Chatfield
Watershed Authority
2014 Annual Report

We Protect The Water You Enjoy

The Chatfield Watershed Authority promotes protection of water quality in the Chatfield Watershed for drinking water supplies, recreation, fisheries, and other beneficial uses.

May 2015

www.chatfieldwatershedauthority.org

The *2014 Chatfield Report* is the annual water quality summary and status report presented by the Chatfield Watershed Authority to communicate the water quality of Chatfield Reservoir and its watershed, highlighting information required by the Colorado Water Quality Control Commission in Control Regulation #73.

Chatfield Watershed Authority

www.chatfieldwatershedauthority.org

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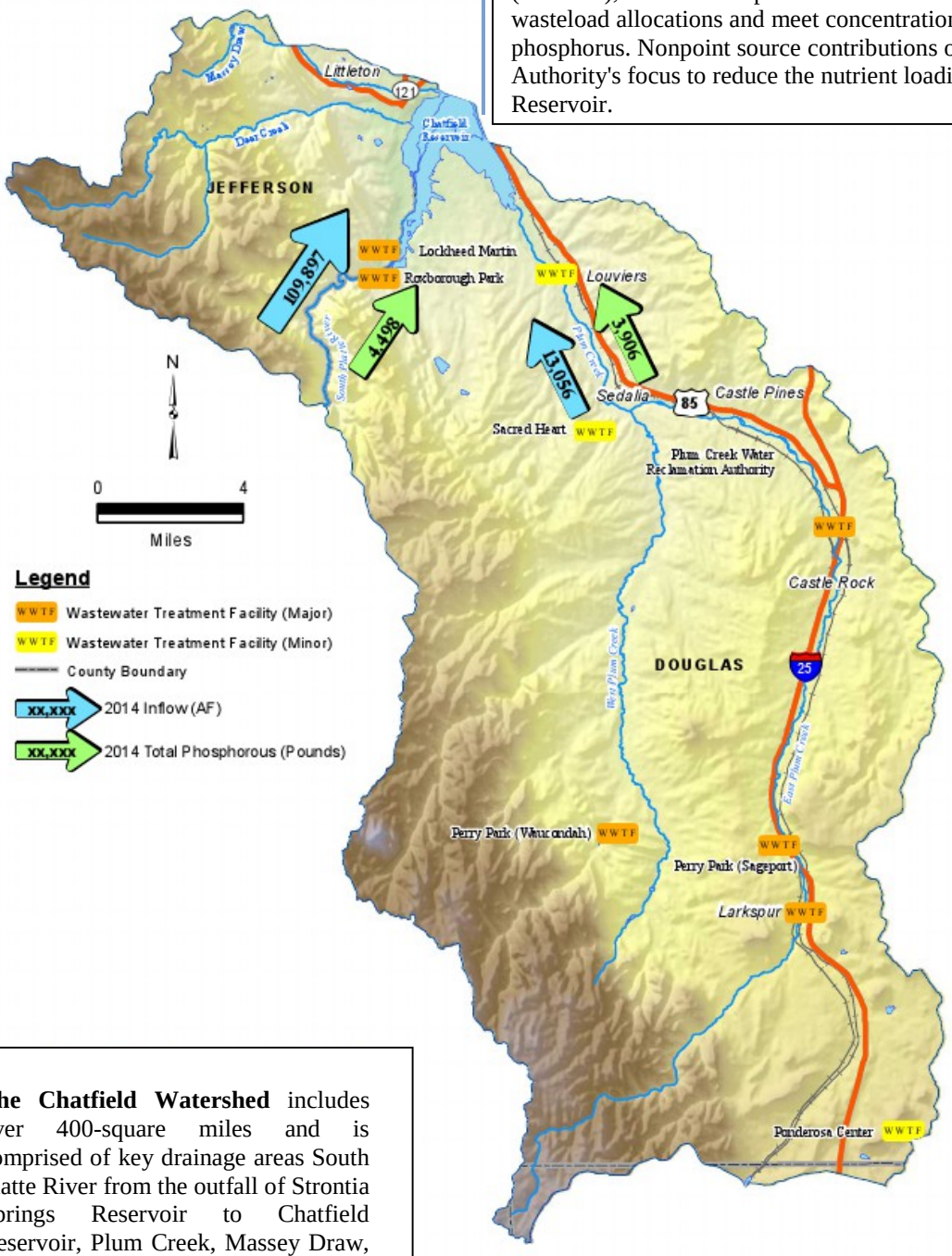
Where Should Limited Resources be Focused to Reduce Phosphorus Loading to Chatfield Reservoir?

We need to focus on nonpoint source total phosphorus (TP) reductions to maintain the water quality of the watershed and the Reservoir.

In 2014, the South Platte River contributed 86% of the inflow and 48% of the TP loading to the Chatfield Reservoir. Comparatively, Plum Creek, which drains the majority of land within the watershed, contributed 10% of the inflow and 42% TP contribution. Point sources, such as wastewater treatment plants (WWTPs), continue to operate well below their phosphorus wasteload allocations and meet concentration limits for phosphorus. Nonpoint source contributions of TP are the Authority's focus to reduce the nutrient loading to Chatfield Reservoir.



The Chatfield Watershed includes over 400-square miles and is comprised of key drainage areas South Platte River from the outfall of Strontia Springs Reservoir to Chatfield Reservoir, Plum Creek, Massey Draw, and Deer Creek.

Reservoir Regulatory Compliance

In 2014, Chatfield Reservoir was in compliance with the growing season averages regulated for chl-*a* and TP. The Colorado Water Quality Control Commission (WQCC) promulgated the water quality standards in Chatfield Reservoir Control Regulation #73 as follows:

- Chlorophyll-*a* (chl-*a*) standard of 10 µg/L, with an assessment threshold of 11.2 µg/L, 1 in 5 year allowable exceedance frequency.

- Total phosphorus (TP) standard of 30 µg/L, with an assessment threshold of 35 µg/L, 1 in 5 year allowable exceedance frequency.

These water quality standards are applicable to the growing season (July through September) concentration averages, measured in the top 1 meter at the centroid location in Chatfield Reservoir. In 2009, the WQCC recognized the variability in TP and chl-*a* water quality, setting assessment thresholds as the marker for determining long-term compliance.

Observed 2014 chl-*a* concentrations in Chatfield Reservoir are depicted in Figure 1. The growing season average concentration for chl-*a* was 4.06 µg/L, below the 10 µg/L water quality standard. Chl-*a* concentrations steadily increased from July (2.2 µg/L) through September (6.1 µg/L). The chl-*a* concentrations observed in September were likely in response to the higher TP observed in the earlier summer months (i.e. July), internal loading, and other factors. Blue-green algae (cyanobacteria species, Anabaena, Ankistrodesmus, and Aphanocapsa) concentrations also grew between June and August reaching counts between 200 and 2,400 as observed in August. These algal species typically indicate elevated chl-*a* measurements and phosphorus as a limiting nutrient, providing an additional source of biologically available nitrogen, in addition to other reservoir sources.

The TP concentrations observed in 2014 in Chatfield Reservoir are shown in Figure 2. The growing season average concentration for TP was 11.0 µg/L, below the TP water quality standard of 30 µg/L.

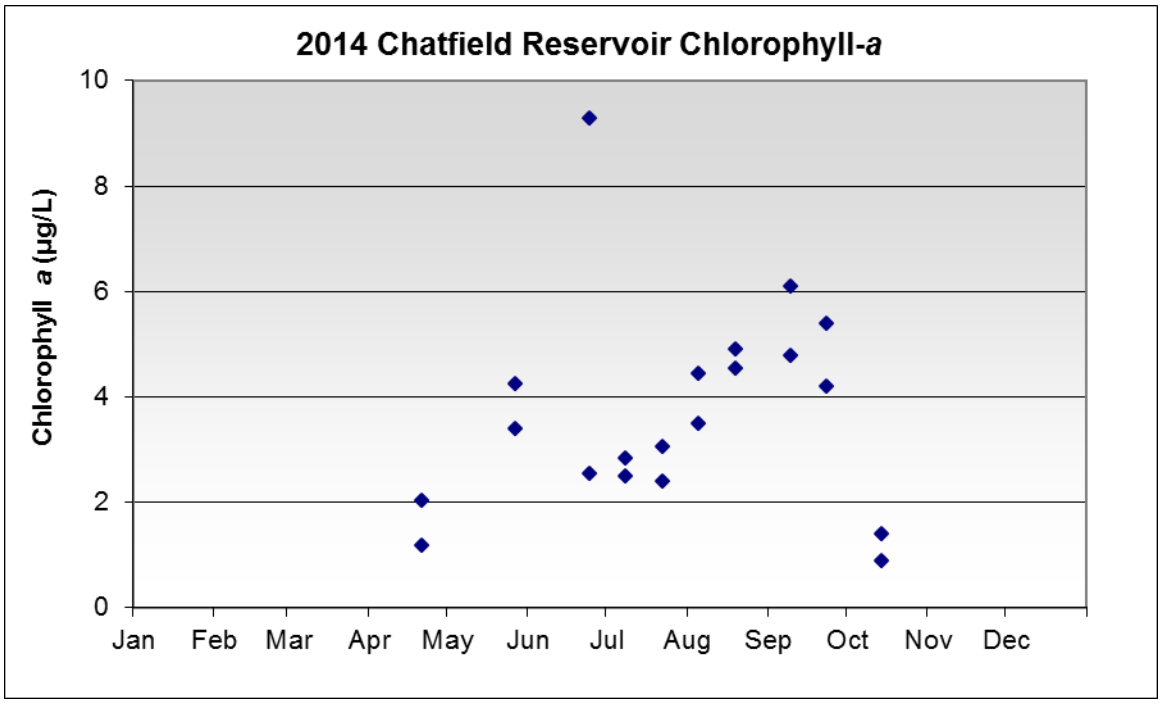


Figure 1 Observed 2014 Chlorophyll-*a* Concentrations in Chatfield Reservoir – The growing season average (July – September) was 4.06 µg/L.

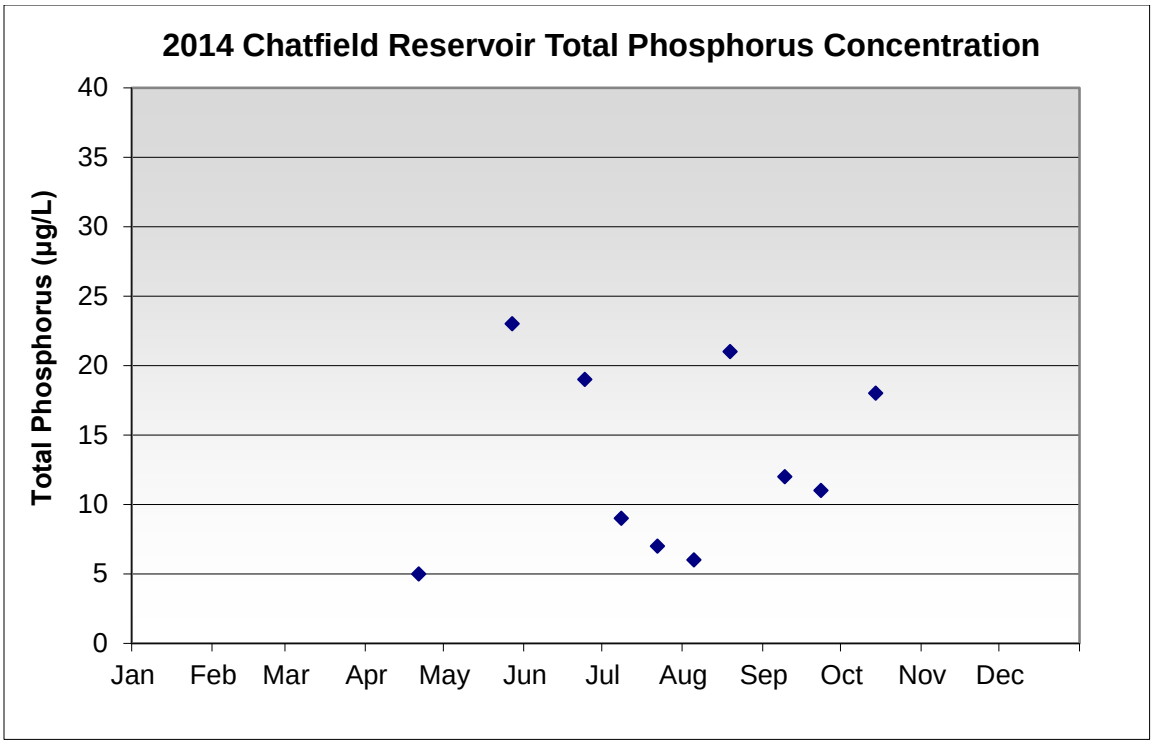


Figure 2 Observed 2014 TP Concentrations in Chatfield Reservoir – The growing season average (July – September) was 11.0 µg/L.

Figure 3 depicts the variability of TP concentrations at 3 meter depth intervals in the Reservoir during the period April 21, 2014 through October 14, 2014.TP concentrations in the top 1 meter ranged between 5-23 µg/L. Increased TP concentrations observed at depths beyond 10 meters in July and September (ranging between 32-42 µg/L) are a result of internal loading.

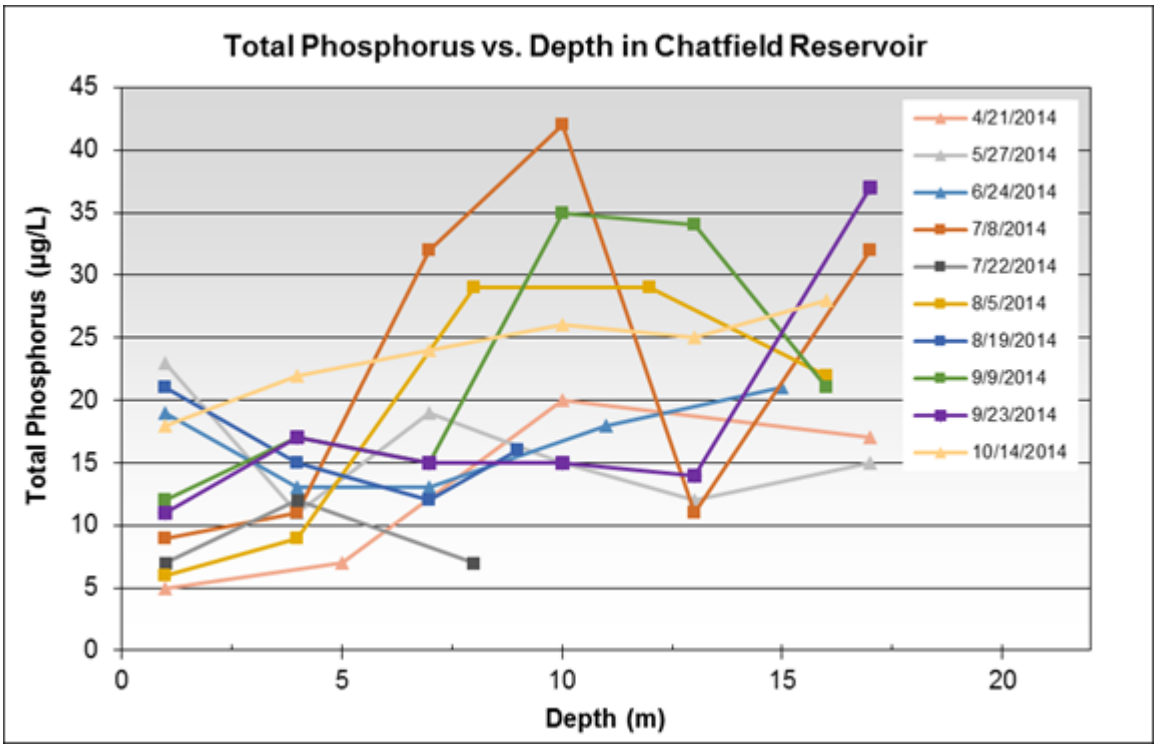


Figure 3 **Total Phosphorus Water Column Depth Profile –** Higher TP concentrations observed at depths of 10-17 meters indicate presence of internal phosphorus loading.

A historic review of compliance from 1983 to 2014 is illustrated in Figures 4 and 5 for growing season average chl-*a* and TP concentrations, respectively. During the past five years, the chl-*a* growing season average concentration has exceeded the 11.2 µg/L water quality assessment threshold once, in 2010 (Figure 4), and the TP growing season average has remained below the water quality assessment threshold since the standard changed in 2009.

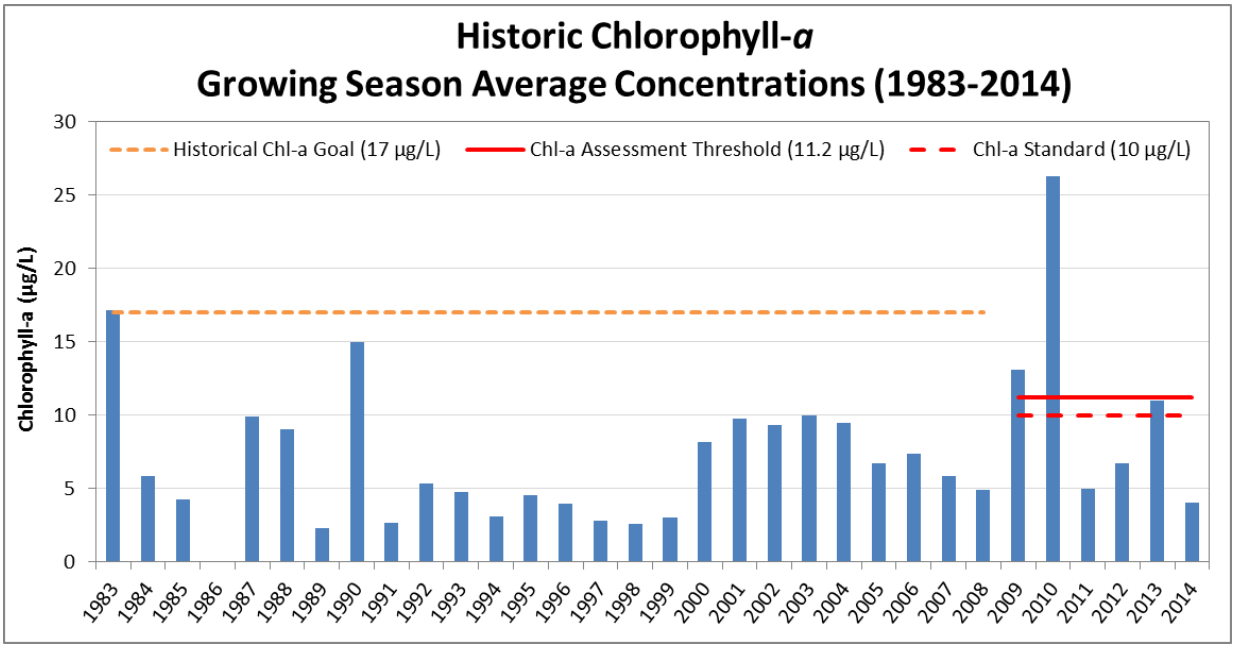


Figure 4 **Historical Perspective of Chl-*a* Growing Season Compliance 1983 to 2014**

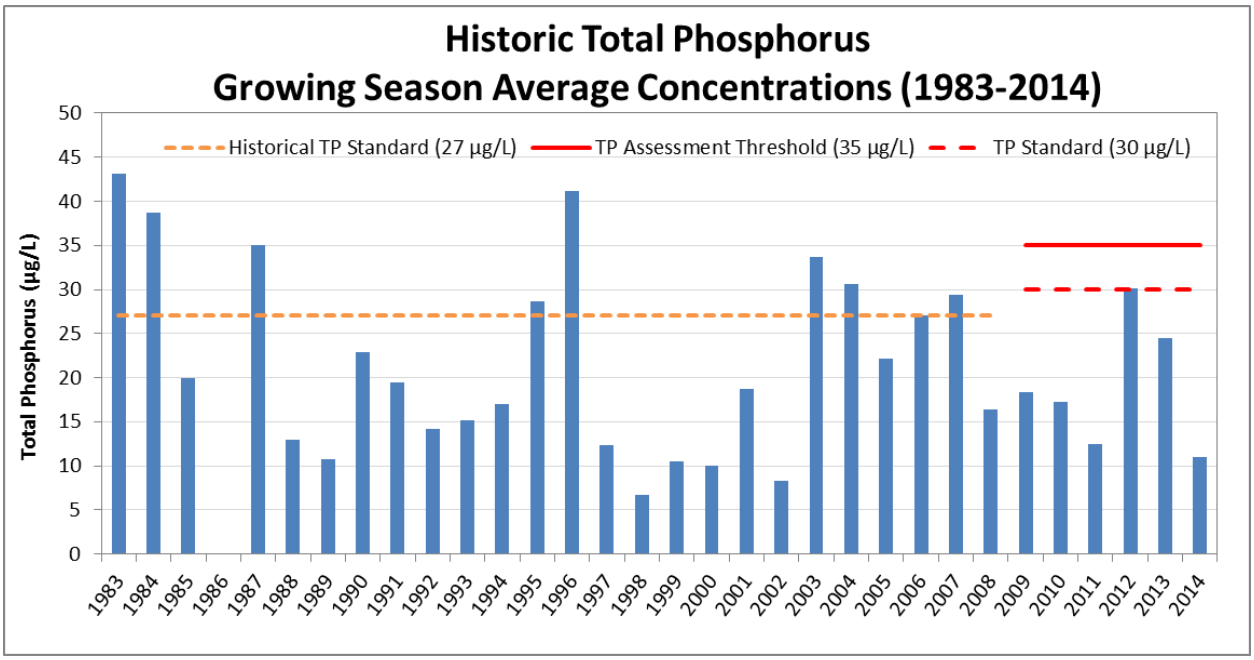


Figure 5 Historical Perspective of TP Growing Season Compliance 1983 to 2014

Compliance with the TMAL

The annual TP load is calculated from inflows, outflows and TP inputs and outputs to the Reservoir. The phosphorus Total Maximum Annual Load (TMAL) of 19,600 pounds/year at a median flow of 100,860 acre-feet/year was revised by the WQCC in 2009 to reflect a statewide probabilistic model describing the linkage between watershed TP loads and in-lake TP concentrations. The WQCC acknowledged that progress towards development of revised phosphorus allocations to meet the TMAL of 19,600 pounds was contingent on suitable funding to support data and modeling needed to re-partition loads between the South Platte River and Plum Creek, reallocating loads within each basin, and revising wasteload allocations, as appropriate. Therefore, until these tasks are completed to provide scientific basis for development of revised allocations, the original point and nonpoint source allocations totaling 59,000 pounds/year remain applicable (WQCC, 2009).

In 2014, donations and in-kind services from Authority members have supported progress towards development of the revised TMAL. While funding sources are very limited, the Authority is commencing additional data collection efforts in the watershed, coupled with watershed modeling (slated to commence in 2015) to strengthen our understanding of TP fate and transport mechanisms, potential phosphorus sources, and phosphorus inputs to the Reservoir. Collaborative discussions on reservoir modeling and additional data collection efforts with Chatfield Reallocation Water Providers will also support the revised TMAL in the coming years.

2014 Flows

In 2014, the estimated inflow to Chatfield Reservoir totaled 128,263 AF (Figure 6), representing above average hydrologic conditions, with about 30,000 AF more than the median inflow into the Chatfield Reservoir (100,860 AF). The South Platte River contributed the majority of the inflow, 109,897 AF (86%). Plum Creek contributed 10% of the inflow, or 13,056 AF, to the Reservoir. Inflows are based on USGS monitored flow measurements from Plum Creek at Titan Road and South Platte River at Waterton Road (Colorado Division of Water Resources Gage). Other inflows include direct precipitation on the Reservoir (21.31 inches) and alluvial flows (2,684 AF). Flows from Deer Creek and Massey Draw have limited flow related to Plum Creek and the South Platte River. Because of the limited flow conditions, combined with the Authority's limited financial resources, these drainages are not measured.

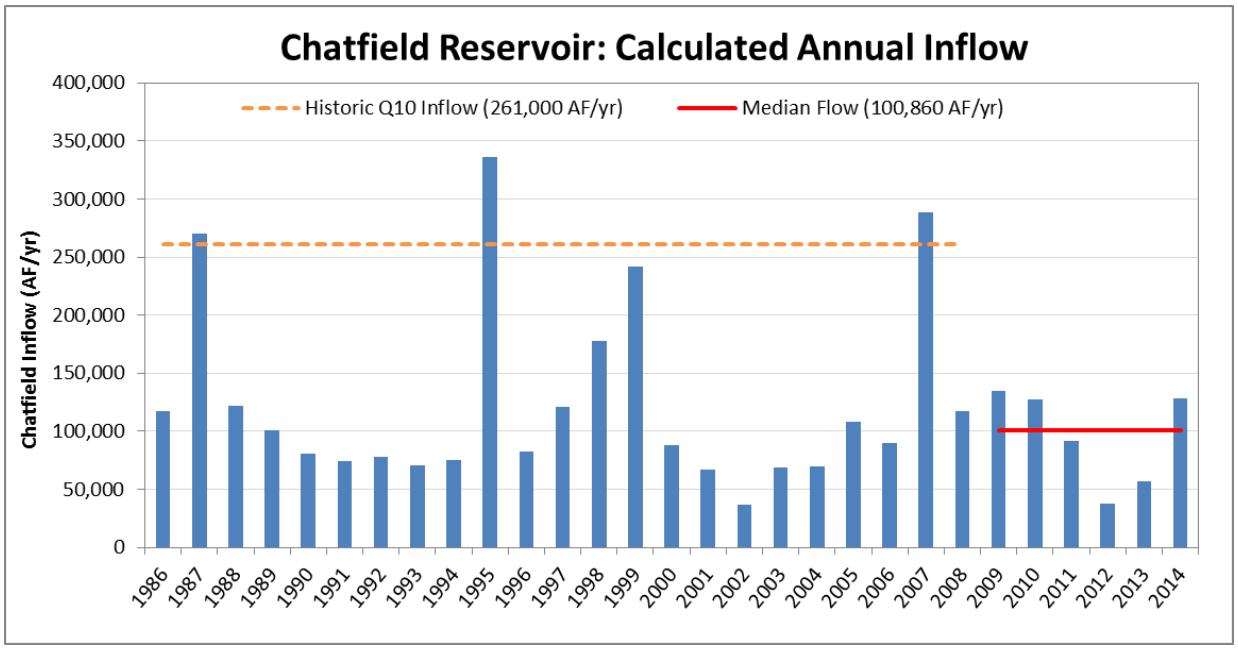


Figure 6 – Chatfield Reservoir Calculated Annual Inflow (1986 – 2014)

2014 TP Concentrations

Observed monthly TP concentrations of South Platte and Plum Creek inflows, Chatfield Reservoir outflow and Chatfield Reservoir (centroid, South Platte arm and Plum Creek arm) are depicted in Figure 7. Plum Creek TP concentrations were highest for all months of the year in comparison to measurements observed elsewhere in the watershed.

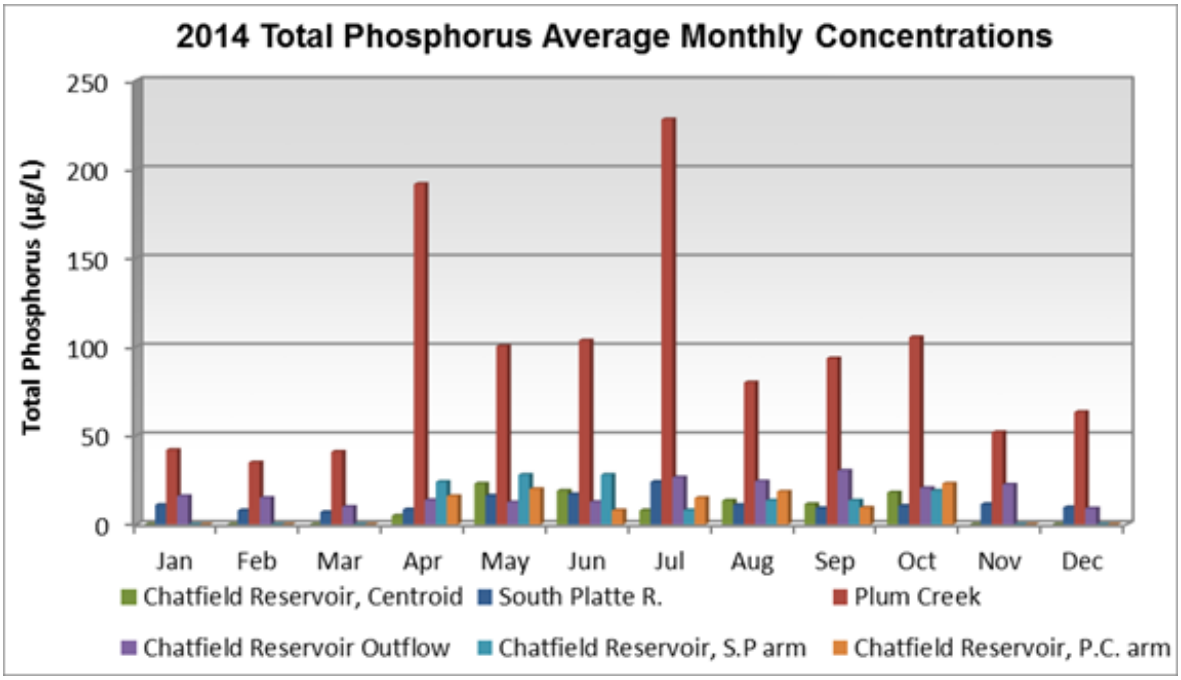


Figure 7 – Average Monthly TP Concentrations in the Chatfield Watershed and Chatfield Reservoir

Calculated TP Load

Even though the monthly Plum Creek TP concentrations were elevated in comparison to other sources, the 2014 calculated annual TP load to the Reservoir remained well below the TMAL of 19,600 pounds, totaling 9,306 pounds (Figure 8) and TP loading from Plum Creek (3,906 pounds (42%) was slightly less than the South Platte River (4,498 pounds (48%). Direct precipitation on Chatfield Reservoir and alluvial inflows and other direct flow sources contributed approximately 900 pounds (10%). A comparison of the inflow and TP load contributions from sources are presented in Figure 9.

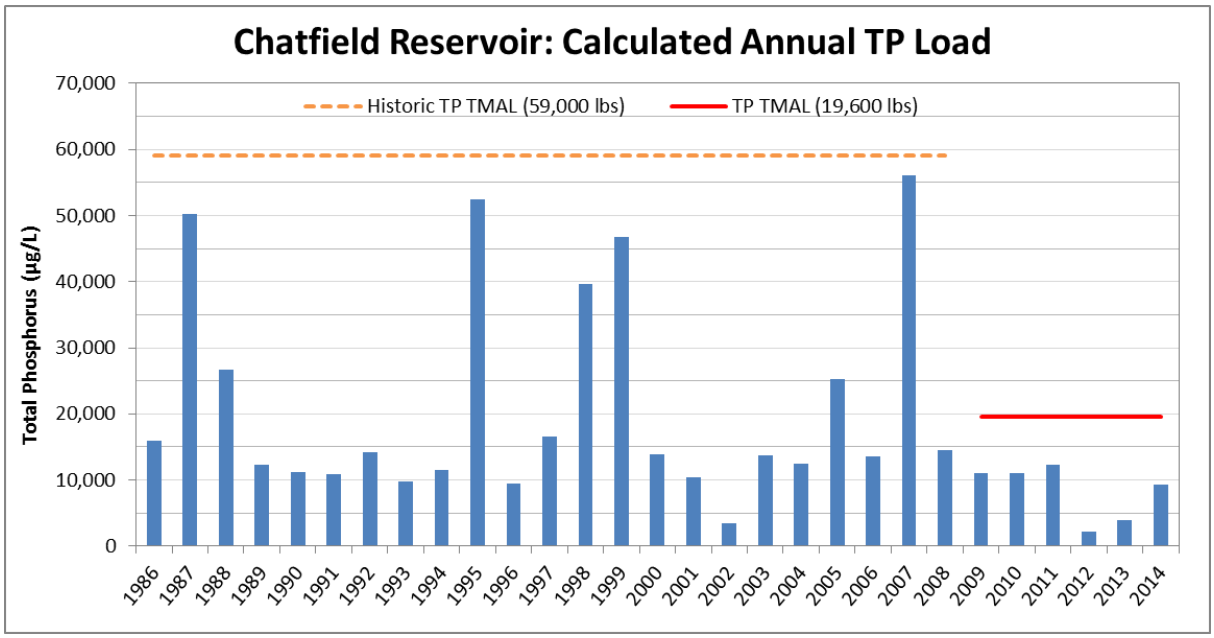


Figure 8 **Calculated TP Load to Chatfield Reservoir**

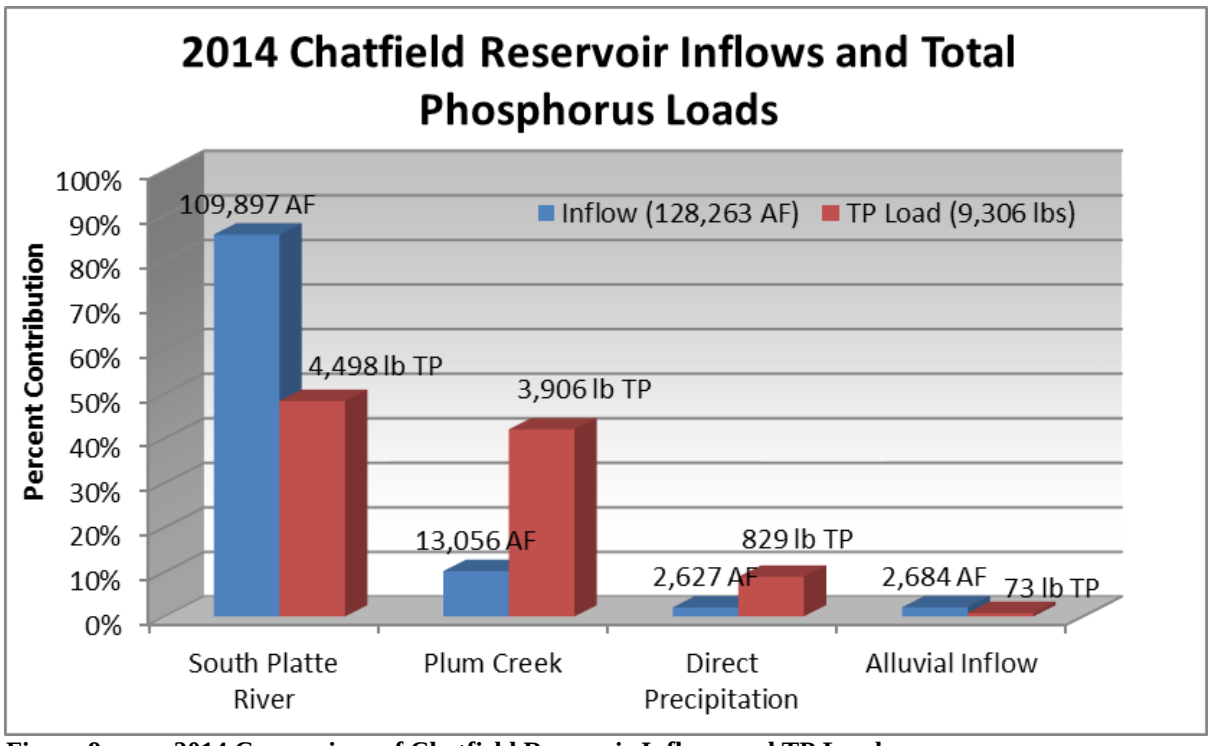


Figure 9 **2014 Comparison of Chatfield Reservoir Inflows and TP Loads**

Reservoir Monitoring Program

The Authority maintains a monitoring program to characterize Reservoir water quality and determine regulatory compliance. Surface water samples are collected by Denver Water and GEI Consultants, Inc. at four locations as shown in Figure 10. These locations include:

- South Platte River at Waterton Road,
- Plum Creek at Titan Road,
- South Platte River below Chatfield, and
- Chatfield Reservoir (centroid, South Platte arm and Plum Creek arm).

The constituents (Table 1) are monitored monthly when ice has melted off the Reservoir. During the growing season (July through September), Reservoir sampling is conducted twice monthly. To better understand reservoir dynamics, the Authority collects water column measurements, including the epiliminion and hypoliminion layers, at various depth intervals. All water quality data are available on the Authority's website, located at www.chatfieldwatershedauthority.org.

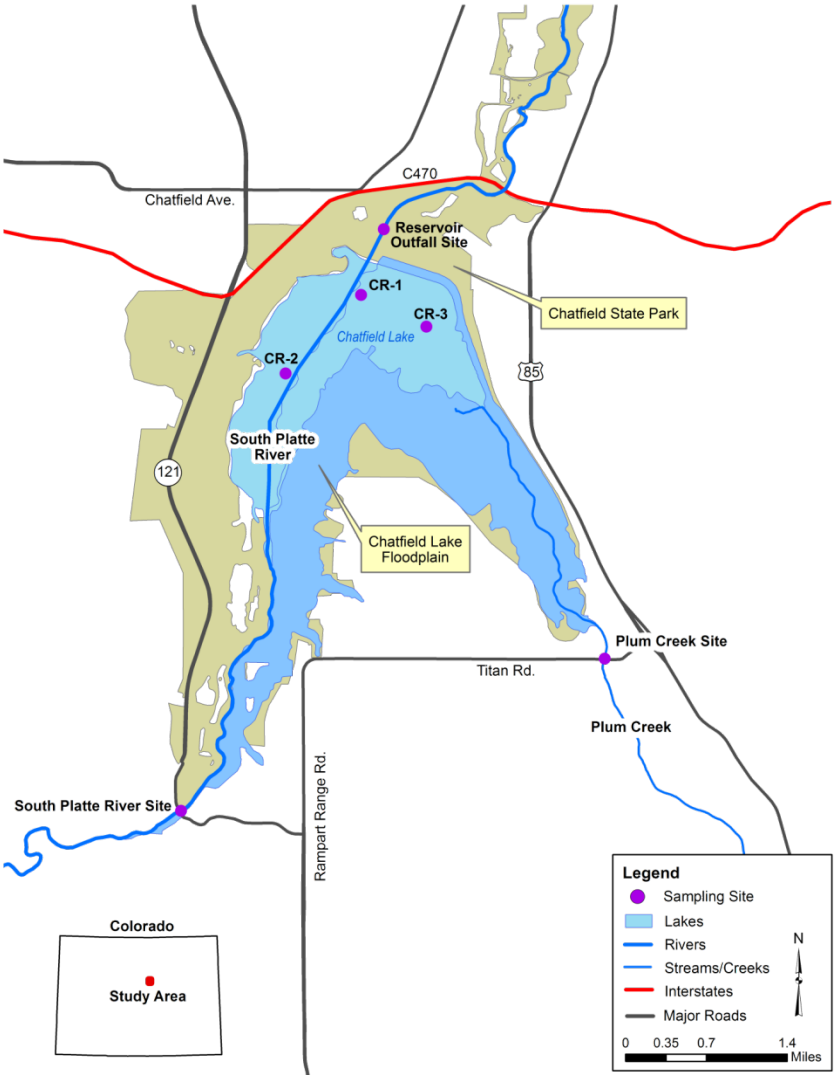


Figure 10 – Chatfield Reservoir Monitoring Locations

Table 1 Chatfield Reservoir Water Quality Monitoring Parameters

Field Parameters	Nutrients	Biological	Wet Chemistry
Temperature, degrees C	Chl-*a*, µg/L	*E. coli* (number/mL)	Alkalinity, mg/L
pH (s.u.)	TP, µg/L	Phytoplankton (# of organisms/ml)	Total Suspended Solids (TSS), mg/L
Specific Conductance, µS/cm	Ortho Phosphorus (Ortho-P), µg/L		Dissolved metals
Dissolved Oxygen (DO), mg/L	Nitrite + Nitrate-nitrogen, mg/L		
Secchi Depth, meters	Ammonia Nitrogen, mg/L		
Instantaneous Flow (Rivers and Creeks), cubic feet per second (cfs)	Total Nitrogen, mg/L		

Plum Creek Watershed Monitoring Program

In 2014, the Authority continued the watershed monitoring efforts at locations illustrated in Figure 11. In the Plum Creek basin, watershed monitoring continues through voluntary sampling efforts by the Plum Creek Water Reclamation Authority (PCWRA). The Plum Creek monthly analyte list is provided in Table 2.

The objective of Plum Creek monitoring program is to better characterize water quality in Plum Creek and identify potential nonpoint source pollutant sources. A variety of potential nonpoint sources have been identified in the Chatfield Watershed, including stormwater runoff from historic urbanized and rural areas, leachate from unmaintained septic systems, agricultural activities, including runoff from overgrazed agricultural lands, runoff from wildfire burn areas, runoff from impervious areas, and erosion from degraded streambanks. Further data collection is needed, contingent on available resources, to identify and quantify phosphorus sources in the Plum Creek watershed.

The 2014 Plum Creek water quality observations included the following:

- *E. coli* measurements are higher and have less variability at EPC-15.1 (E. Plum Creek downstream of PCWRA) and EPC-11.1 (E. Plum Creek above confluence with Plum Creek) compared to other sites in Plum Creek watershed. E. coli concentrations tend to increase from the confluence to the Reservoir. Although variability is evident at all sites, central tendency of observed E. *coli* remains below the water quality standard of 126 organisms/100 mL (Figure 12).
- TP concentration generally increased from upstream to downstream along E. Plum Creek (Figure 13). Comparatively, no significant spatial trends were found in W. Plum Creek or Plum Creek. Average TP concentrations in 2014 were observed at E. Plum Creek above confluence with Plum Creek (214.2 µg/L TP average) and Plum Creek at Sedalia (204.9 µg/L TP average). TP concentrations have historically been observed to be relatively high at Plum Creek at Sedalia site, compared to other sites in Plum Creek watershed.
- Average TSS concentrations (an indicator of sediment) were highest at Plum Creek at Sedalia (330 mg/L), downstream of where the East and West fork of Plum Creek enter the mainstem Plum Creek (Figure 14).
- The relationship between TP and TSS is complex. Some of the highest TSS and TP data collected in the watershed are coincidental with some of the

largest annual precipitation and runoff events in the basin (i.e., on September 10, 2014, 0.26 inches of rainfall and on September 11, 2013, 1.15 inches). Based on review of the hydrologic data, these extreme events result in data that are not considered outliers. The TP vs TSS relationship, along with identification of potential nonpoint sources of TP, will be further evaluated as monitoring in Plum Creek basin continues.

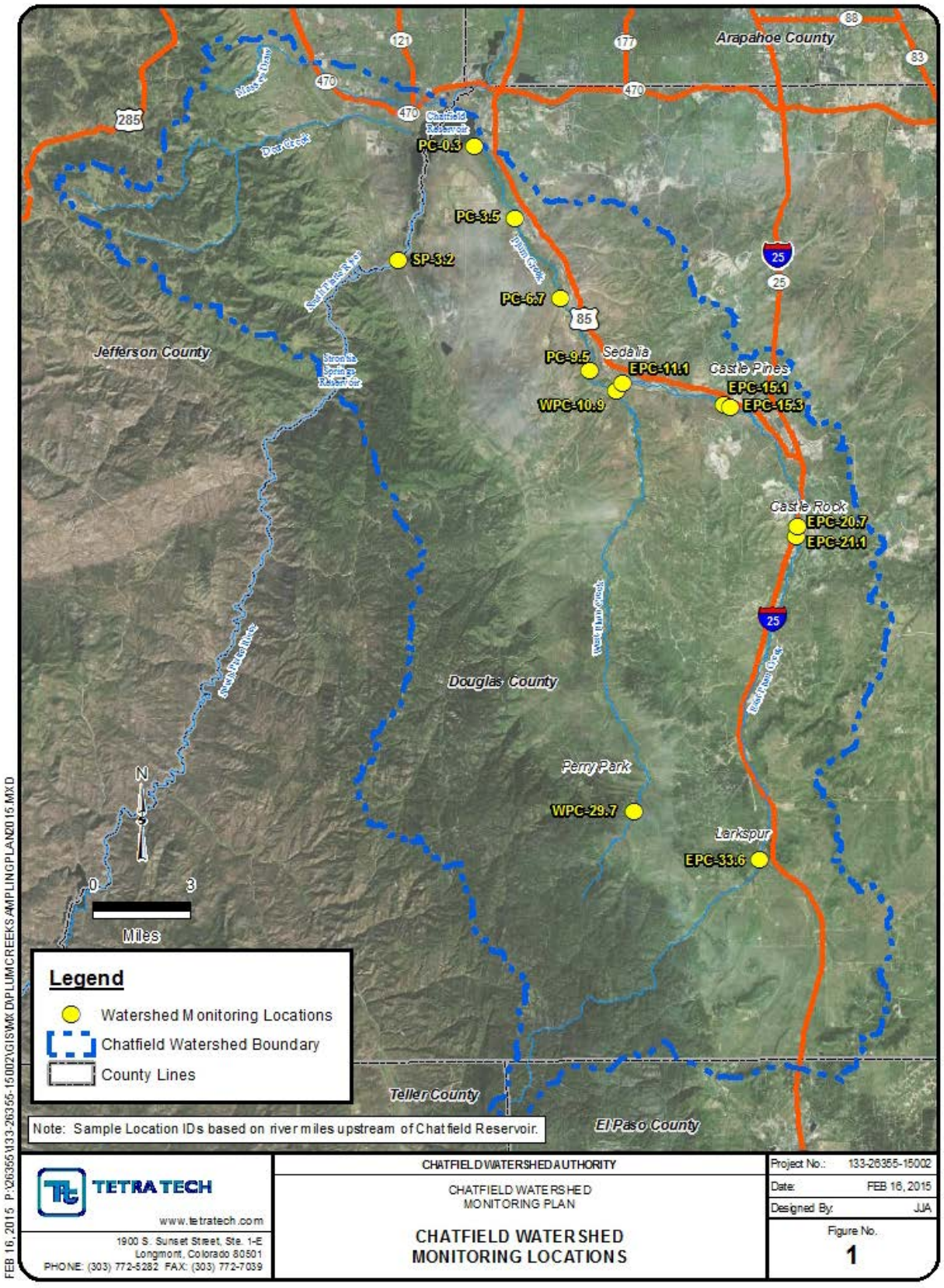


Figure 11 2014 Chatfield Watershed Monitoring Locations – Watershed sampling sites are located along Plum Creek (PC), East Plum Creek (EPC), West Plum Creek (WPC), and the South Platte River (SP).

Table 2 Plum Creek Basin Analyte List

Field Parameters	Nutrients	Biological	Wet Chemistry
Temperature, degrees C	Total Phosphorus, µg/L	*E. coli* (number/mL)	Alkalinity, mg/L
pH (s.u.)	Ortho Phosphorus, µg/L		Total Suspended Solids, mg/L
Specific Conductance, µS/cm	Nitrite + Nitrate-nitrogen, mg/L		
Dissolved Oxygen, mg/L	Ammonia Nitrogen, mg/L		
Instantaneous Flow, cfs	Total Nitrogen, mg/L		

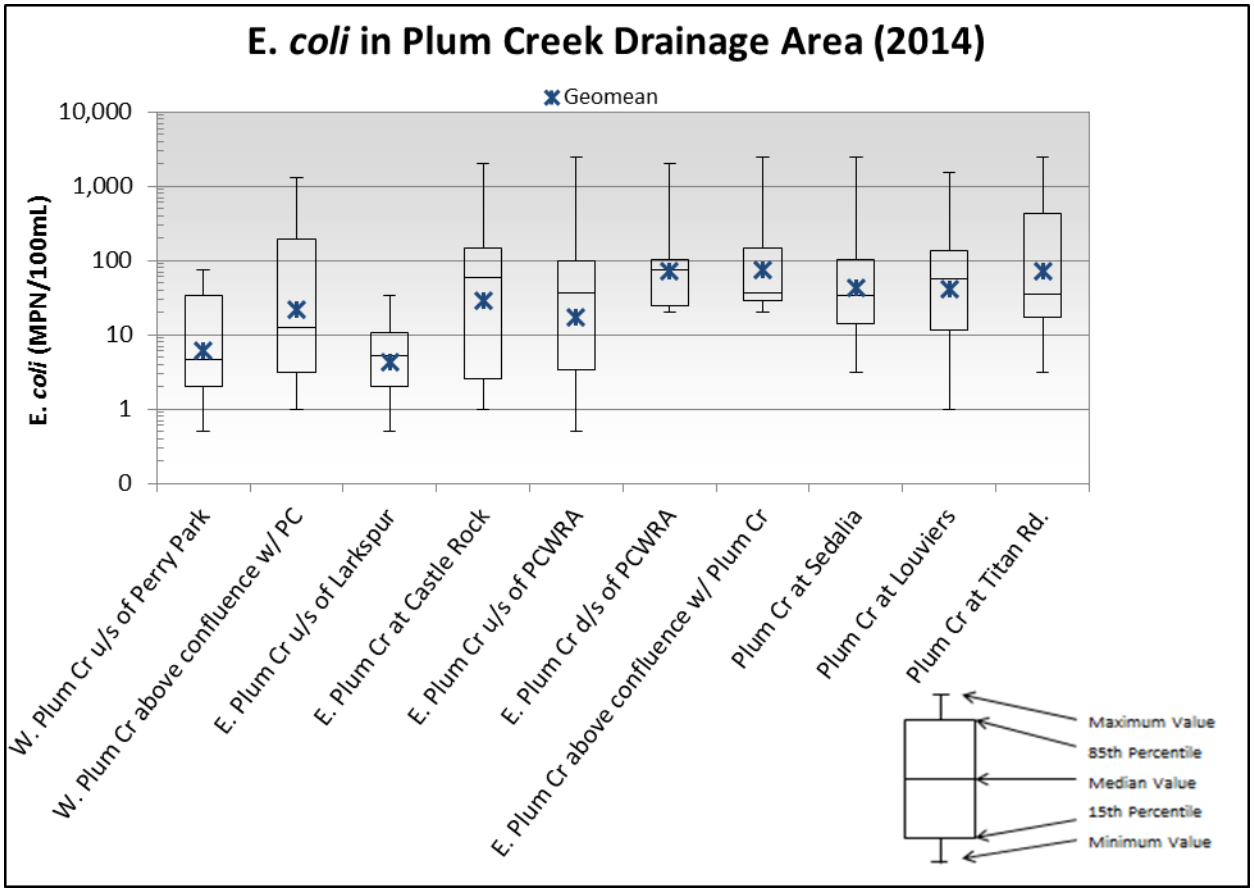


Figure 12 2014 *E. coli* in the Plum Creek Basin

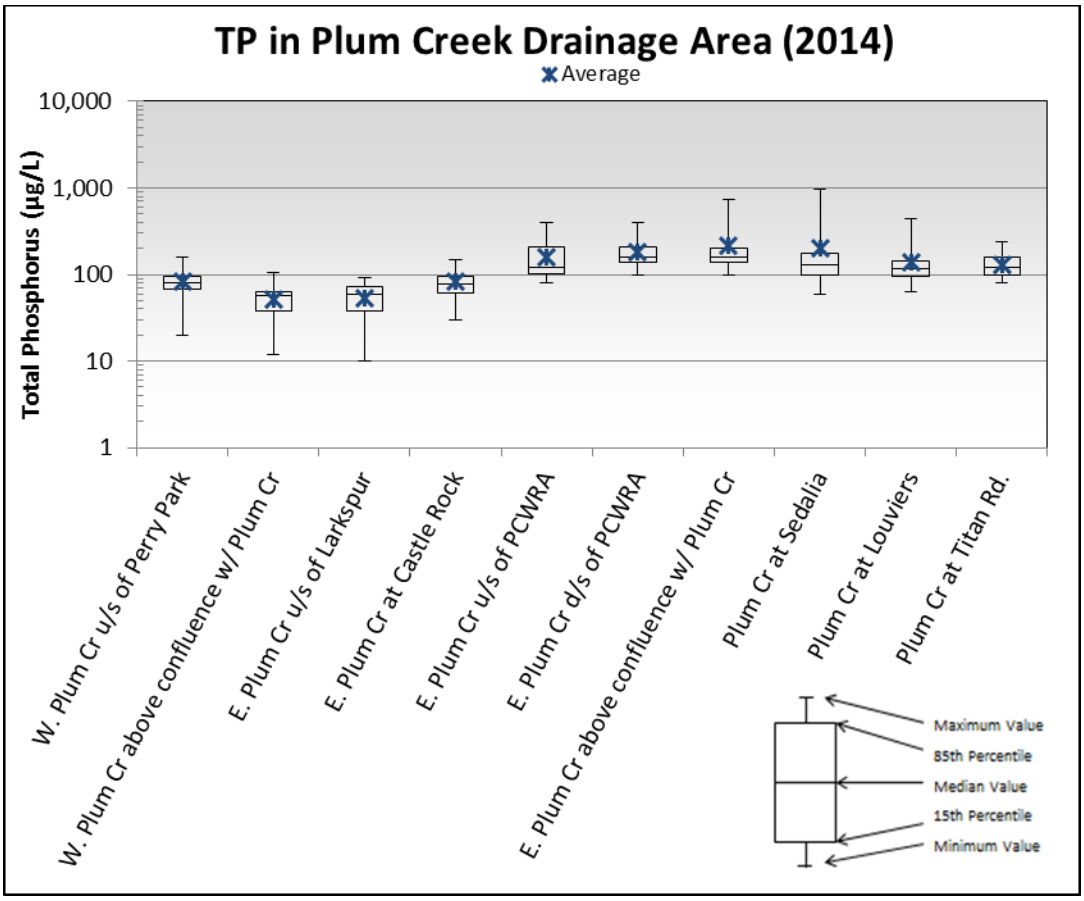


Figure 13 2014 TP Variability in the Plum Creek Basin

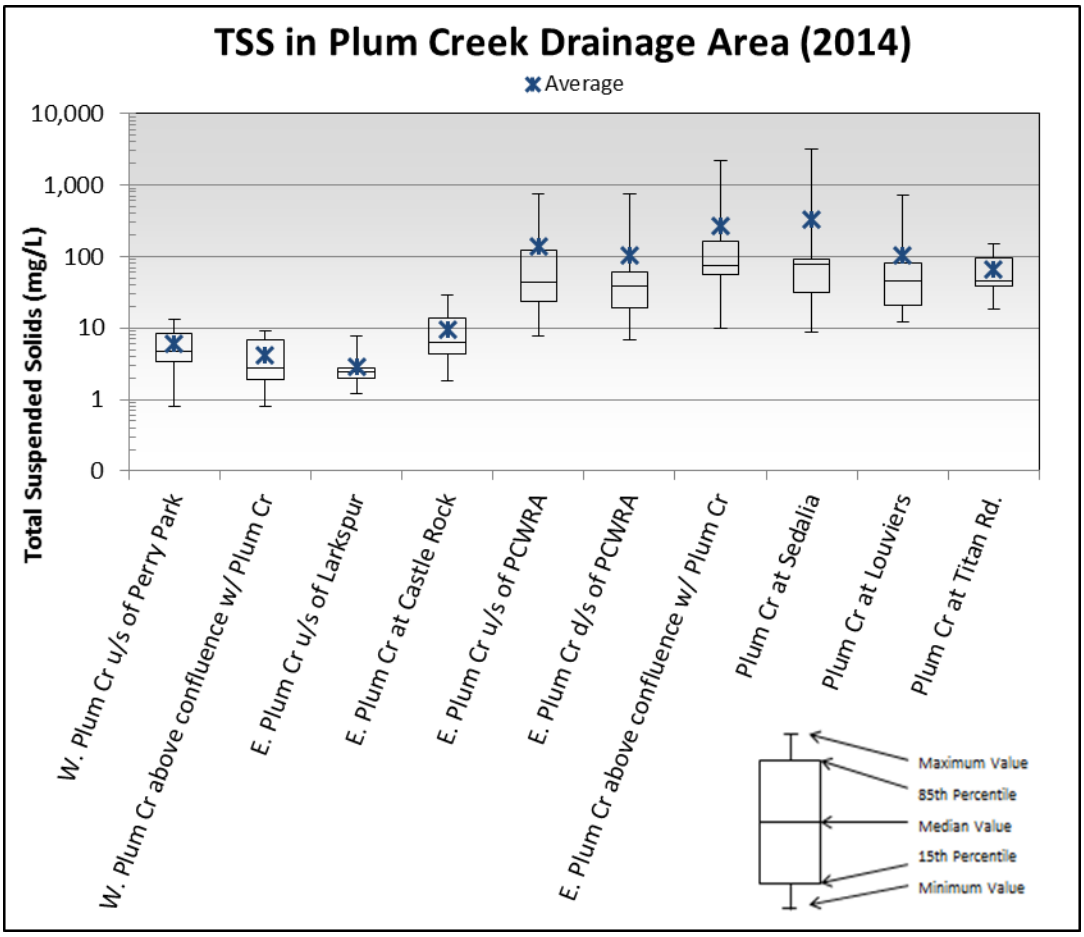


Figure 14 2014 TSS Concentrations in the Plum Creek Basin

Wastewater Treatment Plants

Table 4 summarizes the thirteen wastewater treatment plants (WWTPs) in the Chatfield watershed and their respective TP wasteload allocations. In 2014, reported TP discharges from WWTPs were approximately 2,210 pounds or 27% of the allowable wasteload allocation of 7,533 pounds.

WWTPs monitor their effluent discharges for compliance with their individual permits which include effluent limits established for the Chatfield Watershed in Regulation #73. During 2014, the discharges maintained their record of compliance, with every discharger in the Chatfield Watershed complying with their TP concentration limits and TP wasteload allocation.

Table 3 2014 Phosphorus Wasteloads from WWTPs in the Chatfield Watershed

Allocation Sources	TP Wasteload Allocation (pounds)	2014 TP Loading from WWTPs* (pounds)
Plum Creek Water Reclamation Authority	4,256	1,877.8
Perry Park Water and Sanitation District: Waucondah	365	92.0
Perry Park Water and Sanitation District: Sageport	73	24.6
Lockheed Martin Space Systems Company	1,005	23.7
Town of Larkspur	231	5.1
Centennial Law Enforcement Foundation	30[5]	6.1[7]
Centennial Water and Sanitation District	20	0.0
Ponderosa Center	75[3]	0.1[7]
Louviers Water and Sanitation District	122	0.0
Roxborough Water and Sanitation District	1,218	No discharge[1]
Jackson Creek Metropolitan District	50[4]	No discharge[1]
Sacred Heart Retreat	15[2]	0.4
South Santa Fe Metro District	21[6]	No discharge[1]
Reserve Emergency Pool	52	Not Used
Total Phosphorus Wasteload	**7,533**	**2,029.8**

Notes:

*TP loading from WWTPs is from the WWTP point of discharge; the TP load discharged from WWTPs does not equate to the TP load delivered to Reservoir due to assimilation of TP and geochemical fate and transport processes in the watershed.

1. No discharge of wastewater effluent in the Chatfield watershed.
2. Temporary five-year phosphorus allocation of 15 pounds for inclusion in discharge permit; allocation obtained from Roxborough Water and Sanitation District.
3. Ponderosa Center water quality credits are subject to completing a trade project pursuant to the Authority Trading Program.
4. Jackson Creek Metropolitan District received point source allocations through trades pursuant to the Authority Trading Program. Jackson Creek has a transfer agreement of 50 pounds with Roxborough Water and Sanitation District.
5. Centennial Law Enforcement Foundation water quality credits awarded pursuant to Authority's Trading Program.
6. South Santa Fe Metropolitan District received a point source allocation of 21 pounds through trade pursuant to the Authority Trading Program.
7. Estimate from 2013 data.

Recommendations on Clean Water Plan Amendments, New or Proposed Expansion of WWTPs, and Lift Stations

As the 208 Management Agency, the Authority reviews Clean Water Plan (CWP) Amendments, Site Applications, and Engineering Reports for new or proposed facilities to effectively manage waste treatment works and related facilities serving Chatfield Basin in conformance with the water quality management plan and regulatory requirements. One lift station site application was brought forth in 2014, requesting Authority review and approval.

1. Titan Road Lift Station Site Application

On October 27, 2014, Dominion Water and Sanitation District (Dominion) submitted a Site Application for the Titan Road Lift Station. The capacity of the lift station is 0.346 MGD (maximum month average) and 0.69 MGD (peak hour). Titan Water Reclamation Facility (WRF) will receive flow from the proposed Titan Road Lift Station up to 200,000 gallons per day average daily flow. When flow from the development reaches 80% of this level, the Titan WRF site will be re-developed into a permanent lift station to convey wastewater to the existing Roxborough Wastewater Treatment Plant. Dominion has entered into a contract with Mortenson Construction to design-build-operate-maintain the sewer infrastructure within the District. Part of Mortenson Construction's responsibility will be to provide emergency and on-call services 24 hours per day, 7 days per week. The lift station will be equipped with a self-activated alarm system in case of power failure, pump failure, and high wet well water level. Alarms will be transmitted through an auto-dialer to two contacts minimum at the on-call operator and to Dominion WSD. A diesel-fuel powered generator will be provided with an automatic transfer switch that will provide power to the lift station in case of loss of power. This generator will be supplied with a 100 gallon diesel fuel tank with dual containment. The emergency overflow storage capacity will be provided for one hour of average daily full build-out service area flow (14,400 gallons).

The Authority's Technical Review Committee (TRC) reviewed the site application, engineering report and appendices on November 13, 2014 and recommended approval, to the Authority Board with specific emergency response issues being addressed. The issues were addressed and the Authority Board approved the lift station Site Application on November 19, 2014.

Regulated Stormwater Sources

Colorado's stormwater permit program requires control of stormwater runoff in all Phase I and Phase II Municipal Separate Storm Sewer Systems (MS4) entities. These requirements are separate and distinct from the Chatfield Control Regulations, but complement the TMAL's purpose. Authority members with Phase I and II MS4 permits in the Chatfield Basin include:

- Jefferson County
- Town of Castle Rock
- City of Littleton
- Castle Pines Metropolitan District
- City of Castle Pines
- Colorado Department of Transportation

Figure 15 depicts MS4 boundaries within the Chatfield Watershed. Currently, none of Douglas County's MS4 Permit Boundary is within the Chatfield Watershed, as their boundary presently includes the Cherry Creek Basin portion of unincorporated Douglas County and Highlands Ranch. However, the anticipated renewal of CDPS MS4 permits will result in updated MS4 boundaries in Chatfield Watershed.

MS4 permits require the permittee to develop programs that meet six minimum control measures:

- Public education and outreach on stormwater impacts
- Public participation and involvement
- Detection and elimination of illicit connections and discharges
- Construction site stormwater runoff control
- Post-construction stormwater management in development and redevelopment
- Pollution prevention/good housekeeping for municipal operations

MS4 permits require implementation of best management practices (BMPs) to reduce pollutants discharged to the "maximum extent practicable." A summary of 2014 MS4 permit inspection and enforcement metrics and education and outreach activities are provided in Table 5.

Castle Rock's annual "Spring Up the Creek" public outreach event was another big success with 172 volunteers participating. Sponsored in part by Douglas County and the Chatfield Watershed Authority, the event solicited the help from community volunteers to clean up debris along East Plum Creek, Sellars Gulch, and tributaries to the Meadows. More than 1,000 bags of trash have been picked up as part of this awareness program over the past five years as summarized below.

Spring Up the Creek Outreach Metrics (2010 – 2014)

Year	Volunteers	Bags of Garbage Collected
2010	223	212
2011	163	200
2012	142	78
2013	226	214
2014	172	352

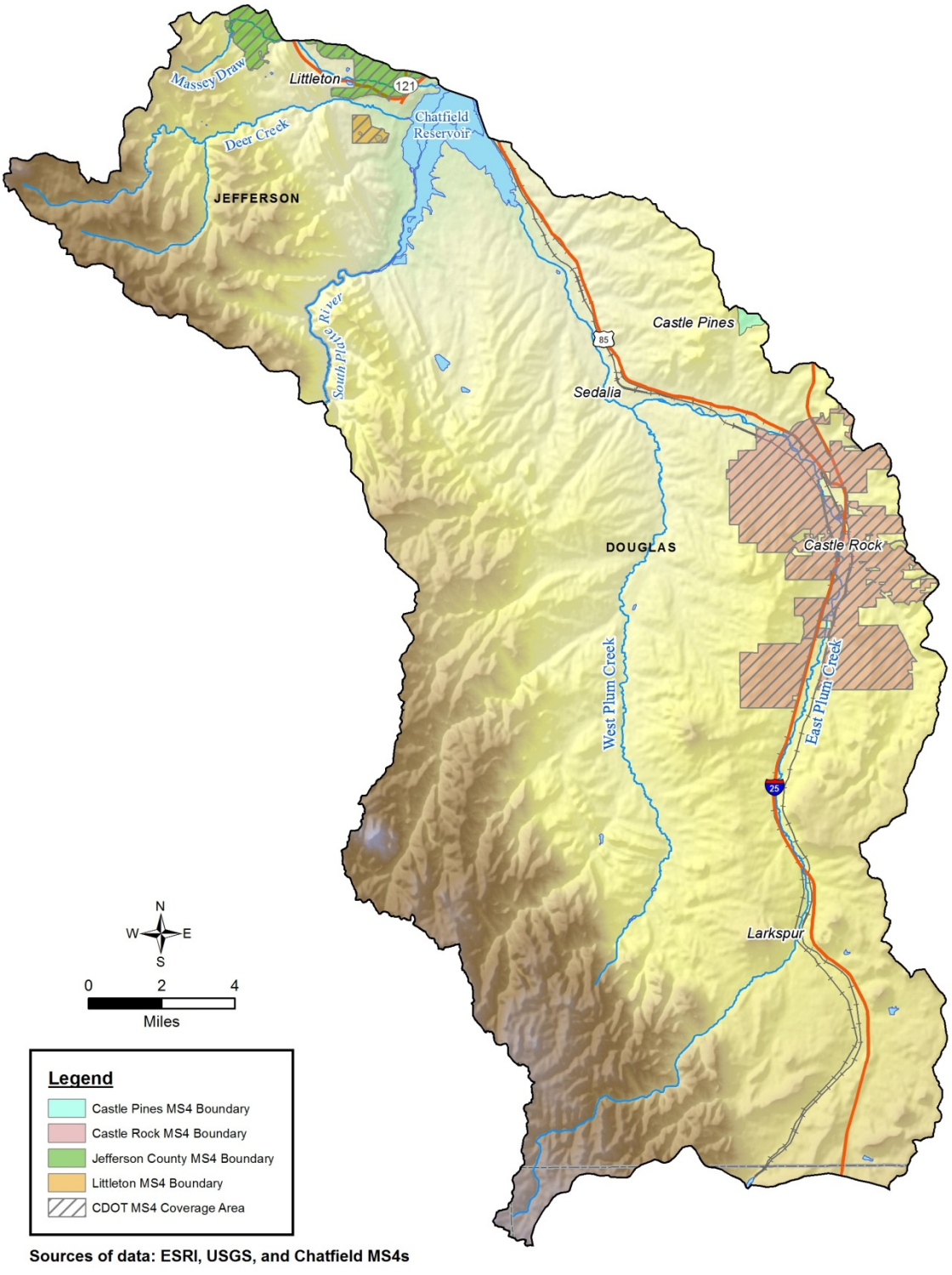


Figure 15 2014 MS4 Boundaries in the Chatfield Watershed

Table 4 Summary of 2014 MS4 Permit Activities

Land Use Agency	Permit Inspection Actions			Permit Enforcement Actions			Education and Outreach
	Illicit Discharges	Construction	Post Construction	Illicit Discharges	Construction	Post Construction	
Douglas County	10	GESC – 919	1	0	5 GESC-V 0-GESC-SW	0	Participated/co-sponsored Spring Up the Creek; Presented to schools in basin.
Jefferson County	9	1592	40	9	61	0	Rooney Road Recycling Facility - in 2014 collected over 400,000 pounds of household hazardous waste; public events on MS4 and floodplain management programs.
Town of Castle Rock	329	3984	350	11	1128	0	Annual outreach in Plum Creek basin at Spring Up the Creek event.
City of Littleton	0	0	3	0	0	0	

Abbreviations: GESC (Grading, Erosion and Sediment Control) program; SW (stop work order); V (violation)
Notes: Castle Pines Metro District inspection and enforcement action data incorporated in Douglas County reporting; City of Castle Pines MS4 boundary predominately in the Cherry Creek Basin; only a very small portion is located in the Chatfield Watershed.

Stormwater Projects Mitigate Impacts from Urban Runoff

Stormwater projects, such as those implemented in the Town of Castle in 2014 in the East Plum Creek basin, help mitigate impacts from urban runoff and provide water quality benefits in the Chatfield Watershed. Key stormwater projects included completion of the Tributary B storm sewer improvements to support the North Meadows Parkway extension project, regional pond forebay construction along South Tributary, and 6400 East/West Tributary flood repairs from 2013 storm event and grade control.

Grade control at Castle Rock's South Tributary (upstream of regional forebay) completed October 2014

Sediment removal underway at Hangman's Gulch

Completed drop structure at 6400 West Tributary, located in the East Plum Creek Drainage

Progress to Promote Water Quality Protection

In 2014, the Authority continued in its mission to "*promote protection of water quality in the Chatfield Watershed for drinking water supplies, recreation, fisheries, and other beneficial uses.*" Our extensive coordination with watershed stakeholders and partnerships with members focused on these three areas;

Draft Chatfield Watershed Plan – Section 319 Grant

In 2014, the Authority continued its stakeholder outreach efforts to solicit input on the draft Chatfield Watershed Plan. Completion of the Chatfield Watershed Plan is essential and anticipated 2015. The Authority's members and rate payers have spent significant funds to date to address water quality in the watershed, particularly through the efforts of MS4s implementing projects to mitigate urban stormwater runoff and wastewater providers treating effluent to meet stringent water quality requirements, yet there is still a need to address nonpoint source water quality issues in Chatfield Reservoir and its Watershed to protect water quality now and in the future.

- Data and modeling are a priority in understanding water quality processes in the Reservoir and Watershed and developing the new TMAL.
- Proactive measures are required to protect Chatfield Reservoir for its designated uses for the long term. High quality surface water is essential to sustain growth and development in the watershed.
- Nonpoint sources potentially impact water quality. Nonpoint sources in the watershed may include degraded streambank erosion, runoff over agricultural lands, seepage from unmaintained septic systems located in the floodplain, and wildfire burn areas.

The draft Watershed Plan prioritizes the additional monitoring, data collection, studies, and projects, contingent on funding, to address water quality concerns. The draft Watershed Plan provides a starting place to define water quality issues, solve potential nonpoint problems, with the goal of promoting water quality for high value water uses; drinking water supplies, recreation, aquatic life, and agriculture.

Outreach with Elected Officials on Funding Strategies for Locally Controlled Watersheds

While grant funding and strategic partnerships are important to support water quality improvements and Watershed Plan efforts, it is widely recognized that a larger, long-term funding source is needed to support the monitoring, studies, and projects identified in the Plan. The Chatfield Watershed Authority, with the assistance Brownstein Hyatt Farber Schreck, has started a conversation about financial strategies for water quality improvements in Colorado Watersheds. In the Chatfield Watershed, current nonpoint funding sources are limited. Next step actions (i.e., monitoring, modeling, studies, and projects) are contingent upon available funding and demonstrating commensurate cost/benefit. Initial planning level cost estimates range between $500,000 - $1.5 million/year to implement potential water quality activities identified in the draft Watershed Plan. While grant funding and strategic partnerships are important to support Watershed Plan efforts, a larger, long-term funding source is needed.

Water Quality Monitoring Coordination with Chatfield Reallocation Water Providers

Partnerships with the Chatfield Reallocation Water Providers continue to support water quality synergies in Chatfield Reservoir. In 2014, the Authority entered into a

Memorandum of Understanding on Chatfield Reservoir water quality monitoring coordination. Some of the mitigation measures required for the Chatfield Reallocation water storage project include, amongst other items, data collection, monitoring and modeling of Chatfield Reservoir, and wetlands creation in the Chatfield Watershed. As such, the mitigation efforts provide opportunities for continued coordination and collaboration on water quality efforts that are a priority for the Authority.

Chatfield Reservoir at Sunset *(Photograph by Thad Roan)*

CHATFIELD WATERSHED AUTHORITY
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