

Overview for 2013

Consent Agreement Item	Actual Value for 2013	Limit
Annual Net Loading (Lbs P)	68.6	175
Max 3 Month Loading (Lbs P)	30.79 (April)	55
Hatchery Flow (mgd)	6.8	20
Adult Coho Passed (Individuals)	17,859	20,000
Adult Chinook Passed (Individuals)	158	1,000
Lake Median TP (mg/m ³)	7.70	8.0
% Compliance with 8 mg/m ³	62	95

Figure 1. Data summary for the 2013 Annual Report.

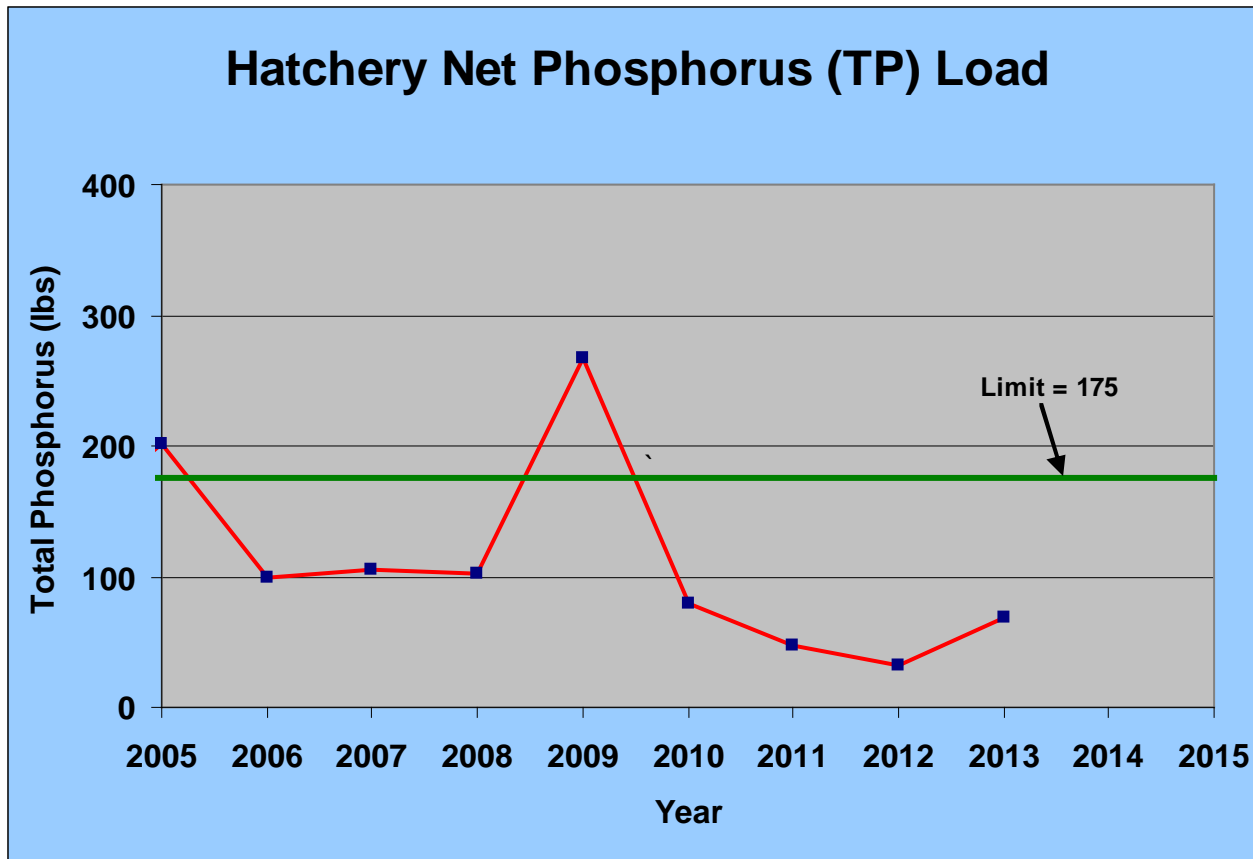


Figure 2. Annual Hatchery phosphorus loadings to the Platte River from 2005 to 2013.

Upper Discharge - Outfall 0002 - Phosphorus for Year 2013

Average Dip: 25.07, Average Sigma 72: 15.48

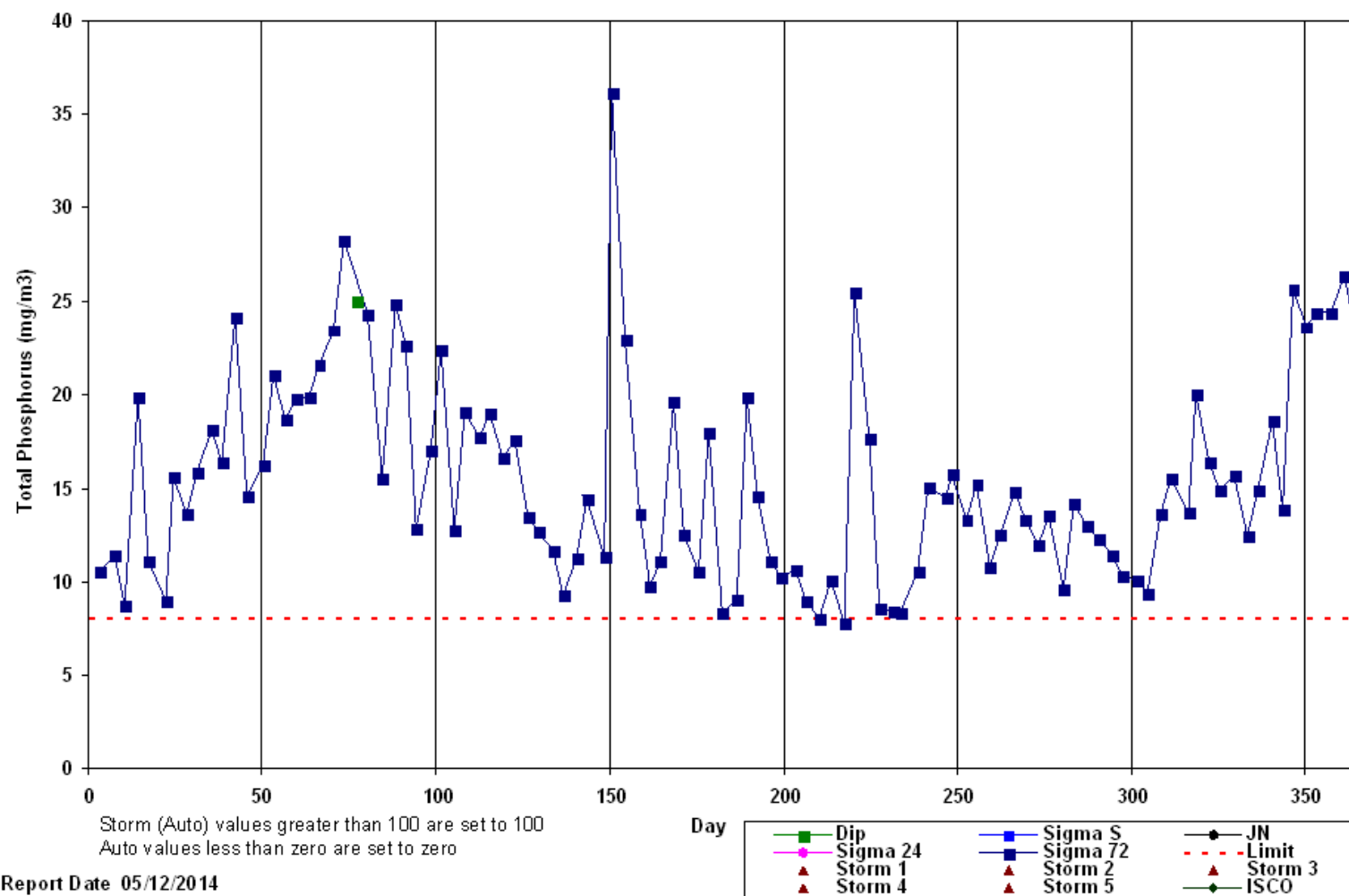
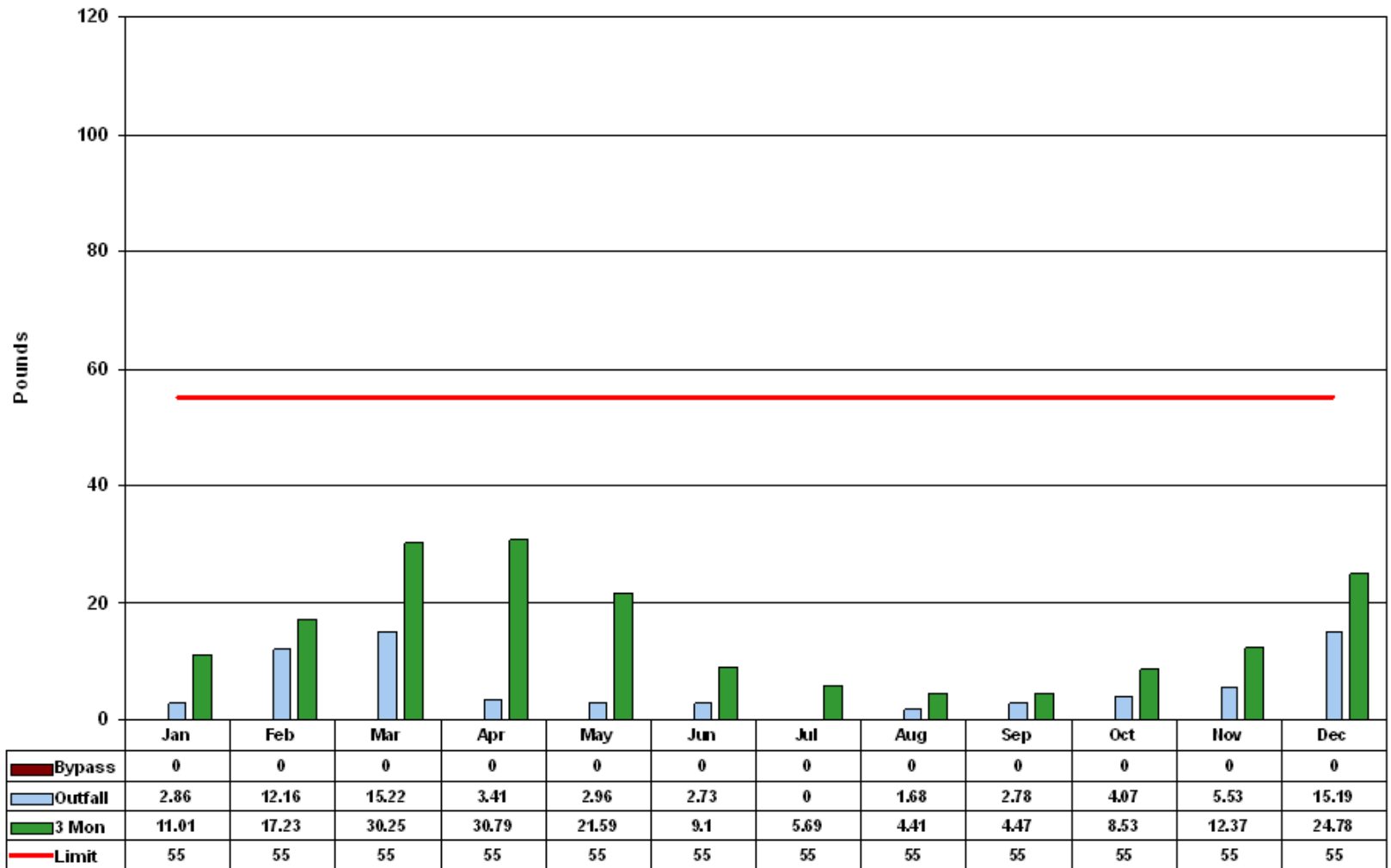


Figure 3. Measured phosphorus concentrations at the Upper Discharge in 2013.

Hatchery Average Monthly Net Load for 2013

Total Net Load is 68.59 Pounds for Method Sigma Automatic 72hr (Sigma a72)



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Figure 4. Hatchery monthly (blue bars) and 3-month cumulative (green bars) phosphorus loadings to the Platte River. The 3-month cumulative phosphorus discharge limit is displayed on the red line.

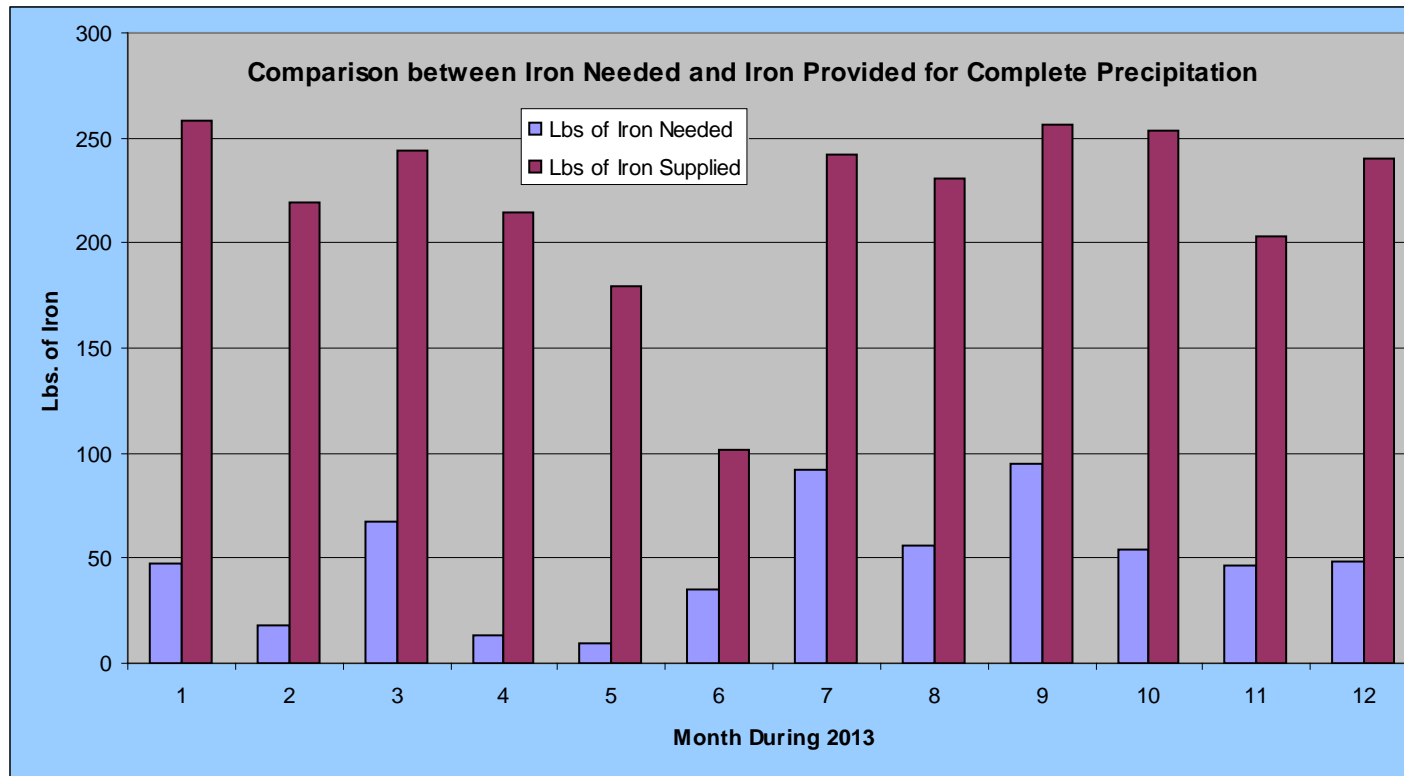


Figure 5 . Comparison between Iron Needed and Iron Provided in 2013 for Complete Phosphorus Precipitation.

Hatchery Phosphorus Mass Balance Diagram for 2013

Total Sources: 1924.83 lbs, Total Losses: 1904.27 lbs

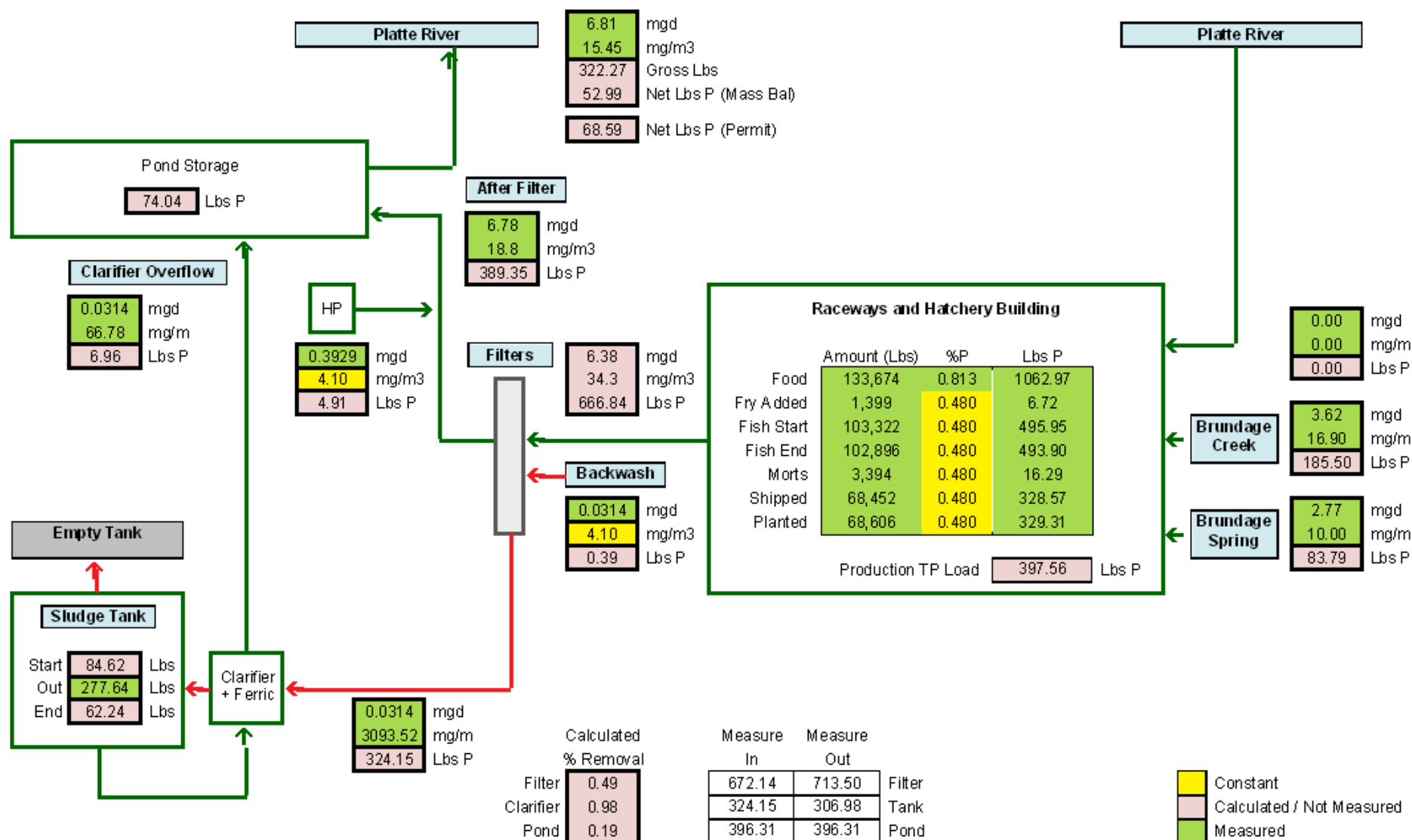


Figure 6. Annual summary of the 2013 Hatchery phosphorus mass balance model.

Big Platte Lake - Median Phosphorus for Year 2013

Average Median Phosphorus for Year is 7.70 (Above Limit 139 of 365 Days, 38%)

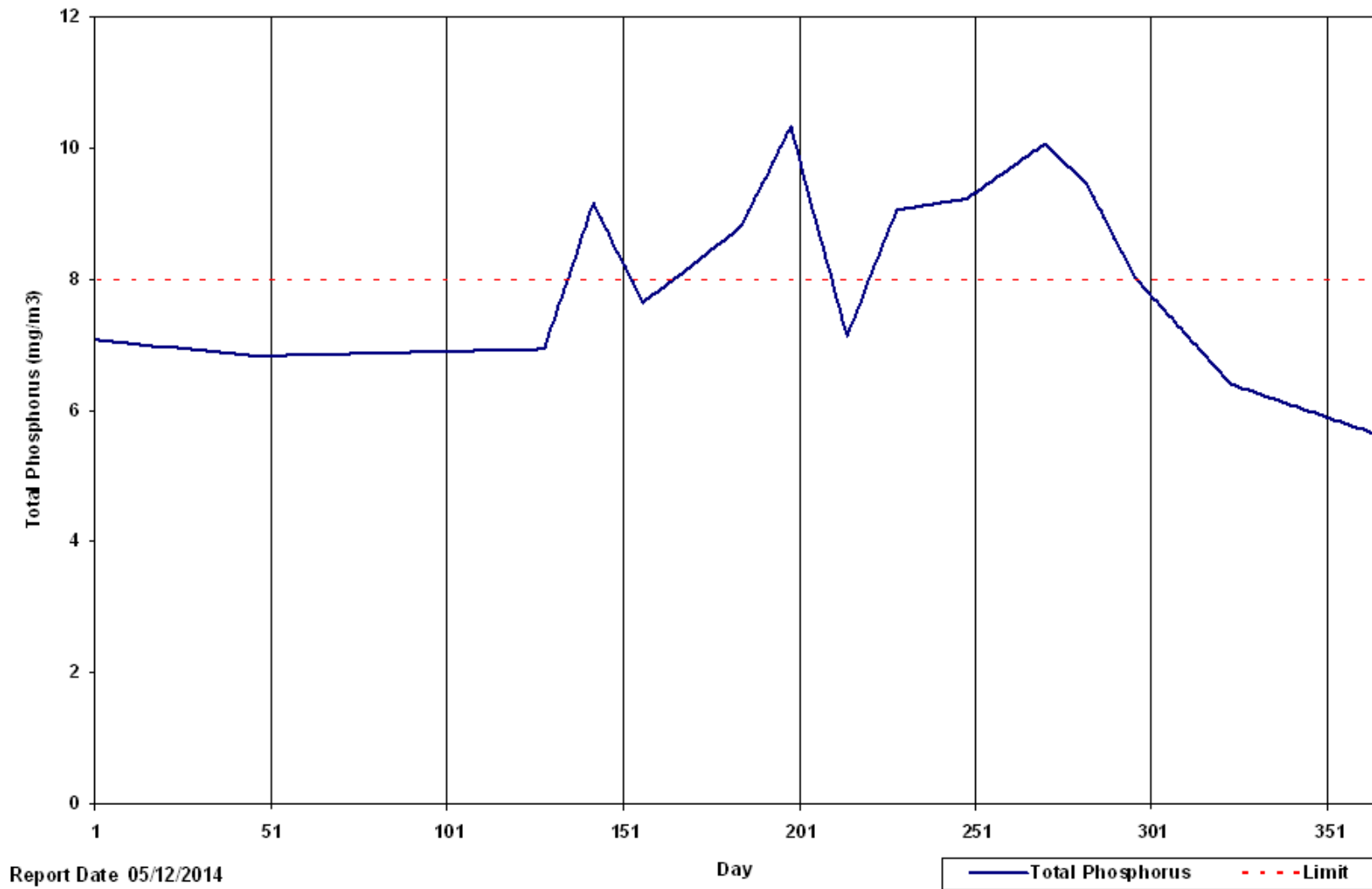


Figure 7. Volume-weighted total phosphorus concentrations in Big Platte Lake during 2013.

Big Platte Lake Secchi Depth for 2013

Average Secchi Value: 15.344 (Minimum: 10, Maximum: 27, Hatchery Avg: 15.615, PLIA Avg: 15.405)

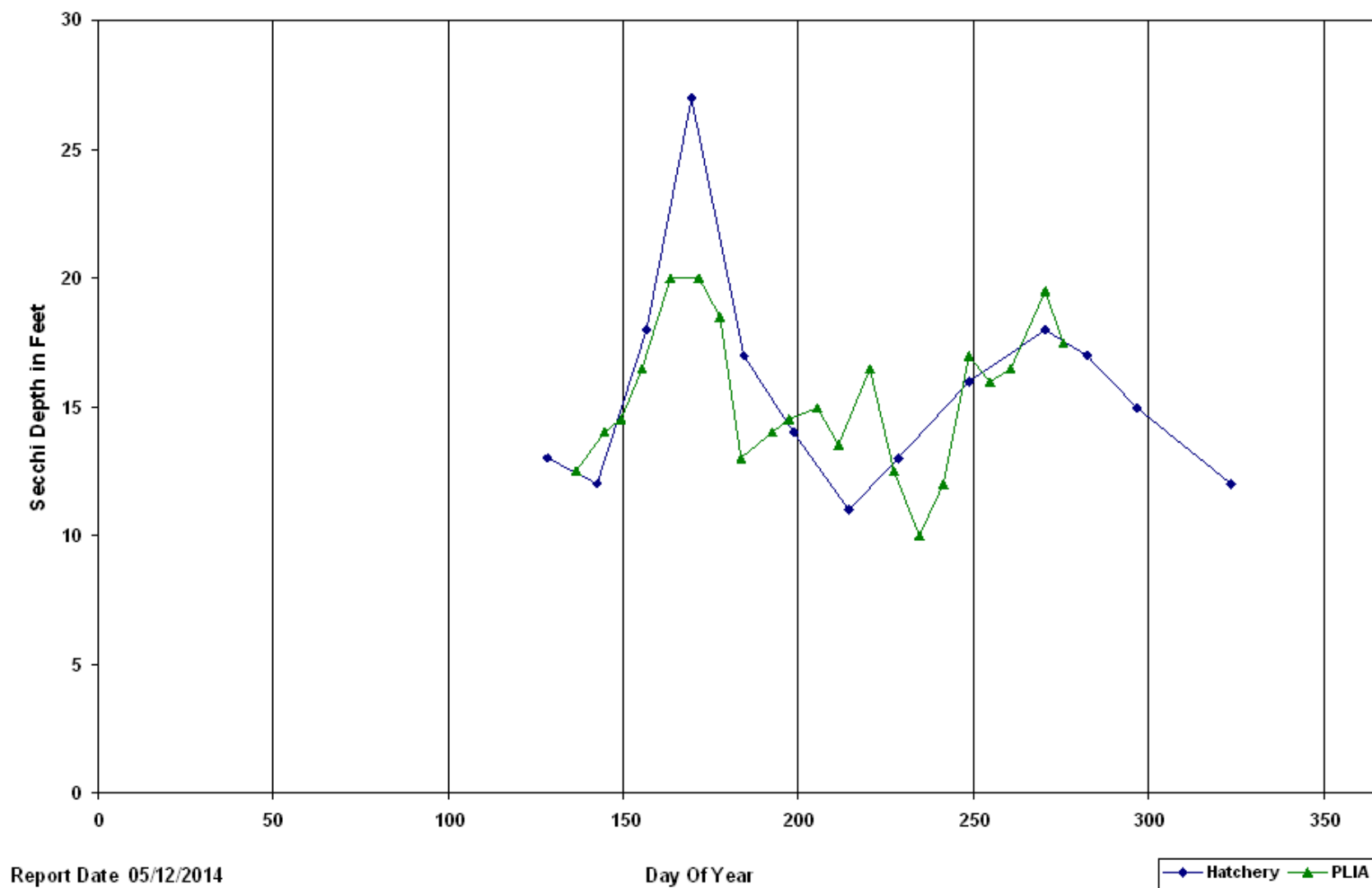
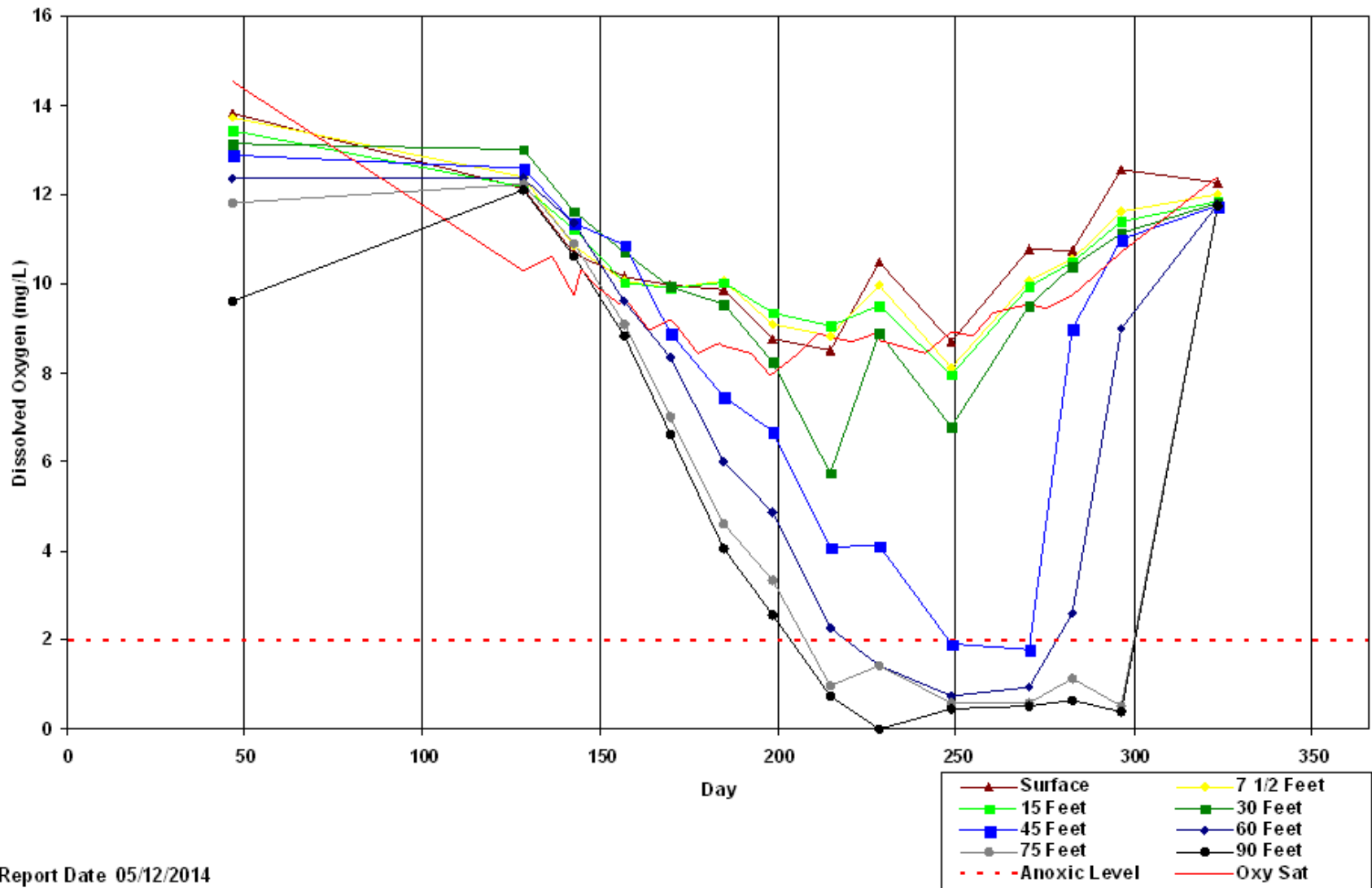


Figure 8. Big Platte Lake Secchi depth measurements for 2013.

Big Platte Lake Dissolved Oxygen (2013 at All Depths)

Anoxic at 45 Feet: 23.1 Days, 60 Feet: 59.1 Days, 75 Feet: 92.5 Days, 90 Feet: 96.8 Days



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Figure 9. Dissolved oxygen measurements by depth in Big Platte Lake during 2013.

Big Platte Lake Temperature (2013 at All Depths)

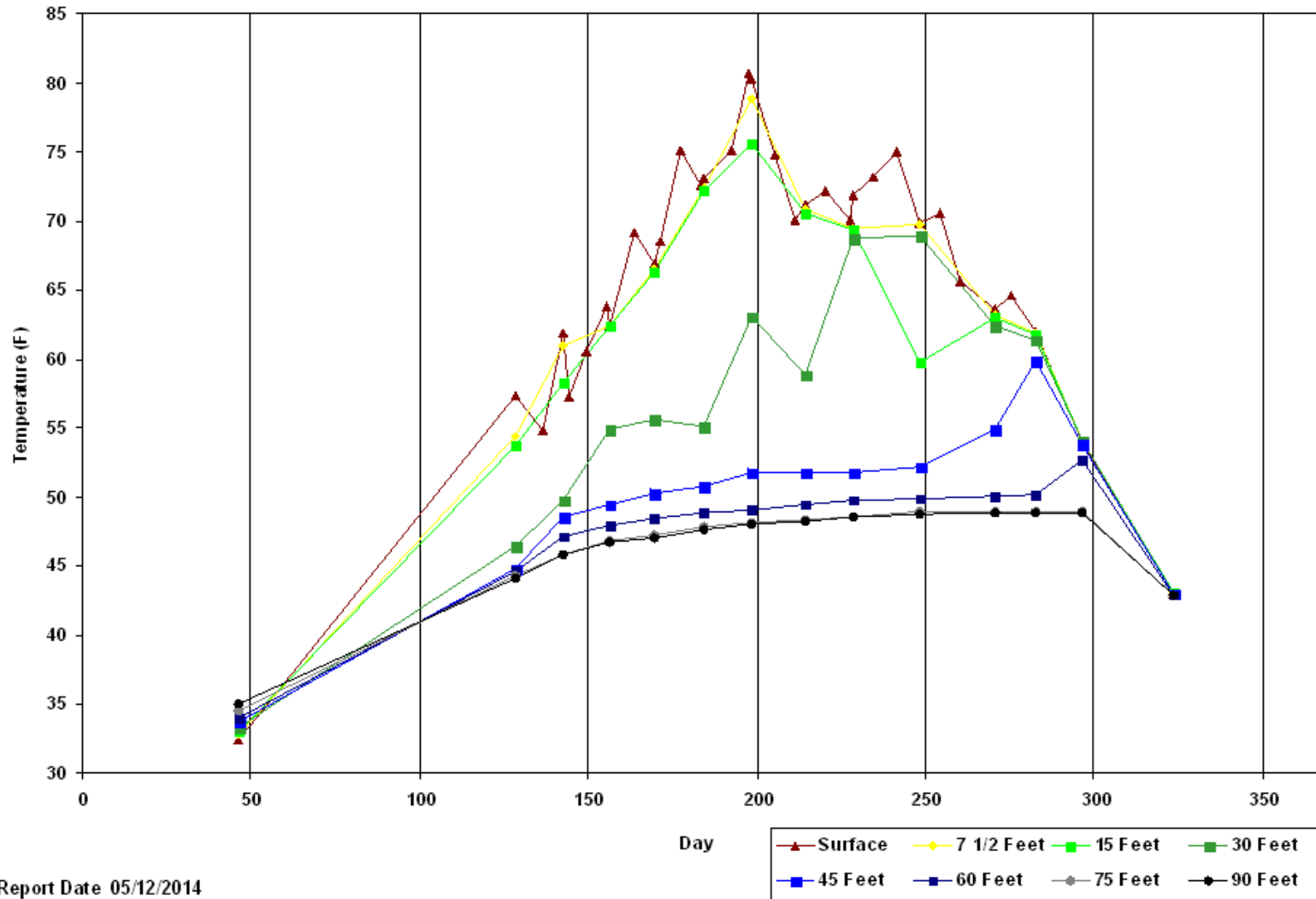


Figure 10. Temperature measurements by depth in Big Platte Lake during 2013.

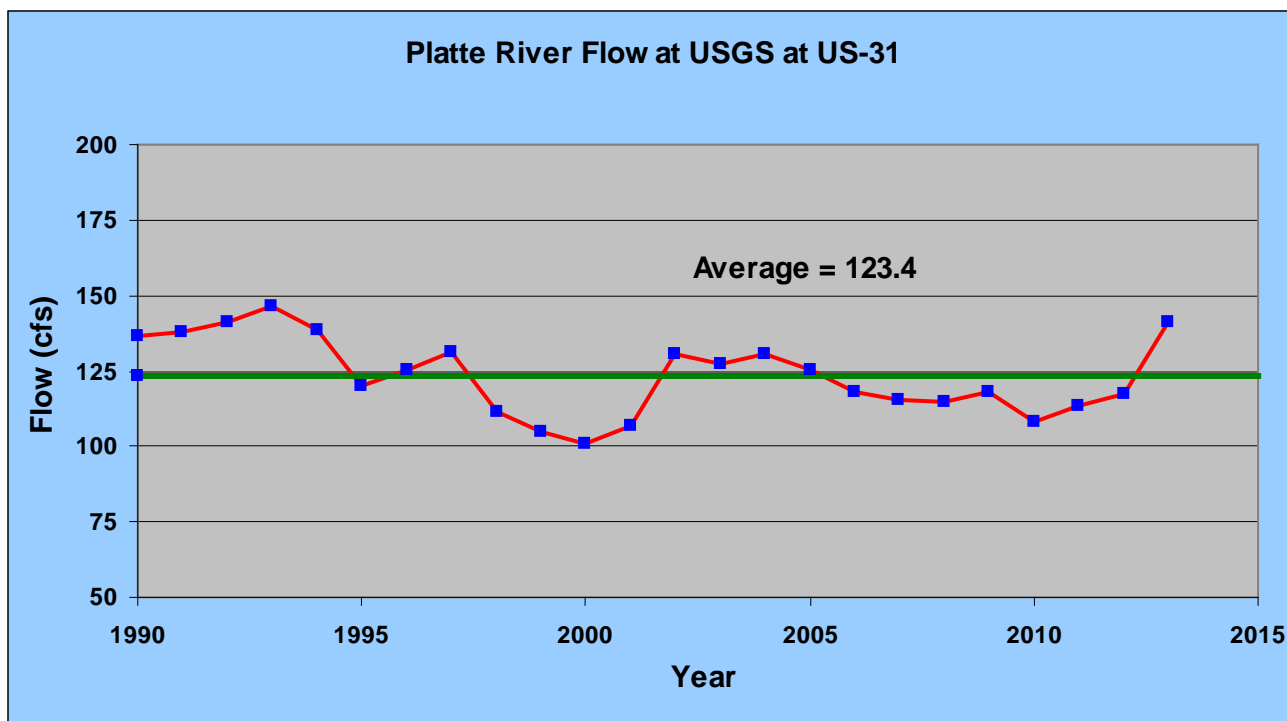


Figure 11. Average annual discharge of the Platte River at the USGS Gauging Station 04126740 at Honor, MI.

2013 Flow of Platte River at US - 31 (cfs)

Method: 24 hour average, US31 Average: 141.1, Sampled Average: 139.7

Storm Event Factor 0.13 Generated 32 Storm Events

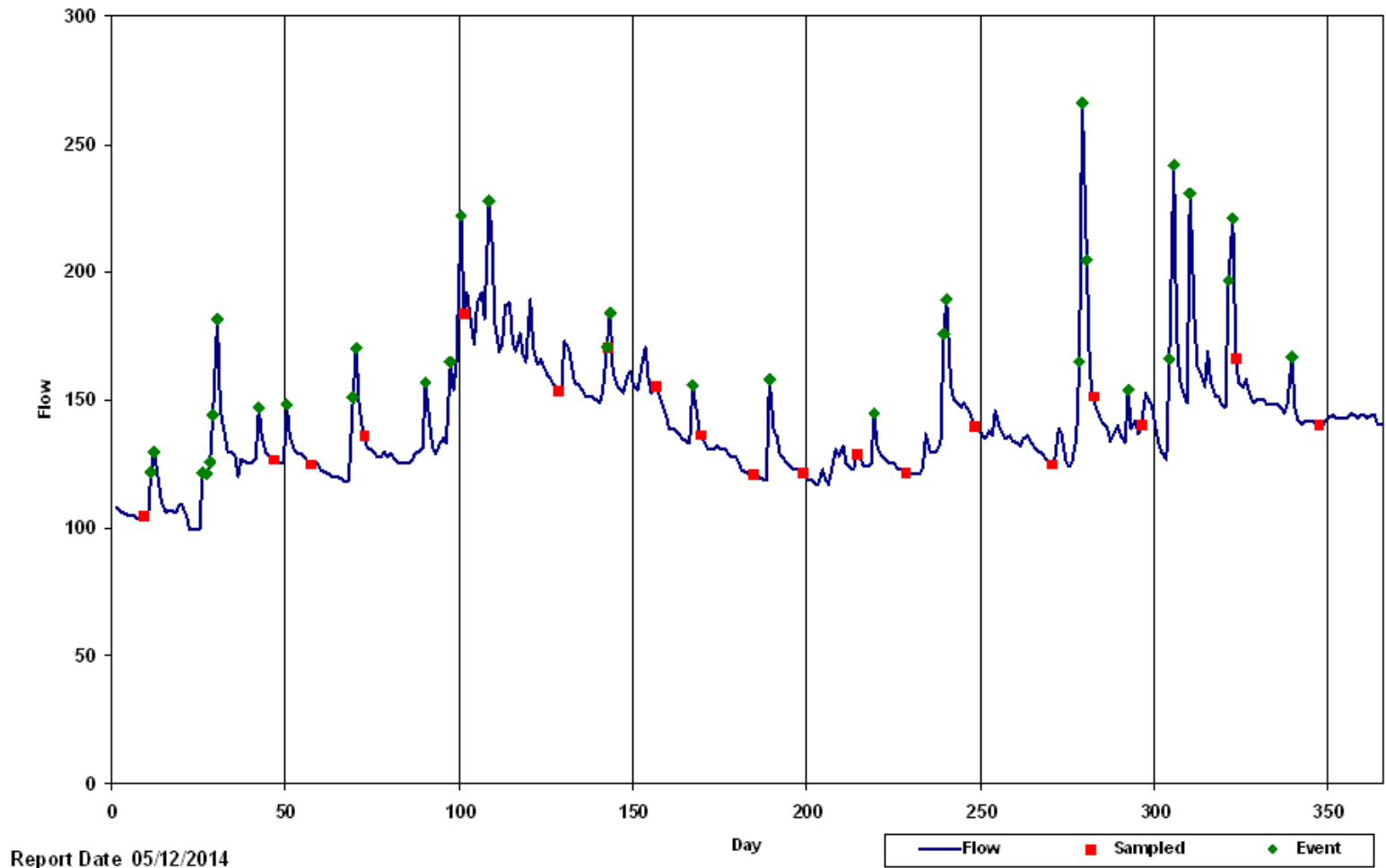


Figure 12. Daily average flows of Platte River in 2013 at the USGS Station 04126740 at Honor, MI and on dates when water quality sampling occurred at that site.

Platte River at US 31 - USGS - Phosphorus & Turbidity ALL Methods for Year 2013

Average Phos: 18.327, Average Turb: 3.189

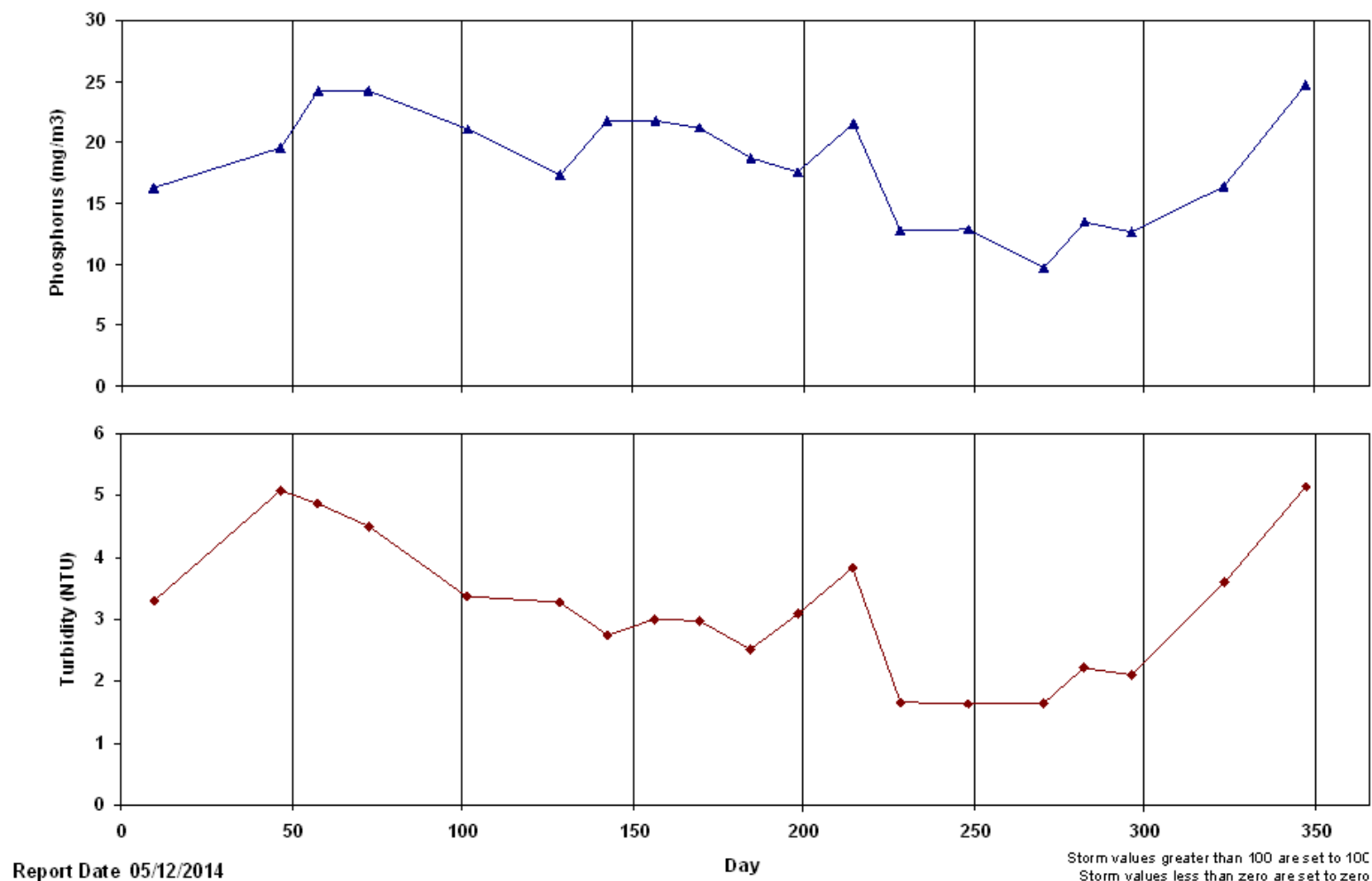


Figure 13. Total Phosphorus and Turbidity of Platte River at USGS during 2013.

North Branch Deadsteam Dr. - Phosphorus & Turbidity ALL Methods for Year 2013

Average Phos: 14.580, Average Turb: 2.627

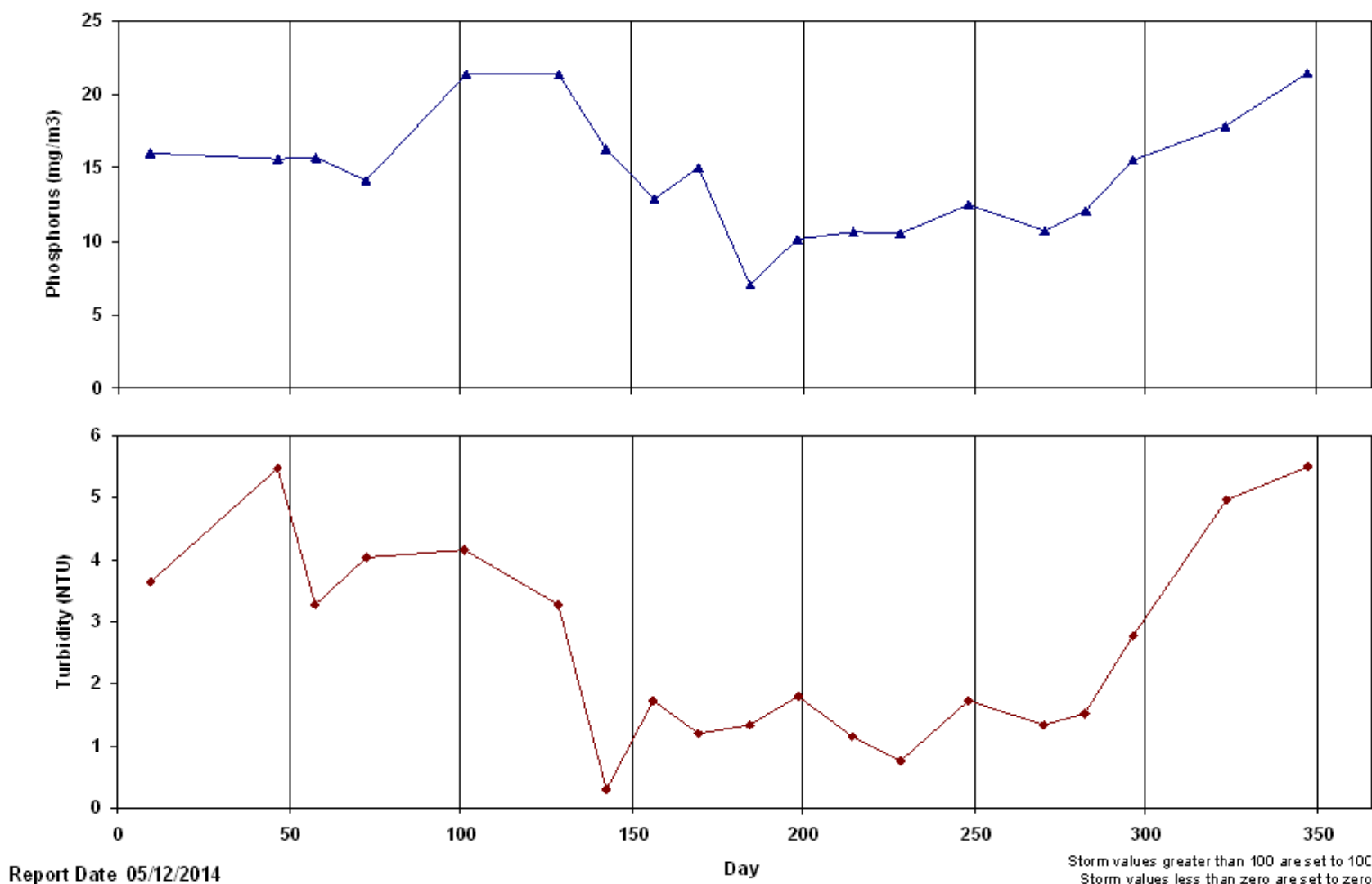
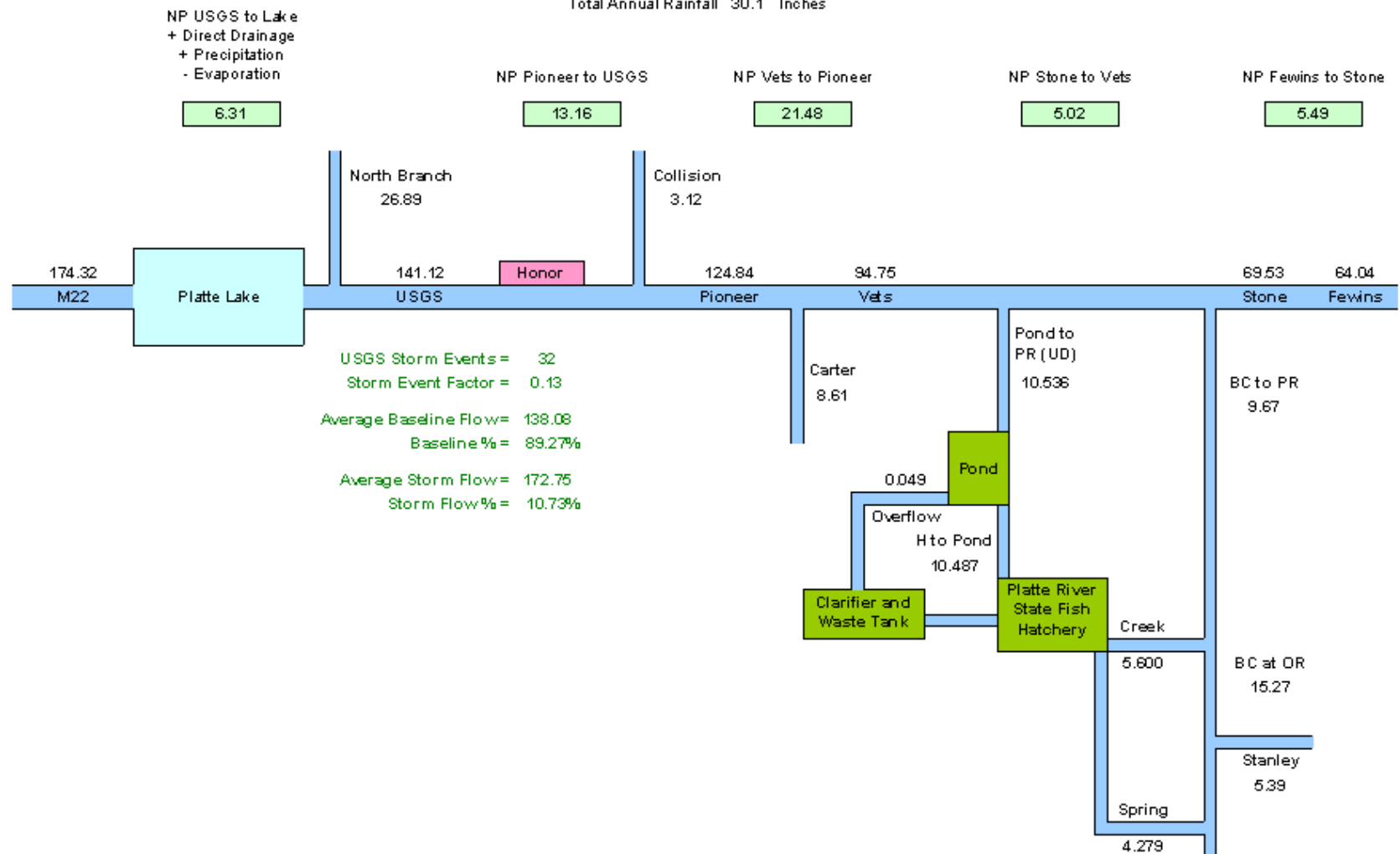


Figure 14. Total Phosphorus and Turbidity of the North Branch of the Platte River at Deadstream Rd during 2013.

Annual Average Watershed Flow Balance for 2013

all flows cfs

Total Annual Rainfall 30.1 Inches

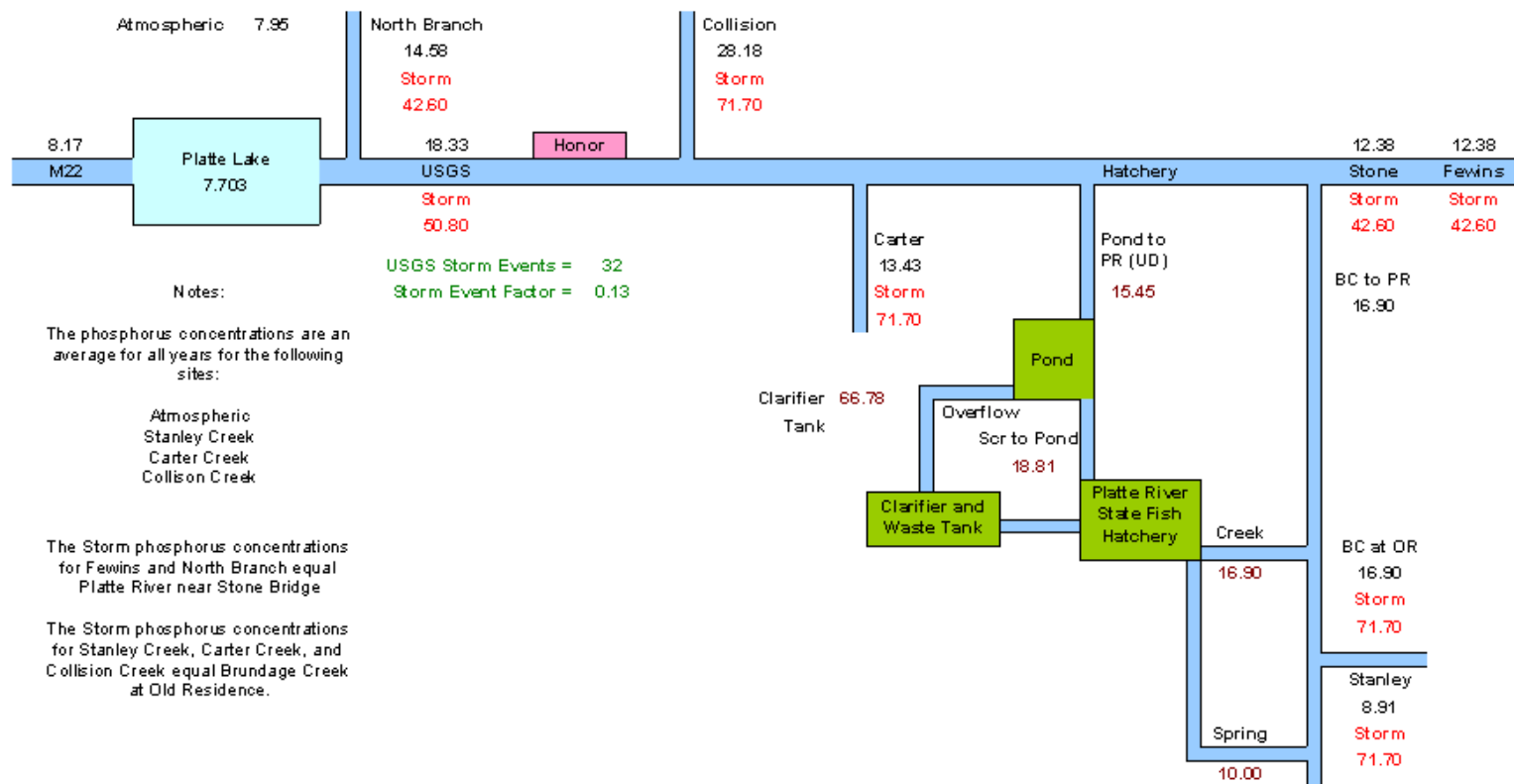


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Platte River Watershed

Figure 15. Watershed Flow Balance for 2013.

Annual Average Watershed TP Concentrations for 2013



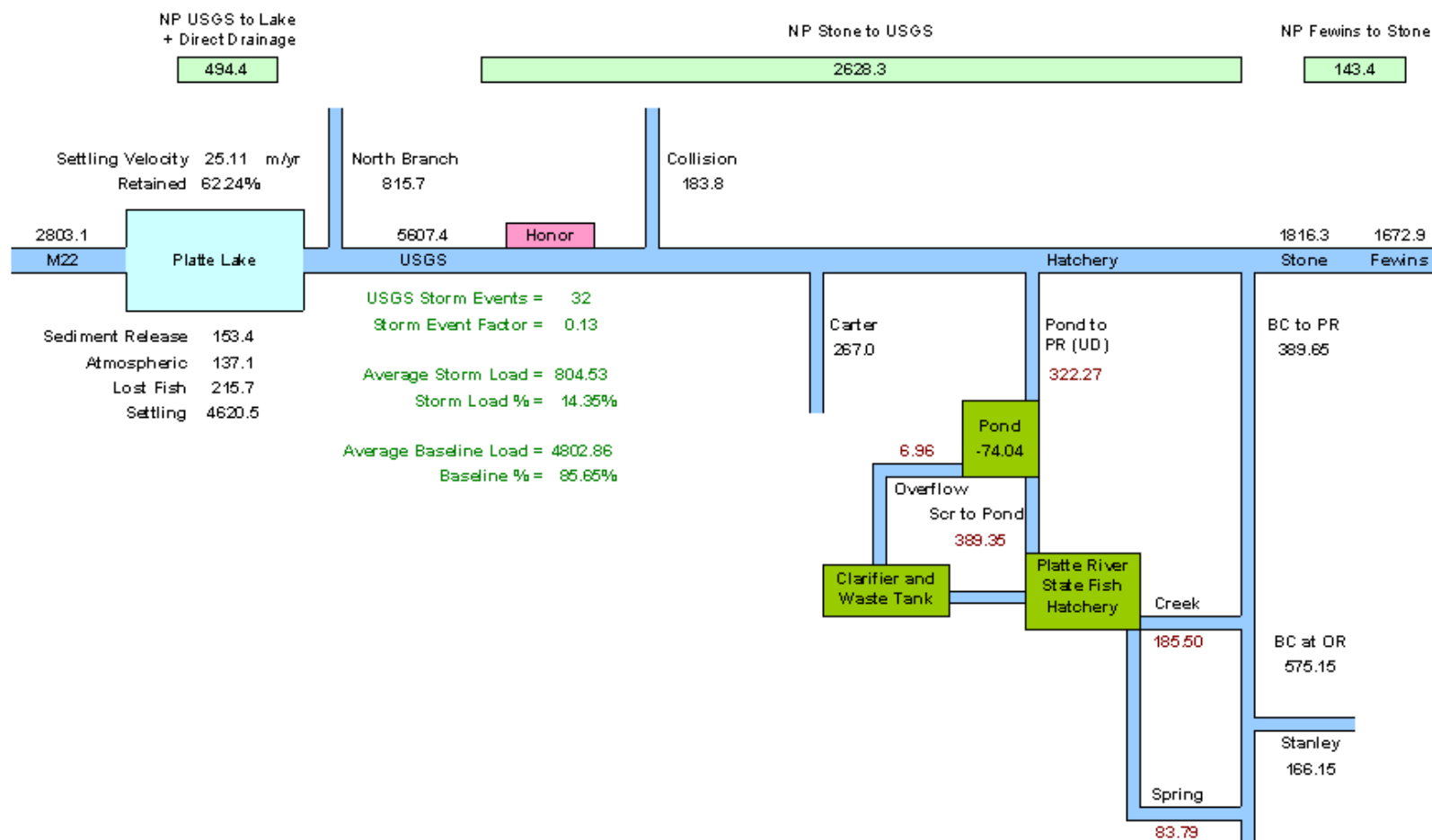
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Figure 16. Annual Average Total Phosphorus Concentrations for 2013.

Annual Average Watershed Load Balance for 2013

all loads annual pounds



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Figure 17. Watershed Phosphorus Load Balance for 2013.