

29. Appendix C:

29.1. Table 2: Water Quality Standards for Stream Segments for Stream Segments in the Park and Teller Counties Portions of South Platte/ Upper South Platte Watersheds

	Stream Segment Description	Desig	Classifications	Physical & Biological	Inorganic (mg/l)		Metals (ug/l)		
2c	South Mosquito Creek from the source to confluence with Mosquito Creek and No Name	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=126/100 ml	NH3(ac/ch)=TVS Cl2(ac)=0.019 Cl2(ch)=0.011 CN=0.005	S=0.002 B=0.75 NO2=0.05 NO3=10 Cl=250 S04=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)=TVS
3	All tributaries to the South Platte River, including all lakes, reservoirs and 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 Plane River, except for specific listings in Segment 1 b.		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=126/100 ml	NH3(ac/ch)=TVS Cl2(ac)=0.019 Cl2(ch)=0.011 CN=0.005	S=0.002 B=0.75 NO2=0.05 NO3=10 Cl=250 S04=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 North Fork of the South Platte River, including all tributaries, lakes, reservoirs 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=126/100 ml	NH3(ac/ch)=TVS Cl2(ac)=0.019 Cl2(ch)=0.011 CN=0.005	S=0.002 B=0.75 NO2=0.05 NO3=10 Cl=250 S04=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
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=126/100 ml	NH3(ac/ch)=TVS Cl2(ac)=0.019 Cl2(ch)=0.011 CN=0.005	S=0.002 NO2=0.05	As(ac)=340 As(ch)=7.6 (Trec) Cd(ch)=2 CrIII(ch)=100 CrVI(ac/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)=1909(dis)
	Stream Segment Description	Desig	Classifications	Physical & Biological	Inorganic (mg/l)		Metals (ug/l)		
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 lakes, reservoirs, and 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=126/100 ml	NH3(ac/ch)=TVS Cl2(ac)=0.019 Cl2(ch)=0.011	CN=0.0055=0.002 B=0.75 NO2=0.05 NO3=10 Cl=250 S04=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

29.2. Table 3: Approved TMDLs in the South Platte/ Upper South Platte Watersheds

Segment #	Affected Portion	Pollutant	Water Quality Targets	Recommended Actions	Date
COSPBO04a	Mainstem of South Boulder Creek	Cadmium, Zinc	Attainment of aquatic life use classification standards for Cd.	<ul style="list-style-type: none"> Remediation plan for Gamble Gulch Additional monitoring 	2010
COSPUS05a COSPUS05b	Mainstem of Geneva Creek	Cadmium, Copper, Zinc, Manganese	Attainment of site-specific chronic cadmium, copper, manganese, and zinc standards; Attainment of acute and chronic table value standards for cadmium.		2010
COSPBO02b	Mainstem of Boulder Creek, 447 square miles	<i>E.coli</i>	Attainment of two month geometric mean of <i>E.coli</i> water quality standard (126 cfu/100 mL) throughout segment.	<ul style="list-style-type: none"> Collaboration between local jurisdictions 	2011
COSPUS15	Mainstem of South Platte River	Cadmium	Attainment of the assigned aquatic life use designation.		2011
COSPMS04	Barr Lake and Milton Reservoir	Dissolved oxygen, Phosphorus	Attainment of assigned use classification standards for DO. Attainment of aquatic life, recreation and water supply use classification standards for Ph.		2013
COSPSV04a COSPSV04b COSPSV04c	Mainstem Left Hand Creek, James Creek, Little James Creek	Cadmium, Copper, Zinc, pH, Lead	Attainment of the table value based standards for dissolved Cd, Cu, Pb, Zn and pH.	<ul style="list-style-type: none"> Additional monitoring 	2015
COSPSU15	Upper South Platte Segment 15	<i>E.coli</i>	Attainment of recreation use.	Interested stakeholders to develop a coordinated implementation plan, including education and outreach; coordination with other watershed groups; additional monitor; possible future microbial source tracking	2015

				for source identification; possible future remission of the TMDL.	
COSPBD01	Mainstem of Big Dry Creek, approximately 108 square miles	<i>E.coli</i>	Attainment of <i>E.coli</i> water quality standard (205 cfu/100 mL) throughout segment.	<ul style="list-style-type: none"> • Coordinate efforts of the Big Dry Creek Water Association • Additional monitoring • Infrastructure maintenance and upgrades • Education and outreach • Stormwater BMPs 	2016

29.3. Table 4: South Platte and Upper South Platte Discharge NPDES Permit Information

	Upper South Platte Segment COSPU501a		USP Segment COSPU502a	Upper South Platte Segment COSPU504		
	Town of Alma	Fairplay Sanitation District	Florissant Water & Sanitation District	City of Woodland Park	Will-O-Wisp	Bailey Water & Sanitation District
NPDES Permit #	CO-0035769	CO-0040088	CO-0041416	CO-0043214	CO-0041521	COG-588056
Permit Expiration Date	5/30/2010	Not issued	6/30/2010	5/31/2014	8/31/2009	6/31/2010
Flow (MGD)	0.117	0.300	0.057	0.893	0.060	0.075
Existing Load (MGD)	0.041	0.10	0.019	0.69	0.025	0.03
Year at 80% Design	2020	2020	2025	2015	2025	2025
Year at 95% Design	2025	2025	2030	2021	2030	2030
Organic (lbs/day BOD ₅)	111	880	162	1,955	138	125
Existing Load (lbs/day BOD ₅)	73	200		1,740	Not Available	29
Year at 80% Design	2020	2020	2020	2010	Not Available	2025
Year at 95% Design	2025	2025	2025	2013	Not Available	2030
30-day avg / 7-day avg						
BOD	30 / 45	30 / 45	30 / 45	30 / 45	30 / 45	30 / 45
Total Suspended Solids	75 / 110	75 / 110	75 / 110	30 / 45	30 / 45	30 / 45
Fecal Coliforms, #/100 ml	4,140 / 8,280	5,339 / 10,678	NA	NA	200 / 400	6,000 / 12,000
E. coli	NA	2,000 / 4,000	1,248 / 2,496	126 / 252	NA	NA
Total Residual Chlorine, mg/l ¹	N/A / 0.083	0.298 / NA	Report / 0.05	N/A / 0.019	0.0042 / 0.0054	Report / 0.5
Total ammonia as N, mg/l, 30-day avg / daily max						
January	26.8 / Report	17 / Report	10.3 / Report ¹	5.3 / NA	2.7 / Report	25 / 25
February	Report / Report	18 / Report	11.5 / Report	5.3 / NA	1.8 / Report	25 / 25
March	Report / Report	13 / Report	9.1 / Report	5.3 / NA	3.4 / Report	25 / 25
April	Report / Report	19 / Report	6.6 / Report	5.3 / NA	2.7 / Report	25 / 25
May	18.1 / Report	24 / Report	6.5 / Report	8.2 / NA	1.8 / Report	25 / 25
June	Report / Report	Report / Report	16.3 / Report	8.2 / NA	3.4 / Report	25 / 25
July	Report / Report	19 / Report	7.6 / Report	8.2 / NA	7.7 / Report	25 / 25
Aug	Report / Report	20 / Report	6.0 / Report	5.9 / NA	2.7 / Report	25 / 25
Sept	Report / Report	16 / Report	4.9 / Report	5.9 / NA	2.0 / Report	25 / 25
October	Report / Report	26 / Report		5.9 / NA	7.7 / Report	25 / 25
November	Report / Report	24 / Report	13.5 / Report	5.3 / NA	3.1 / Report	25 / 25
December	Report / Report	18 / Report	3.3 / Report	5.3 / NA	3.8 / Report	25 / 25
Metals (conc in ug/l), 30-day avg / daily max						
Chromium III Dissolved	555.7 / 72.3	NA	NA	NA	NA	NA
Copper, PD	13.1 / 8.7	NA	NA	NA	NA	NA
Nickel, PD	456.3 / 50.7	NA	NA	NA	NA	NA
Zinc, PD	114.2 / 115.1	NA	NA	NA	NA	NA
Silver, PD	1.93 / 0.07	NA	NA	NA	NA	NA
Cadmium, PD	3.58 / 2.19	NA	NA	NA	NA	NA
Manganese, PD	2956 / 1633	NA	NA	NA	NA	NA

Footnotes¹ Ammonia limits will apply once construction is completed (Report only during construction)

29.4. Table 5: Upper Arkansas Stream Classifications and Water Quality Standards

	Stream Segment Description	Desig	Classifications	Physical & Biological	Inorganic (mg/l)			Metals (ug/l)		
18	Mainstem of Currant Creek (Park County), including all tributaries, wetlands, lakes, and reservoirs, from the source to the confluence with Tallahassee Creek, except for the specific listings in 17a, 17b, and 17c.		Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH3(ac/ch)=TV S CL2(ac)=0.019 CL2(ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO2= 0.05 NO3= 10 Cl= 250 SO4= 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	Mainstem of Fourmile Creek, including all tributaries, wetlands, lakes, and reservoirs, from the source immediately above the confluence with Cripple Creek.		Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100m l	NH3(ac/ch)=TV S CL2(ac)=0.019 CL2(ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO2= 0.5 NO3= 10 Cl= 250 SO4= 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	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	Mainstem of Fourmile Creek, including all tributaries, wetlands, lakes, and reservoirs, from immediately above the confluence with Cripple Creek to the confluence with the Arkansas River, except for the specific listing to segment 23.		Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH3(ac/ch)=TV S CL2(ac)=0.019 CL2(ch)=0.011	CN=0.005 S=0.002 B= 0.75 NO2= 0.05 SO4= WS	As(ac)=340 As(ch)=0.02 (Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=100(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 a	Mainstem of Cripple Creek from the source to a point 1.5 miles upstream of the confluence with Fourmile Creek.		Aq Life Cold 2 Recreation E Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100m l	NH3(ac)=TVS(s a) NH3(ch)=TVS(e la) CL2(ac)=0.019 CL2(ch)=0.011	CN=0.005 S=0.002 B= 0.75 NO2= 0.05	As(ac)=340 As(ch)=100 (Trec) Cd(ac)=TVS Cd(ch)=TVS CrIII(ac)=100(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	

21 b	Mainstem of Cripple Creek from a point 1.5 miles upstream to the confluence with Fourmile Creek		Aq Life Cold 2 Recreation E Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100m l	NH3(ac)=TVS(sa) NH3(ch)=TVS(gja) CL2(ac)=0.019 CL2(ch)=0.011	CN=0.005 S=0.002 B= 0.75 NO2= 0.05	As(ac)=340 As(ch)=100 (Trec) Cd(ac/ch)=TVS CrIII(ch)=100(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
22 a	Mainstem of Arequa Gulch from the source to the confluence with Cripple Creek	UP	Aq Life Cold 2 Recreation N Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.0-9.0 E.Coli= 630/100ml	NH3(ac/ch)=TVS CL2(ac)=0.019 CL2(ch)=0.011	CN=0.005 S=0.002 B= 0.75 NO2= 0.05	Al(ac/ch)=11,000 As(ac)=340 As(ch)=100 (Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000 (trec) Pb(ac/ch)=TVS Mn(ac)=5903 Mn(ch)=3674 Hg(ch)=0.01(tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac)=3500 Zn(ch)=600
22 b	Squaw Gulch from the source to the confluence with Cripple Creek	UP	Aq Life Cold 2 Recreation N Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 630/100m l	CN=0.02 NO2=10 NO3=10 0	B=5.0	As(ch)=200 (Trec) Cd(ch)=50 (Trec) CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS	Cu(ch)=500 (trec) Pb(ch)=100 (trec) Hg(ch)=0.01(tot) Se(ch)=50 (trec)	Zn(ch)=25000 (trec)
23	Mainstem of Wilson Creek (Teller County) from the source to the confluence with Fourmile Creek		Aq Life Cold 2 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100m l	NH3(ac/ch)=TVS CL2(ac)=0.019 CL2(ch)=0.011 CN=0.005 S=0.002	B=0.75 NO2=0.05 NO3=10 Cl=250 SO4=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	Cu(ac/ch)=TVS Fe(ch)=WS(dic) 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 Pb(ac/ch)=TVS(tr) Zn(ac/ch)=TVS
24	Mainstem of East and West Beaver Creeks, including all tributaries, wetlands, lakes, reservoirs, from the source to the confluence with Beaver Creek; mainstem of Beaver Creek from the source to the point of diversion to Brush Hollow Reservoir		Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100m l	NH3(ac/ch)=TVS CL2(ac)=0.019 CL2(ch)=0.011 CN=0.005 S=0.002	B=0.75 NO2=0.05 NO3=10 Cl=250 SO4=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(dic) 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

Note: No temporary modifications exist

29.5. Table 6: Fountain Creek Watershed Stream Classifications and Water Quality Standards

	Stream Segment Description	Desig	Class	Physical & Biological	Inorganic (mg/l)			Metals (ug/l)		
1a	Mainstem of Fountain Creek, including all tributaries, lakes, and reservoirs, from the source to a point immediately above the confluence with Monument Creek, except for specific listings in segment 1b.		Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO ₂ = 0.05 NO ₃ = 10 Cl= 250 SO ₄ = 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	Severy Creek and all tributaries from the source to a point just upstream of where US Forest Service Road 330 crosses the stream.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO ₂ = 0.05 NO ₃ = 10 Cl= 250 SO ₄ = 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 Fountain Creek from a point immediately above the confluence with Monument Creek to a point immediately above the State Highway 47 bridge.		Aq Life Warm 2 Recreation E Water Supply Agriculture	D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO ₂ = 0.5 NO ₃ = 10 Cl= 250 SO ₄ = 330	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	
2b	Mainstem of Fountain Creek from a point immediately above the State Highway 47 bridge to the confluence with the Arkansas River.		Aq Life Warm 2 Recreation E Water Supply Agriculture	D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO ₂ = 1.0 NO ₃ = 10 Cl= 250 SO ₄ = 485	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)=5280 (trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01 (tot) Ni(ac/ch)=TVS Se(ac)=42.3 Se(ch)=28.1 Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

3a	All tributaries to Fountain Creek that are within the boundaries of national forest or Air Force Academy lands, including all wetlands, lakes, and reservoirs, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for the mainstem of Monument Creek in the Air Force Academy lands and for specific listings in segment 3b.		Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100m l	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO ₂ = 0.05 NO ₃ = 10 Cl= 250 SO ₄ = 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)=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
3b	Bear Creek and all tributaries from the source to a point upstream of GPS coordinates N3847682, W 10454917 (this location is at elevation 8,200 feet above sea level at a 250-degree angle and 3,000 feet from the trailhead of the Mount Buckhorn Trail off High Drive.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	D.O. = 6.0 mg/l D.O.(sp)= 7.0 mg/l pH = 6.5-9.0 E.Coli= 126/100m l	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO ₂ = 0.05 NO ₃ = 10 Cl= 250 SO ₄ = 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)=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 tributaries to Fountain Creek that are not within the boundaries of national forest or Air Force Academy lands, including all wetlands, lakes, and reservoirs, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for the specific listings in segments 5.6,7a, and 7b.		Aq Life Warm 2 Recreation E Agriculture	D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	CN=0.2 NO ₂ (ac/ch)=10 NO ₃ (ac/ch)=100	B= 0.75	As(ch)=0.02 (Trec) Be(ch)=100(trec) Cu(ch)=10 (trec) CrIII(ac)=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)
5	Marshland on Nash Property (60 acres at 103030 Old Pueblo Road, El Paso County) located in Section 28 T16S R65W; Jimmy Camp Creek from the irrigation diversion east of Old Pueblo Road to its confluence with Fountain Creek; unnamed tributary from the boundary of Fort Carson to the confluence with Fountain Creek; located in S1/2, SW1/4, Section 6 and N1/2, NW1/4, Section 7, T16S, R65W.		Aq Life Cold 2 Recreation E Agriculture	D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011	CN=0.005 S=0.002 B= 0.75 NO ₂ = 0.05	As(ch)=100 (trec) As(ac)=340 Cd(ac/ch)=TVS CrIII(ac/ch)=50TVS 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	Mainstem of Monument Creek from the boundary of national forest lands to the confluence with Fountain Creek.		Aq Life Warm 2 Recreation E Water Supply Agriculture	D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005	B= 0.75 NO ₂ = 0.05 NO ₃ = 10 Cl= 250 SO ₄ = 329	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)=1430 (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
7a	Pikeview Reservoir, Willow Springs Pond #1, and Willow Springs Pond #2	UP	Aq Life Warm 2 Recreation P Water Supply Agriculture	D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli= 205/100ml	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO ₂ = 0.05 NO ₃ = 10 SO ₄ = 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
7b	Prospect Lake, Quail Lake, Monument Lake	UP	Aq Life Warm 2 Recreation E Agriculture	D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli= 126/100ml	NH ₃ (ac/ch)=TVS CL ₂ (ac)=0.019 CL ₂ (ch)=0.011 CN=0.005 S=0.002	B= 0.75 NO ₂ = 1.0	As(ac)=340 As(ch)=7.6 (Trec) 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 (dis) Hg(ch)=0.01 (tot)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS

Segment 1a: Temporary modification (type iii); Se(ch)=8.7; expiration date: 12/31/2012

Segment 2a: Temporary modification:

Segment 6: Temporary modification (type iii); Cu(ac/ch)= current condition; expiration date: 12/31/09; NH₃(ac/ch)=TVS (old) (type i); expiration date:12/31/2011

Segment 7a: Water + fish standards apply

Segment 7b: Fish ingestion standards apply

29.6. Table 7: Fountain Creek Watershed Discharge Locations Major Facilities (> 0.05 mgd)

Wastewater Treatment Plant	Permit No.	Discharge Location	Mgmt. Area	Design Capacity (mgd)	Existing Load (as of Jan 2019) (mgd)
Colorado Springs Utilities Las Vegas Facility	CO-0026735	Fountain Creek Segment 2a- via Fountain Mutual irrigation channel	MM	75.0	36.6
Colorado Springs Utilities J.D. Phillips Facility	CO-0046850	Monument Creek south of Pikeview Reservoir	MM	20	6.6
Academy Water and Sanitation District	COG-589020	Discharge to Smith Creek from treatment facility ceased Oct. 31, 2018; wastewater from District pumped to Donala W&S District	UM	NA	0.04
Upper Monument Creek Regional WWTF (Donala Water and Sanitation District, Forest Lakes and Triview Metropolitan Districts)	CO-0042030	Monument Creek at southwest corner of service area	UM	1,750	0.7
Tri-Lakes WWTF (Monument, Palmer Lake and Woodmoor Water and/or Sanitation District)	CO-0020435	Monument Creek at southern edge of Tri-Lakes service area	UM	4.2	1.38
United States Air Force Academy	CO-0020974	Academy's effluent recycle system	UM	2.2	1.4
WWTF (Cheyenne Mountain Estates-Broadmoor Park)	CO---34274	Intermittent tributary of Fountain Creek about 0.5 miles upstream of Hwy 115.	LF	0.06	0.03
Fort Carson	CO-0021181	Clover Ditch about 1 mile upstream from Fountain Creek confluence	LF	4.0	1.4
Fountain Sanitation District	CO-0020532	Fountain Creek, southern edge of treatment facility	LF	1,908	0.58
Security Sanitation District	CO-0024392	Fountain Creek, upstream from Carson Blvd. bridge	LF	1.95	1.32
Widefield Water and Sanitation District	CO-0021067	Fountain Creek, 0.25 miles downstream from Colorado Hwy 16. bridge	LF	2.5	1.4
Lower Fountain MSDD	CO-0000005	Trib. of Fountain Creek; 1.8 miles from mainstem	LF	2.5	1.01

29.7. Table 8: Fountain Creek Watershed CDPS Information

		SU Las Vegas Street WRRF	Fort Carson	Fountain Sanitation District	Security Sanitation District	Lower Fountain Metropolitan Sewage Disposal District	Widefield Water and Sanitation District
NPDES Permit #		CO-0026735	CO-0021181	CO-0020532	CO-0024392	CO-0000005	CO-0021067
Permit Expiration Date		05/31/2020	9/30/2016	04/30/2020	04-30-2020	06/30/18	1/31/2008
Flow (MGD)		75	4.00	1.90	1.95	2.50	2.50
Existing Load (MGD)		41.8	1.40	0.58	1.32	1.01	1.40
Year at 80% Design		2006	2035	2030	2019	2027	2016
Year at 95% Design		2015	2045	2035	2045	2035	2018
Organic (lb/day BOD ₅)		238,000	8,500	5,808		7,610	4,170
Existing Load (lb/day BOD ₅)		88,402	2,600	3,252		0	2,993
Year at 80% Design		2006	2025	2020		2020	2016
Year at 95% Design		2015	2030	2025		2025	2018
30-day avg / 7-day avg							
BOD or CBOD		25/40	30 / 45	30/45	30 / 45	30 / 45	25 / 40
Total Suspended Solids		30 / 45	30 / 45	30 / 45	30 / 45	30 / 45	30 / 45
			N/A	NA	2,206 / 4,412	NA	6,000 / 12,000
E. coli		126 / 252	126/252	126 / 252	NA	126 / 252	NA
Total Residual Chlorine, mg/l ¹		0.012/NA	NA	0.22 / 0.31 / NA	N/A / 0.21	N/A / 0.077	N/A / 0.077
Total ammonia as N, mg/l 30-day avg / daily max							
January		5.3 / 7.3	10 / 14	Report/Report	Report/Report	17.2 / N/A / N/A	Report/Report
February		5.3 / 9	10 / 21	Report/Report	9.8 / Report	(Note minimum 30 day avg in July; all other	9.8 / Report
March		3.6 / 6	10 / 23	25 / Report	8.6 / 12	avg in July; all other	8.6 / 12
April		4.1 / 9.0	9.2 / 22	19 / Report	13.3 / Report	30 day avg. greater	13.3 / Report
May		4.5 / 10	9.4 / 20	12 / Report	12 / 20	than 25 mg/l; all daily	12 / 20
June		4.8 / 15.00	8 / 23	20 / Report	14 / Report	max (acute limit)	14 / Report
July		4.1 / 15	8 / 27	18 / Report	16 / Report	greater than 40 mg/l	16 / Report
Aug		3.9 / 15	8 / 26	21 / Report	18 / Report	as determined by	18 / Report
Sept		3.2 / 14	8 / 24	Report/ Report	22 / Report	AMTOX model prepared	22 / Report
October		4.6 / 9	8 / 19	21 / Report	15.2 / 15.2	by GMS Feb 2007]	15.2 / 15.2
November		4 / 9.0	10 / 16	19 / Report	24 / Report		24 / Report
December		5.2 / 8	10 / 15	20 / Report	Report / Report		Report / Report
Metals (Conc in ug/l) 30-day avg / daily max							
Copper, PD		Report	16 / 39	368 / 377	Temp Mod - Type III (exp 12/31/2012) of 137/117, limit as of 1/1/2013 will be 24/38	NA	24 / 38
Mercury, Total		Report	Report	0.2 / No acute std.	0.011/Report	NA	Report / Report
Selenium, PD		Report	Report	8.0 / 127	5.9/19	NA	NA
Iron, TR		Report	N/A	2,690 / No acute std.	NA	NA	NA

Footnotes

¹ Reported as 30-day avg / daily max

² Minor Wastewater Plant Provider

	Fountain Creek Segment COARF004		Fountain Creek Segment COARF006			
	Academy Water and Sanitation District	Cheyenne Mountain Estates/Broadmoor Park	SU JD Phillips WRRF	Upper Monument Creek Regional WWTF	Tri Lakes WWTF	U.S. Air Force Academy
NPDES Permit #	COG-589020	COG 582000	CO-0026735	CO-0042030	CO-0020435	CO-0020974
Permit Expiration Date	10/31/2010	7/31/2004	5/31/2020	8/31/2006	12/31/2009	12/31/2005
Flow (MGD)	0.116	0.06	20	1.75	4.2	1.4
Existing Load (MGD)	0.05	0.03	4.81	0.8	1.38	0.9
Year at 80% Design	2025	2020	2025	2018	2020	2020
Year at 95% Design	2030	2025	2030	2022	2025	2025
Organic (lbs/day BOD ₅)	375	100	51,374	3,553	5,600	4,386
Existing Load (lbs/day BOD ₅)	220	70	0	1,167	2,317	1,900
Year at 80% Design	2010	2020	2025	2018	2020	2020
Year at 95% Design	2015	2025	2030	2022	2025	2025
30-day avg / 7-day avg						
BOD	30 / 45	30	20 / 40	25 / 40	30 / 45 / N/A	25
Total Suspended Solids	75 / 110	30	30 / 45	30 / 45	30 / 45 / N/A	10
Fecal Coliforms, #/100 ml	200 / 400	2000		N/A	200 / 400 / N/A	N/A
E. coli	NA		126 / 252	163 / 326	NA	
Total Residual Chlorine, mg/l ¹	Report / 0.5	N/A	0.012	N/A	0.011 / NA / 0.019	N/A
Total ammonia as N, mg/l, 30-day avg / daily max			Report till 12/1/14			
January	NA	NA	5.0 / 12	5.4 / 22.0	Report / Report	NA
February	NA	NA	5.0 / 11	5.4 / 22.0	Report / Report	NA
March	NA	NA	4.7 / 12	5.4 / 26.0	Report / Report	NA
April	NA	NA	3.3 / 11	6.9 / 35.0	Report / Report	NA
May	NA	NA	3.4 / 12	3.0 / 32.5	Report / Report	NA
June	NA	NA	3.5 / 15	3.8 / 32.5	Report / Report	NA
July	NA	NA	3.4 / 18	3.3 / 34.5	18 / NA	NA
Aug	NA	NA	2.6 / 12	2.9 / 35.5	17 / NA	NA
Sept	NA	NA	4.0 / 16	3.3 / 32.5	22 / NA	NA
October	NA	NA	4.3 / 14	3.3 / 32.5	Report / NA	NA
November	NA	NA	5.0 / 14	4.1 / 20.0	Report / NA	NA
December	NA	NA	4.5/12	5.1 / 21.0	Report / NA	NA
Metals (Conc in ug/l) 30-day avg / daily max						
			16 ug/L (May 1, 2020)			
Copper, PD			Report	Report / Report	24.8 / 36.4	
Mercury, Total				Report / NA	Report / Report	
Selenium			N/A	Report / Report	Report / Report	
Iron, TR			N/A	Report / NA	Report / NA	
Footnotes						
¹ Reported as 30-day avg / daily max						
² Minor Wastewater Plant Provider						

29.8. Table 9: Chico Creek Watershed CDPS Information

Discharge Segment	Middle Arkansas Segment COARMA04c		Discharge to Groundwater	Cherry Creek Watershed	Big Sandy Creek Watershed
	Woodmen Hills Metropolitan District Regional Water Resource Facility	Sunset's Ellicott Springs	Cherokee Metropolitan District ¹	Walden Corporation	Town of Calhan
NPDES Permit #	CO-0047091	CO-0047252	COX048348	CO-0041921	COG--0582015
Permit Expiration Date	01/31/2020	12/31/2010	July 31, 2023	11/30/2003	10/31/2010
Flow (MGD)	1.30	0.25	4.8	0.11	0.80
Existing Load (MGD)	0.775	0.01	1.8	0.03	0.05
Year at 80% Design	2015	2015	2045	2020	2020
Year at 95% Design	2020	2020	2050	2025	2025
Organic (Lbs/day BOD ₅)	3,470	2,168	8,835	230	170
Existing Load (Lbs/day BOD ₅)	2,784		3700	41	85
Year at 80% Design	2015	2012	2045	2020	2020
Year at 95% Design	2020	2015	2050	2025	2025
30-day avq / 7-day avq					
BOD	30 / 45	30 / 45 /	30 / 45		
Total Suspended Solids	75 / 110	75 / 110	30 / 45		
Fecal Coliforms, #/100 ml	6000 / 12000 (until 12 / 31 / 2010)		23 (total coliforms)		
E. coli	126 / 252 (beg 01/01/2011)	640 / 1280 (beg 12/01/2010 will be 126 / 252)			
Total Residual Chlorine, mg/l	N/A / 0.5 (beg 01/01/2011 will be 0.01 / 0.019)	N/A / 0.5 (beg 12/01/2010 will be 0.01 / 0.019)			
Total 30000.00 as N, mg/l, 30-day avq / daily max					
January	Report / Report	6.3 / 12.0			
February	Report / Report	5.1 / 11.0			
March	Report / Report	2.9 / 5.8			
April	Report / Report	1.8 / 5.4			
May	Report / Report	1.7 / 6.8			
June	Report / Report	1.9 / 9.2			
July	Report / Report	1.3 / 7.9			
Aug	Report / Report	1.1 / 6.3			
Sept	Report / Report	1.4 / 7.1			
October	Report / Report	2.5 / 9.7			
November	Report / Report	3.6 / 10.0			
December	Report / Report	3.8 / 8.6			
Metals (conc in ug/l), 30-day avq / daily max					
Chromium Hex Dissolved	Report / Report				
Copper, PD	Report / Report				
Lead, PD	Report / Report				
Cyanide	NA / Report				
Iron, TR	Report / NA				
Note:					
¹ Limits also exist for nitrate (10, daily max); sulfate (250, 30-day avq); and chloride (250, 30-day avq). Based on PFI's developed for groundwater.					