coyote Run to the Denver Hudson Canal.	UP	Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-IV) °C <sup>1</sup> D.O. (ch)=4.7 mg/l pH=6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =10 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	<sup>1</sup> 15 <sup>th</sup> percentile of D.O. measurements collected between 6:30 a.m. and 6:30 p.m.
5c. Mainstems of Crow Creek and Box Elder Creek from their sources to their confluences with the South Platte River, except for specific listings in Segment 5b.		Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

## REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: <b>MIDDLE SOUTH PLATTE RIVER</b>	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC  mg/l		METALS  µg/l			
Stream Segment Description									
6. Lost Creek from Interstate 76 south, including all its tributaries, stock ponds and wetlands.	UP	Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-IV) °C D.O.=5.0 mg/l pH=6.5-9.0 E. Coli=630/100ml	NO <sub>3</sub> =100 NO <sub>2</sub> =10 CN=0.2	S=0.002 B=0.75	As(ac)=340 As=100(Trec) Be(ch)=100(Trec) Cd=10(Trec) CrIII=100(Trec) CrVI=100(Trec) Cu=200(Trec)	Pb=100(Trec) Mn=200(Trec) Ni=200(Trec) Se=20(Trec)	Zn=2000(Trec)	
7. All lakes and reservoirs tributary to the South Platte River from a point immediately below the confluence with Big Dry Creek to the Weld/Morgan County line, except for specific listings in the subbasins of the South Platte River, and in Segment 4.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=WS(dis) Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Water + Fish Standards

## Site-Specific Minimum Dissolved Oxygen and Ammonia Standards for Middle South Platte Segment 1a

### Dissolved Oxygen:

#### STANDARDS

Early Life Stage Protection Period (April 1 through July 31)

1-Day<sup>1,4,5</sup> 3.0 mg/L (acute)

7-Day Average<sup>1,2</sup> 5.0 mg/L

Older Life Stage Protection Period (August 1 through March 31)

1-Day<sup>1,4</sup> 2.0 mg/L (acute)

7-Day Mean of Minimums<sup>1,3</sup> 2.5 mg/L

30-Day Average<sup>1,2</sup> 4.5 mg/L

Refer to Section 38(6)(4)(c) for Dissolved Oxygen assessment locations.

### Footnotes

1. For the purpose of determining compliance with the standards, dissolved oxygen measurements shall only be taken in the flowing portion of the stream at mid-depth, and at least six inches above the bottom of the channel. All sampling protocols and test procedures shall be in accordance with procedures and protocols approved by the Division.
2. A minimum of four independent daily means must be used to calculate the average for the 7-Day Average standard. A minimum of eight independent daily means must be used to calculate the average for the 30-Day Average standard. The four days and the eight days must be representative of the 7-Day and the 30-Day periods respectively. The daily mean shall be the mean of the daily high and low values. In calculating the mean values, the dissolved oxygen saturation value shall be used in place of any dissolved oxygen measurements which exceed saturation.
3. The 7-Day Mean Minimum is the average of the daily minimums measured at a location on each day during any 7-Day period.
4. During a 24 hour day, dissolved oxygen levels are likely to be lower during the nighttime when there is no photosynthesis. The dissolved oxygen levels should not drop below the acute standard (ELS acute standard of 3.0 mg/L or the OLS standard of 2.0 mg/L). However, if during the ELS period multiple measurements are below 3.0 mg/L during the same nighttime period, the multiple measurements shall be considered a single exceedance of the acute standard. For measurements below 2.0 mg/L during either the ELS or the OLS periods, each hourly measurement below 2.0 mg/L shall be considered an exceedance of the acute standard.
5. In July, the dissolved oxygen level in Segment 1a may be lower than the 3.0 mg/L acute standard for up to 14 exceedances in any one year and up to a total of 21 exceedances in three years before there is a determination that the acute dissolved oxygen standards is not being met. Exceedances shall be counted as described in Footnote 4.

### Ammonia:

Early Life Stage Protection Period (April 1 through July 31)

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Ammonia

Warm Water = (mg/l as N)Total

$$acute = \frac{0.411}{1 + 10^{7.204 - pH}} + \frac{58.4}{1 + 10^{pH - 7.204}}$$

$$chronic \text{ (Apr 1 - July 31)} = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * MIN \left( 2.85, 1.45 * 10^{0.028(25 - T)} \right)$$

$$chronic \text{ (Aug 1 - Mar 31)} = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * 1.45 * 10^{0.028 * (25 - MAX(T, 7))}$$

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NH<sub>3</sub> = old TVS

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Warm Water Acute = 0.62/FT/FPH/2<sup>(4 old)</sup> in mg/ (N)

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: <b>BIG THOMPSON RIVER</b>	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS µg/l			
Stream Segment Description									
1. Mainstem of the Big Thompson River, including all tributaries and wetlands, within Rocky Mountain National Park, except for specific listings in Segment 2.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2. Mainstem of the Big Thompson River, including all tributaries and wetlands from the boundary of Rocky Mountain National Park to the Home Supply Canal diversion, except for the specific listing in Segment 7; mainstem of Black Canyon Creek and Glacier Creek below Estes Park water treatment plant.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modifications: D.O., E. coli, NH <sub>3</sub> , NO <sub>3</sub> , B, Cd, Cu, Pb, Hg, Ni, Se, Ag, Zn = current condition. Wapiti Meadow wetlands at the toe of Lake Estes Dam (Type iii). Expiration date of 12/31/2014. Cu(ch)=2.5 µg/l (dis). (Type iii). Mainstem. Expiration date of 12/31/2014.
3. Mainstem of the Big Thompson River from the Home Supply Canal diversion to the Big Barnes Ditch diversion.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
4a. Mainstem of the Big Thompson from the Big Barnes Ditch diversion to the Greeley-Loveland Canal diversion.		Aq Life Cold 2 Water Supply Agriculture  5/1 – 10/15 Recreation E  10/16 – 4/30 Recreation N	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0  5/1 – 10/15 E.Coli=126/100ml  10/16 – 4/30 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
4b. Mainstem of the Big Thompson from the Greeley-Loveland Canal diversion to County Road 11H.		Aq Life Warm 2 Agriculture  5/1 – 10/15 Recreation E  10/16 – 4/30 Recreation N	T=TVS(WS-I) °C D.O. = 5.0 mg/l pH = 6.5-9.0  5/1 – 10/15 E.Coli=126/100ml  10/16 – 4/30 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)-TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards Temporary modification: Se(ch)=5.5µg/l (dis). (type iii) Expiration date of 12/31/2015.
4c. Mainstem of the Big Thompson from County Road 11H to I-25.		Aq Life Warm 2 Agriculture  5/1 – 10/15 Recreation E  10/16 – 4/30 Recreation N	T=TVS(WS-I) °C D.O. = 5.0 mg/l pH = 6.5-9.0  5/1 – 10/15 E.Coli=126/100ml  10/16 – 4/30 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)-TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: <b>BIG THOMPSON RIVER</b>	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
				mg/l	µg/l				
Stream Segment Description									
5. Mainstem of The Big Thompson River from I-25 to the confluence with the South Platte River.		Aq Life Warm 2 Agriculture  5/1 – 10/15 Recreation P  10/16 – 4/30 Recreation N	T=TVS(WS-I) °C D.O. = 5.0 mg/l pH = 6.5-9.0  5/1 – 10/15 E.Coli=205/100ml  10/16 – 4/30 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Se(ch)=5.7 µg/l (dis). (Type iii). Expiration date of 12/31/2014. NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.10 (Type i). Expiration date of 12/31/2011.
6. All tributaries to the Big Thompson River, including all wetlands, from the Home Supply Canal diversion to the confluence with the South Platte River.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-I) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards
7. Mainstem of the North Fork of the Big Thompson River from the boundary of Rocky Mountain National Park to the confluence with the Big Thompson River; mainstem of Buckhorn Creek from the source to the confluence with the Big Thompson River.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
8. Mainstem of the Little Thompson River, including all tributaries and wetlands, from the source to the Culver Ditch diversion.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
9. Mainstem of the Little Thompson River from the Culver Ditch diversion to the confluence with the Big Thompson River.		Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Se(ch)=13.1 µg/l (dis). (Type iii). Expiration date of 12/31/2014. NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.10 (Type i). Expiration date of 12/31/2011.
10. All tributaries to the Little Thompson River, including all wetlands, from the Culver Ditch diversion to the confluence with the Big Thompson River.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	.
11. Carter Lake.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CLL) °C April-Dec T <sub>(WAT)</sub> =22.7°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
12. Lake Loveland, Horseshoe Lake, Boyd Lake.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: <b>BIG THOMPSON RIVER</b>			PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description				mg/l	µg/l				
13. Berthoud Reservoir, Johnstown Reservoir.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
14. Welch Reservoir, Lonetree Reservoir, Boedecker Lake, Lon Hagler Reservoir.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis)	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
15. All lakes and reservoirs tributary to the Big Thompson River within Rocky Mountain National Park.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
16. All lakes and reservoirs tributary to the Big Thompson River from the boundary of Rocky Mountain National Park to the Home Supply Canal diversion. This segment includes Lake Estes.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
17. All lakes and reservoirs tributary to the Big Thompson River from the Home Supply Canal diversion to the confluence with the South Platte River, except for specific listings in Segments 12 and 14.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)-TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
18. All lakes and reservoirs tributary to the Little Thompson River from the source to the Culver Ditch diversion.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)-TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
19. All lakes and reservoirs tributary to the Little Thompson River from the Culver Ditch diversion to the confluence with the Big Thompson River, except for specific listings in Segments 11 and 13.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: <b>CACHE LA POUDRE RIVER</b>				PHYSICAL and BIOLOGICAL	INORGANIC  mg/l	METALS  µg/l				
Stream Segment Description										
1.	Mainstem of the Cache La Poudre River, and all tributaries and wetlands, within Rocky Mountain National Park and the Rawah, Neota, Comanche Peak, and Cache La Poudre Wilderness Areas.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (c)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2a.	Mainstem of the Cache La Poudre River, including all tributaries and wetlands from the boundaries of Rocky Mountain National Park, and the Rawah, Neota, Comanche Peak, and Cache La Poudre Wilderness Areas to a point immediately below the confluence with the South Fork Cache La Poudre River.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2b.	Mainstem of the Cache La Poudre River, including all tributaries and wetlands, from a point immediately below the confluence with the South Fork Cache La Poudre River to the Monroe Gravity Canal/North Poudre Supply canal diversion.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
3.	Deleted.									
4.	Deleted.									
5.	Deleted.									
6.	Mainstem of the North Fork of the Cache La Poudre River, including all tributaries and wetlands, from the source to the inlet of Halligan Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
7.	Mainstem of the North Fork of the Cache La Poudre River from the inlet of Halligan Reservoir to the confluence with the Cache La Poudre River.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
8.	All tributaries to the North Fork of the Cache La Poudre River, including all wetlands from, the inlet of Halligan Reservoir to the confluence with the Cache La Poudre River, except for specific listings in Segment 9.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
9.	Mainstem of Rabbit Creek and Lone Pine Creek from the source to the confluence with the North Fork of the Cache La Poudre River.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	



# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: CACHE LA POUDRE RIVER				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
10.	Mainstem of the Cache La Poudre River from the Monroe Gravity Canal/North Poudre Supply Canal diversion to Shields Street in Ft. Collins, Colorado.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
11.	Mainstem of the Cache La Poudre River from Shields Street in Ft. Collins to a point immediately above the confluence with Boxelder Creek.		Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =2.7 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Nitrite as a 30 day average. Fish Ingestion Standards  Temporary Modifications: Se(ch)=5.4 µg/l (dis). (Type iii). Expiration date of 12/31/2014.
12.	Mainstem of the Cache La Poudre River from a point immediately above the confluence with Boxelder Creek to the confluence with the South Platte River.		Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =2.7 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Nitrite as a 30 day average. Fish Ingestion Standards  Temporary modifications: Se(ch)=7.1 µg/l (dis). (Type iii). Expiration date of 12/31/2014. NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.10 (Type i). Expiration date of 12/31/2011.
13a.	All tributaries to the Cache La Poudre River, including all wetlands, from the Monroe Gravity Canal/North Poudre Supply canal diversion to the confluence with the South Platte River, except for specific listings in Segments 6, 7, 8, 13b and 13c.	UP	Aq Life Warm 2 Recreation E Agriculture Water Supply	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification: NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.06 (Type i). Expiration date of 12/31/2011.
13b.	Mainstem of Boxelder Creek from its source to the confluence with the Cache La Poudre River.		Aq Life Warm 2  5/15-9/15 Recreation P  9/16-5/14 Recreation N  Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0  5/15-9/15 E.Coli=205/100ml  9/16-5/14 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Se(ch)=13.0 µg/l (dis). (Type iii). Expiration date of 12/31/2014.
13c.	Mainstems of South Branch of Boxelder Creek, North Branch of Boxelder Creek and Sand Creek from their sources to their confluences with the mainstem of Boxelder Creek.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
14.	Horsetooth Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CLL) °C Apr-Dec T <sub>(WAT)</sub> =22.8°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
15.	Watson Lake.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr)	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: CACHE LA POUDRE RIVER				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
				E.Coli=126/100ml		Cl=250 SO <sub>4</sub> =WS	CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Zn(ac/ch)=TVS	
16.	Reservoir #4 (T 9 N, R 68 W), Water Supply Reservoir #3 (T 8 N, R 68 W), Claymore Lake, College Lake, Dixon Reservoir, Robert Benson Lake, Black Hollow Reservoir, Seeley Lake.	UP	Aq Life Warm 1 Recreation E Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
17.	All lakes and reservoirs tributary to the Cache La Poudre River within Rocky Mountain National Park and the Rawah, Neota, Comanche Peak, and Cache La Poudre Wilderness Area.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (c)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
18.	All lakes and reservoirs tributary to the Cache La Poudre River from the boundaries of Rocky Mountain National Park, and the Rawah, Neota, Comanche Peak and Cache La Poudre Wilderness Area to the Monroe Gravity Canal/North Poudre Supply canal diversion.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
19.	All lakes and reservoirs tributary to the North Fork of the Cache La Poudre River from the source to the inlet of Halligan Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
20.	All lakes and reservoirs tributary to the North Fork of the Cache La Poudre River from the inlet of Halligan Reservoir to the confluence with the Cache La Poudre River. This segment includes Halligan Reservoir and Seaman Reservoir.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C Seaman Reservoir Apr-Dec T <sub>(WAT)</sub> =22.5°C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Water + Fish Standards
21.	All lakes and reservoirs tributary to the Cache La Poudre River from the Monroe Gravity Canal/North Poudre Supply canal diversion to the confluence with the South Platte River, except for specific listings in Segments 14, 15, 16, 19, 20 and 22.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
22.	Fossil Creek Reservoir.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification: NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.06 (Type i). Expiration date of 12/31/2011.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4  BASIN: <b>LARAMIE RIVER</b>	DESIG	CLASSIFICATIONS	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC  mg/l		METALS  µg/l			
Stream Segment Description									
1. All tributaries to the Laramie River, including all wetlands, which are within the Rawah Wilderness Area.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2a. Mainstem of the Laramie River from the source to the National Forest boundary, and all tributaries and wetlands, from the source to the Colorado/Wyoming border, except for specific listings in Segment 1.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2b. Mainstem of the Laramie River from the National Forest boundary to the Colorado/Wyoming border.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
3. All lakes and reservoirs tributary to the Laramie River within the Rawah Wilderness Area.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4. All lakes and reservoirs tributary to the Laramie River from the source to the Colorado/Wyoming border, except for specific listings in Segment 3.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: LOWER SOUTH PLATTE RIVER				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
1. Mainstem of the South Platte River from the Weld/Morgan County line to the Colorado/Nebraska border.			Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: Se(ch)=12.3 µg/l (dis). (Type iii). Expiration date of 12/31/2014. NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.10 (Type i). Expiration date of 12/31/2011.
2a All tributaries to the South Platte River, including all wetlands, from the Weld/Morgan County line to the Colorado/Nebraska border, except for the specific listings in Segment 2b.		UP	Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75	As(ac)=340 As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec)	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
2b. All tributaries to the South Platte River, including all wetlands, north of the South Platte River and below 4,500 feet in elevation in Morgan County, north of the South Platte River in Washington County, north of the South Platte River and below 4,200 feet in elevation in Logan County, north of the South Platte River and below 3,700 feet in elevation in Sedgwick County, and the mainstems of Beaver Creek, Bijou Creek and Kiowa Creek from their sources to the confluence with the South Platte River, except for the portion of Beaver Creek from its source to the Fort Morgan Canal.		UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: NH <sub>3</sub> (ac)=TVS(old) NH <sub>3</sub> (ch)=0.06 (Type i). Expiration date of 12/31/2011.
3. Jackson Reservoir, Prewitt Reservoir, North Sterling Reservoir, Jumbo (Julesburg), Riverside Reservoir, Empire Reservoir, and Vancil Reservoir.		UP	Aq Life Warm 1 Recreation E Agriculture	T=TVS(WL) °C Jackson Reservoir April-Dec T <sub>(WAT)</sub> =28.1° North Sterling Res. April-Dec T <sub>(WAT)</sub> =26.1° Jumbo Reservoir April-Dec T <sub>(WAT)</sub> =27.0° D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
4 All lakes and reservoirs tributary to the South Platte River from the Weld/Morgan County line to the Colorado/Nebraska border, except for specific listings in Segments 3 and 5.			Aq Life Warm 2 Recreation U Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec) CrVI(ch)=100(Trec)	Cu(ch)=200(Trec) Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ch)=100(Trec) Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
5. All lakes and reservoirs tributary to the South Platte River north of the South Platte River and below 4,500 feet in elevation in Morgan County, north of the South Platte River in Washington County, north of the South Platte River and below 4,200 feet in elevation in Logan County, north of the South Platte River and below 3,700 feet in elevation in Sedgwick County, and the mainstems of Beaver Creek, Bijou Creek and Kiowa Creek from their sources to the confluence with the South Platte River, except for those specific listings in Segment 3.			Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 3 AND 4		DESIG	CLASSIFICATIONS	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: <b>REPUBLICAN RIVER</b>				PHYSICAL and BIOLOGICAL	INORGANIC	METALS				
Stream Segment Description					mg/l	µg/l				
1. Mainstem of the South Fork of the Republican River from a point 10 miles above Bonny Reservoir to the Colorado-Kansas border.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
2. Bonny Reservoir, Stalker Lake.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis)	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
3. Mainstem of the North Fork of the Republican River from the source to the Colorado/Nebraska border and the mainstem of Chief Creek.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
4. Mainstem of the Arikaree River from the confluence of the North and South Forks to the Colorado/Kansas border.			Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
5. Mainstem of the Black Wolf Creek from the source to the confluence with the Arikaree River.			Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS Cl <sub>2</sub> (ac)=0.019 Cl <sub>2</sub> (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis)	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
6. All tributaries to the Republican River system in Colorado, including all wetlands, except for specific listings in Segments 1, 3, 4 and 5.	UP		Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-I) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75	As(ac)=340 As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec)	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
7. Mainstem of the North Fork of the Smoky Hill River and mainstem of the Smoky Hill River, including all tributaries and wetlands, from the source to the Colorado/Kansas border.	UP		Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-IV) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=630/100ml	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75	As(ac)=340 As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec)	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
8. All lakes and reservoirs tributary to the Republican and Smoky Hill Rivers in Colorado, except for specific listings in Segment 2.			Aq Life Warm 2 Recreation U Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	CN=0.2	S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec) CrVI(ch)=100(Trec)	Cu(ch)=200(Trec) Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ch)=100(Trec) Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(Tot)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	

Table 2  
SITE SPECIFIC RADIONUCLIDE STANDARDS\*  
(in Picocuries/Liter, except as noted)

The radionuclides listed below shall be maintained at the lowest practical level and in no case shall they be increased by any cause attributable to municipal, industrial, or agricultural practices to exceed the site specific numeric standards.

A. Ambient based site-specific standards:				
	Segment 2 Standley Lake	Segment 3 Great Western Reservoir	Segment 4a Segment 5 Woman Creek	Segment 4a Segment 4b Segment 5 Walnut Creek
Gross Alpha	6	5		
Gross Beta	9	12		
Plutonium	.03	.03	0.15** ***	0.15** ***
Americium	.03	.03	0.15** ***	0.15** ***
Tritium	500	500	500	500
Uranium	3	4	16.8 µg/l	16.8 µg/l
B. Other site-specific standard applicable to segments 2,3,4a, 4b, and 5.				
Curium	60	60	60	60
Neptunium	30	30	30	30

\*Statewide standards also apply for radionuclides not listed above.

\*\*0.15pCi/l Statewide Basic Standards.

\*\*\*For plutonium and americium measurements in Segment 5 in Woman Creek and Segment 5 in Walnut Creek, attainment will be assessed based on the results of a 12-month flow-weighted rolling average concentration (computed monthly).

Table 3  
Temporary Modifications (type i)  
Big Dry Creek, Segment 5

Effective until December 31, 2009 for the Walnut Creek portions of segment 5:

Parameter	mg/l
Nitrate	100
Nitrite	4.5

Effective until December 31, 2009 for all of segment 5:

Parameter	mg/l
Benzene	0.005
Carbon tetrachloride	0.005
1,2-Dichloroethane	0.005
1,1-Dichloroethene	0.007
Tetrachloroethylene	0.005
Trichloroethylene	0.005
All other organic and radiologic parameters are covered by the Basic Standards.	

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