

Municipal Separate Storm Sewer System
National Pollutant Discharge
Elimination System

Joint Annual Report

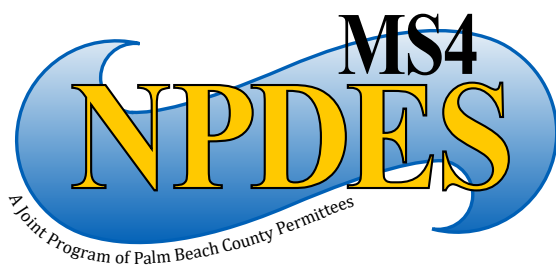
Cycle 4 - Year 1

October 1, 2016 Thru
September 30, 2017

Submitted by
Northern Palm Beach County
Improvement District
as Lead Permittee

prepared by
MOCK•ROOS

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Palm Beach County MS4
Permit No. FLS000018-004

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30. Palm Beach Gardens, City of
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32. Palm Springs, Village of
33. Riviera Beach, City of
34. Royal Palm Beach, Village of
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36. South Indian River Water Control District
37. South Palm Beach, Town of
38. Tequesta, Village of
39. Wellington, Village of
40. West Palm Beach, City of

Report Certification

Engineer's Certification

I hereby certify, as a Professional Engineer in the State of Florida, that this Cycle 4, 1st Year, Joint Annual Report for the Florida Department of Environmental Protection National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Permit for Palm Beach County (Permit No. FLS000018-004) was assembled under by direct responsible charge. This certification is provided in accordance with Florida Board of professional Engineers Rule of Certification under Chapter 61G15-23.003.



Alan D. Wertepny, P.E.
Project Manager, Mock•Roos
FL P.E. No. 32350
4-9-2018

Mock•Roos
5720 Corporate Way
West Palm Beach, FL 33407
Florida E.B. No. 48

(Reproductions are not valid unless signed, dated,
and embossed with an Engineer's Seal)

Permittee Certifications

Certifications for the individual permittee annual reports are included in each individual annual report form, which are attached to this Joint Report as Appendices 1 through 40

1.0 Palm Beach County MS4 Program

1.1 Introduction

The Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) is a federal program designed to reduce stormwater pollutant discharges to receiving waters of the United States. In 1987, the United States Environmental Protection Agency (EPA) was required under Section 402 (p) of the Clean Water Act (N40CFR Part 112.26) to establish final regulations governing stormwater discharge permit application requirements. In 1990, the Federal Register indicated that Palm Beach County was to begin compliance with the program. In 1997, the first 5-year permit (No. FLS000018) was issued by EPA to Palm Beach County's permittees. In 2001, the Florida Department of Environmental Protection (Department) received delegation from EPA for the MS4 Programs. In November 2002, the Cycle 2 MS4 Permit was issued by the Department. The Cycle 3 permit was issued on March 2, 2011 and the Cycle 4 Permit was issued on September 8, 2016.



Northern Palm Beach County Improvement District (Northern) acts as lead permittee for the Palm Beach coalition of permittees. As the lead permittee, Northern re-entered into Interlocal Agreements with each of the other permittees in 2017 for the purposes of identifying duties and responsibilities of the parties and fulfilling the conditions of the Palm Beach County MS4 permit. Through these Interlocal Agreements, cost sharing for joint activities is provided by each of the permittees.

This joint annual report was reviewed by the permittees and approved by the Steering Committee.

1.2 Permittees

There are 40 permittees identified in the Cycle 4 MS4 permit. **Table 1-1** is a list of the designated MS4 NPDES stormwater management program contacts for each of the permittees.

1.3 Steering Committee

To coordinate the joint activities in Palm Beach County's MS4 Program, the permittees established an MS4 Steering Committee in 1991. The seven-member Steering Committee is comprised of two representatives of large municipalities, two representatives of smaller municipalities, one representative from the lead permittee, one representative of special districts, and one representative from Palm Beach County. A list of the MS4 Steering Committee and administrative personnel is provided in **Table 1-2**. Minutes of all meetings and descriptions of programs overseen by the Steering Committee may be viewed on the Palm Beach County MS4 NPDES website at <http://www.pbco-npdes.org>.

During the reporting period, the Steering Committee met eight times. Permittee representation at the meetings averaged eighty-one percent. Major meeting agenda items included the following:

- Cycle 3, 6th Year Annual Report
- 2017 Program Schedule
- Budget Reports
- FDEP Sedimentation & Erosion Control Training
- Refresher Training Session
- Monitoring Program
- Public Education Program
- Water Quality Assessment Reports
- Total Maximum Daily Load Prioritization Reports
- FDEP Interview/Presentation
- Cycle 4 – New Annual Report Forms
- Loxahatchee River Reasonable Assurance Plan
- Execution of Cycle 4 Interlocal Agreements

**Table 1-1
Permittee Contacts**

Appendix No.	Permittee, Address	Name, Title, Telephone
1	Atlantis, City of 260 Orange Tree Drive Atlantis, FL 33462	Steven Mazuk Utilities/Public Works Director (561) 965-1744
2	Belle Glade, City of 110 Dr. Martin Luther King, Jr. Blvd. Belle Glade, FL 33430	Lomax Harrelle City Manager (561) 996-0100
3	Boca Raton, City of 201 West Palmetto Park Road Boca Raton, FL 33432	Zachary Bihr, P.E. Project Engineer (561) 416-3402
4	Boynton Beach, City of 124 East Woolbright Road Boynton Beach, FL 33435	Angela A. Prymas, P.E. Stormwater Supervisor (561) 742-6421
5	Cloud Lake, Town of 100 Lang Road Cloud Lake, FL 33406-3222	Dorothy C. Gravelin Town Clerk (561) 686-2815
6	Delray Beach, City of 434 S. Swinton Avenue Delray Beach, FL 33444-2698	Jeffrey Needle Asst. Director of Environmental Services (561) 243-7320
7	FDOT – District Four 3400 West Commercial Boulevard Ft. Lauderdale, FL 33309-3421	Ivette Leiva NPDES Coordinator (954) 777-4644
8	FDOT – Turnpike Enterprise P. O. Box 9828 Ft. Lauderdale, FL 33310-9828	Troy Craig NPDES Coordinator (954) 934-1213
9	Glen Ridge, Town of 1501 Glen Road West Palm Beach, FL 33406	John J. Deal Town Manager (561) 697-8868
10	Greenacres, City of 5750 Melaleuca Greenacres, FL 33463	Carlos Cedeno Public Works Director (561) 642-2074
11	Gulf Stream, Town of 100 Sea Road Gulf Stream, FL 33483-7427	William Thrasher Town Manager (561) 276-5116
12	Haverhill, Town of 4585 Charlotte Street Haverhill, FL 33417-5911	Joseph Roche Director of Public Works (561) 689-0370
13	Highland Beach, Town of 3614 South Ocean Blvd. Highland Beach, FL 33487	Edward J. Soper Public Works Director (561) 243-2084

14	Hypoluxo, Town of 7580 S. Federal Highway Hypoluxo, FL 33462	Leonard G. Rubin, P.A. Town Attorney (561) 721-1683
15	Indian Trail Improvement District 13476 61 st Street North West Palm Beach, FL 33412-1915	Greg Shafer Director of Stormwater (561) 793-0874
16	Juno Beach, Town of 340 Ocean Drive Juno Beach, FL 33408	Anthony R. Meriano Director of Public Works (561) 626-1122
17	Jupiter, Town of 210 Military Trail Jupiter, FL 33458	David J. Rotar Utility Services Manager (561) 741-2705
18	Jupiter Inlet Colony, Town of 1 Colony Road Jupiter Inlet Colony, FL 33469	John Pruitt Administrative Officer (561) 746-3787
19	Lake Clarke Shores, Town of 1701 Barbados Road West Palm Beach, FL 33406	Damon Gammons Utilities Superintendent (561) 642-7870
20	Lake Park, Town of 650 Old Dixie Highway Lake Park, FL 33403	Richard Scherle Public Works Director (561) 908-3874
21	Lake Worth, City of 7 North Dixie Highway Lake Worth, FL 33461	Brian Shields Director/Water Utilities (561) 586-1675
22	Lantana, Town of 500 Greynolds Circle Lantana, FL 33462	Jerry Darr Assistant Utilities Director (561) 540-5758
23	Manalapan, Town of 600 S. Ocean Blvd. Manalapan, FL 33462-3398	Lisa Petersen Town Clerk (561) 383-2541
24	Mangonia Park, Town of 1755 East Tiffany Drive Mangonia Park, FL 33407	Kenneth Metcalf Town Manager (561) 848-1235
25	Northern Palm Beach County Improvement District 359 Hiatt Drive Palm Beach Gardens, FL 33418	Jared Kneiss Program Administrator (561) 624-7830
26	North Palm Beach, Village of 501 U.S. Highway No. 1 North Palm Beach, FL 33408	Steven Hallock Director of Public Works (561) 691-3440

27	Ocean Ridge, Town of 6450 N. Ocean Blvd. Ocean Ridge, FL 33435	James Titcomb Town Manager (561) 732-2635
28	Palm Beach, Town of 260 S. County Road Palm Beach, FL 33480	Jeffrey M. Sanon Project Engineer (561) 227-7024
29	Palm Beach County 2300 North Jog Road, 4 th Floor West Palm Beach, FL 33411	Bonnie Finneran Environmental Director (561) 233-2400
30	Palm Beach Gardens, City of 10500 North Military Trail Palm Beach Gardens, FL 33410	Todd Engle, P.E. City Engineer (561) 804-7012
31	Palm Beach Shores, Town of 247 Edwards Lane Palm Beach Shores, FL 33404-5718	Alan Welch Public Services Director (561) 844-3457
32	Palm Springs, Village of 226 Cypress Lane Palm Springs, FL 33461	Angela Thul Stormwater Coordinator (561) 434-5122
33	Riviera Beach, City of 2391 Avenue L Riviera Beach, FL 33404	Malcom Sommons Stormwater Coordinator (561) 845-4080
34	Royal Palm Beach, Village of 10996 Okeechobee Blvd. Royal Palm Beach, FL 33411	Paul L. Webster, P.E. Director of Public Works (561) 790-5122
35	South Bay, City of 335 S.W. Second Avenue South Bay, FL 33493	Edgar Kerr Director of Public Works (561) 996-6751
36	South Indian River WCD 15600 Jupiter Farms Road Jupiter, FL 33478	Michael Dillon General Manager (561) 747-0550
37	South Palm Beach, Town of 3577 S. Ocean Blvd. South Palm Beach, FL 33480	Mo Thornton Town Manager (561) 588-8889
38	Tequesta, Village of 136 Bridge Road Tequesta, FL 33469	Rudy Smith Utility Director (561) 768-0493
39	Wellington, Village of 12300 Forest Hill Boulevard Wellington, FL 33414	Jim Barnes Village Manager (561) 791-4720
40	West Palm Beach, City of P. O. Box 3368 West Palm Beach, FL 33402	Poonam Kalkat Director of Public Utilities (561) 822-2220

Table 1-2 Palm Beach County MS4 Steering Committee	
<p>Laurent Van Cott, P.E. Steering Committee Chair For Town of Mangonia Park Southern Design Group, Inc. Phone (561) 743-0501</p>	<p>Karen Brandon, P.E. Steering Committee Member For South Indian River Water Control District AECOM Phone (561) 684-3375</p>
<p>Jay Foy, P.E. Steering Committee Vice-Chair For City of Atlantis Stormwater J. Engineering, Inc. Phone (561) 242-0028</p>	<p>Bonnie Finneran Steering Committee Member Palm Beach County Phone (561) 233-2400</p>
<p>Jeff Needle, P.E. Steering Committee Secretary City of Delray Beach Phone (561) 243-7000, x-4117</p>	<p>Maurice Morel, P.E. Steering Committee Member City of Boca Raton Phone (561) 416-3402</p>
<p>Dan Beatty, P.E. Steering Committee Member North Palm Beach County Improvement District Phone (561) 624-7830</p>	

Administration – Northern Palm Beach County Improvement District as Lead Permittee	
<p>Alan Wertepny, P.E. Mock, Roos & Associates, Inc. Program Manager Phone (561) 683-3113, x-231</p>	<p>Betsy S. Burden, Esq. Caldwell Pacetti Edwards Schoech & Viator LLP Legal Counsel Phone (561) 655-0620</p>
<p>Anne Capelli Mock, Roos & Associates, Inc. Public Education Coordinator Phone (561) 683-3113, x-287</p>	<p>Laura Ham, CPA Northern Palm Beach County Improvement District Budget Manager Phone (561) 624-7830</p>
<p>Brian Einkauf Mock, Roos & Associates, Inc. Webmaster Phone (561) 683-3113, x-250</p>	<p>Jane Hayes Mock, Roos & Associates, Inc. Administrative Assistant Phone (561) 683-3113, x-264</p>

2.0 Training Program

The Palm Beach County MS4 permit requires that permittees provide training on three topics. Annual follow-up (or “refresher”) training is required for those that have received the initial training. The three topics are:

- Identification & reporting procedures for a suspected illicit discharge or dumping in the MS4 for all appropriate permittee personnel (including field crews, fleet maintenance staff, and inspectors) and contractors. (Part III.A.7.c)
- Spill prevention, containment & response procedures (including techniques for mitigating pollution from spills) for all appropriate permittee personnel (including field crews, firefighters, fleet maintenance staff, and inspectors). (Part III.A.7.d)
- Stormwater management and erosion and sedimentation control BMPs for construction sites for site plan reviewers, site operators, and site inspectors. Construction site inspectors must be certified through the Florida Stormwater, Erosion, and Sedimentation Control Inspector Training programs, or equivalent. (Part III.A.9.c)

The Palm Beach County MS4 permittees carry out a joint training program that is available to all permittee personnel, as well as contractors and private individuals.

- EXCAL Visual Video Training: The illicit discharge and spill prevention training topics are covered by one or more EXCAL Visual (www.excalvisual.com) videos presented at a group training session, held at least once each year, typically in March. Attendance logs are maintained for each training session. In addition, the library of videos is available to the permittees anytime for use at in-house training sessions.

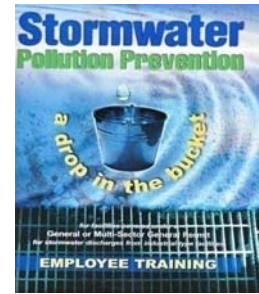
The permittees have purchased training videos from EXCAL Visual (www.excalvisual.com) to assist in meeting permit training requirements. These videos may not be reproduced, but additional copies may be purchased from the vendor to assist in meeting these training requirements.

The videos include the following:

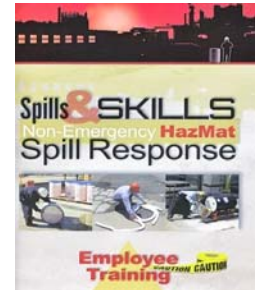
1. Rain Check: This video provides instruction on good housekeeping, spill response, materials management, vehicle fueling and washing and other BMPs outlined in EPA’s “National Menu of BMPs.”



2. **A Drop in the Bucket:** The video focuses on employee training that describes concepts and practices of stormwater pollution prevention. The video describes stormwater pollution and its negative effects on people, wildlife, and the environment. It includes good housekeeping, spill prevention, exposure minimization, maintenance and spill clean-up. It also provides an overview of the work practices that can be effective for stormwater pollution prevention.



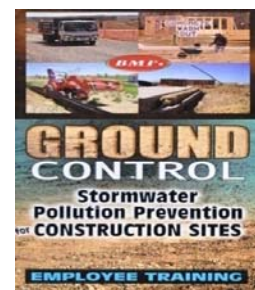
3. **Spills & Skills:** The video is designed to help train non-Hazardous Waste Operations and Emergency Response (HAZWOPER) employees on dealing with a hazardous material (or hazardous waste) spill, leak or release. What to do if you discover a hazmat release? How to determine if the release requires HAZWOPER-trained responders or not? If it is a hazmat emergency release (HAZWOPER event), what to do then? If it is non-HAZWOPER event (an "incidental release"), the discreet steps involved to clean it up. The "step-across" test. The clean-up supplies and equipment you should expect to find in the spill locker. Different styles of absorbent (loose, pads, pillows, socks) and how to use each. How to use all the equipment and supplies safely and effectively. How to manage the clean-up wastes. Post clean-up measures.



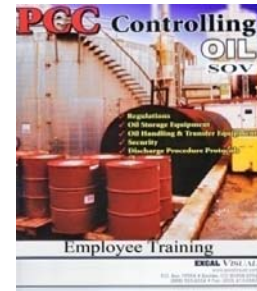
4. **Storm Warnings:** Storm Water Pollution Prevention - Describes Best Management Practices that are crucial for compliance with facility Stormwater Pollution Prevention Plans including: good housekeeping, exposure minimization, and soil-cleanup.



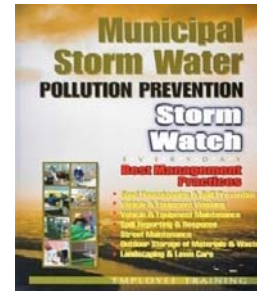
5. **Ground Control:** Stormwater Pollution Prevention for Construction Sites - The video focuses on BMPs that are widely used at most construction sites including: silt fences, stabilized entrances/exits, drop inlet protectors and others. The program illustrates how these BMPs work and how they can fail. Employees are encouraged to promptly report any failing BMPs. By making all employees "look-outs" for BMP problems, this training program is an important part of the required BMP maintenance program.



6. Controlling Oil: Spill Prevention, Control & Countermeasure (SPCC) – This 20-minute video instructs employees on SPCC Plans, oil pollution regulations, effective oil storage and oil transfer procedures. It also instructs employees on “discharge procedure protocols” first response measures to take when a discharge is discovered. The video also addresses site security measures to take to protect oil handling facilities against vandalism and terrorism.



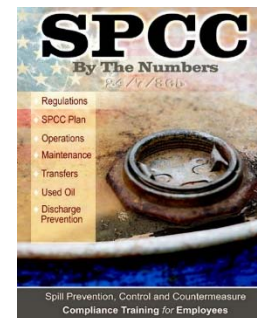
7. Storm Watch: Municipal Stormwater Pollution Prevention - The video focuses on municipal BMPs such as good housekeeping, spill response, materials storage and handling, landscape maintenance, and street maintenance. Employees working in maintenance and other departments can benefit from this training video. The video shows employees how to spot potential “illicit discharges.”



8. Illicit Discharge Detection & Elimination (IDDE): Shows viewers how to spot a possible illicit discharge or signs of past discharges. It discusses direct and indirect discharges and shows viewers what to look for at curb inlets, drop inlets and outfalls. It shows examples of the tell-tale signs often left by past illicit discharges. It encourages employees to be vigilant in watching for signs of illicit discharges and to report their suspicions to the storm drainage staff, Public Works Department or Environmental Staff who can then initiate the process of tracking the source of the discharge and eliminating it.



9. Spill Prevention, Control and Countermeasure by the Numbers 24/7/365: The video is designed to familiarize employees and contractors with the fundamental requirements as it applies at fixed facilities that store, use or handle oil in above ground containers (ASTs or portable containers such as 55 gallon drums). It shows employees and contractors at regulated facilities their role in the on-going process of oil spill prevention. It discusses the following topics:



- The scope of the oil pollution problem
- Oil pollution control laws and regulations and the SPCC rule
- General facility operations
- Oil storage equipment
- Operation and maintenance of spill prevention equipment
- Discharge procedure protocols

Training conducted in 2016/2017 included:

1. A PowerPoint presentation and videos (Ground Control and IDDE) covering the three required annual training topics (spill prevention and response, illicit discharge, and sediment and erosion control for construction sites) – March 15, 2017. Attendees for the training included 88 representatives from the Palm Beach County MS4 permittees.
2. Florida Stormwater, Erosion and Sedimentation Control Inspector Training Program – Palm Beach County MS4 permittees sponsored an FDEP course on May 23, & 24, 2017. The class, held at the Town of Jupiter Community Center, was taught by Cheryl Moore, a state certified instructor. A total of 105 individuals were in attendance, including 28 private individuals, 45 municipal construction site inspectors, 7 municipal site plan reviewers, and 25 municipal construction site operators.



3.0 Public Education Program

The Palm Beach County MS4 permittees have undertaken a jointly-funded program to meet the public education requirements of the MS4 permit. In so doing, all permittees participate in conducting the program. The premise of a joint program is that a unified message, repeated throughout the County, will have more of an impact than 40 separate messages. The Stormwater and Me (SAM) program, as it is called, kicked off in 2009.

Objective:

The objective of the public education program is to put relevant information in the hands of the residents of and visitors to the Palm Beach County geographic area so they can make better decisions with respect to pesticides, herbicides, fertilizers, illicit discharges, illegal dumping, and the disposal of household hazardous waste. The intent is that this will result in less of these items ending up in our stormwater systems and, in turn, our water bodies.

Topics:

As prescribed by the MS4 permit, the following topics are covered by the public education program:

- Encourage citizens to reduce their use of pesticides, herbicides, and fertilizers. [Part III.A.6.]
- Promote, publicize and facilitate public reporting of the presence of illicit discharges and improper disposal of materials into the MS4. [Part III.A.7.e.]
- Encourage the proper use and disposal of used motor vehicles fluids, leftover hazardous household products, and lead acid batteries. [Part III.A.7.f.]

Target Audience:

The target audience of the program is residents (children and adults) of and visitors to Palm Beach County, Florida.

Activities and Materials:

This reporting period, the SAM public outreach program included three 30-second Public Service Announcements (PSAs) dealing with pet waste pickup, keeping grass clippings off the streets, and reducing the usage of pesticides, herbicides and fertilizers. The PSAs were aired on five commercial television networks (Discovery, Animal Planet, Weather Channel, HGTV, and CNN), broadcast by a local cable television provider (Comcast) from December 2016 through March 2017 to broadcast zones within Palm Beach County. A total of 1,542 PSAs were aired. The PSAs were also aired by local/municipal TV stations throughout the year and many permittees play the videos on their website. Copies of the PSAs can be found on the SAM website: StormwaterAndMe.org.

As part of the Comcast PSA contract, an additional feature called a “taggable” was included. A 30-second promotional spot about not littering was “sponsored” by our SAM program, which simply means that at the end of the spot, our logo appeared, with a 10-second closing voice-over that told viewers: “The Palm Beach County Stormwater and Me website also has ideas on what you can do to help protect water quality in your

neighborhood.” Approximately 70 taggables appeared in the same Palm Beach County Comcast broadcast zones as our PSAs.

Finally, visitors to the Xfinity.com website home page were exposed to one PSA with a hot link that clicked directly through to our StormwaterAndMe.org website. Our ad repeatedly got exposure on Xfinity.com (Comcast’s portal).

During the 2016-2017 reporting period, the Palm Beach County Extension Service reports that it distributed 25,354 brochures, conducted 24 neighborhood presentations reaching 1,098 participants, produced 2 displays, conducted 8 school presentations reaching 798 participants, conducted 137 workshops reaching 3,896 participants, conducted 11 special events reaching 1,992 participants and provided Green Industry BMP training to 163 participants. The County Extension Service has estimated that its outreach program reached 8.6% of the population in Palm Beach County. Costs for these programs total about \$36,000.

The Palm Beach County Solid Waste Authority (SWA) continued to carry out a public education/outreach program to educate Palm Beach County residents and visitors about proper disposal of household hazardous waste (HHW). Through the MS4 NPDES Interlocal Agreement between Palm Beach County and Northern Palm Beach County Improvement District, SWA continues its program, in part to fulfill the permit requirement that all permittees educate their residents on proper disposal of HHW. During the 2016-2017 reporting period, SWA reports that it distributed 105,500 brochures, conducted 2,170 events, collected 1,973 tons of HHW, conducted 163 neighborhood presentations reaching 7,890 participants, distributed 12 newsletters, produced 136 displays, aired close to 4,000 PSAs, conducted 297 school presentations reaching 13,201 participants, conducted 4 workshops reaching 100 participants, and conducted 117 special events reaching 62,983 participants. SWA also hosts a public outreach website at http://www.swa.org/site/hhw/haz_waste_home/hazardous_waste_portal.htm. SWA has estimated that its outreach program reached 80% of the population in Palm Beach County. Costs for these programs total \$1,816,142.00.

Methods for Distribution:

The television PSAs allow the greatest opportunity for the distribution of information. In addition, the website, brochures, and meetings allow for the presentation of more in-depth information.

Annual Schedule:

Public education efforts are emphasized during the months of January through March, when residential population in the County is at its highest.

Documentation:

The Public Education Coordinator maintains record information for all materials distributed.

Responsible Entities:

The program is coordinated by the Palm Beach County MS4 Steering Committee administrative staff. HHW outreach is carried out by the Palm Beach County Solid Waste Authority (SWA) for all permittees under the inter-local agreement with Palm Beach County. The group supports the Fertilizer and Pesticide education carried out by the IFAS/County Extension office.

Resources Allocated:

The 2016-2017 allocation for the public education program (not including Palm Beach County SWA Programs) was \$35,000.

Assessment Method:

The bottom line on the effectiveness of public education is if the receiving waters experience improved water quality. Therefore, the water quality monitoring is offered as a measure of the collective effectiveness of this and other MS4 permit programs.

Public Reporting of Illicit Discharge:

The StormwaterAndMe.org website contains information on stormwater pollution and illicit discharges. Included is a listing of contacts for each of the 40 permittees to report an illicit discharge or spill.

4.0 Total Maximum Daily Load (TMDL) Program

4.1 Description

The PBC MS4 Cycle 4 permit includes TMDL requirements and a schedule for developing an implementation plan to reduce the discharge of pollutants from each affected permittee's MS4 to the maximum extent practicable. Both the Department and EPA have identified impaired waterbody segments within Palm Beach County. As of the issuance date of this permit, both the Department and EPA had established TMDLs that required action.



4.2 Established and Adopted TMDLs

TMDLs established by EPA and verified by the Department or adopted by the Department as of issuance data of the Cycle 4 permit, along with the respective potentially affected permittees, are identified in **Table 4-1**.

Although no action is required under the MS4 permit for TMDLs in the planning stage, this information is still tracked by the MS4 Group. FDEP has a planning list for development of TMDLs through 2022. As of November 10, 2017, seven water bodies were listed in Palm Beach County. Three of the water bodies are included in a Reasonable Assurance Plan (RAP) being coordinated by FDEP for the Loxahatchee River (North Fork WBID 3226D, NW Fork 3226A and SW Fork 3226C). The RAP activity removed all three TMDLs from the planning list, resulting in four remaining water bodies as shown in **Table 4-2**.

4.3 Prioritization Plan and Schedule

During Year 1 of this permit cycle the eight permittees identified as stakeholders for the required TMDL activity met to discuss an approach. As a result, Prioritization Plans for each permittee were submitted and approved by the Department (refer to **Table 4-3**). Two of the permittees (Boynton Beach and Delray Beach) were required to submit an Outfall Prioritization Plan. A joint plan was submitted to the Department an approval letter dated January 19, 2018 was received.

Agency	WBID	Segment Name	Basin	Constituent	TMDL	Percent Reduction	Date	MS4s
EPA	3226C	SW Fork Loxahatchee River	St. Lucie/ Loxahatchee	Fecal Coliform	<43 (counts/100 ml)	93	05/16/12	Jupiter, FDOT, PBC, SIRWCD, Turnpike, NPBCID
EPA	3262A	Lake Ida	Lake Worth Lagoon	Nutrients	TN=0.857 mg/l TP=0.062 mg/l	20 45	11/09/12	Delray, Boynton, FDOT, PBC
FDEP	3364A	E-1 Canal	Lake Worth Lagoon	Fecal Coliform	<400 (counts/100 ml)	94 0	08/31/11	FDOT, PBC

WBID	Segment Name	Basin	Parameter	MS4s
3262A	Lake Ida	Lake Worth Lagoon	TP and Chlorophyll-a	Palm Beach County, Delray Beach, Boynton Beach, FDOT-District IV
3245C4	Pine Lake	Lake Worth Lagoon	Chlorophyll-a	Palm Beach County, FDOT – District IV, West Palm Beach
3262B1	E-1	Lake Worth Lagoon	Chlorophyll-a	Palm Beach County, FDOT-District IV
3248	New River Canal (North Segment)	Everglades	Nutrient	South Bay

Permittee	WBID-Waterbody-TMDL	Outfall Prioritization Plan Due	Monitoring Summary Due (Year 3 AR)	Supplemental SWMP Due (Year 4 AR)	BPCP Due (Year 3 AR)
Boynton Beach	3262A- Lake IDA – Nutrients (EPA)	09/08/17	03/31/20	03/31/21	N/A
Delray Beach	3262A- Lake IDA – Nutrients (EPA)	09/08/17	03/31/20	03/31/21	N/A
FDOT District 4	3264A – E-1 Canal – Bacteria Loxahatchee River RAP (3226C)	N/A	N/A	N/A	03/31/20
FDOT Turnpike Enterprise	3226C – SW Loxahatchee River - Bacteria	N/A	N/A	N/A	03/31/20
Jupiter	Loxahatchee River RAP (3226C)	N/A	N/A	N/A	03/31/20
NPBCID	Loxahatchee River RAP (3226C)	N/A	N/A	N/A	03/31/20
Palm Beach County	3264A – E-1 Canal Bacteria Loxahatchee River RAP (3226C)	N/A	N/A	N/A	03/31/20
SIRWCD	Loxahatchee River RAP (3226C)	N/A	N/A	N/A	03/31/20
* RAP – Reasonable Assurance Plan * SWMP – Stormwater Management Plan * BPCP – Bacteria Pollution Control Plan					

5.0 Water Quality Monitoring Program

5.1 Description

In order to provide water quality monitoring data to permittees, to assist them with their required water quality assessment programs, the group made the decision to continue the +18-year joint water quality monitoring program. The monitoring program includes the following components:

- ambient water quality sampling
- water quality data analyses
- trend analyses
- annual pollutant loading estimations in Year 3
- program modifications as needed

The Palm Beach County MS4 NPDES permit monitoring program includes 40 ambient water quality monitoring sites which were selected after coordination among the South Florida Water Management District (SFWMD), Palm Beach County Environmental Resource Management (ERM), the Loxahatchee River District (LRD), Broward County (BC), and the Palm Beach County permittees.

5.2 Monitoring Sites

Table 5-1 identifies each monitoring site location and provides the site designation, watershed name, the entity conducting the sampling, and the site location northing and easting coordinates. Note that site designations are unique within an individual agency, but may be duplicated across agencies. Data for these sites are assigned a unique agency code and station identification in the State's database (DbHydro or WIN/STORET).

Figure 5-1 depicts the water quality monitoring site locations and shows the boundaries of the associated watersheds. Sites monitored by ERM are shown as circles, those monitored by the LRD are shown as squares, those monitored by SFWMD are shown as triangles, and those monitored by BC are shown as stars. White symbols signify marine or tidal sites and yellow symbols designate freshwater sites.

The LRD monitors four marine sites and three freshwater. ERM monitors ten marine sites and fifteen freshwater sites. The SFWMD monitors five freshwater sites and Broward County monitors one freshwater and two marine water sites. All of Palm Beach County's ERM, LRD and BC is in WIN/STORET and SFWMD data is in DbHydro.

The twenty-five sites monitored by ERM are sampled and initially analyzed in-situ by ERM staff using a multi-parameter water quality monitoring instrument. Water samples are collected, preserved and stored according to the Department Standard Operating Procedures. Quality assurance/quality control measures include pre-cleaned equipment blanks, field cleaned equipment blanks, field spikes, and the collection of duplicate samples.

Further analysis of samples from all ERM sites is conducted by an independent laboratory under contract with ERM.

The water quality parameters and frequency being monitored by ERM, LRD, SFWMD and BC are listed in Table 5-2. For this reporting period several monitoring events were missed. PBC ERM experienced a significant staff absence due to extended medical leave. Also the Lake Worth Lagoon monitoring is anticipated to experience missed monitoring event due to the following constraints. The protocol for monitoring tidal sites is “immediately at or prior to slack low tide”. This allows for approximately 2 windows per month when low tide is between 11:00 a.m. and 2:30 p.m., which can occur on weekends. The time on either side of this time frame is necessary for initial calibration, equipment decon, mobilization, travel, boat launch, boat recovery, travel, continuing calibration verification, and paper/tablet documentation work. Monitoring protocol prohibits monitoring during rain. Boating safety requirements prohibit monitoring during lightning events and winds exceeding 20 knots. Mechanical problems such as trailer lights malfunction and engine problems also result in missed monitoring events. Broward County data was only available for the first quarter. The remaining data has not been released.

Table 5-3 (3 pages) provides a list of the parameters and the Florida Surface Water Quality Standards (WQ Standards) as promulgated in Florida Administrative Code (F.A.C.) 62-302.530, 62-302.532, and 62-302.530 (47)(b). Numeric Nutrient Criteria for Palm Beach County estuaries/marine water bodies and freshwater lakes is shown on pages 2 and 3, respectively, in **Table 5-3**.

The water quality sampling program in Palm Beach County is a cooperative effort designed to incorporate desirable elements of existing monitoring programs being administered by various agencies throughout the County. Attempts to coordinate sampling frequencies, parameters, and methodologies are ongoing, but not all sampling programs produce results that are compatible for a combined analysis. Data for a given parameter, location, and event may be unavailable due to the specific goals of that agency’s monitoring program or procedural variations, including event frequency, sample depth, methodology, and instrumentation.

5.3 Water Quality Monitoring Results and Exceedances

The results of the monitoring conducted from October 2016 through September 2017 are provided in **Table 5-4** (40 pages). Sample values that were below the limits of detection (BDL or Non-detect) have been replaced whenever possible with ½ of the respective minimum detection limit (MDL) value for a more reasonable analysis. MDLs are determined by instrumentation and method of analysis. These substitutions have been highlighted in blue in the data tables. Exceedances of the WQ Standards are highlighted in yellow.

For Class I and Class III freshwater, exceedance limits for heavy metals (cadmium, copper, lead, and zinc) are based on a logarithmic function of the total hardness. In cases where a total hardness was not measured, an exceedance limit was not calculated. For marine waters, the limits for heavy metals are constant and do not depend on the total hardness. In marine waters, cadmium, copper, lead, and zinc exceed the surface WQ standards at values above 0.0088 mg/L, 0.0037 mg/L, 0.0085 mg/L, and 0.086 mg/L, respectively.

Exceedance limits for chlorophyll-a (corrected for pheophytin) are determined by the annual geometric mean of the samples taken at a given site. In freshwater systems (canals), the water quality standard is exceeded if the mean is greater than 20 ug/L. In marine systems (estuaries) and freshwater lakes, exceedance occurs when the

geometric mean is greater than the values shown on **Table 5-3 (Pages 2 and 3)** for the specific segment of the waterbody.

Table 5-5 summarizes the number of exceedances (as described above) at each site. Each cell in the columns for Dissolved Oxygen, Turbidity, Fecal Coliform, pH, Chlorophyll-a, Total Phosphorus and Total Nitrogen shows the number of exceedances and the total number of samples taken at each site during the reporting period. For example, two dissolved oxygen samples out of twelve taken at Site 69 within the Loxahatchee River watershed were in exceedance of the WQ Standard.

Exceedances of the dissolved oxygen % saturation standard occurred in the C-16, C-18, the Northwest Fork of the Loxahatchee River and the S-2-6-7 watershed (North New River Canal and Hillsboro Canal).

Exceedances of the fecal coliform standard occurred in the Class II Marine waters of the Loxahatchee River (Northwest Fork, and Southwest Fork). The criterion for this natural Class II water body is extremely low (< 43 cfu/100 ml) compared to all other classifications of water bodies (< 400 cfu/ml). Potential sources of bacteria are being investigated by the Town of Jupiter and the Loxahatchee River District.

Exceedances of the turbidity standard occurred in the L-8 Canal and North New River Canal which is probably linked to discharges from Lake Okeechobee.

Exceedances of the chlorophyll-a criteria occurred in the Southwest Fork of the Loxahatchee River and the Lake Worth Lagoon (North, Central and South). Chlorophyll-a is used as an indicator for excessive nutrient levels. Two sites in the Lake Worth Lagoon Central showed exceedance of the applicable criteria for Total Phosphorous and for Total Nitrogen. One site in the Lake Worth Lagoon South showed exceedance of the Total Phosphorus criteria. The suspected source of the marine water quality stations with exceedances of the nutrient criteria is the close proximity of the water quality monitoring stations and the inflows from major tributaries such as Sims and Jones Creek (Site 72 in the Loxahatchee), C-17 Canal (Site 13 in Lake Worth Lagoon North), C-51 Canal (Sites 18C and 18D in the Lake Worth Lagoon Central), and C-16 Canal (LWL-18 in the Lake Worth Lagoon South).

5.4 Trend Analysis

Tabular Data

The data set for the trend analyses includes approximately 22 water quality parameters (21 sampled parameters plus calculated TN) and all MS4 sampling events for each site's period of record as identified in Table 5-6 (24 pages). The period of record ranged from 1 year to 18 years.

Minimum detection limits were provided by Palm Beach County ERM for values that were reported BDL within the data set. MDL values for sampling events from September 2004 to December 2004 were obtained directly from STORET where available, and substituted for sample readings that were BDL. MDL values for data after December 2004 have been provided directly by the data supplier. MDL values in excess of the WQ Standard were not counted as exceedances.



A statistical summary of each sampling site by watershed is presented in **Table 5-6**. The statistical summary provides the following information.

<i>Start:</i>	The earliest sample event date for the given site.
<i>End:</i>	The latest sample event date for the given site.
<i>Samples:</i>	The total number of sample events for the given site.
<i>Count:</i>	The number of usable, numerical results for the given parameter.
<i>Exceedances:</i>	The number of measured values exceeding the criterion of the WQ Standard or IWR as previously described.
<i>Geometric</i>	Sample values are multiplied together then the nth root of the product is taken, where n is the number of samples
<i>Mean:</i>	Average of the usable samples.
<i>Max:</i>	The maximum value of the usable samples or “None” if no sample values were obtained.
<i>Min:</i>	The minimum value of the usable samples or “None” if no sample values were obtained.
<i>Standard Deviation:</i>	The standard deviation is based on the assumption that the data represents a sample of the population. This function uses an “n-1” denominator and will return “None” if there were less than two usable samples.

$$\sqrt{\frac{n \cdot \sum x^2 - (\sum x)^2}{n \cdot (n - 1)}}$$

n = number of samples

x = value

$\sum x^2$ = The sum of the squares of the values

$(\sum x)^2$ = The square of the sum of the values

The following parameters have been analyzed in greater detail:

Total Nitrogen (TN)

Total Phosphorus (TP)

Chlorophyll-a (Chl-a)

Table 5-7 summarizes the geometric mean values at each site for the period of record for TN, TP, and Chl-a. Historically, based on Chl-a, TN and/or TP exceedance of the nutrient criteria has occurred in the C-51 Basin, Loxahatchee River, and all three watersheds of the Lake Worth Lagoon. This information highlights individual

monitoring sites that may contribute to exceedances of water quality standards on a watershed basis. For example, Site 31E in the C-15 watershed has a historical geometric mean of 21.76 ug/l which may have been attributed to adjacent agricultural lands. Recently, some of the agricultural lands have been replaced with residential development. The last three years of water quality data has yielded significantly lower Chl-a values (**Table 5-10, Page 1 of 4**).

Graphical Data

Water quality trend graphs are presented for TN, TP, and Chl-a for the period of record in **Figures 5-2, 5-3, and 5-4** (12 pages each), respectively. The trend analyses are based on the annual geometric mean of all the monitoring site values within each watershed calculated on a calendar year (January 1 to December 31). The freshwater sites include data back to 1999, the marine sites use data from ERM that dates back to 2004.

Review of the trend graphs indicates the following:

Total Nitrogen trend graphs (**Figure 5-2**) indicate the concentrations are improving (decreasing) for nine watersheds (C-15, C-16, C-17, C-18, C-51, Loxahatchee, Lake Worth Lagoon North and Lake Worth Lagoon South). Only the Lake Worth Lagoon Central watershed shows an increasing trend. However, the concentrations are well below the nitrogen numeric criteria of 0.66 mg/l. Two watersheds do not have enough data for a trend analysis (L-8 and S-2-6-7).

Total Phosphorus trend graphs (**Figure 5-3**) indicate a general improvement (decrease or stabilized) in values within the watersheds, except for two watersheds, C-51 and the Loxahatchee River.

Chlorophyll-a trend graphs (**Figure 5-4**) indicate that the C-18 watershed, the C-51 watershed, the Loxahatchee River watershed, the Hillsboro, and the L-8 are showing improvement. All three watersheds in the Lake Worth Lagoon show an increasing trend.

Nutrient Trends – Two watersheds (C-18 and Hillsboro Canal) are showing beneficial long term trends for all three nutrient parameters which are evidence of the positive efforts of the co-permittee Stormwater Management Programs. Eight watersheds (C-15, C-16, C-17, C-51, Loxahatchee, Lake Worth Lagoon (North, Central and South) have declining water quality for one or more nutrient parameters. Only one of these (Lake Worth Lagoon – North) is the trend above the water quality criteria for Chlorophyll-a. This trend may be an indication that additional stormwater management programs may be needed. Two watersheds (L-8, S-2-6-7) have insufficient data for assessment.

Water Quality Improvements

FDEP's Water Quality Watershed Assessment Program uses ten years of water quality data to identify impaired water bodies for placement on the TMDL Planning List. The most recent seven years of data is used for placement on the Verified List of impaired waters. To provide the Palm Beach County MS4s with site specific, as well as basin-wide water quality trends, historical data charts were developed (using a traffic light symbology – red for exceedance of the water quality criteria, green for no exceedance, and yellow where there is no numeric

standard). Since nutrient impairment is a major concern in Palm Beach County water bodies, Chl-a, TP, and TN were selected for this evaluation. FDEP has established State-wide Chl-a numeric standard for all water bodies. However, for TP and TN there is no numeric criteria for the South Florida Region Canals, leaving 18 of the 40 monitoring sites without applicable numeric criteria. **Tables 5-8** through **Tables 5-10** provide the historic record of annual geometric mean exceedance for each site for these three nutrient based water quality parameters. The annual geometric mean calculation for each site is based on a calendar year, while the basin annual geometric mean is calculated using all the sample sites and data within the basin watershed.

The total nitrogen standards (basin averaging of sites) are being met in all twelve watersheds. Individual sites not meeting standards include Site 13 in the Lake Worth Lagoon North and Sites 18C and 18D in the Lake Worth Lagoon Central.

The total phosphorus standards (basin averaging of sites) are being met for eleven of the twelve watersheds. Only Lake Worth Lagoon Central is not meeting the standard. Individual sites not meeting the standards include Sites 11 and 13 (Lake Worth Lagoon North) and Sites LWL-8, 18C, 18D and LWL- 11 (Lake Worth Lagoon Central).

The Chl-a criterion (basin averaging of sites) is not being met in four watersheds, the C-15, Loxahatchee River (marine/tidal areas of the North, Northwest, and Southwest Forks), and the two watersheds of the Lake Worth Lagoon (North and Central).

5.5 Pollutant Loading Analyses

Refer to the Cycle 3, 3rd Year Joint Annual Report for the most recent pollutant loading estimates.

5.6 Program Modifications

Generally, the water quality monitoring data and assessments (annual exceedances, historical statistical data, more recent data, trends) show an improvement in the water quality of the receiving water bodies. Consequently, the stormwater management programs implemented by the permittees, as required by the MS4 permit, appear to be effective.

No program modifications are proposed with this year's report.

**Table 5-1
Water Quality Monitoring Site Locations**

Watershed	Surface Water Classification	Site Designation	Agency	Marine/ Freshwater	Northing	Easting
C-15	III (Fresh)	31E	ERM	Freshwater	760549.91	916736.89
		31C	ERM	Freshwater	760879.83	943443.02
		31B	ERM	Freshwater	802772.09	964368.10
C-16	III (Fresh)	22	ERM	Freshwater	828280.34	957602.68
		24	ERM	Freshwater	820399.97	957270.70
		27B	ERM	Freshwater	802276.58	916052.08
		27A	ERM	Freshwater	802545.25	942880.04
		28	ERM	Freshwater	760234.13	959303.11
C-17	III (Fresh)	12A	ERM	Freshwater	882520.57	953672.56
		C17S44	SFWMD	Freshwater	903830.19	955552.70
C-18	I (Fresh)	16	ERM	Freshwater	923477.26	902076.42
		15	ERM	Freshwater	901986.07	931378.31
		92	LRD	Freshwater	924685.07	937805.48
		81	LRD	Freshwater	946081.68	935811.57
C-51	III (Fresh)	38B	ERM	Freshwater	854963.27	867962.99
		37B	ERM	Freshwater	853637.29	916592.84
		C51S155	SFWMD	Freshwater	841132.85	964349.43
Lox	III (Fresh)	69	LRD	Freshwater	947071.77	924822.40
	III (Marine)	30	LRD	Marine	961625.76	961625.76
		51	LRD	Marine	954939.97	948224.55
		62	LRD	Marine	938898.36	961525.58
	II	72	LRD	Marine	946223.78	954573.37
LWL-N	III (Marine)	LWL-1	ERM	Marine	913398.12	964095.22
		11	ERM	Marine	908969.28	962655.71
		13	ERM	Marine	900706.79	964049.58
		LWL-4	ERM	Marine	898346.67	970040.36
LWL-C	III (Marine)	LWL-8	ERM	Marine	856238.64	968284.93
		18C	ERM	Marine	839740.15	969747.03
		18D	ERM	Marine	835593.23	967942.19
		LWL-11	ERM	Marine	830580.53	967926.64
LWL-S	III (Marine)	LWL-13	ERM	Marine	819086.28	968516.09
		LWL-18	ERM	Marine	798402.11	965585.04
Hillsboro	III (Marine)	1	BC	Marine	724863.71	953909.23
		2	BC	Marine	725864.04	940799.29
	III (Fresh)	3	BC	Freshwater	725348.47	917217.65
		S39	SFWMD	Freshwater	734632.99	888668.58
L-8	III (Fresh)	Culv10	SFWMD	Freshwater	938859.59	778727.09
S-2-6-7	III (Fresh)	S-2	SFWMD	Freshwater	860426.94	748850.27
		39	ERM	Freshwater	855232.20	764581.68
		43	ERM	Freshwater	847294.87	750036.29

**Table 5-2
Parameter Collection Schedule**

Parameter	ERM		SFWMD	LRD	BC
	Freshwater	Marine			
Alkalinity*	--	--	--	M	
Arsenic	BM	Q	--	--	
Cadmium	BM	Q	--	--	
Chlorophyll-a (corrected)	BM	M	--	M	Q
Copper	BM	Q	--	--	
Dissolved Oxygen	BM	M	M	M	Q
Fecal Coliform	--	--	--	M	
Lead	BM	Q	--	--	
Nitrogen, Ammonia	BM	M	M	M	Q
Nitrogen, Nitrate-Nitrite	BM	M	M	M	Q
Nitrogen, Total Kjeldahl	BM	M	M	M	Q
Nitrogen, Total	BM	M	M	M	Q
pH	BM	M	M	M	Q
Phosphorus, Orthophosphate	BM	M	M	M	
Phosphorus, Total	BM	M	M	M	
Salinity†	--	M	--	M	Q
Specific Conductivity	BM	M	M	M	Q
Temperature	BM	M	M	M	Q
Total Hardness (as CaCO ₃)*	BM	--	--	--	
Total Suspended Solids*	BM	M	M	M	
Turbidity	BM	M	M	M	Q
Zinc*	BM	Q	--	--	

- Notes: 1. Not all parameters are collected for every site.
2. LRD - Loxahatchee River District Sites 62, 69, and 72, are sampled monthly. Sites 30, 51, 81, and 92 bi-monthly.
3. ERM – Palm Beach County Environmental Resource Management
4. SFWMD – South Florida Water Management District
5. BC – Broward County

BM (Bi-Monthly)
M (Monthly)
Q (Quarterly)
-- (Not Sampled)

**Table 5-3
(Page 1 of 3)**

**State of Florida
Numerical Surface Water Quality Standards per Rule 62-302.530**

Parameter	Units	Class I – Freshwater	Class II – Marine	Class III - Freshwater	Class III Marine-(Tidal)
PH		6.0 to 8.5	6.5 to 8.5	6.0 to 8.5	6.5 to 8.5
Dissolved Oxygen (saturation value)	%	> 38	> 42	> 38	> 42
Turbidity	NTU	< 29 above background	< 29 above background	< 29 above background	< 29 above background
Chlorophyll-a (corrected)*	ug/L	Annual geometric mean < 20	Annual geometric mean < 11	Annual geometric mean < 20	Annual geometric mean < 11
Fecal Coliform*	#/100 mL	< 400 counts	< 43 counts (4)	< 400 counts	< 400 counts
Arsenic	mg/L	< 0.01	< 0.05	< 0.05	< 0.05
Cadmium	mg/L	$< [e^{(0.7409 \ln H) - 4.719}] 10^{-3}$	< 0.0088	$< [e^{(0.7409 \ln H) - 4.719}] 10^{-3}$	< 0.0088
Copper	mg/L	$< [e^{(0.8545 \ln H) - 1.702}] 10^{-3}$	< 0.0037	$< [e^{(0.8545 \ln H) - 1.702}] 10^{-3}$	< 0.0037
Lead	mg/L	$< [e^{(0.1273 \ln H) - 4.705}] 10^{-3}$	< 0.0085	$< [e^{(0.1273 \ln H) - 4.705}] 10^{-3}$	< 0.0085
Specific Conductance	umho/cm	< 1275		< 1275	
Zinc	mg/L	$< [e^{(0.8473 \ln H) + 0.884}] 10^{-3}$	< 0.086	$< [e^{(0.8473 \ln H) + 0.884}] 10^{-3}$	< 0.086

Notes:

- (1) lnH means the natural logarithm of total hardness expressed as milligrams/L of CaCO₃. For metals criteria involving equations with hardness, the hardness shall be set at 25 mg/L if actual hardness is < 25 mg/L and set at 400 mg/L if actual hardness is > 400 mg/L.
- (2) This criterion is protective of human health not of aquatic life.
- (3) DO saturation shall not be below the criteria in more than 10% of the measurements.
- (4) This criterion applies to Sites 51, 62, and 72

Table 5-3**(Page 2 of 3)****State of Florida****Numeric Interpretation of the Estuary****Specific Narrative Nutrient Criterion per Rule 62-302.532**

Estuary	Total Phosphorus	Total Nitrogen	Chlorophyll-a	Applicable to Monitoring Sites
Middle Loxahatchee River	0.030 mg/L as AGM	0.80 mg/L as AGM	4.0 ug/L as AGM	51
Upper Loxahatchee River	0.075 mg/L as AGM	1.26 mg/L as AGM	5.5 ug/L as AGM	62
Loxahatchee River Southwest Fork	0.075 mg/L as AGM	1.26 mg/L as AGM	5.5 ug/L as AGM	72
ICWW South of Loxahatchee River	0.035 mg/L as AGM	0.66 mg/L as AGM	4.7 ug/L as AGM	30
Northern Lake Worth Lagoon	0.044 mg/L as AGM	0.54 mg/L as AGM	2.9 ug/L as AGM	LWL-1, LWL-4, 11, 13
Central Lake Worth Lagoon	0.049 mg/L as AGM	0.66 mg/L as AGM	10.2 ug/L	LWL-8, LWL-11, 18C, 18D
Southern Lake Worth Lagoon	0.050 mg/L as AGM	0.59 mg/L as AGM	5.7 ug/L as AGM	LWL-13 LWL-18
Notes: For estuary segments with criteria expressed as annual geometric means (AGM), the values shall not be exceeded more than once in a three-year period. For all other estuary segments, the criteria shall not be exceeded in more than 10 percent of the measurements.				

Table 5-3

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State of Florida**Numeric Interpretation of the Narrative Nutrient Lake and Stream Criteria per Rule 62-302.531**

Long Term Geometric Mean Lake Color and Alkalinity	Annual Geometric Mean Chlorophyll-a	Minimum Calculated Numeric Interpretation		Maximum Calculated Numeric Interpretation	
		Annual Geometric Mean Total Phosphorus	Annual Geometric Mean Total Nitrogen	Annual Geometric Mean Total Phosphorus	Annual Geometric Mean Total Nitrogen
≤40 Platinum Cobalt units and > 20 mg/L CaCO ₃	<20 ug/L	0.03 mg/l	1.05 mg/l	0.09 mg/l	1.91 mg/l
≥40 Platinum Cobalt units	<20 ug/L	0.05 mg/l	1.27 mg/l	0.16 mg/l	2.23 mg/l

Notes: For lakes, FDEP allows for an acceptable range of annual geometric means of TN and TP, up to the values shown in the “maximum calculated numeric interpretation” column, as long as the applicable chlorophyll-a criterion is achieved in that same year. These numeric interpretations for TN, TP, and chlorophyll-a cannot be exceeded more than once in any consecutive calendar three-year period.

State of Florida – Nutrient Criterion for South Florida Canals per Rule 62-302.530(47)(b) and 62-303.351

In no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural population of aquatic flora for fauna. Annual mean chlorophyll-a value less than or equal to 20 ug/l. This is applicable to sites 31E, 31C, 31B, 22, 24, 27b, 27a, 28, 12A, C1744, 16, 15, 38b, 37b, C51S155, 69, Culv10, S39, 1, 2, 3, S2, 39 and 43.

State of Florida has established nutrient threshold (expressed as annual geometric means) for the Peninsula Region of 20 ug/l for chlorophyll-a, 0.12 mg/l for TP, and 1.54 mg/l for TN. These values cannot be exceeded more than once in a three-year period. This is applicable to the C-18 Basin and freshwater portions of the Loxahatchee River (Sites 15, 16, 69, 81, and 92).

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C-15 Watershed Monitoring Events							
SITE 31E	SAMPLE DATE	10/21/16	1/3/17	4/20/17	6/29/17	9/21/17	Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0028	0.0045	0.0022	0.0022	0.0022	
Cadmium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	
Chlorophyll-a (corrected)	ug/L	60.5	26.7	3.0	24.4	9.3	16.2
Copper	mg/L	0.0028	0.0019	0.0010	0.0044	0.00315	
Dissolved Oxygen	% Saturation	89.1	98.7	79.3	65.8	81.1	
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021	0.0021	0.0021	0.0021	
Nitrogen, Ammonia	mg/L	0.088	0.105	0.105	0.105	0.138	
Nitrogen, nitrate + nitrite	mg/L	0.104	0.023	0.033	0.0285	0.0288	
Nitrogen, Total	mg/L	2.77	1.11	1.34	0.39	1.46	1.19
Nitrogen, Total Kjeldahl	mg/L	2.67	1.09	1.31	0.365	1.43	
pH	None	7.78	8.04	7.88	7.96	8.85	
Phosphorus, orthophosphate	mg/L	0.2450	0.136	0.003	0.109	0.650	
Phosphorus, Total	mg/L	0.3260	0.1990	0.0200	0.198	0.734	0.180
Salinity	ppth						
Specific Conductivity	umho/cm	708	679	624	446.2	535	
Temperature	deg C	26.9	24.3	24.9	31.0	30.8	
Total Hardness	mg/L	228	208	140	156	189	
Total Suspended Solids	mg/L	3.3	5.0	7.9	5.6	7	
Turbidity	NTU	5.6	3.5	2.4	5.1	6.8	
Zinc	mg/L	0.0106	0.0021	0.0021	0.0106	0.0018	

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- Highlighted in "yellow" are sample values that exceed either the State Water Quality Standards for a specific parameter or Florida's Impaired Waters Rule criteria for chlorophyll-a.

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C-15 Watershed Monitoring Events							
SITE 31C	SAMPLE DATE	10/21/16	1/3/17	4/20/17	6/29/17	9/21/17	Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0037	0.0022	0.0018	0.0022	2.2350	
Cadmium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	
Chlorophyll-a (corrected)	ug/L	40.0	21.3	3.0	21.8	15.5	15.4
Copper	mg/L	0.0018	0.0012	0.0015	0.0295	0.0043	
Dissolved Oxygen	% Saturation	71.6	123.1	67.0	67.8	88.6	
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021	0.0021	0.0021	0.0021	
Nitrogen, Ammonia	mg/L	0.168	0.105	0.086	0.075	0.105	
Nitrogen, nitrate + nitrite	mg/L	0.089	0.029	0.025	0.0663	0.029	
Nitrogen, Total	mg/L	2.20	0.62	1.10	1.15	0.90	1.09
Nitrogen, Total Kjeldahl	mg/L	2.11	0.59	1.07	1.08	0.87	
pH	None	7.53	8.13	8.11	7.84	8.48	
Phosphorus, orthophosphate	mg/L	0.0967	0.033	0.043	0.081	0.088	
Phosphorus, Total	mg/L	0.173	0.081	0.086	0.136	0.156	0.121
Salinity	ppth						
Specific Conductivity	umho/cm	523	485	535	542	488.5	
Temperature	deg C	27.1	24.8	25.0	30.5	30.2	
Total Hardness	mg/L	183	167	201	181	174	
Total Suspended Solids	mg/L	3.2	2.9	6.4	2.9	5.0	
Turbidity	NTU	3.5	2.8	2.3	2.5	4.0	
Zinc	mg/L	0.0090	0.0022	0.0026	0.1030	0.0016	

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C-15 Watershed Monitoring Events							
SITE 31B	SAMPLE DATE	10/21/16	01/03/17	04/20/17			Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.00277	0.0022	0.0018			
Cadmium	mg/L	0.000195	0.0002	0.0002			
Chlorophyll-a (corrected)	ug/L	37.8	8.9	20.9			19.16
Copper	mg/L	0.00292	0.0022	0.0023			
Dissolved Oxygen	% Saturation	124.7	104.95	96.8			
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021	0.0021			
Nitrogen, Ammonia	mg/L	0.105	0.105	0.105			
Nitrogen, nitrate + nitrite	mg/L	0.029	0.029	0.029			
Nitrogen, Total	mg/L	1.75	0.74	0.95			1.07
Nitrogen, Total Kjeldahl	mg/L	1.72	0.714	0.92			
pH	None	8.4	8.4	8.6			
Phosphorus, orthophosphate	mg/L						
Phosphorus, Total	mg/L	0.0931	0.0366	0.0030			0.02
Salinity	ppth						
Specific Conductivity	umho/cm	488	499.1	764			
Temperature	deg C	26.6	23.5	24.3			
Total Hardness	mg/L	178	173	162			
Total Suspended Solids	mg/L	8.1	5.6	4.5			
Turbidity	NTU	4.4	4	3.9			
Zinc	mg/L	0.0093	0.0027	0.0028			

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C-16 Watershed Monitoring Events							
SITE 22	SAMPLE DATE	10/19/16	12/29/16	4/19/17	6/30/17		Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0035	0.0022		0.002235		
Cadmium	mg/L	0.0002	0.0002		0.0002		
Chlorophyll-a (corrected)	ug/L	22.6	62.7	3	24.9		18.0
Copper	mg/L	0.0027	0.0011		0.00142		
Dissolved Oxygen	% Saturation	87.3	118.5	105.6	136.5		
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021		0.0021		
Nitrogen, Ammonia	mg/L	0.025	0.105	0.105	0.105		
Nitrogen, nitrate + nitrite	mg/L	0.030	0.029	0.003	0.003		
Nitrogen, Total	mg/L	0.71	1.19	0.81	0.72		0.84
Nitrogen, Total Kjeldahl	mg/L	0.68	1.16	0.807	0.72		
pH	None	7.9	8.4	8.1	8.90		
Phosphorus, orthophosphate	mg/L						
Phosphorus, Total	mg/L	0.004	0.014	0.008	0.003		0.006
Salinity	ppth						
Specific Conductivity	umho/cm	414	583	765	464.5		
Temperature	deg C	26.0	24.5	25.1	32.3		
Total Hardness	mg/L	158	175		165		
Total Suspended Solids	mg/L	4.0	3.3		5.3		
Turbidity	NTU	2.8	2.2	4	4.2		
Zinc	mg/L	0.0502	0.0027		0.0036		

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C-16 Watershed Monitoring Events							
SITE 24	SAMPLE DATE	10/19/16	12/29/16	4/19/17	6/30/17		Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.00254	0.0041		0.00385		
Cadmium	mg/L	0.0002	0.0002		0.0002		
Chlorophyll-a (corrected)	ug/L	4.4	3.5	3	30.7		6.1
Copper	mg/L	0.0024	0.0014		0.0019		
Dissolved Oxygen	% Saturation	95.3	94.4	74.5	145.6		
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021		0.0021		
Nitrogen, Ammonia	mg/L	0.0332	0.105	0.105	0.105		
Nitrogen, nitrate + nitrite	mg/L	0.583	0.0285	0.0285	0.0285		
Nitrogen, Total	mg/L	1.35	1.06	0.95	0.89		1.05
Nitrogen, Total Kjeldahl	mg/L	0.765	1.03	0.922	0.859		
pH	None	8.0	8.3	8.1	8.84		
Phosphorus, orthophosphate	mg/L	0.0119	0.006	0.003	0.003		
Phosphorus, Total	mg/L	0.015	0.012	0.0177	0.062		0.021
Salinity	ppth						
Specific Conductivity	umho/cm	382	545	628	471		
Temperature	deg C	26.7	24.1	24.6	32.0		
Total Hardness	mg/L	136	157		172		
Total Suspended Solids	mg/L	1.5	2.3		6.6		
Turbidity	NTU	0.90	1.60	0.90	5.80		
Zinc	mg/L	0.0264	0.0017		0.0026		

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C-16 Watershed Monitoring Events							
SITE 27B	SAMPLE DATE	10/21/16	4/20/17	6/29/17			Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0046	0.0022	0.0022			
Cadmium	mg/L	0.0002	0.0002	0.0002			
Chlorophyll-a (corrected)	ug/L	61.4	3.0	4.8			9.6
Copper	mg/L	0.0041	0.0022	0.0975			
Dissolved Oxygen	% Saturation	81.0	62.60	21.9			
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021	0.0021			
Nitrogen, Ammonia	mg/L	0.036	0.034	0.105			
Nitrogen, nitrate + nitrite	mg/L	0.035	0.029	0.029			
Nitrogen, Total	mg/L	1.90	1.37	1.12			1.43
Nitrogen, Total Kjeldahl	mg/L	1.86	1.34	1.09			
pH	None	7.76	8.54	8.17			
Phosphorus, orthophosphate	mg/L	0.3970	0.0379	0.0074			
Phosphorus, Total	mg/L	0.465	0.083	0.031			0.106
Salinity	ppth						
Specific Conductivity	umho/cm	669	569	528			
Temperature	deg C	26.7	24.2	28.8			
Total Hardness	mg/L	226	155	133			
Total Suspended Solids	mg/L	3.3	7.0	2.4			
Turbidity	NTU	6.0	3.1	1.3			
Zinc	mg/L	0.0191	0.0037	0.0016			

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C-16 Watershed Monitoring Events							
SITE 27A	SAMPLE DATE	10/21/16	1/3/17	4/20/17	6/29/17	9/21/17	Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.00304	0.002235	0.00174	0.002235	0.002235	
Cadmium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	
Chlorophyll-a (corrected)	ug/L	3.0	24.4	3.0	11.1	13.8	8.0
Copper	mg/L	0.0040	0.0025	0.0022	0.0020	0.0032	
Dissolved Oxygen	% Saturation	95.0	102.6	95.4	39.4	109.4	
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021	0.0021	0.0021	0.0021	
Nitrogen, Ammonia	mg/L	0.027	0.105	0.105	0.105	0.105	
Nitrogen, nitrate + nitrite	mg/L	0.029	0.147	0.029	0.0228	0.029	
Nitrogen, Total	mg/L	2.35	1.39	0.91	0.99	0.94	1.22
Nitrogen, Total Kjeldahl	mg/L	2.32	1.24	0.88	0.97	0.91	
pH	None	8.24	8.37	8.49	7.81	8.44	
Phosphorus, orthophosphate	mg/L	0.0238	0.0054	0.0030	0.0642	0.0458	
Phosphorus, Total	mg/L	0.071	0.043	0.022	0.136	0.129	0.065
Salinity	ppth						
Specific Conductivity	umho/cm	521	649	535	533	444.3	
Temperature	deg C	26.2	23.1	24.3	30.9	30.5	
Total Hardness	mg/L	175	171	167	173	171	
Total Suspended Solids	mg/L	1.8	5.9	5.3	2.6	6.0	
Turbidity	NTU	4.5	2.9	1.8	2.6	4.9	
Zinc	mg/L	0.0165	0.0026	0.0027	0.0033	0.0019	

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C-16 Watershed Monitoring Events							
SITE 28	SAMPLE DATE	10/21/16	1/3/17	4/20/17			Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.002235	0.0022	0.0022			
Cadmium	mg/L	0.000195	0.0002	0.0002			
Chlorophyll-a (corrected)	ug/L	3	10.6	3.0			4.6
Copper	mg/L	0.00331	0.0021	0.0019			
Dissolved Oxygen	% Saturation	74.32	108.0	95.1			
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021	0.0021			
Nitrogen, Ammonia	mg/L	0.057	0.105	0.105			
Nitrogen, nitrate + nitrite	mg/L	0.061	0.029	0.029			
Nitrogen, Total	mg/L	1.71	0.97	0.11			0.57
Nitrogen, Total Kjeldahl	mg/L	1.65	0.94	0.08			
pH	None	7.8	8.4	8.6			
Phosphorus, orthophosphate	mg/L	0.032	0.007	0.003			
Phosphorus, Total	mg/L	0.0607	0.0204	0.0266			0.032
Salinity	ppth						
Specific Conductivity	umho/cm	438	420.5	522			
Temperature	deg C	26.0	23.4	24.1			
Total Hardness	mg/L	150	140	150			
Total Suspended Solids	mg/L	4.0	3.3	2.2			
Turbidity	NTU	3.9	2.0	3.0			
Zinc	mg/L	0.0134	0.0024	0.0025			

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C-17 Watershed Monitoring Events							
SITE 12A	SAMPLE DATE	10/19/16	12/29/16	4/18/17	6/28/17	9/20/17	Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0022	0.0022		0.0044	0.0022	
Cadmium	mg/L	0.0002	0.0002		0.0002	0.0002	
Chlorophyll-a (corrected)	ug/L	3.0	23.1	3.0	20	8.4	8.1
Copper	mg/L	0.0020	0.0015		0.00156	0.0010	
Dissolved Oxygen	% Saturation	71.0	85.0	88.0	61.6	101.7	
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0024	0.0021		0.0021	0.0021	
Nitrogen, Ammonia	mg/L	0.838	0.105	0.105	0.105	0.015	
Nitrogen, nitrate + nitrite	mg/L	0.123	0.048	0.029	0.029	0.026	
Nitrogen, Total	mg/L	1.05	1.19	1.11	0.74	1.13	1.03
Nitrogen, Total Kjeldahl	mg/L	0.93	1.14	1.08	0.711	1.10	
pH	None	8.12	8.50	8.75	7.78	8.43	
Phosphorus, orthophosphate	mg/L	0.0030	0.003	0.003	0.003	0.003	
Phosphorus, Total	mg/L	0.055	0.029	0.045	0.055	0.094	0.052
Salinity	ppth						
Specific Conductivity	umho/cm	419	483.7	482.2	472.6	457.2	
Temperature	deg C	25.6	24.7	24.9	30.5	29.4	
Total Hardness	mg/L	157	175		149	158	
Total Suspended Solids	mg/L	7.5	8.5		4.2	7	
Turbidity	NTU	6.2	5.3	5	4.2	5.7	
Zinc	mg/L	0.0425	0.0044		0.0070	0.0038	

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C-17 Watershed Monitoring Events								
SITE C17S44	SAMPLE DATE	11/17/16	12/8/16	1/12/17	2/9/17	3/9/17	4/13/17	5/11/17
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation		52.22	78.63	86.91	85.39	75.56	98.48
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.077	0.035	0.034	0.014	0.007	0.043	0.008
Nitrogen, nitrate + nitrite	mg/L	0.115	0.041	0.02	0.005	0.0025	0.011	0.0025
Nitrogen, Total	mg/L	0.811	0.854	0.728	0.756	0.74	0.724	0.689
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.8	7.7	7.9	7.9	8.2	8.3	7.8
Phosphorus, orthophosphate	mg/L	0.009	0.002	0.004	0.001	0.002	0.004	0.001
Phosphorus, Total	mg/L	0.031	0.047	0.029	0.03	0.033	0.027	0.029
Salinity	ppth							
Specific Conductivity	umho/cm	475	493	483	484	465	461	417
Temperature	deg C	22.2	24.5	19.2	23.5	21.4	23.6	27.3
Total Hardness	mg/L							
Total Suspended Solids	mg/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Turbidity	NTU	1.3	2	1.6	2.8	1.8	1.1	1.4
Zinc	mg/L							

SITE C17S44	SAMPLE DATE	6/13/17	7/20/17	8/10/17	9/21/17			Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation	91.75	44.88	47.31	45.77			
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.013	0.033	0.068	0.097			
Nitrogen, nitrate + nitrite	mg/L	0.013	0.02	0.026	0.036			
Nitrogen, Total	mg/L	0.828	0.791	0.869	0.869			0.78
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.6	7.7	7.9	7.5			
Phosphorus, orthophosphate	mg/L	0.002	0.004	0.009	0.017			
Phosphorus, Total	mg/L	0.051	0.036	0.04	0.056			0.036
Salinity	ppth							
Specific Conductivity	umho/cm	443	486	482	478			
Temperature	deg C	29.3	31	30.8	28.9			
Total Hardness	mg/L							
Total Suspended Solids	mg/L	4	1.5	1.5	2			
Turbidity	NTU	2.6	1.4	1.1	1.7			
Zinc	mg/L							

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C-18 Watershed Monitoring Events							
SITE 16	SAMPLE DATE	10/19/16	12/29/16	4/18/17	6/28/17	9/20/17	Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0022	0.0022		0.0022	0.0022	
Cadmium	mg/L	0.0002	0.0002		0.0002	0.0002	
Chlorophyll-a (corrected)	ug/L	3.0	7.1	3.0	5.3	7.5	4.8
Copper	mg/L	0.0010	0.0010		0.0010	0.0010	
Dissolved Oxygen	% Saturation	49.9	23.7	112.5	25.4	43.9	
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021		0.0021	0.0021	
Nitrogen, Ammonia	mg/L	0.042	0.498	0.105	0.0225	0.061	
Nitrogen, nitrate + nitrite	mg/L	0.029	0.041	0.029	0.029	0.029	
Nitrogen, Total	mg/L	1.04	0.95	0.70	0.86	0.90	0.88
Nitrogen, Total Kjeldahl	mg/L	1.01	0.91	0.67	0.83	0.87	
pH	None	7.10	8.13	8.53	7.43	7.92	
Phosphorus, orthophosphate	mg/L	0.0030	0.003	0.003	0.00534	0.003	
Phosphorus, Total	mg/L	0.003	1.500	0.0046	0.0323	0.0245	0.027
Salinity	ppth						
Specific Conductivity	umho/cm	154	448.6	486	226.7	169.1	
Temperature	deg C	26.2	23.0	23.9	30.7	30.1	
Total Hardness	mg/L	48.7	190		75.4	58.8	
Total Suspended Solids	mg/L	1.5	1.6		2.5	3.3	
Turbidity	NTU	1.3	1.4	1.6	1	2.7	
Zinc	mg/L	0.0197	0.0024		0.0047	0.0035	

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C-18 Watershed Monitoring Events							
SITE 15	SAMPLE DATE	10/19/16	12/29/16	4/18/17	6/28/17	9/20/17	Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0022	0.0022		0.0022	0.0022	
Cadmium	mg/L	0.0002	0.0002		0.0002	0.0002	
Chlorophyll-a (corrected)	ug/L	1.3000	1.7000	3.0	1.7	3.0	2.0
Copper	mg/L	0.00	0.00		0.0010	0.0010	
Dissolved Oxygen	% Saturation	28.0000	43.1000	51.9	33.5	55.1	
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021		0.0021	0.0021	
Nitrogen, Ammonia	mg/L	0.1050	0.0229	0.016	0.105	0.014	
Nitrogen, nitrate + nitrite	mg/L	0.0285	0.0557	0.03	0.0285	0.03	
Nitrogen, Total	mg/L	0.6055	1.0657	0.9485	0.5885	0.6015	0.74
Nitrogen, Total Kjeldahl	mg/L	0.5770	1.0100	0.92	0.56	0.573	
pH	None	7.31	8.12	8.0	7.7	8.3	
Phosphorus, orthophosphate	mg/L	0.0030	0.0030	0.003	0.003	0.003	
Phosphorus, Total	mg/L	1.5000	1.5000	0.008	1.500	0.003	0.152
Salinity	ppth						
Specific Conductivity	umho/cm	198	272	611	235	219.5	
Temperature	deg C	25.30	23.40	24.6	30.2	29.2	
Total Hardness	mg/L	66.6	74.1		78.2	74	
Total Suspended Solids	mg/L	1.5000	2.2000		1.0	1.0	
Turbidity	NTU	0.8000	1.4000	2.1	0.65	0.7	
Zinc	mg/L	0.0016	0.0025		0.00314	0.0032	

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C-18 Watershed Monitoring Events (Fresh)								
Site 92	SAMPLE DATE	9/13/16	11/21/16	1/16/17	3/20/17	5/22/17	7/18/17	Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L	106	146	120	136	216	101	
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	7.3	1.6	2.8	3.3	6.1	2.5	3.4
Copper	mg/L							
Dissolved Oxygen	% Saturation	45.00	38.10	77.40	78.90	5.70	37.8	
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.080	0.100	0.060	0.040	0.130	0.050	
Nitrogen, nitrate + nitrite	mg/L	0.043	0.094	0.048	0.035	0.031	0.042	
Nitrogen, Total	mg/L	1.043	0.894	0.748	0.735	1.031	0.842	0.87
Nitrogen, Total Kjeldahl	mg/L	1.00	0.80	0.7	0.7	1	0.8	
pH	None	7.07	7.44	7.41	7.74	7.13	7.14	
Phosphorus, orthophosphate	mg/L	0.005	0.008	0.007	0.006	0.020	0.125	
Phosphorus, Total	mg/L	0.025	0.024	0.013	0.023	0.066	0.182	0.036
Salinity	ppth	0.2	0.37	0.2	0.2	0.4	0.2	
Specific Conductivity	umho/cm	346	746.9	406	459	909	357	
Temperature	deg C	30.1	22.1	21.5	22.0	29.2	26.9	
Total Hardness	mg/L							
Total Suspended Solids	mg/L	1.4	2.4	0.7	3.3	6.1	4.7	
Turbidity	NTU	1.3	2.2	0.6	2.6	4.5	6.4	
Zinc	mg/L							

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C-18 Watershed Monitoring Events (Fresh)								
Site 81	SAMPLE DATE	9/13/16	11/21/16	1/16/17	3/20/17	5/22/17	7/18/17	Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L	121	93	141	146	135	86	
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	12.6	3.7	2.5	11.1	4.7	15.0	6.7
Copper	mg/L							
Dissolved Oxygen	% Saturation	25.00	77.70	80.70	69.60	109.10	67.3	
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.040	0.030	0.050	0.050	0.030	0.140	
Nitrogen, nitrate + nitrite	mg/L	0.058	0.088	0.020	0.005	0.005	0.020	
Nitrogen, Total	mg/L	0.858	0.988	1.120	0.805	0.805	1.320	0.97
Nitrogen, Total Kjeldahl	mg/L	0.80	0.90	1.1	0.8	0.8	1.3	
pH	None	7.21	7.78	7.72	7.78	8.05	7.46	
Phosphorus, orthophosphate	mg/L	0.005	0.005	0.005	0.005	0.007	0.011	
Phosphorus, Total	mg/L	0.034	0.016	0.012	0.018	0.021	0.030	0.020
Salinity	ppth							
Specific Conductivity	umho/cm	392	249.7	446	444	588	293	
Temperature	deg C	29.8	21.4	20.9	21.5	29.6	31.3	
Total Hardness	mg/L							
Total Suspended Solids	mg/L	1.4	3.7	1.0	3.7	6.0	3.6	
Turbidity	NTU	1.6	2.0	0.9	2.8	3.8	2.6	
Zinc	mg/L							

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C-51 W Watershed Monitoring Events							
SITE 38B	SAMPLE DATE	10/19/16	12/29/16	4/19/17	6/29/17		Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0022	0.0022		0.0022		
Cadmium	mg/L	0.0002	0.0002		0.0002		
Chlorophyll-a (corrected)	ug/L	2.2	1.7	3.0	8.9		3.2
Copper	mg/L	0.0011	0.0014		0.0010		
Dissolved Oxygen	% Saturation	62.9	87.7	61.1	44.5		
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0021	0.0021		0.0021		
Nitrogen, Ammonia	mg/L	0.080	0.049	0.105	0.250		
Nitrogen, nitrate + nitrite	mg/L	0.185	0.34	0.201	0.364		
Nitrogen, Total	mg/L	1.36	1.48	1.30	0.65		1.14
Nitrogen, Total Kjeldahl	mg/L	1.17	1.14	1.1	0.284		
pH	None	7.32	8.06	8.75	7.84		
Phosphorus, orthophosphate	mg/L	0.015	0.031	0.540	0.091		
Phosphorus, Total	mg/L	0.8910	0.0716	0.1180	0.1470		0.182
Salinity	ppth						
Specific Conductivity	umho/cm	250	654	435.4	1114		
Temperature	deg C	27.1	23.5	23.5	30.9		
Total Hardness	mg/L	58.6	137		331		
Total Suspended Solids	mg/L	5.8	18		9.7		
Turbidity	NTU	6.8	20.0	27.0	7.8		
Zinc	mg/L	0.0894	0.0544		0.0017		

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C-51 E Watershed Monitoring Events							
SITE 37B	SAMPLE DATE	10/19/16	12/29/16	4/19/17	6/29/17		Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L	0.0022	0.0022		0.002235		
Cadmium	mg/L	0.0002	0.0002		0.0002		
Chlorophyll-a (corrected)	ug/L	3.0	3.0	3.0	9.3		4.0
Copper	mg/L	0.0013	0.0015		0.0008		
Dissolved Oxygen	% Saturation	54.4	66.6	71.8	56.6		
Fecal Coliform	cfu/100mL						
Lead	mg/L	0.0051	0.0021		0.0021		
Nitrogen, Ammonia	mg/L	0.074	0.053	0.026	0.199		
Nitrogen, nitrate + nitrite	mg/L						
Nitrogen, Total	mg/L	0.59	1.08	0.92	0.71		0.80
Nitrogen, Total Kjeldahl	mg/L	0.59	1.08	0.92	0.708		
pH	None	7.42	8.18	8.22	7.91		
Phosphorus, orthophosphate	mg/L	0.0167	0.047	0.055	0.0837		
Phosphorus, Total	mg/L	0.0059	0.0537	0.1050	0.131		0.046
Salinity	ppth						
Specific Conductivity	umho/cm	505	461.7	765	966		
Temperature	deg C	27.1	24.0	24.0	30.9		
Total Hardness	mg/L	159	136		293		
Total Suspended Solids	mg/L	4.5	6.0		4.1		
Turbidity	NTU	4.4	12.0	17.0	4.4		
Zinc	mg/L	0.0396	0.0485		0.0014		

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C-51 W Watershed Monitoring Events								
SITE C51S155	SAMPLE DATE	11/17/16	12/8/16	1/12/17	2/9/17	3/9/17	4/13/17	5/11/17
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation		106.14	79.19	109.43	79.07	70.37	88.33
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.058	0.018	0.051	0.011	0.07	0.081	0.01
Nitrogen, nitrate + nitrite	mg/L	0.219	0.044	0.283	0.006	0.076	0.033	0.0025
Nitrogen, Total	mg/L	0.997	0.801	0.911	0.798	0.885	0.782	0.785
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.6	7.9	7.8	8	8.1	8.5	7.8
Phosphorus, orthophosphate	mg/L	0.02	0.002	0.04	0.001	0.025	0.06	0.016
Phosphorus, Total	mg/L	0.048	0.033	0.062	0.031	0.047	0.088	0.059
Salinity	ppth							
Specific Conductivity	umho/cm	800	730	574	765	790	657	528
Temperature	deg C	23.3	24.6	19.7	23.5	21.3	23.1	26.9
Total Hardness	mg/L							
Total Suspended Solids	mg/L	4	2	3	1.5	1.5	1.5	3
Turbidity	NTU	3	2.6	3.1	2.3	2.2	1.3	2
Zinc	mg/L							

SITE C51S155	SAMPLE DATE	6/13/17	7/20/17	8/10/17	9/21/17			Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation	85.83	39.84	61.92	30.2			
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.059	0.111	0.099	0.286			
Nitrogen, nitrate + nitrite	mg/L	0.124	0.303	0.221	0.318			
Nitrogen, Total	mg/L	1.14	1.85	1.42	2			1.06
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.4	7.5	8.3	7.3			
Phosphorus, orthophosphate	mg/L	0.023	0.055	0.033	0.126			
Phosphorus, Total	mg/L	0.095	0.093	0.059	0.156			0.063
Salinity	ppth							
Specific Conductivity	umho/cm	556	976	800	755			
Temperature	deg C	29.4	30.8	30.2	29.2			
Total Hardness	mg/L							
Total Suspended Solids	mg/L	6	6	1.5	5			
Turbidity	NTU	4.5	5.7	2.1	3.6			
Zinc	mg/L							

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Loxahatchee River Watershed Monitoring Events								
SITE 69 (Lox)	SAMPLE DATE	10/17/16	11/21/16	12/12/16	1/16/17	2/13/17	3/20/17	4/10/17
PARAMETER	UNITS							
Alkalinity	mg/L	84	153	158	135	143	143	132
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	2.3	1.0	1.0	1.0	2.0	1.1	1.4
Copper	mg/L							
Dissolved Oxygen	% Saturation	39.6	46.1	45.6	60.4	60.3	65.5	50.10
Fecal Coliform	cfu/100mL	11	5	11	19	6	4	10
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.060	0.100	0.100	0.050	0.070	0.060	0.060
Nitrogen, nitrate + nitrite	mg/L	0.068	0.135	0.136	0.070	0.091	0.041	0.051
Nitrogen, Total	mg/L	0.87	0.84	0.84	0.97	0.77	0.84	1.05
Nitrogen, Total Kjeldahl	mg/L	0.8	0.7	0.7	0.9	0.5	0.8	1
pH	None	7.2	7.4	7.4	7.1	7.7	7.5	7.0
Phosphorus, orthophosphate	mg/L	0.013	0.009	0.014	0.007	0.022	0.008	0.006
Phosphorus, Total	mg/L	0.027	0.022	0.018	0.016	0.044	0.016	0.024
Salinity	ppth	0.14	0.22	0.20	0.20	0.20	0.20	0.20
Specific Conductivity	umho/cm	294.6	463.9	445	447	468.1	473	491
Temperature	deg C	26.5	20.6	22.4	20.9	22.1	20.7	24.1
Total Hardness	mg/L							
Total Suspended Solids	mg/L	1.6	1.0	1.6	0.5	3.2	0.5	1.8
Turbidity	NTU	1.4	1.3	1.1	0.9	2.9	1.1	1.5
Zinc	mg/L							

SITE 69 (Lox)	SAMPLE DATE	5/22/17	6/12/17	7/17/17	8/14/17	9/25/17		Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L	190	178	180	184	179		
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	1.3	6.0	5.2	3.8	6.2		2.1
Copper	mg/L							
Dissolved Oxygen	% Saturation	48	36.0	37.8		56.0		
Fecal Coliform	cfu/100mL	20	52	56	66	31		
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.080	0.220	0.120	0.100	0.210		
Nitrogen, nitrate + nitrite	mg/L	0.047	0.058	0.051	0.057	0.077		
Nitrogen, Total	mg/L	0.85	1.30	1.65	1.26	1.18		1.01
Nitrogen, Total Kjeldahl	mg/L	0.80	1.20	1.60	1.20	1.10		
pH	None	7.6	7.1	7.3	7.12	7.5		
Phosphorus, orthophosphate	mg/L	0.022	0.053	0.032	0.023	0.038		
Phosphorus, Total	mg/L	0.040	0.122	0.127	0.063	0.080		0.038
Salinity	ppth	0.4	0.3	0.3	0.3	0.1		
Specific Conductivity	umho/cm	767	615	669	584	281		
Temperature	deg C	29.3	28.3	31.1	29.9	28.3		
Total Hardness	mg/L							
Total Suspended Solids	mg/L	1.9	3.0	2.6	1.9	2.5		
Turbidity	NTU	1.8	4.0	2.1	2.2	3.5		
Zinc	mg/L							

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Loxahatchee River Watershed Monitoring Events (Marine)							
SITE 30	SAMPLE DATE	11/14/16	1/10/17	3/14/17	5/8/17	7/11/17	Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L	125	122	126	125	127	
Arsenic	mg/L						
Cadmium	mg/L						
Chlorophyll-a (corrected)	ug/L	3.0	6.7	1.8	3.9	4.2	3.6
Copper	mg/L						
Dissolved Oxygen	% Saturation	75.6	92.9	90.5	82.0	78.7	
Fecal Coliform	cfu/100mL	3	20	10	10	10	
Lead	mg/L						
Nitrogen, Ammonia	mg/L						
Nitrogen, nitrate + nitrite	mg/L	0.044	0.029	0.010	0.005	0.005	
Nitrogen, Total	mg/L	0.24	0.33	0.21	0.21	0.31	0.25
Nitrogen, Total Kjeldahl	mg/L	0.20	0.30	0.20	0.20	0.30	
pH	None	7.62	7.74	7.88	7.73	7.78	
Phosphorus, orthophosphate	mg/L	0.100	0.007	0.007	0.008	0.025	
Phosphorus, Total	mg/L	0.026	0.034	0.015	0.017	0.022	0.022
Salinity	ppth	31.64	35.10	35.50	35.90	32.10	
Specific Conductivity	umho/cm	48492	53100	53720	54274	49002	
Temperature	deg C	25.0	19.3	23.9	26.3	31.6	
Total Hardness	mg/L						
Total Suspended Solids	mg/L	10.7	7.2	7.2	12.8	5.9	
Turbidity	NTU	4.2	2.1	3.5	3.2	2.5	
Zinc	mg/L						

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Loxahatchee River Watershed Monitoring Events (Marine)							
SITE 51	SAMPLE DATE	11/15/16	1/9/217	3/13/17	5/9/17	7/10/17	Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L	112	123	123	123	123	
Arsenic	mg/L						
Cadmium	mg/L						
Chlorophyll-a (corrected)	ug/L	2.2	2.4	1.2	2.5	4.0	2.3
Copper	mg/L						
Dissolved Oxygen	% Saturation	92.5	98.5	93.6	91.1	84.6	
Fecal Coliform	cfu/100mL	5	10	10	20	10	
Lead	mg/L						
Nitrogen, Ammonia	mg/L	0.030	0.030	0.070	0.030	0.100	
Nitrogen, nitrate + nitrite	mg/L	0.007	0.005	0.005	0.006	0.005	
Nitrogen, Total	mg/L	0.31	0.21	0.21	0.21	0.21	0.22
Nitrogen, Total Kjeldahl	mg/L	0.30	0.20	0.20	0.20	0.20	
pH	None	7.99	7.82	7.93	7.89	7.86	
Phosphorus, orthophosphate	mg/L	0.005	0.007	0.006	0.011	0.023	
Phosphorus, Total	mg/L	0.011	0.019	0.011	0.019	0.018	0.015
Salinity	ppth	35.44	34.80	35.80	35.10	33.10	
Specific Conductivity	umho/cm	53685	52701	54161	53285	50319	
Temperature	deg C	25.9	19.2	24.2	26.3	30.2	
Total Hardness	mg/L						
Total Suspended Solids	mg/L	4.3	6.0	5.8	15.6	5.2	
Turbidity	NTU	3.8	3.5	2.9	3.4	2.4	
Zinc	mg/L						

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Loxahatchee River Watershed Monitoring Events (Marine)								
SITE 62 (Lox)	SAMPLE DATE	10/17/16	11/21/16	12/12/16	1/16/17	2/23/17	3/20/17	4/10/17
PARAMETER	UNITS							
Alkalinity	mg/L	108	138	151	145	146	154	139
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	7.50	6.80	1.22	5.90	6.10	5.30	3.60
Copper	mg/L							
Dissolved Oxygen	% Saturation	73.9	79.0	63.7	93.3	78.9	93.9	84.5
Fecal Coliform	cfu/100mL	98		72	40	64	20	20
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.040	0.030	0.080	0.030	0.030	0.030	0.130
Nitrogen, nitrate + nitrite	mg/L	0.054	0.053	0.093	0.027	0.009	0.025	0.005
Nitrogen, Total	mg/L	0.65	0.25	0.39	0.63	0.23	0.43	0.30
Nitrogen, Total Kjeldahl	mg/L	0.6	0.2	0.3	0.6	0.2	0.4	0.3
pH	None	7.6	7.5	7.4	7.6	7.5	7.7	7.7
Phosphorus, orthophosphate	mg/L	0.029	0.018	0.038	0.016	0.005	0.013	0.014
Phosphorus, Total	mg/L	0.045	0.031	0.040	0.029	0.006	0.055	0.029
Salinity	ppth	12.90	24.24	20.20	20.90	20.10	20.90	25.30
Specific Conductivity	umho/cm	21519	38131	32387	33302.3	32161	33379.1	39637
Temperature	deg C	26.6	22.8	22.8	21.7	23.3	22.8	24.3
Total Hardness	mg/L							
Total Suspended Solids	mg/L	5.5	3.9	6.0	4.1	5.0	3.9	6.2
Turbidity	NTU	2.7	2.6	4.1	3.3	1.3	3	3.3
Zinc	mg/L							

SITE 62 (Lox)	SAMPLE DATE	5/22/17	6/12/17	7/17/17	8/14/17	9/25/17		Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L	176	114	149	148	116		
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	7.9	10.7	9.8	3.0	4.9		5.3
Copper	mg/L							
Dissolved Oxygen	% Saturation	76.1	54.7	57.9	49.2	52.2		
Fecal Coliform	cfu/100mL	20	20	41	173	41		
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.030	0.060	0.030	0.070	0.070		
Nitrogen, nitrate + nitrite	mg/L	0.006	0.182	0.031	0.083	0.048		
Nitrogen, Total	mg/L	0.71	1.20	0.93	1.18	0.95		0.57
Nitrogen, Total Kjeldahl	mg/L	0.70	1.00	0.90	1.10	0.90		
pH	None	7.55	7.3	7.59	7.66	7.46		
Phosphorus, orthophosphate	mg/L	0.032	0.071	0.042	0.037	0.050		
Phosphorus, Total	mg/L	0.051	0.110	0.069	0.073	0.071		0.042
Salinity	ppth	13.4	3.9	31.1	28.7	11.4		
Specific Conductivity	umho/cm	22437.1	7146	7038	8236.7	19247		
Temperature	deg C	30.2	29.1	31.1	29.7	29.1		
Total Hardness	mg/L							
Total Suspended Solids	mg/L	7.9	4.3	4.4	2.9	3.4		
Turbidity	NTU	4.2	3.9	3.1	2.5	2.2		
Zinc	mg/L							

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Loxahatchee River Watershed Monitoring Events (Marine)								
SITE 72	SAMPLE DATE	10/17/16	11/15/16	12/12/16	1/9/17	2/13/17	3/13/17	4/10/17
PARAMETER	UNITS							
Alkalinity	mg/L	94	121	141	126	133	128	128
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	4.3	9.3	6.9	8.6	11.5	5.2	9.4
Copper	mg/L							
Dissolved Oxygen	% Saturation	76.4	74.9	70.2	85.6	91.9	84.3	93.5
Fecal Coliform	cfu/100mL	280	108	240	146	87	41	63
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.140	0.130	0.063	0.200	0.320	0.250	0.030
Nitrogen, nitrate + nitrite	mg/L	0.063	0.025	0.101	0.045	0.127	0.040	0.018
Nitrogen, Total	mg/L	0.86	0.43	0.90	0.55		0.54	0.42
Nitrogen, Total Kjeldahl	mg/L	0.8	0.4	0.8	0.5		0.5	0.4
pH	None	7.5	7.8	7.4	7.6	7.6	7.8	7.8
Phosphorus, orthophosphate	mg/L	0.021	0.010	0.044	0.017	0.019	0.014	0.007
Phosphorus, Total	mg/L	0.031	0.027	0.057	0.032	0.027	0.026	0.029
Salinity	ppth	6.20	37.98	30.50	33.30	33.50	33.00	35.00
Specific Conductivity	umho/cm	10839	48972	46845	50713.6	50920	50338.1	53064
Temperature	deg C	26.4	25.1	23.3	19.4	23.0	24.2	23.9
Total Hardness	mg/L							
Total Suspended Solids	mg/L	2.1	3.8	4.4	6.9	0.8	10.4	13.4
Turbidity	NTU	1.5	3.1	3.5	5.3	1.3	3.9	6.3
Zinc	mg/L							

SITE 72	SAMPLE DATE	5/9/17	6/12/17	7/10/17	8/14/17	9/25/17		Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L	128	102	111	120	97		
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	9.7	9.3	17.7	2.9	7.1		7.7
Copper	mg/L							
Dissolved Oxygen	% Saturation	93.4	83.4	97.2	63.2	43.5		
Fecal Coliform	cfu/100mL	20	98	133	62	63		
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.170	0.090	0.110	0.120	0.120		
Nitrogen, nitrate + nitrite	mg/L	0.035	0.039	0.017	0.04	0.028		
Nitrogen, Total	mg/L	0.535	1.1	1.017	0.74	0.928		0.69
Nitrogen, Total Kjeldahl	mg/L	0.5	1.1	1	0.7	0.9		
pH	None	7.9	7.7	7.7	7.9	6.8		
Phosphorus, orthophosphate	mg/L	0.013	0.008	0.1	0.013	0.018		
Phosphorus, Total	mg/L	0.029	0.051	0.036	0.025	0.033		0.032
Salinity	ppth	32.70	4.40	15.90	30.30	0.30		
Specific Conductivity	umho/cm	50005.8	8027	26069	48875.1	633		
Temperature	deg C	27.4	28.9	31.1	30.6	27.9		
Total Hardness	mg/L							
Total Suspended Solids	mg/L	14.4	3.2	8.3	2.6	2.4		
Turbidity	NTU	3.6	2.7	3.0	2.1	1.5		
Zinc	mg/L							

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Lake Worth Lagoon North Watershed Monitoring Events (Marine)							
SITE LWL-1	SAMPLE DATE	12/15/16	7/20/17	8/17/17			Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L						
Cadmium	mg/L						
Chlorophyll-a (corrected)	ug/L	9.27	6.3	6.0			7.1
Copper	mg/L						
Dissolved Oxygen	% Saturation	92.51	99.35	104.1			
Fecal Coliform	cfu/100mL						
Lead	mg/L						
Nitrogen, Ammonia	mg/L	0.056	0.014	0.007			
Nitrogen, nitrate + nitrite	mg/L	0.066	0.003	0.003			
Nitrogen, Total	mg/L	0.379	0.354	0.293			0.34
Nitrogen, Total Kjeldahl	mg/L						
pH	None	7.8	8.3	8.8			
Phosphorus, orthophosphate	mg/L	0.017	0.012	0.005			
Phosphorus, Total	mg/L	0.041	0.037	0.028			0.035
Salinity	ppth	33.20	31.60	30.90			
Specific Conductivity	umho/cm	50550	48680	47838			
Temperature	deg C	24.1	32.3	32.2			
Total Hardness	mg/L						
Total Suspended Solids	mg/L	4.0	4.0	4.0			
Turbidity	NTU	2.0	2.4	1.1			
Zinc	mg/L						

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Lake Worth Lagoon North Watershed Monitoring Events (Marine)								
SITE 11	SAMPLE DATE	11/29/16	12/28/16	1/11/17	4/6/17	6/30/17	8/18/17	Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	2.2	14.6	1.3	1.8	4.4	1.5	2.8
Copper	mg/L							
Dissolved Oxygen	% Saturation	94.2	100.9	96.6	93.9	86.9	95.4	
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.021	0.021	0.021	0.021	0.021	0.021	
Nitrogen, nitrate + nitrite	mg/L	0.029	0.029	0.031	0.029	0.029	0.029	
Nitrogen, Total	mg/L	0.13	0.13	0.14	0.13	0.13	0.13	0.13
Nitrogen, Total Kjeldahl	mg/L	0.11	0.11	0.11	0.11	0.11	0.11	
pH	None	7.64	7.94	7.93	8.25	8.04	8.70	
Phosphorus, orthophosphate	mg/L	0.023	0.005	0.006	0.005	0.007	0.005	
Phosphorus, Total	mg/L	0.019	0.003	0.003	0.003	0.029	0.019	0.008
Salinity	ppth	33.49	34.09	34.55	35.45	29.86	31.14	
Specific Conductivity	umho/cm	50974	51829	52366	23728	46250	48113	
Temperature	deg C	23.2	24.7	19.7	26.8	30.3	32.4	
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU	2.8	2.1	3.1	2.0	2.6	2.2	
Zinc	mg/L							

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Lake Worth Lagoon North Watershed Monitoring Events (Marine)								
SITE 13	SAMPLE DATE	11/29/16	12/28/16	1/11/17	4/6/17	6/30/17	8/18/17	Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	4.0	8.0	2.2	2.7	4.8	4.0	3.9
Copper	mg/L							
Dissolved Oxygen	% Saturation	89.2	104.4	97.8	93.1	90.1	88.4	
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.021	0.021	0.021	0.021	0.021	0.021	
Nitrogen, nitrate + nitrite	mg/L	0.029	0.029	0.028	0.029	0.029	0.029	
Nitrogen, Total	mg/L	0.13	0.13	0.13	0.13	0.13	0.17	0.14
Nitrogen, Total Kjeldahl	mg/L	0.11	0.11	0.11	0.11	0.11	0.14	
pH	None	7.6	7.8	7.8	8.1	7.8	8.4	
Phosphorus, orthophosphate	mg/L	0.009	0.005	0.006	0.005	0.005	0.005	
Phosphorus, Total	mg/L	0.018	0.003	0.003	0.004	0.027	0.025	0.009
Salinity	ppth	33.03	32.82	34.29	34.90	30.65	25.29	
Specific Conductivity	umho/cm	50356	50119	52018	53060	47297	39960	
Temperature	deg C	23.5	25.0	20.2	27.1	29.8	32.8	
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU	2.7	2.1	2.6	2.2	2.1	2.7	
Zinc	mg/L							

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Lake Worth Lagoon North Watershed Monitoring Events (Marine)							
SITE LWL-4	SAMPLE DATE	12/15/16	7/20/17	8/17/17			Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L						
Cadmium	mg/L						
Chlorophyll-a (corrected)	ug/L	3.27	1.45	1.95			2.1
Copper	mg/L						
Dissolved Oxygen	% Saturation	107.25	132.3	110.9			
Fecal Coliform	cfu/100mL						
Lead	mg/L						
Nitrogen, Ammonia	mg/L	0.01	0.009	0.013			
Nitrogen, nitrate + nitrite	mg/L	0.010	0.003	0.003			
Nitrogen, Total	mg/L	0.208	0.249	0.311			0.25
Nitrogen, Total Kjeldahl	mg/L						
pH	None	8	8.5	8.7			
Phosphorus, orthophosphate	mg/L	0.003	0.001	0.001			
Phosphorus, Total	mg/L	0.016	0.014	0.018			0.016
Salinity	ppth	35.1	33.3	32.4			
Specific Conductivity	umho/cm	53158	51068	49850			
Temperature	deg C	25	31.5	31.8			
Total Hardness	mg/L						
Total Suspended Solids	mg/L	12	19	7			
Turbidity	NTU	1.9	1.5	1.4			
Zinc	mg/L						

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Lake Worth Lagoon Central Watershed Monitoring Events (Marine)								
SITE LWL-8	SAMPLE DATE	11/9/16	12/14/16	5/24/17	6/22/17	7/19/17	8/16/17	9/27/17
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	3.58	3.52	9.09	8.13	35	9.1	5.14
Copper	mg/L							
Dissolved Oxygen	% Saturation	93.25	92.50	103.35	98.68	101.84	70.75	61.20
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.024	0.056	0.007	0.026	0.016	0.097	0.158
Nitrogen, nitrate + nitrite	mg/L	0.103	0.081	0.0025	0.043	0.01	0.166	0.135
Nitrogen, Total	mg/L	0.419	0.409	0.52	0.733	0.981	1.02	0.918
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.8	7.9	7.9	8	8.2	8.5	8.5
Phosphorus, orthophosphate	mg/L	0.02	0.024	0.01	0.017	0.009	0.028	0.055
Phosphorus, Total	mg/L	0.039	0.051	0.08	0.059	0.078	0.066	0.077
Salinity	ppth	29.5	32.1	35.6	15.7	22.2	17	16.5
Specific Conductivity	umho/cm	45597	49136	54047	25930	35535	27934	26968
Temperature	deg C	22.8	24.6	29.3	30.8	31.4	31.6	29.1
Total Hardness	mg/L							
Total Suspended Solids	mg/L	8	20	31	10	37	10	6
Turbidity	NTU	4.4	8.4	14.7	6.1	10.7	6.8	2.6
Zinc	mg/L							

SITE LWL-8	SAMPLE DATE							Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation							
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L							
Nitrogen, nitrate + nitrite	mg/L							
Nitrogen, Total	mg/L							0.67
Nitrogen, Total Kjeldahl	mg/L							
pH	None							
Phosphorus, orthophosphate	mg/L							
Phosphorus, Total	mg/L							0.062
Salinity	ppth							
Specific Conductivity	umho/cm							
Temperature	deg C							
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU							
Zinc	mg/L							

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Lake Worth Lagoon Central Watershed Monitoring Events (Marine)								
SITE 18C	SAMPLE DATE	11/29/16	12/28/16	1/11/17	4/6/17	6/30/17	08/18/17	Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	4.00	4.40	1.70	10.60	2.60	1.5	
Copper	mg/L							
Dissolved Oxygen	% Saturation	100.0	93.2	106.8	101.5	103.9	79.3	
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.021	0.0210	0.021	0.021	0.021	0.021	
Nitrogen, nitrate + nitrite	mg/L	0.054	0.091	0.029	0.029	0.258	0.292	
Nitrogen, Total	mg/L	0.23	0.21	0.03	0.29	1.14		0.21
Nitrogen, Total Kjeldahl	mg/L	0.18	0.12		0.26	0.88	1.33	
pH	None	7.4	7.9	8.0	8.2	8.0	8.3	
Phosphorus, orthophosphate	mg/L	0.024	0.014	0.00943	0.005	0.036	0.032	
Phosphorus, Total	mg/L	0.045	0.025	0.031	0.051	0.086	0.096	0.049
Salinity	ppth	30.00	32.95	34.57	35.56	7.51	9.07	
Specific Conductivity	umho/cm	45057	50285	52383	53942	13178	15701	
Temperature	deg C	23.3	24.9	19.9	28.1	31.5	32.3	
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU	8.4	19.0	9.7	21.0	7.7	12.0	
Zinc	mg/L							

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Lake Worth Lagoon Central Watershed Monitoring Events (Marine)								
SITE 18D	SAMPLE DATE	11/29/16	12/28/16	1/11/17	4/6/17	6/30/17	08/18/17	Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	9.7	5.7	1.7	5.3	21.8	1.5	
Copper	mg/L							
Dissolved Oxygen	% Saturation	105.6	99.6	105.6	103.1	111.8	101.0	
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.021	0.021	0.021	0.021	0.021	0.021	
Nitrogen, nitrate + nitrite	mg/L	0.086	0.068	0.029	0.029	0.029	0.124	
Nitrogen, Total	mg/L	0.31	0.17	0.03	0.13	0.39		0.15
Nitrogen, Total Kjeldahl	mg/L	0.22	0.11		0.10	0.37	0.63	
pH	None	7.71	7.96	8.05	8.30	8.42	8.5	
Phosphorus, orthophosphate	mg/L	0.013	0.009	0.006	0.005	0.005	0.016	
Phosphorus, Total	mg/L	0.042	0.017	0.004	0.014	0.047	0.046	0.021
Salinity	ppth	30.39	33.50	34.58	35.50	17.71	18.31	
Specific Conductivity	umho/cm	45385	51038	52413	53822	28900	29907	
Temperature	deg C	23.5	25.2	19.7	27.5	30.8	34.3	
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU	7.4	5.0	2.5	7.9	4.9	3.6	
Zinc	mg/L							

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Lake Worth Lagoon Central Watershed Monitoring Events (Marine)								
SITE LWL-11	SAMPLE DATE	11/9/16	12/14/16	5/24/17	6/22/17	7/19/17	8/16/17	9/27/17
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	5.46	4.82	4.55	6.68	19.90	8.99	15.40
Copper	mg/L							
Dissolved Oxygen	% Saturation	94.58	103.50	98.89	109.69	123.31	91.71	68.34
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.046	0.044	0.008	0.003	0.009	0.015	0.105
Nitrogen, nitrate + nitrite	mg/L	0.146	0.083	0.003	0.003	0.003	0.100	0.138
Nitrogen, Total	mg/L	0.57	0.39	0.72	0.55	0.68	0.84	1.11
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.8	7.9	8.0	8.2	8.3	8.7	8.5
Phosphorus, orthophosphate	mg/L	0.020	0.021	0.004	0.006	0.004	0.005	0.044
Phosphorus, Total	mg/L	0.043	0.039	0.138	0.052	0.038	0.044	0.088
Salinity	ppth	26.40	32.30	36.30	25.20	24.70	20.50	11.30
Specific Conductivity	umho/cm	41142	49405	54947	39813	39056	33039	19198
Temperature	deg C	22.9	25.1	28.9	30.7	32.3	32.2	29.4
Total Hardness	mg/L							
Total Suspended Solids	mg/L	7.0	14.0	65.0	8.0	11.0	1.5	8.0
Turbidity	NTU	3.8	3.3	29.0	4.6	1.4	2.8	5.2
Zinc	mg/L							

SITE LWL-11	SAMPLE DATE	9/14/16						Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	mg/m3							
Copper	mg/L							
Dissolved Oxygen	mg/L							
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L							
Nitrogen, nitrate + nitrite	mg/L							
Nitrogen, Total	mg/L							0.66
Nitrogen, Total Kjeldahl	mg/L							
pH	None							
Phosphorus, orthophosphate	mg/L							
Phosphorus, Total	mg/L							0.056
Salinity	ppth							
Specific Conductivity	umho/cm							
Temperature	deg C							
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU							
Zinc	mg/L							

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Lake Worth Lagoon South Watershed Monitoring Events (Marine)								
SITE LWL-13	SAMPLE DATE	11/8/16	12/13/16	5/23/17	6/21/17	7/18/17	8/15/17	9/26/17
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	7.06	3.57	2.75	6.42	2.45	6.77	17.4
Copper	mg/L							
Dissolved Oxygen	% Saturation	100.00	101.90	101.42	112.63	99.84	100.31	78.13
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.041	0.043	0.006	0.0025	0.008	0.011	0.074
Nitrogen, nitrate + nitrite	mg/L	0.159	0.058	0.0025	0.0025	0.0025	0.0025	0.098
Nitrogen, Total	mg/L	0.622	0.297	0.251	0.434	0.288	0.496	0.986
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.9	7.9	7.8	8.1	8.2	8.2	8.4
Phosphorus, orthophosphate	mg/L	0.02	0.015	0.001	0.005	0.001	0.001	0.031
Phosphorus, Total	mg/L	0.045	0.03	0.016	0.046	0.019	0.029	0.074
Salinity	ppth	24.5	33.7	35.7	24.4	32.7	23.8	17.7
Specific Conductivity	umho/cm	38488	51320	54096	38552	50233	37734	28873
Temperature	deg C	22.5	24.9	28.5	29.6	30.8	30.7	28.4
Total Hardness	mg/L							
Total Suspended Solids	mg/L	8	10	8	7	7	5	5
Turbidity	NTU	4.6	2.8	2.8	3.7	1.4	2.2	2.9
Zinc	mg/L							

SITE LWL-13	SAMPLE DATE							Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							5.4
Copper	mg/L							
Dissolved Oxygen	% Saturation							
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L							
Nitrogen, nitrate + nitrite	mg/L							
Nitrogen, Total	mg/L							0.43
Nitrogen, Total Kjeldahl	mg/L							
pH	None							
Phosphorus, orthophosphate	mg/L							
Phosphorus, Total	mg/L							0.033
Salinity	ppth							
Specific Conductivity	umho/cm							
Temperature	deg C							
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU							
Zinc	mg/L							

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Lake Worth Lagoon South Watershed Monitoring Events (Marine)								
SITE LWL-18	SAMPLE DATE	11/8/16	12/13/16	5/23/17	6/21/17	7/18/17	8/15/17	9/26/17
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	8.36	1.64	9.92	20.6	4.91	8.69	16
Copper	mg/L							
Dissolved Oxygen	% Saturation	100.69	77.55	93.12	114.43	77.32	85.69	62.35
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.009	0.122	0.008	0.0025	0.052	0.015	0.01
Nitrogen, nitrate + nitrite	mg/L	0.107	0.069	0.0025	0.0025	0.015	0.007	0.0025
Nitrogen, Total	mg/L	0.554	0.418	0.421	0.676	0.466	0.431	0.561
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.9	7.8	7.8	8.2	8	8.2	8.6
Phosphorus, orthophosphate	mg/L	0.007	0.034	0.004	0.014	0.019	0.015	0.024
Phosphorus, Total	mg/L	0.044	0.052	0.051	0.087	0.047	0.047	0.071
Salinity	ppth	28.3	33.2	33.7	20.6	29.2	26.3	27.5
Specific Conductivity	umho/cm	43854	50625	51487	33200	45391	41300	42957
Temperature	deg C	23.2	24.8	30.2	30.2	31.7	31.7	29.4
Total Hardness	mg/L							
Total Suspended Solids	mg/L	14	7	15	21	8	7	5
Turbidity	NTU	6.1	3.8	8.4	5.9	3.5	1.8	2.4
Zinc	mg/L							

SITE LWL-18	SAMPLE DATE							Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							7.9
Copper	mg/L							
Dissolved Oxygen	% Saturation							
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L							
Nitrogen, nitrate + nitrite	mg/L							
Nitrogen, Total	mg/L							0.50
Nitrogen, Total Kjeldahl	mg/L							
pH	None							
Phosphorus, orthophosphate	mg/L							
Phosphorus, Total	mg/L							0.055
Salinity	ppth							
Specific Conductivity	umho/cm							
Temperature	deg C							
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU							
Zinc	mg/L							

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Hillsboro Watershed Monitoring Events							
SITE 1	SAMPLE DATE	12/05/16					Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L						
Cadmium	mg/L						
Chlorophyll-a (corrected)	ug/L	3.13					
Copper	mg/L						
Dissolved Oxygen	% Saturation	83.9					
Fecal Coliform	cfu/100mL						
Lead	mg/L						
Nitrogen, Ammonia	mg/L	0.143					
Nitrogen, nitrate + nitrite	mg/L						
Nitrogen, Total	mg/L	0.59					
Nitrogen, Total Kjeldahl	mg/L	0.48					
pH	None	7.5					
Phosphorus, orthophosphate	mg/L						
Phosphorus, Total	mg/L						
Salinity	ppth	26.4					
Specific Conductivity	umho/cm	7.11					
Temperature	deg C	24.7					
Total Hardness	mg/L						
Total Suspended Solids	mg/L						
Turbidity	NTU	1.4					
Zinc	mg/L						

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Hillsboro Watershed Monitoring Events							
SITE 2	SAMPLE DATE	12/6/16					Geometric Mean
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L						
Cadmium	mg/L						
Chlorophyll-a (corrected)	ug/L	2.2					
Copper	mg/L						
Dissolved Oxygen	% Saturation	95.8					
Fecal Coliform	cfu/100mL						
Lead	mg/L						
Nitrogen, Ammonia	mg/L	0.038					
Nitrogen, nitrate + nitrite	mg/L	0.315					
Nitrogen, Total	mg/L	1.07					
Nitrogen, Total Kjeldahl	mg/L	0.752					
pH	None	7.60					
Phosphorus, orthophosphate	mg/L						
Phosphorus, Total	mg/L						
Salinity	ppth	0.38					
Specific Conductivity	umho/cm	784					
Temperature	deg C	24.5					
Total Hardness	mg/L						
Total Suspended Solids	mg/L						
Turbidity	NTU	0.6					
Zinc	mg/L						

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Hillsboro Watershed Monitoring Events								
SITE 3	SAMPLE DATE	12/6/16						Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L	0.8						
Copper	mg/L							
Dissolved Oxygen	% Saturation	65.6						
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.210						
Nitrogen, nitrate + nitrite	mg/L	0.156						
Nitrogen, Total	mg/L	1.22						
Nitrogen, Total Kjeldahl	mg/L	1.06						
pH	None	7.60						
Phosphorus, orthophosphate	mg/L							
Phosphorus, Total	mg/L							
Salinity	ppth	0.38						
Specific Conductivity	umho/cm	778						
Temperature	deg C	20.4						
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU	0.5						
Zinc	mg/L							

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Hillsboro Watershed Monitoring Events								
SITE S39	SAMPLE DATE	10/25/16	11/8/16	12/6/16	1/4/17	2/14/17	3/14/17	4/11/17
PARAMETER	UNITS							
Alkalinity	mg/L			132	144	148	113	86
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation	81.98	87.83	77.98	86.85	90.60	88.48	86.14
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L			0.021	0.017	0.012	0.015	0.013
Nitrogen, nitrate + nitrite	mg/L	0.012	0.012	0.005	0.006	0.003	0.003	0.003
Nitrogen, Total	mg/L							
Nitrogen, Total Kjeldahl	mg/L	1.22	1.20	1.30	1.37	1.02	1.12	1.23
pH	None	7.9	8.0	8.2	8.1	8.0	8.1	7.9
Phosphorus, orthophosphate	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Phosphorus, Total	mg/L	0.009	0.011	0.009	0.009	0.010	0.009	0.010
Salinity	ppth							
Specific Conductivity	umho/cm	755	795	745	841	808	678	488
Temperature	deg C	24.8	23.6	24.0	22.8	22.6	23.3	24.2
Total Hardness	mg/L			169.9	189.4	190.2	154.2	111.6
Total Suspended Solids	mg/L			1.5	1.5	2.0	1.5	2.0
Turbidity	NTU			1.2	0.5	0.7	0.7	0.6
Zinc	mg/L							

SITE S39	SAMPLE DATE	5/26/17	6/6/17	7/6/17	8/1/17	9/14/17		Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L	117	128	77	87	104		111
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	mg/m3							
Copper	mg/L							
Dissolved Oxygen	mg/L	82.68	54.34	60.19	56.19	29.21		70.4
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.023	0.052	0.024	0.04	0.056		0.024
Nitrogen, nitrate + nitrite	mg/L	0.005	0.02	0.008	0.02	0.072		0.01
Nitrogen, Total	mg/L							
Nitrogen, Total Kjeldahl	mg/L	1.42	1.36	0.96	0.91	1.15		1.2
pH	None	8	7.2	7.6	8.1	7.2		7.9
Phosphorus, orthophosphate	mg/L	0.001	0.001	0.001	0.003	0.001		0.001
Phosphorus, Total	mg/L	0.011	0.015	0.013	0.013	0.022		0.011
Salinity	ppth							
Specific Conductivity	umho/cm	669	753	322	365	467		612
Temperature	deg C	29.4	27	31.5	29.1	29.6		25.8
Total Hardness	mg/L	133.1	156.5	87.7	100.8	129.3		138
Total Suspended Solids	mg/L	1.5	1.5	1.5	2	4		1.8
Turbidity	NTU	0.6	1.3	0.7	0.5	2		0.8
Zinc	mg/L							

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Watershed Monitoring Events								
SITE CULV10A	SAMPLE DATE	10/10/16	11/7/16	12/5/16	1/4/17	2/13/17	3/14/17	4/10/17
PARAMETER	UNITS							
Alkalinity	mg/L	235	101	102.00	106	115	127	107
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation	98.4	93.57	99.77	98.11	93.64	95.49	87.27
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.68	0.074	0.02	0.059	0.01	0.016	0.038
Nitrogen, nitrate + nitrite	mg/L	1.205	0.376	0.415	0.335	0.441	0.401	0.433
Nitrogen, Total	mg/L	3.65	1.45	1.51	2.50	2.74	4.79	2.07
Nitrogen, Total Kjeldahl	mg/L	2.44	1.07	1.09	2.16	2.3	4.39	1.64
pH	None	7.8	7.5	7.8	7.5	7.6	8.1	8
Phosphorus, orthophosphate	mg/L	0.057	0.048	0.05	0.042	0.052	0.059	0.054
Phosphorus, Total	mg/L	0.107	0.139	0.137	0.277	0.312	0.195	0.195
Salinity	ppth							
Specific Conductivity	umho/cm	456	388	372.00	352	383	378	401
Temperature	deg C	26.5	23.1	22.40	23.6	21.6	22.5	22.1
Total Hardness	mg/L			114.40			123.9	
Total Suspended Solids	mg/L	6.0	30.0	36.00	119	135	360	67
Turbidity	NTU	8.4	54.1	50.20	133	136	284	57.1
Zinc	mg/L							

SITE CULV10A	SAMPLE DATE	5/8/17	6/5/17	7/5/17	8/1/17	9/13/17		Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L	148	197	87	82	57		
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation	92.54	63.43	31.48	46.06	58.1		
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.044	0.098	0.176	0.218	0.094		
Nitrogen, nitrate + nitrite	mg/L	0.161	0.129	0.107	0.078	0.764		
Nitrogen, Total	mg/L	0.161	0.129	0.107	0.078	0.764		0.80
Nitrogen, Total Kjeldahl	mg/L							
pH	None	8.2	7.7	7	7.4	7		
Phosphorus, orthophosphate	mg/L	0.045	0.021	0.014	0.03	0.053		
Phosphorus, Total	mg/L	0.192	0.358	0.103	0.122	0.118		0.17
Salinity	ppth							
Specific Conductivity	umho/cm	859	1498	385	313	362		
Temperature	deg C	23.7	27.8	29.9	27.7	28.3		
Total Hardness	mg/L							
Total Suspended Solids	mg/L	50	101	24	24	20		
Turbidity	NTU	63	76.4	14.6	11.7	13.1		
Zinc	mg/L							

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S-2-6-7 Watershed Monitoring Events								
SITE S2	SAMPLE DATE	10/24/16	11/21/16	12/19/16	1/17/17	2/13/17	3/14/17	4/10/17
PARAMETER	UNITS							
Alkalinity	mg/L	114	107	108	101	112	108	115
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation	59.8	82.8	73.5	84.57	87.24	80.63	87.6
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.151	0.096	0.167	0.058	0.049	0.066	0.047
Nitrogen, nitrate + nitrite	mg/L	0.194	0.1	0.156	0.322	0.058	0.198	0.23
Nitrogen, Total	mg/L	1.26	1.12	1.20	1.38	1.15	1.28	1.51
Nitrogen, Total Kjeldahl	mg/L	1.07	1.02	1.04	1.06	1.09	1.08	1.28
pH	None	7.7	7.8	7.6	7.7	7.6	7.9	7.9
Phosphorus, orthophosphate	mg/L	0.025	0.022	0.069	0.046	0.027	0.036	0.046
Phosphorus, Total	mg/L	0.08	0.07	0.107	0.106	0.079	0.103	0.126
Salinity	ppth							
Specific Conductivity	umho/cm	443	400	402	383	407	415	424
Temperature	deg C	24.3	21.0	23.3	19.7	22.7	23.3	22.1
Total Hardness	mg/L			135.7			133.3	
Total Suspended Solids	mg/L	6.0	12.0	5	10.0	10	14	29
Turbidity	NTU	6.1	10.4	6.2	18.2	9.4	15.1	27.7
Zinc	mg/L							

SITE S2	SAMPLE DATE	5/8/17	6/5/17	7/3/17	8/1/17	9/12/17		Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L	232	171	214	317	147		
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							
Copper	mg/L							
Dissolved Oxygen	% Saturation	41.66	34.18	17.6	34.68	33.5		
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L	0.558	0.209	0.005	0.523	0.208		
Nitrogen, nitrate + nitrite	mg/L	1.604	1.069	0.098	0.554	2.824		
Nitrogen, Total	mg/L	3.9	2.57	2.11	3.18	7.63		1.93
Nitrogen, Total Kjeldahl	mg/L							
pH	None	7.6	7.5	7.4	7.6	8.7		
Phosphorus, orthophosphate	mg/L	0.067	0.093	0.016	0.073	0.184		
Phosphorus, Total	mg/L	0.104	0.124	0.056	0.12	0.447		0.11
Salinity	ppth							
Specific Conductivity	umho/cm	960	628	743	1151	545		
Temperature	deg C	24.4	27.8	30.3	28.7	26.9		
Total Hardness	mg/L							
Total Suspended Solids	mg/L	4	6	7	5	67		
Turbidity	NTU	3.8	6.8	6.5	3.7	65		
Zinc	mg/L							

Highlighted in "blue" are substituted values that were below the limits of detection. The value shown is the method detection limit provided with the data.

Highlighted in "yellow" are sample values that exceed either the State Water Quality Standards for a specific parameter or Florida's Impaired Waters Rule criteria for chlorophyll-a.

Table 5-4
Monitoring Data
Reporting Period October 2016 - September 2017
 (Page 39 of 40)

S-2-6-7 Watershed Monitoring Events								
SITE 39	SAMPLE DATE	4/18/17	6/28/17	9/20/17				
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L		2.2350	2.24				
Cadmium	mg/L		0.1950	0.20				
Chlorophyll-a (corrected)	ug/L	3	8.4	3.00				
Copper	mg/L		0.9750	0.98				
Dissolved Oxygen	% Saturation	76.3	50.4	9.80				
Fecal Coliform	cfu/100mL							
Lead	mg/L		2.1000	2.10				
Nitrogen, Ammonia	mg/L	0.0493	0.105	0.567				
Nitrogen, nitrate + nitrite	mg/L							
Nitrogen, Total	mg/L							
Nitrogen, Total Kjeldahl	mg/L	0.262	0.0285	0.0855				
pH	None	8.18	7.61	7.66				
Phosphorus, orthophosphate	mg/L	0.047	0.024	0.20				
Phosphorus, Total	mg/L	0.121	0.0581	0.254				
Salinity	ppth							
Specific Conductivity	umho/cm	403.5	586	771				
Temperature	deg C	23.6	34.1	29.1				
Total Hardness	mg/L		213	282				
Total Suspended Solids	mg/L		4.7	3.5				
Turbidity	NTU	27	4.6	2.9				
Zinc	mg/L		0.0077	0.0015				

SITE 39	SAMPLE DATE	1/0/00	1/0/00	1/0/00	1/0/00	1/0/00	1/0/00	Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							4.23
Copper	mg/L							
Dissolved Oxygen	% Saturation							
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L							
Nitrogen, nitrate + nitrite	mg/L							
Nitrogen, Total	mg/L							
Nitrogen, Total Kjeldahl	mg/L							
pH	None							
Phosphorus, orthophosphate	mg/L							
Phosphorus, Total	mg/L							0.12
Salinity	ppth							
Specific Conductivity	umho/cm							
Temperature	deg C							
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU							
Zinc	mg/L							

Highlighted in "blue" are substituted values that were below the limits of detection. The value shown is the method detection limit provided with the data.

Highlighted in "yellow" are sample values that exceed either the State Water Quality Standards for a specific parameter or Florida's Impaired Waters Rule criteria for chlorophyll-a.

Table 5-4
Monitoring Data
Reporting Period October 2016 - September 2017
 (Page 40 of 40)

S-2-6-7 Watershed Monitoring Events							
SITE 43	SAMPLE DATE	4/18/2017	6/28/2017	9/20/2017			
PARAMETER	UNITS						
Alkalinity	mg/L						
Arsenic	mg/L		0.0031	2.235			
Cadmium	mg/L		0.000718	0.195			
Chlorophyll-a (corrected)	ug/L	13.7	4	2.6			
Copper	mg/L		0.00117	0.975			
Dissolved Oxygen	% Saturation	80.2	27.4	56.3			
Fecal Coliform	cfu/100mL						
Lead	mg/L		2.1	2.1			
Nitrogen, Ammonia	mg/L	0.0536	0.105	0.26			
Nitrogen, nitrate + nitrite	mg/L	0.245	0.042	0.0671			
Nitrogen, Total	mg/L						
Nitrogen, Total Kjeldahl	mg/L	1.22	1.1	2.25			
pH	None	8.49	7.69	9.14			
Phosphorus, orthophosphate	mg/L	0.0448	0.003	0.0442			
Phosphorus, Total	mg/L	0.139	0.0362	0.167			
Salinity	ppth						
Specific Conductivity	umho/cm	401.6	605	948			
Temperature	deg C	23.5	32.6	28.5			
Total Hardness	mg/L		220	386			
Total Suspended Solids	mg/L		7.8	8.7			
Turbidity	NTU	35	7	5.4			
Zinc	mg/L		0.015	0.00151			

SITE 43	SAMPLE DATE	1/0/00	1/0/00	1/0/00	1/0/00	1/0/00		Geometric Mean
PARAMETER	UNITS							
Alkalinity	mg/L							
Arsenic	mg/L							
Cadmium	mg/L							
Chlorophyll-a (corrected)	ug/L							5.22
Copper	mg/L							
Dissolved Oxygen	% Saturation							
Fecal Coliform	cfu/100mL							
Lead	mg/L							
Nitrogen, Ammonia	mg/L							
Nitrogen, nitrate + nitrite	mg/L							
Nitrogen, Total	mg/L							
Nitrogen, Total Kjeldahl	mg/L							
pH	None							
Phosphorus, orthophosphate	mg/L							
Phosphorus, Total	mg/L							0.09
Salinity	ppth							
Specific Conductivity	umho/cm							
Temperature	deg C							
Total Hardness	mg/L							
Total Suspended Solids	mg/L							
Turbidity	NTU							
Zinc	mg/L							

Highlighted in "blue" are substituted values that were below the limits of detection. The value shown is the method detection limit provided with the data.

Highlighted in "yellow" are sample values that exceed either the State Water Quality Standards for a specific parameter or Florida's Impaired Waters Rule criteria for chlorophyll-a.

TABLE 5-5
Summary of Exceedances per Site by Parameter
October 1, 2016 - September 30, 2017

Watershed	Site	Dissolved Oxygen	Turbidity	Fecal Coliform	PH	Chlorophyll-a*	Total Phosphorus	Total Nitrogen
						(Annual Geometric Mean)	(Annual Geometric Mean)	(Annual Geometric Mean)
C-15	31E				1/5			
	31C							
	31B							
C-16	22				1/5			
	24				1/5			
	27B	1/3			1/3			
	27A							
	28							
C-17	12A				1/5			
	C17S44							
C-18	16	2/5						
	15	2/5						
	92	2/6						
	81	1/6						
C-51	38B				1/4			
	37B							
	C51S155							
Loxahatchee River	69	2/12						
	30							
	51							
	62			04/11				
	72			10/12		7.7		
Lake Worth Lagoon North	LWL-1				1/3	7.1		
	11				1/6			
	13					3.9		
	LWL-4				1/3			
Lake Worth Lagoon Central	LWL-8					1/7	.062	.67
	18C					1/6		
	18D					1/6		
	LWL-11					2/7	.056	.66
Lake Worth Lagoon South Watershed	LWL-13							
	LWL-18				1/7	7.9	0.055	
Hillsboro	1							
	2							
	3							
	S-39							
L-8	CULV10		8/10					
S-2-6-7	S2	4/12			1/12			
	39	1/3						
	43	1/3	1/3					

Chlorophyll-a criteria for Lake Worth Lagoon Central and South Watershed is based on ten percent of the measurements exceeding the standard.

Table 5-6
Monitoring Data Summary - C-15 Watershed
Period of Record

(Page 1 of 24)

SITE 31E		03/24/99 - 09/21/17		Samples		88	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	25	165	163	210	123	22
Arsenic	mg/L	71	0.0036	0.0025	2.2350	0.0005	0.5184
Cadmium	mg/L	85	0.0005	0.0003	0.0050	0.0002	0.0017
Chlorophyll-a (corrected)	ug/L	76	21.8	24.2	120.0	2.5	23.6
Copper	mg/L	84	0.0049	0.0048	0.0200	0.0010	0.0035
Dissolved Oxygen	% Saturation	14	73.6	77.1	127.8	35.0	21.8
Fecal Coliform	cfu/100mL	33	67	50	5000	1	875
Lead	mg/L	74	0.0020	0.0022	0.0050	0.0005	0.0014
Nitrogen, Ammonia	mg/L	81	0.052	0.050	0.820	0.003	0.127
Nitrogen, nitrate + nitrite	mg/L	76	0.048	0.050	0.785	0.001	0.182
Nitrogen, Total	mg/L	74	1.57	1.54	3.87	0.39	0.65
Nitrogen, Total Kjeldahl	mg/L	79	1.48	1.50	3.84	0.37	0.65
pH	None	85	7.6	7.6	8.9	6.3	0.4
Phosphorus, orthophosphate	mg/L	81	0.127	0.140	1.330	0.003	0.222
Phosphorus, Total	mg/L	77	0.248	0.240	1.490	0.020	0.264
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	86	552	557	833	227	110
Temperature	deg C	86	25.4	26.0	32.0	16.7	3.9
Total Hardness	mg/L	83	198	195	390	118	37
Total Suspended Solids	mg/L	83	6.3	7.0	18.0	1.0	3.5
Turbidity	NTU	84	4.5	4.8	15.9	0.2	2.7
Zinc	mg/L	85	0.0056	0.0050	0.0140	0.0018	0.0030

SITE 31C		01/28/99 - 09/21/17		Samples		89	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	22	150	151	177	123	14
Arsenic	mg/L	69	0.0029	0.0025	2.2350	0.0005	0.2687
Cadmium	mg/L	86	0.0005	0.0004	0.0050	0.0002	0.0017
Chlorophyll-a (corrected)	ug/L	75	16.1	18.9	93.0	0.1	17.5
Copper	mg/L	86	0.0042	0.0045	0.0295	0.0012	0.0042
Dissolved Oxygen	% Saturation	14	75.8	72.4	123.1	33.1	29.1
Fecal Coliform	cfu/100mL	33	69	70	5000	3	886
Lead	mg/L	74	0.0021	0.0023	0.0070	0.0005	0.0015
Nitrogen, Ammonia	mg/L	83	0.043	0.040	0.456	0.001	0.080
Nitrogen, nitrate + nitrite	mg/L	76	0.071	0.068	1.300	0.006	0.189
Nitrogen, Total	mg/L	76	1.26	1.16	3.09	0.62	0.57
Nitrogen, Total Kjeldahl	mg/L	86	1.11	1.07	3.07	0.11	0.54
pH	None	87	7.5	7.5	8.5	6.3	0.4
Phosphorus, orthophosphate	mg/L	84	0.044	0.050	0.440	0.003	0.078
Phosphorus, Total	mg/L	79	0.125	0.120	0.560	0.020	0.095
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	88	538	510	11188	391	1140
Temperature	deg C	86	26.0	25.8	32.0	19.2	3.3
Total Hardness	mg/L	86	180	184	260	16	25
Total Suspended Solids	mg/L	82	4.1	4.0	15.7	1.0	3.3
Turbidity	NTU	84	2.7	2.8	13.3	0.1	2.0
Zinc	mg/L	86	0.0056	0.0050	0.1030	0.0016	0.0111

Table 5-6
Monitoring Data Summary - C-15 Watershed
Period of Record

(Page 2 of 24)

SITE 31B		06/15/00 - 04/20/17		Samples		123	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	90	148	152	207	32	19
Arsenic	mg/L	34	0.0022	0.0025	0.0046	0.0005	0.0008
Cadmium	mg/L	46	0.0006	0.0004	0.0050	0.0002	0.0019
Chlorophyll-a (corrected)	ug/L	40	13.4	19.1	52.0	1.7	14.0
Copper	mg/L	46	0.0046	0.0046	0.0200	0.0013	0.0037
Dissolved Oxygen	% Saturation	11	107.7	105.0	141.5	70.0	25.3
Fecal Coliform	DHu/100mL	25	85	110	420	1	100
Lead	mg/L	46	0.0021	0.0025	0.0260	0.0003	0.0038
Nitrogen, Ammonia	mg/L	112	0.018	0.014	0.305	0.003	0.053
Nitrogen, nitrate + nitrite	mg/L	118	0.019	0.014	0.470	0.001	0.103
Nitrogen, Total	mg/L	117	1.02	1.00	4.23	0.57	0.40
Nitrogen, Total Kjeldahl	mg/L	121	0.95	0.93	4.18	0.56	0.37
pH	None	121	7.8	7.8	8.7	6.7	0.4
Phosphorus, orthophosphate	mg/L	118	0.053	0.071	0.344	0.001	0.071
Phosphorus, Total	mg/L	108	0.107	0.108	0.702	0.003	0.092
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	123	493	495	787	392	52
Temperature	deg C	123	25.0	26.0	32.5	15.0	4.0
Total Hardness	mg/L	54	176	177	230	138	18
Total Suspended Solids	mg/L	119	2.9	3.0	43.7	1.0	4.6
Turbidity	NTU	123	2.5	2.7	17.8	0.1	2.3
Zinc	mg/L	46	0.0060	0.0050	0.0492	0.0027	0.0068

Site 31B is a continuation of Site C1540 when SFWMD discontinued sampling after September 2014.

Table 5-6
Monitoring Data Summary - C-16 Watershed
Period of Record

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SITE 22		01/29/04 - 06/30/17			Samples 70		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	25	142	141	185	110	16
Arsenic	mg/L	68	0.0024	0.0025	0.0300	0.0005	0.0034
Cadmium	mg/L	68	0.0004	0.0003	0.0026	0.0002	0.0006
Chlorophyll-a (corrected)	ug/L	68	12.3	15.6	62.7	0.8	13.9
Copper	mg/L	68	0.0030	0.0030	0.0180	0.0010	0.0039
Dissolved Oxygen	% Saturation	13	106.5	118.5	149.5	51.2	27.3
Fecal Coliform	cfu/100mL	16	42	39	600	2	210
Lead	mg/L	56	0.0016	0.0016	0.0029	0.0005	0.0007
Nitrogen, Ammonia	mg/L	64	0.026	0.030	1.010	0.002	0.125
Nitrogen, nitrate + nitrite	mg/L	63	0.055	0.050	1.990	0.003	0.284
Nitrogen, Total	mg/L	62	1.02	1.00	3.07	0.53	0.41
Nitrogen, Total Kjeldahl	mg/L	69	0.87	0.86	2.19	0.27	0.29
pH	None	67	8.0	8.0	8.9	6.5	0.4
Phosphorus, orthophosphate	mg/L	64	0.013	0.023	0.086	0.001	0.021
Phosphorus, Total	mg/L	69	0.053	0.058	0.840	0.003	0.106
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	67	500	502	1008	7	143
Temperature	deg C	68	25.5	25.6	36.3	17.1	4.3
Total Hardness	mg/L	68	180	182	239	139	22
Total Suspended Solids	mg/L	67	3.9	4.3	33.8	1.0	4.3
Turbidity	NTU	67	2.3	2.5	6.6	0.1	1.3
Zinc	mg/L	68	0.0050	0.0050	0.0600	0.0013	0.0092

SITE 24		01/25/99 - 06/30/17			Samples 86		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	19	113	150	177	3	38
Arsenic	mg/L	63	0.0025	0.0025	0.0063	0.0005	0.0010
CFdmium	mg/L	78	0.0005	0.0003	0.0050	0.0002	0.0017
Chlorophyll-a (corrected)	ug/L	74	13.0	14.2	49.0	2.0	11.3
Copper	mg/L	78	0.0033	0.0035	0.0113	0.0007	0.0030
Dissolved Oxygen	% Saturation	13	113.7	117.0	145.6	74.5	25.5
FeCFI Coliform	cfu/100mL	30	67	95	2300	1	491
Lead	mg/L	71	0.0021	0.0024	0.0050	0.0007	0.0013
Nitrogen, Ammonia	mg/L	78	0.027	0.031	0.105	0.007	0.024
Nitrogen, nitrate + nitrite	mg/L	76	0.041	0.029	0.940	0.001	0.156
Nitrogen, Total	mg/L	76	1.00	0.99	2.67	0.11	0.43
Nitrogen, Total Kjeldahl	mg/L	77	0.89	0.90	2.61	0.09	0.41
pH	None	83	8.0	8.0	8.8	7.1	0.4
Phosphorus, orthophosphate	mg/L	79	0.012	0.014	0.230	0.001	0.033
Phosphorus, Total	mg/L	81	0.060	0.056	3.053	0.012	0.335
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	84	523	487	4220	348	422
Temperature	deg C	83	24.9	25.8	33.1	2.8	4.8
Total Hardness	mg/L	76	176	178	233	111	25
Total Suspended Solids	mg/L	80	4.4	5.0	16.5	1.0	3.3
Turbidity	NTU	83	3.1	3.2	11.4	0.6	1.9
Zinc	mg/L	78	0.0056	0.0050	0.0360	0.0013	0.0057

Table 5-6
Monitoring Data Summary - C-16 Watershed
Period of Record

(Page 4 of 24)

SITE 27B		01/28/99 - 06/29/17			Samples 77		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	21	176	170	222	121	28
Arsenic	mg/L	58	0.0026	0.0025	0.0120	0.0005	0.0017
Cadmium	mg/L	75	0.0005	0.0003	0.0050	0.0002	0.0018
Chlorophyll-a (corrected)	ug/L	63	14.6	18.7	76.4	1.5	16.4
Copper	mg/L	75	0.0046	0.0044	0.0975	0.0007	0.0113
Dissolved Oxygen	% Saturation	10	70.5	72.7	139.7	21.9	33.5
Fecal Coliform	cfu/100mL	29	139	100	6000	7	1526
Lead	mg/L	69	0.0022	0.0025	0.0067	0.0005	0.0015
Nitrogen, Ammonia	mg/L	73	0.050	0.048	0.740	0.007	0.097
Nitrogen, nitrate + nitrite	mg/L	68	0.074	0.064	0.785	0.006	0.160
Nitrogen, Total	mg/L	67	1.50	1.53	3.42	0.75	0.51
Nitrogen, Total Kjeldahl	mg/L	73	1.35	1.39	3.37	0.68	0.51
pH	None	75	7.5	7.5	8.5	6.7	0.3
Phosphorus, orthophosphate	mg/L	71	0.066	0.064	0.680	0.001	0.162
Phosphorus, Total	mg/L	73	0.165	0.160	0.770	0.030	0.181
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	76	553	562	10481	8	1147
Temperature	deg C	76	25.3	26.6	32.4	16.5	3.9
Total Hardness	mg/L	75	195	201	288	113	36
Total Suspended Solids	mg/L	73	5.6	6.2	20.0	1.0	4.0
Turbidity	NTU	75	3.1	3.2	11.4	0.6	1.9
Zinc	mg/L	74	0.0056	0.0050	0.0360	0.0013	0.0057

SITE 27A		01/28/99 - 09/21/17			Samples 88		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	24	153	151	191	128	14
Arsenic	mg/L	69	0.0025	0.0025	0.0078	0.0005	0.0012
Cadmium	mg/L	86	0.0006	0.0003	0.0050	0.0002	0.0017
Chlorophyll-a (corrected)	ug/L	73	14.2	16.3	66.0	1.6	15.1
Copper	mg/L	86	0.0046	0.0047	0.0200	0.0013	0.0032
Dissolved Oxygen	% Saturation	14	87.5	95.2	135.3	39.4	24.4
Fecal Coliform	cfu/100mL	32	52	54	1200	4	255
Lead	mg/L	80	0.0022	0.0024	0.0150	0.0005	0.0021
Nitrogen, Ammonia	mg/L	83	0.036	0.040	2.060	0.002	0.226
Nitrogen, nitrate + nitrite	mg/L	79	0.050	0.050	0.750	0.006	0.136
Nitrogen, Total	mg/L	79	1.21	1.20	4.32	0.15	0.57
Nitrogen, Total Kjeldahl	mg/L	85	1.12	1.19	3.96	0.08	0.53
pH	None	85	7.8	7.9	8.6	6.5	0.4
Phosphorus, orthophosphate	mg/L	77	0.034	0.039	0.440	0.001	0.095
Phosphorus, Total	mg/L	82	0.125	0.125	1.580	0.022	0.206
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	86	522	514	939	219	116
Temperature	deg C	84	25.5	25.7	32.6	18.5	3.9
Total Hardness	mg/L	86	182	181	258	117	24
Total Suspended Solids	mg/L	77	4.1	5.1	38.0	1.0	4.9
Turbidity	NTU	85	3.2	3.4	71.5	0.1	8.0
Zinc	mg/L	84	0.0057	0.0050	0.0690	0.0013	0.0092

Table 5-6
Monitoring Data Summary - C-16 Watershed
Period of Record

(Page 5 of 24)

SITE 28		01/28/99 - 04/20/17		Samples		128	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	90	147	147	210	119	15
Arsenic	mg/L	34	0.0022	0.0025	0.0059	0.0005	0.0009
Cadmium	mg/L	51	0.0007	0.0005	0.0050	0.0002	0.0021
Chlorophyll-a (corrected)	ug/L	40	7.5	7.3	50.0	1.6	9.9
Copper	mg/L	51	0.0036	0.0033	0.0200	0.0007	0.0039
Dissolved Oxygen	% Saturation	12	93.1	99.5	147.0	46.4	24.6
Fecal Coliform	cfu/100mL	28	104	92	2600	10	663
Lead	mg/L	51	0.0023	0.0025	0.0261	0.0003	0.0037
Nitrogen, Ammonia	mg/L	121	0.026	0.033	2.760	0.001	0.250
Nitrogen, nitrate + nitrite	mg/L	123	0.038	0.050	13.000	0.001	1.170
Nitrogen, Total	mg/L	122	1.03	0.99	13.71	0.11	1.27
Nitrogen, Total Kjeldahl	mg/L	126	0.91	0.88	5.81	0.08	0.51
pH	None	126	7.7	7.8	8.6	6.2	0.4
Phosphorus, orthophosphate	mg/L	126	0.020	0.030	0.209	0.001	0.046
Phosphorus, Total	mg/L	114	0.073	0.067	0.877	0.020	0.092
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	128	446	475	946	5	123
Temperature	deg C	128	25.1	25.9	56.8	13.1	4.9
Total Hardness	mg/L	58	173	175	224	120	22
Total Suspended Solids	mg/L	123	3.0	3.0	24.9	1.0	3.4
Turbidity	NTU	128	2.4	2.5	12.0	0.1	1.9
Zinc	mg/L	51	0.0062	0.0050	0.1180	0.0024	0.0159

Site 28 is a continuation of Site C16S41 when SFWMD discontinued sampling after September 2014

Table 5-6
Monitoring Data Summary - C-17 Watershed
Period of Record

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SITE 12A		01/19/99 - 09/20/17			Samples 104		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	28	146	148	185	87	19
Arsenic	mg/L	73	0.0026	0.0025	0.0068	0.0005	0.0014
Cadmium	mg/L	90	0.0005	0.0004	0.0050	0.0002	0.0017
Chlorophyll-a (corrected)	ug/L	78	13.2	16.0	74.8	1.2	11.9
Copper	mg/L	90	0.0036	0.0032	0.0500	0.0010	0.0058
Dissolved Oxygen	% Saturation	26	23.1	46.7	108.9	3.8	40.5
Fecal Coliform	CKu/100mL	35	138	110	4000	23	660
Lead	mg/L	84	0.0019	0.0024	0.0076	0.0004	0.0015
Nitrogen, Ammonia	mg/L	102	0.063	0.059	2.260	0.006	0.247
Nitrogen, nitrate + nitrite	mg/L	95	0.071	0.083	1.590	0.003	0.180
Nitrogen, Total	mg/L	91	1.43	1.13	9.08	0.43	2.26
Nitrogen, Total Kjeldahl	mg/L	99	1.04	1.00	3.10	0.38	0.42
pH	None	102	7.6	7.6	8.8	6.2	0.5
Phosphorus, orthophosphate	mg/L	92	0.008	0.010	0.058	0.001	0.013
Phosphorus, Total	mg/L	98	0.051	0.061	0.340	0.003	0.040
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	102	451	462	831	231	76
Temperature	deg C	102	25.2	25.7	31.7	16.3	3.6
Total Hardness	mg/L	85	162	172	216	86	26
Total Suspended Solids	mg/L	92	4.0	4.7	15.5	1.0	3.2
Turbidity	NTU	93	3.3	3.6	6.3	0.3	1.4
Zinc	mg/L	90	0.0066	0.0053	0.0614	0.0013	0.0084

SITE C17S44		01/19/99 - 09/21/17			Samples 148		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	78	158	163	192	112	19
Arsenic	mg/L	14	0.0017	0.0019	0.0049	0.0005	0.0011
Cadmium	mg/L	31	0.0014	0.0008	0.0050	0.0002	0.0022
Chlorophyll-a (corrected)	ug/L	23	9.2	9.1	40.0	1.7	9.7
Copper	mg/L	31	0.0042	0.0050	0.0500	0.0007	0.0089
Dissolved Oxygen	% Saturation	10	67.7	77.1	98.5	44.9	21.0
Fecal Coliform	cfu/100mL	31	96	100	730	5	215
Lead	mg/L	31	0.0021	0.0019	0.0250	0.0003	0.0045
Nitrogen, Ammonia	mg/L	144	0.034	0.040	1.500	0.003	0.135
Nitrogen, nitrate + nitrite	mg/L	145	0.035	0.048	0.374	0.001	0.093
Nitrogen, Total	mg/L	142	0.88	0.91	1.51	0.02	0.23
Nitrogen, Total Kjeldahl	mg/L	117	0.87	0.87	1.33	0.20	0.16
pH	None	146	7.7	7.7	8.3	6.6	0.3
Phosphorus, orthophosphate	mg/L	144	0.006	0.005	0.095	0.001	0.018
Phosphorus, Total	mg/L	137	0.040	0.046	0.126	0.002	0.021
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	148	460	465	728	313	50
Temperature	deg C	148	25.5	26.1	90.0	15.7	6.6
Total Hardness	mg/L	40	174	185	233	90	30
Total Suspended Solids	mg/L	144	2.8	3.0	26.0	0.1	3.3
Turbidity	NTU	147	2.6	2.7	18.1	0.9	1.7
Zinc	mg/L	31	0.0080	0.0100	0.0954	0.0032	0.0161

Table 5-6
Monitoring Data Summary - C-18 Watershed
Period of Record

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SITE 16		01/19/99 - 09/20/17			Samples 80		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	29	119	138	216	31	52
Arsenic	mg/L	71	0.0020	0.0024	0.0050	0.0005	0.0009
Cadmium	mg/L	88	0.0005	0.0003	0.0050	0.0002	0.0017
Chlorophyll-a (corrected)	ug/L	75	4.1	3.8	43.0	0.6	7.0
Copper	mg/L	86	0.0021	0.0016	0.0100	0.0005	0.0033
Dissolved Oxygen	% Saturation	14	49.3	47.9	147.1	23.2	36.8
Fecal Coliform	cfu/100mL	34	33	20	1400	2	249
Lead	mg/L	86	0.0021	0.0025	0.0125	0.0005	0.0018
Nitrogen, Ammonia	mg/L	83	0.042	0.040	0.498	0.008	0.078
Nitrogen, nitrate + nitrite	mg/L	81	0.040	0.044	1.210	0.006	0.166
Nitrogen, Total	mg/L	81	0.99	1.01	2.35	0.21	0.43
Nitrogen, Total Kjeldahl	mg/L	88	0.93	0.93	2.30	0.16	0.42
pH	None	82	7.3	7.3	9.7	6.0	0.5
Phosphorus, orthophosphate	mg/L	82	0.008	0.009	0.560	0.001	0.062
Phosphorus, Total	mg/L	83	0.033	0.034	1.500	0.001	0.166
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	82	341	384	737	105	137
Temperature	deg C	82	24.6	25.4	33.4	15.8	3.7
Total Hardness	mg/L	79	129	147	734	30	88
Total Suspended Solids	mg/L	84	2.2	2.0	29.7	1.0	4.0
Turbidity	NTU	86	1.7	1.6	10.2	0.5	1.3
Zinc	mg/L	87	0.0061	0.0050	0.0500	0.0012	0.0117

SITE 15		01/19/99 - 09/20/17			Samples 87		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	25	111	99	244	41	66
Arsenic	mg/L	68	0.0021	0.0025	0.0068	0.0005	0.0011
Cadmium	mg/L	85	0.0006	0.0005	0.0050	0.0002	0.0018
Chlorophyll-a (corrected)	ug/L	73	2.3	2.3	19.0	0.1	2.5
Copper	mg/L	84	0.0028	0.0018	49.5000	0.0005	7.3427
Dissolved Oxygen	% Saturation	11	41.9	43.1	55.1	28.0	9.1
Fecal Coliform	cfu/100mL	34	48	35	1100	1	230
Lead	mg/L	85	0.0020	0.0025	0.0103	0.0005	0.0016
Nitrogen, Ammonia	mg/L	83	0.044	0.040	8.167	0.007	0.892
Nitrogen, nitrate + nitrite	mg/L	78	0.027	0.025	0.480	0.006	0.089
Nitrogen, Total	mg/L	70	0.96	0.94	4.51	0.34	0.57
Nitrogen, Total Kjeldahl	mg/L	79	0.89	0.89	4.50	0.29	0.54
pH	None	79	7.2	7.3	8.4	2.8	0.7
Phosphorus, orthophosphate	mg/L	78	0.005	0.003	0.071	0.001	0.014
Phosphorus, Total	mg/L	79	0.021	0.020	1.500	0.001	0.286
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	79	315	350	632	91	132
Temperature	deg C	79	23.6	24.0	30.9	15.8	3.8
Total Hardness	mg/L	72	105	103	260	38	57
Total Suspended Solids	mg/L	81	1.7	1.8	15.0	0.5	2.1
Turbidity	NTU	83	0.8	0.7	18.3	0.1	2.0
Zinc	mg/L	85	0.0056	0.0050	0.1160	0.0013	0.0126

Table 5-6
Monitoring Data Summary - C-18 Watershed
Period of Record

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SITE 92		01/19/99 - 07/18/17		Samples		155	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	99	138.68	136.00	268.00	61.00	49.92
Arsenic	mg/L	16	0.00	0.00	0.00	0.00	0.00
Cadmium	mg/L	33	0.00	0.00	0.01	0.00	0.00
Chlorophyll-a (corrected)	ug/L	34	3.62	3.58	15.30	1.00	3.04
Copper	mg/L	33	0.00	0.00	0.01	0.00	0.00
Dissolved Oxygen	% Saturation	11	42.68	48.90	78.90	5.70	23.70
Fecal Coliform	cfu/100mL	37	14.82	12.00	730.00	1.00	149.95
Lead	mg/L	32	0.00	0.00	0.02	0.00	0.00
Nitrogen, Ammonia	mg/L	151	0.03	0.03	1.50	0.00	0.12
Nitrogen, nitrate + nitrite	mg/L	150	0.02	0.03	0.52	0.00	0.05
Nitrogen, Total	mg/L	153	0.81	0.89	1.65	0.00	0.21
Nitrogen, Total Kjeldahl	mg/L	140	0.86	0.87	1.40	0.22	0.17
pH	None	153	7.44	7.50	8.20	6.24	0.34
Phosphorus, orthophosphate	mg/L	154	0.00	0.00	0.50	0.00	0.04
Phosphorus, Total	mg/L	142	0.02	0.02	23.00	0.00	1.93
Salinity	ppth	11	0.23	0.20	0.40	0.20	0.08
Specific Conductivity	umho/cm	155	410.56	410.00	909.00	148.00	165.00
Temperature	deg C	155	26.40	26.50	3001.00	15.80	239.00
Total Hardness	mg/L	40	158.36	171.90	298.00	60.00	60.54
Total Suspended Solids	mg/L	151	1.28	1.50	153.00	0.00	12.36
Turbidity	NTU	154	1.58	1.60	6.40	0.40	0.86
Zinc	mg/L	33	0.01	0.01	0.16	0.00	0.03

SITE 81		01/19/99 - 07/18/17		Samples		155	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	98	135.305	138.5	247	59	45.027
Arsenic	mg/L	16	0.001	0.001065	0.0024	0.00047	0.001
Cadmium	mg/L	33	0.001	0.0008	0.005	0.00018	0.002
Chlorophyll-a (corrected)	ug/L	33	4.521	4.7	15	1	3.903
Copper	mg/L	33	0.003	0.00332	0.01	0.00034	0.004
Dissolved Oxygen	% Saturation	11	68.359	71.1	109.1	25	19.646
Fecal Coliform	cfu/100mL	38	62.238	55	1600	3	376.501
Lead	mg/L	33	0.002	0.0013	0.0236	0.00033	0.004
Nitrogen, Ammonia	mg/L	149	0.025	0.03	0.14	0.0025	0.028
Nitrogen, nitrate + nitrite	mg/L	152	0.017	0.0215	0.244	0.002	0.040
Nitrogen, Total	mg/L	153	0.768	0.838	1.32	0.0025	0.195
Nitrogen, Total Kjeldahl	mg/L	139	0.815	0.82	1.3	0.26	0.153
pH	None	141	7.626	7.7	8.3	6.54	0.375
Phosphorus, orthophosphate	mg/L	152	0.003	0.002	0.082	0.001	0.013
Phosphorus, Total	mg/L	141	0.021	0.021	0.21	0.002	0.022
Salinity	ppth	6	None	None	0.2	0.1	0.041
Specific Conductivity	umho/cm	155	401.519	401	1588	151	220.193
Temperature	deg C	154	25.230	26.09	33.2	15.8	3.978
Total Hardness	mg/L	42	156.297	173.3	311	60	60.350
Total Suspended Solids	mg/L	138	1.638	1.5	6	0.3	1.017
Turbidity	NTU	155	1.438	1.4	8.7	0.3	0.963
Zinc	mg/L	33	0.007	0.008	0.0429	0.00176	0.007

Site 81 and 92 are a continuation of Sites C18S46 and C18G92 when SFWMD discontinued sampling after September 2014

Table 5-6
Monitoring Data Summary - C-51 Watershed
Period of Record

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SITE 38B		01/21/99 - 06/29/17			Samples 91		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	27	136	130	291	62	56
Arsenic	mg/L	72	0.0024	0.0025	0.0160	0.0005	0.0024
Cadmium	mg/L	89	0.0005	0.0003	0.0050	0.0002	0.0017
Chlorophyll-a (corrected)	ug/L	78	6.5	7.0	70.7	1.0	11.5
Copper	mg/L	87	0.0027	0.0018	0.0100	0.0005	0.0031
Dissolved Oxygen	% Saturation	8	77.6	82.0	137.8	44.5	28.2
Fecal Coliform	cfu/100mL	34	66	80	1090	2	211
Lead	mg/L	89	0.0021	0.0025	0.0152	0.0003	0.0019
Nitrogen, Ammonia	mg/L	87	0.067	0.070	0.830	0.008	0.163
Nitrogen, nitrate + nitrite	mg/L	81	0.180	0.210	0.907	0.006	0.221
Nitrogen, Total	mg/L	81	1.64	1.55	4.05	0.65	0.75
Nitrogen, Total Kjeldahl	mg/L	89	1.38	1.30	4.00	0.28	0.76
pH	None	84	7.6	7.6	14.0	6.6	0.8
Phosphorus, orthophosphate	mg/L	84	0.038	0.048	0.540	0.002	0.067
Phosphorus, Total	mg/L	79	0.101	0.108	0.891	0.019	0.141
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	84	694	723	1834	2	411
Temperature	deg C	84	24.8	25.2	33.4	16.7	4.1
Total Hardness	mg/L	85	205	200	412	59	86
Total Suspended Solids	mg/L	86	9.4	10.1	53.4	1.0	10.8
Turbidity	NTU	87	9.6	10.8	69.9	0.6	13.5
Zinc	mg/L	87	0.0063	0.0050	0.0894	0.0013	0.0118

SITE 37B		01/21/99 - 06/29/17			Samples 89		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	29	158	165	238	103	36
Arsenic	mg/L	71	0.0022	0.0025	0.0070	0.0002	0.0010
Cadmium	mg/L	87	0.0005	0.0003	0.0050	0.0002	0.0017
Chlorophyll-a (corrected)	ug/L	76	4.2	4.3	22.3	0.4	4.5
Copper	mg/L	87	0.0026	0.0023	0.0100	0.0005	0.0030
Dissolved Oxygen	% Saturation	8	72.3	71.1	97.1	54.4	15.1
Fecal Coliform	cfu/100mL	32	48	44	300	10	88
Lead	mg/L	87	0.0021	0.0025	0.0155	0.0005	0.0019
Nitrogen, Ammonia	mg/L	88	0.063	0.064	0.332	0.008	0.060
Nitrogen, nitrate + nitrite	mg/L	77	0.170	0.199	1.320	0.010	0.220
Nitrogen, Total	mg/L	81	1.22	1.20	6.89	0.20	0.84
Nitrogen, Total Kjeldahl	mg/L	87	1.04	0.94	6.70	0.13	0.79
pH	None	82	7.4	7.5	8.2	2.8	0.6
Phosphorus, orthophosphate	mg/L	84	0.027	0.038	0.193	0.001	0.036
Phosphorus, Total	mg/L	77	0.073	0.080	1.540	0.006	0.192
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	82	670	691	1198	163	177
Temperature	deg C	82	25.3	26.1	32.2	16.8	3.8
Total Hardness	mg/L	84	212	216	305	124	41
Total Suspended Solids	mg/L	86	4.7	5.3	43.3	1.0	7.7
Turbidity	NTU	86	5.3	5.6	87.0	0.4	13.7
Zinc	mg/L	86	0.0061	0.0050	0.1100	0.0013	0.0135

Table 5-6
Monitoring Data Summary - C-51 Watershed
Period of Record

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SITE C51S155		01/21/99	-	09/21/17	Samples		156
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	86	161	163	216	100	24
Arsenic	mg/L	14	0.0014	0.0016	0.0029	0.0005	0.0008
Cadmium	mg/L	30	0.0015	0.0008	0.0050	0.0002	0.0022
Chlorophyll-a (corrected)	ug/L	31	1.7	3.3	45.0	0.0	8.6
Copper	mg/L	29	0.0051	0.0064	0.0230	0.0017	0.0047
Dissolved Oxygen	% Saturation	10	70.2	79.1	109.4	30.2	25.6
Fecal Coliform	cfu/100mL	29	148	150	2000	2	388
Lead	mg/L	30	0.0022	0.0039	0.0152	0.0005	0.0030
Nitrogen, Ammonia	mg/L	151	0.046	0.059	0.520	0.003	0.069
Nitrogen, nitrate + nitrite	mg/L	149	0.104	0.188	20.900	0.003	1.706
Nitrogen, Total	mg/L	150	1.12	1.13	21.79	0.15	1.74
Nitrogen, Total Kjeldahl	mg/L	127	0.96	0.94	3.87	0.41	0.37
pH	None	153	7.6	7.6	8.5	6.2	0.4
Phosphorus, orthophosphate	mg/L	154	0.022	0.032	0.279	0.001	0.042
Phosphorus, Total	mg/L	143	0.064	0.065	0.200	0.003	0.034
Salinity	ppth	1	0.3300	0.3300	0.3300	0.3300	None
Specific Conductivity	umho/cm	155	579	600	1681	6	180
Temperature	ECg C	155	25.2	25.9	56.3	15.3	4.7
Total Hardness	mg/L	40	172	199	337	1	53
Total SuspenECd Solids	mg/L	152	3.6	4.0	47.0	1.0	6.2
Turbidity	NTU	156	4.7	4.2	59.4	1.1	8.7
Zinc	mg/L	30	0.0079	0.0100	0.0310	0.0032	0.0056

Table 5-6
Monitoring Data Summary - Loxahatchee River Watershed
Period of Record

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SITE 69 (Lox)		11/20/03 - 09/25/17			Samples 139		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	129	149	151	245	74	37
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	0	None	None	None	None	None
Chlorophyll-a (corrected)	ug/L	127	2.9	2.9	19.5	0.1	3.9
Copper	mg/L	0	None	None	None	None	None
Dissolved Oxygen	% Saturation	47	42.9	44.2	65.5	17.8	12.0
Fecal Coliform	cfu/100mL	129	28	24	13800	3	1216
Lead	mg/L	0	None	None	None	None	None
Nitrogen, Ammonia	mg/L	125	0.086	0.090	0.471	0.025	0.060
Nitrogen, nitrate + nitrite	mg/L	129	0.060	0.059	0.216	0.007	0.042
Nitrogen, Total	mg/L	129	1.01	0.97	38.00	0.58	3.27
Nitrogen, Total Kjeldahl	mg/L	117	0.88	0.90	2.52	0.50	0.29
pH	None	135	7.3	7.3	8.1	6.3	0.3
Phosphorus, orthophosphate	mg/L	129	0.010	0.011	0.074	0.001	0.012
Phosphorus, Total	mg/L	129	0.036	0.034	0.147	0.003	0.024
Salinity	ppth	101	0.30	0.21	11.40	0.10	1.80
Specific Conductivity	umho/cm	99	598	478	19200	218	3107
Temperature	deg C	135	24.8	24.4	31.2	17.0	3.7
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	129	2.1	2.1	10.0	0.5	1.5
Turbidity	NTU	85	3.1	3.2	7.2	1.5	1.1
Zinc	mg/L	8	0.0080	0.0100	0.0100	0.0050	0.0024

SITE 30		05/10/00 - 07/11/17			Samples 86		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	78	122	125	137	79	9
Arsenic	mg/L	6	0.0035	0.0042	0.0047	0.0021	0.0011
Cadmium	mg/L	8	0.0027	0.0050	0.0080	0.0008	0.0027
Chlorophyll-a (corrected)	ug/L	74	4.0	4.5	36.3	0.5	4.6
Copper	mg/L	7	0.0116	0.0100	0.0900	0.0017	0.0319
Dissolved Oxygen	% Saturation	23	75.8	82.0	92.9	15.6	15.7
Fecal Coliform	cfu/100mL	84	13	13	616	1	97
Lead	mg/L	7	0.0040	0.0050	0.1020	0.0011	0.0375
Nitrogen, Ammonia	mg/L	59	0.049	0.040	0.300	0.010	0.088
Nitrogen, nitrate + nitrite	mg/L	86	0.011	0.010	0.146	0.003	0.028
Nitrogen, Total	mg/L	85	0.29	0.30	2.04	0.02	0.42
Nitrogen, Total Kjeldahl	mg/L	77	0.34	0.30	2.02	0.10	0.40
pH	None	86	7.8	7.8	8.3	7.1	0.2
Phosphorus, orthophosphate	mg/L	78	0.006	0.005	0.100	0.001	0.013
Phosphorus, Total	mg/L	86	0.026	0.024	0.130	0.010	0.017
Salinity	ppth	63	30.17	32.10	37.90	15.60	5.08
Specific Conductivity	umho/cm	74	35505	48496	56789	281	12575
Temperature	deg C	86	25.5	26.0	32.3	17.7	3.7
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	86	5.2	5.2	14.0	2.0	3.0
Turbidity	NTU	86	2.8	2.8	7.6	1.1	1.3
Zinc	mg/L	8	0.0182	0.0100	0.1210	0.0016	0.0470

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SITE 51		05/11/00 - 07/10/17			Samples 85		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	77	120	123	163	70	14
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	8	0.0033	0.0050	0.0440	0.0008	0.0146
Chlorophyll-a (corrected)	ug/L	75	3.9	4.0	62.0	0.5	7.5
Copper	mg/L	7	0.0088	0.0050	0.0700	0.0014	0.0296
Dissolved Oxygen	% Saturation	23	85.2	86.9	98.5	42.7	10.8
Fecal Coliform	cfu/100mL	84	14	13	420	1	63
Lead	mg/L	7	0.0034	0.0050	0.0340	0.0011	0.0119
Nitrogen, Ammonia	mg/L	53	0.030	0.030	0.140	0.002	0.029
Nitrogen, nitrate + nitrite	mg/L	85	0.008	0.006	0.068	0.002	0.016
Nitrogen, Total	mg/L	82	0.34	0.30	2.29	0.10	0.46
Nitrogen, Total Kjeldahl	mg/L	76	0.34	0.30	2.23	0.10	0.46
pH	None	86	7.8	7.9	8.4	6.7	0.2
Phosphorus, orthophosphate	mg/L	82	0.006	0.006	0.177	0.001	0.020
Phosphorus, Total	mg/L	85	0.025	0.025	0.222	0.006	0.025
Salinity	ppth	67	24.65	31.40	37.50	0.60	8.91
Specific Conductivity	umho/cm	68	38496	48050	56271	1118	12890
Temperature	deg C	86	24.6	25.1	31.1	15.9	3.8
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	85	5.4	5.3	43.5	0.8	6.6
Turbidity	NTU	85	3.1	3.2	7.2	1.5	1.1
Zinc	mg/L	8	0.0080	0.0100	0.0100	0.0050	0.0024

SITE 62 (Lox)		05/31/00 - 09/25/17			Samples 140		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	132	133	136	226	64	26
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	8	0.0027	0.0050	0.0080	0.0008	0.0027
Chlorophyll-a (corrected)	ug/L	123	5.4	5.9	61.9	0.5	6.3
Copper	mg/L	7	0.0071	0.0100	0.0500	0.0017	0.0184
Dissolved Oxygen	% Saturation	48	66.5	69.3	93.9	37.3	12.9
Fecal Coliform	cfu/100mL	139	58	63	2300	1	238
Lead	mg/L	7	0.0030	0.0050	0.0130	0.0011	0.0042
Nitrogen, Ammonia	mg/L	130	0.054	0.050	0.650	0.010	0.083
Nitrogen, nitrate + nitrite	mg/L	140	0.032	0.046	0.182	0.003	0.040
Nitrogen, Total	mg/L	140	0.79	0.77	3.93	0.23	0.59
Nitrogen, Total Kjeldahl	mg/L	134	0.72	0.70	3.93	0.20	0.60
pH	None	140	7.7	7.5	73.8	7.0	5.6
Phosphorus, orthophosphate	mg/L	138	0.020	0.024	0.121	0.002	0.017
Phosphorus, Total	mg/L	140	0.046	0.047	0.480	0.006	0.044
Salinity	ppth	125	7.36	10.60	35.70	0.20	9.86
Specific Conductivity	umho/cm	110	13729	18800	53860	439	15603
Temperature	deg C	140	24.8	24.7	32.8	16.1	3.9
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	128	4.1	4.0	23.2	1.0	3.2
Turbidity	NTU	140	2.8	2.6	22.0	1.2	2.1
Zinc	mg/L	8	0.0124	0.0100	0.0480	0.0050	0.0185

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SITE 72		05/11/00 - 09/25/17			Samples 147		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	138	124	129	178	28	19
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	8	0.0035	0.0050	0.0720	0.0008	0.0244
Chlorophyll-a (corrected)	ug/L	141	8.7	9.3	97.9	0.5	12.1
Copper	mg/L	7	0.0076	0.0100	0.0600	0.0010	0.0246
Dissolved Oxygen	% Saturation	48	75.1	80.4	128.1	27.2	19.0
Fecal Coliform	cfu/100mL	145	75	76	1336	1	213
Lead	mg/L	7	0.0044	0.0050	0.0640	0.0011	0.0229
Nitrogen, Ammonia	mg/L	135	0.087	0.090	3.000	0.015	0.264
Nitrogen, nitrate + nitrite	mg/L	146	0.019	0.025	0.172	0.000	0.030
Nitrogen, Total	mg/L	145	0.60	0.63	2.88	0.10	0.39
Nitrogen, Total Kjeldahl	mg/L	133	0.57	0.60	2.85	0.10	0.39
pH	None	147	7.7	7.8	8.2	6.8	0.2
Phosphorus, orthophosphate	mg/L	144	0.008	0.009	0.100	0.001	0.013
Phosphorus, Total	mg/L	146	0.037	0.036	0.640	0.006	0.052
Salinity	ppth	126	18.63	28.01	37.98	0.04	10.02
Specific Conductivity	umho/cm	111	28141	42818	55828	500	15472
Temperature	deg C	147	25.7	26.8	32.5	16.0	3.7
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	145	4.8	4.5	22.4	0.5	4.2
Turbidity	NTU	146	3.0	3.1	8.7	0.3	1.3
Zinc	mg/L	8	0.0164	0.0100	0.2780	0.0050	0.0941

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LWL-1		01/26/99 - 08/17/17			Samples 119		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	7	0.0039	0.0025	0.0089	0.0023	0.0029
Cadmium	mg/L	7	0.0009	0.0006	0.0025	0.0002	0
DAlorophyll-a (corrected)	ug/L	92	5.4	5.0	19.7	1.8	3.5
Copper	mg/L	31	0.0029	0.0030	0.0048	0.0017	0.0008
Dissolved Oxygen	mg/L	7	97.7	98.6	104.1	91.6	4.5
Fecal Coliform	cfu/100mL	2	14	26	47	4	30
Lead	mg/L	7	0.0031	0.0025	0.0246	0.0013	0.0085
Nitrogen, Ammonia	mg/L	110	0.011	0.010	0.260	0.001	0.031
Nitrogen, nitrate + nitrite	mg/L	90	0.006	0.004	0.120	0.003	0.021
Nitrogen, Total	mg/L	87	0.36	0.36	0.96	0.00	0.18
Nitrogen, Total Kjeldahl	mg/L	96	0.36	0.35	0.92	0.09	0.17
pH	None	118	7.9	7.9	8.9	7.2	0.2
Phosphorus, orthophosphate	mg/L	103	0.007	0.008	0.066	0.001	0.010
Phosphorus, Total	mg/L	101	0.034	0.033	0.120	0.004	0.017
Salinity	ppth	79	30.66	31.60	36.10	21.10	3.21
Specific Conductivity	umho/cm	118	45299	47819	67154	4184	6950
Temperature	deg C	118	25.7	25.8	32.8	14.6	4.5
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	85	4.0	4.0	33.0	1.5	6.2
Turbidity	NTU	116	1.8	2.0	6.0	0.5	0.8
Zinc	mg/L	6	0.0041	0.0042	0.0050	0.0034	0.0009

SITE 11		01/26/99 - 08/18/17			Samples 147		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	1	130	130	130	130	None
Arsenic	mg/L	11	0.0281	0.0071	2.5000	0.0028	1.1648
Cadmium	mg/L	24	0.0025	0.0029	0.2500	0.0001	0.0835
Chlorophyll-a (corrected)	ug/L	130	3.3	3.1	29.9	0.1	4.6
Copper	mg/L	22	0.0162	0.0099	6.2500	0.0017	1.5079
Dissolved Oxygen	mg/L	11	95.8	96.6	111.0	73.0	10.1
Fecal Coliform	DZu/100mL	39	16	15	170	2	38
Lead	mg/L	23	0.0090	0.0050	2.5000	0.0002	0.8568
Nitrogen, Ammonia	mg/L	141	0.040	0.040	0.250	0.007	0.044
Nitrogen, nitrate + nitrite	mg/L	120	0.052	0.050	1.200	0.007	0.176
Nitrogen, Total	mg/L	118	0.44	0.52	1.87	0.06	0.33
Nitrogen, Total Kjeldahl	mg/L	138	0.37	0.39	1.86	0.04	0.30
pH	None	139	7.8	7.9	8.7	6.6	0.3
Phosphorus, orthophosphate	mg/L	135	0.013	0.022	0.650	0.001	0.060
Phosphorus, Total	mg/L	141	0.035	0.036	1.110	0.003	0.101
Salinity	ppth	123	30.48	31.73	35.92	9.54	4.16
Specific Conductivity	umho/cm	139	42244	48763	54441	425	9094
Temperature	deg C	127	25.5	25.6	32.4	16.5	3.7
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	15	16.7	25.0	59.0	1.0	16.3
Turbidity	NTU	142	1.7	2.0	12.4	0.1	1.5
Zinc	mg/L	19	0.0319	0.0100	5.0000	0.0034	1.8660

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SITE 13		05/11/00 - 08/18/17			Samples 141		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	1	140	140	140	140	None
Arsenic	mg/L	13	0.0174	0.0034	2.5000	0.0026	1.0943
Cadmium	mg/L	20	0.0020	0.0008	0.2500	0.0001	0.0909
Chlorophyll-a (corrected)	ug/L	129	4.0	3.9	24.1	0.1	4.5
Copper	mg/L	18	0.0154	0.0056	12.9000	0.0017	3.1986
Dissolved Oxygen	mg/L	11	93.6	94.0	109.5	70.5	10.2
Fecal Coliform	cfu/100mL	36	53	51	3200	6	533
Lead	mg/L	19	0.0080	0.0050	2.5000	0.0002	0.9351
Nitrogen, Ammonia	mg/L	136	0.049	0.049	13.000	0.007	1.110
Nitrogen, nitrate + nitrite	mg/L	124	0.057	0.050	1.517	0.003	0.227
Nitrogen, Total	mg/L	125	0.51	0.58	2.14	0.06	0.38
Nitrogen, Total Kjeldahl	mg/L	138	0.44	0.48	1.83	0.04	0.32
pH	None	133	7.8	7.8	8.4	6.4	0.2
Phosphorus, orthophosphate	mg/L	132	0.015	0.021	0.650	0.001	0.062
Phosphorus, Total	mg/L	133	0.040	0.041	1.400	0.003	0.137
Salinity	ppth	122	25.11	30.08	38.30	0.63	7.58
Specific Conductivity	umho/cm	131	35497	46763	59740	531	12162
Temperature	deg C	131	25.7	26.2	32.8	16.0	3.8
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	11	24.9	32.0	56.0	4.0	17.1
Turbidity	NTU	134	1.9	2.2	13.0	0.1	1.4
Zinc	mg/L	14	0.0478	0.0109	5.0000	0.0034	2.1186

LWL-4		04/05/04 - 08/17/17			Samples 116		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	7	0.0041	0.0025	0.0090	0.0023	0.0033
Cadmium	mg/L	7	0.0004	0.0003	0.0017	0.0003	0
Chlorophyll-a (corrected)	ug/L	93	2.4	2.1	14.7	0.1	2.8
Copper	mg/L	30	0.0019	0.0018	0.0031	0.0009	0.0006
Dissolved Oxygen	mg/L	7	104.1	97.8	132.3	91.2	13.9
Fecal Coliform	cfu/100mL	0	None	None	None	None	None
Lead	mg/L	7	0.0025	0.0025	0.0157	0.0005	0.0052
Nitrogen, Ammonia	mg/L	108	0.009	0.010	0.390	0.003	0.038
Nitrogen, nitrate + nitrite	mg/L	97	0.004	0.003	0.050	0.003	0.008
Nitrogen, Total	mg/L	96	0.28	0.27	0.74	0.00	0.15
Nitrogen, Total Kjeldahl	mg/L	94	0.29	0.27	0.73	0.13	0.15
pH	None	115	8.0	8.0	8.9	7.5	0.2
Phosphorus, orthophosphate	mg/L	98	0.004	0.004	0.028	0.001	0.006
Phosphorus, Total	mg/L	96	0.023	0.021	0.064	0.011	0.011
Salinity	ppth	80	32.59	33.30	36.40	24.70	2.79
Specific Conductivity	umho/cm	115	48364	50360	68870	4594	6461
Temperature	deg C	115	25.2	25.6	32.2	15.2	4.3
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	85	6.5	6.0	52.0	1.5	8.3
Turbidity	NTU	114	2.6	2.6	8.9	0.9	1.6
Zinc	mg/L	6	0.0051	0.0042	0.0197	0.0034	0.0065

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LWL-8		01/26/99 - 09/27/17			Samples 140		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	6	0.0043	0.0045	0.0098	0.0023	0.0032
Cadmium	mg/L	18	0.0016	0.0035	0.0060	0.0003	0.0023
Chlorophyll-a (corrected)	ug/L	105	5.1	5.0	41.2	0.5	7.5
Copper	mg/L	38	0.0029	0.0017	0.0500	0.0012	0.0110
Dissolved Oxygen	mg/L	7	87.3	93.3	103.4	61.2	16.3
Fecal Coliform	cfu/100mL	12	21	16	700	2	196
Lead	mg/L	17	0.0041	0.0050	0.0530	0.0011	0.0121
Nitrogen, Ammonia	mg/L	127	0.027	0.028	3.046	0.001	0.283
Nitrogen, nitrate + nitrite	mg/L	119	0.027	0.042	0.430	0.003	0.061
Nitrogen, Total	mg/L	108	0.51	0.51	1.67	0.02	0.32
Nitrogen, Total Kjeldahl	mg/L	102	0.45	0.47	1.50	0.13	0.31
pH	None	138	7.8	7.9	8.5	1.9	0.6
Phosphorus, orthophosphate	mg/L	121	0.015	0.016	0.130	0.001	0.017
Phosphorus, Total	mg/L	119	0.048	0.047	0.270	0.012	0.033
Salinity	ppth	88	25.49	28.90	36.40	9.32	7.35
Specific Conductivity	umho/cm	140	36982	43235	63187	2762	11361
Temperature	deg C	139	25.2	25.5	34.1	12.1	4.4
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	108	8.5	8.0	82.0	1.0	12.9
Turbidity	NTU	139	5.0	5.4	14.7	1.2	2.7
Zinc	mg/L	18	0.0088	0.0100	0.1200	0.0034	0.0271

SITE 18C		01/30/04 - 08/18/17			Samples 126		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	1	140	140	140	140	None
Arsenic	mg/L	12	0.0183	0.0032	2.5000	0.0023	1.1288
Cadmium	mg/L	11	0.0020	0.0006	0.2500	0.0001	0.1166
Chlorophyll-a (corrected)	ug/L	118	5.6	5.9	32.0	0.1	5.8
Copper	mg/L	11	0.0167	0.0031	4.8000	0.0017	1.5902
Dissolved Oxygen	mg/L	11	92.5	99.2	112.2	62.4	14.7
Fecal Coliform	cfu/100mL	25	26	20	300	2	75
Lead	mg/L	11	0.0179	0.0026	2.5000	0.0009	1.1655
Nitrogen, Ammonia	mg/L	112	0.053	0.061	0.310	0.009	0.057
Nitrogen, nitrate + nitrite	mg/L	111	0.100	0.101	1.677	0.006	0.244
Nitrogen, Total	mg/L	111	0.80	0.89	20.80	0.03	1.97
Nitrogen, Total Kjeldahl	mg/L	114	0.66	0.73	20.70	0.04	1.94
pH	None	110	7.8	7.8	8.4	7.1	0.2
Phosphorus, orthophosphate	mg/L	116	0.023	0.036	0.156	0.001	0.025
Phosphorus, Total	mg/L	111	0.064	0.072	1.280	0.001	0.127
Salinity	ppth	89	22.23	28.60	3388.00	4.74	356.75
Specific Conductivity	umho/cm	97	32305	44440	55098	537	15074
Temperature	deg C	108	26.5	27.9	33.9	14.1	4.5
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	2	42.0	42.0	42.0	42.0	0.0
Turbidity	NTU	120	9.1	11.5	222.0	0.1	20.8
Zinc	mg/L	7	0.1302	0.0190	5.0000	0.0034	2.6672

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SITE 18D		07/28/05 - 08/18/17			Samples 112		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	11	0.0210	0.0048	2.5000	0.0023	1.1660
Cadmium	mg/L	11	0.0025	0.0006	0.2500	0.0001	0.1165
Chlorophyll-a (corrected)	ug/L	105	5.6	6.0	41.1	0.1	8.6
Copper	mg/L	11	0.0147	0.0021	3.0000	0.0017	0.9689
Dissolved Oxygen	mg/L	11	103.4	105.6	132.8	77.3	15.4
Fecal Coliform	CRu/100mL	15	18	20	400	1	101
Lead	mg/L	11	0.0159	0.0026	2.5000	0.0002	1.1656
Nitrogen, Ammonia	mg/L	106	0.048	0.053	0.400	0.009	0.062
Nitrogen, nitrate + nitrite	mg/L	92	0.072	0.064	1.477	0.006	0.256
Nitrogen, Total	mg/L	88	0.59	0.68	3.87	0.03	0.52
Nitrogen, Total Kjeldahl	mg/L	102	0.48	0.55	3.86	0.04	0.45
pH	None	84	7.9	7.9	8.5	7.3	0.2
Phosphorus, orthophosphate	mg/L	102	0.015	0.023	0.500	0.001	0.056
Phosphorus, Total	mg/L	106	0.061	0.061	1.620	0.004	0.183
Salinity	ppth	82	26.41	30.56	352.20	9.36	36.75
SpeCRfic Conductivity	umho/cm	81	39293	46500	54782	3311	11697
Temperature	deg C	96	26.8	26.8	263.7	16.6	24.6
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	0	None	None	None	None	None
Turbidity	NTU	109	4.6	6.4	72.2	0.1	7.3
Zinc	mg/L	6	0.1472	2.5036	5.0000	0.0034	2.7361

LWL-11		01/26/99 - 09/27/17			Samples 127		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	6	0.0040	0.0025	0.0173	0.0023	0.0060
Cadmium	mg/L	6	0.0004	0.0004	0.0006	0.0003	0
Chlorophyll-a (corrected)	ug/L	95	6.1	5.7	59.2	1.0	7.7
Copper	mg/L	29	0.0019	0.0017	0.0160	0.0008	0.0035
Dissolved Oxygen	mg/L	7	97.2	98.9	123.3	68.3	17.0
Fecal Coliform	cfu/100mL	3	12	20	63	1	32
Lead	mg/L	6	0.0035	0.0025	0.0198	0.0024	0.0071
Nitrogen, Ammonia	mg/L	117	0.019	0.015	0.410	0.001	0.052
Nitrogen, nitrate + nitrite	mg/L	107	0.016	0.016	0.190	0.003	0.046
Nitrogen, Total	mg/L	101	0.48	0.54	1.54	0.00	0.29
Nitrogen, Total Kjeldahl	mg/L	92	0.47	0.49	1.40	0.05	0.27
pH	None	126	7.8	8.0	8.8	1.8	0.6
Phosphorus, orthophosphate	mg/L	111	0.010	0.011	0.086	0.001	0.013
Phosphorus, Total	mg/L	107	0.047	0.046	0.180	0.018	0.024
Salinity	ppth	85	27.36	29.70	36.40	11.30	6.17
Specific Conductivity	umho/cm	127	38955	44711	65170	3117	10255
Temperature	deg C	127	25.7	26.3	233.0	13.0	18.9
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	93	8.4	8.0	65.0	1.0	8.9
Turbidity	NTU	127	5.0	5.0	29.5	0.8	3.6
Zinc	mg/L	6	0.0041	0.0042	0.0050	0.0034	0.0009

Table 5-6
Monitoring Data Summary - Lake Worth Lagoon Central Watershed
Period of Record

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LWL-13		04/05/04	-		09/26/17	Samples 124	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	7	0.0041	0.0025	0.0095	0.0023	0.0033
Cadmium	mg/L	7	0.0004	0.0003	0.0006	0.0003	0
Chlorophyll-a (corrected)	ug/L	101	4.9	4.2	39.5	1.6	5.6
Copper	mg/L	31	0.0017	0.0017	0.0039	0.0009	0.0007
Dissolved Oxygen	mg/L	7	98.7	100.3	112.6	78.1	10.3
Fecal Coliform	CZu/100mL	3	100	100	100	100	0
Lead	mg/L	7	0.0028	0.0025	0.0229	0.0005	0.0078
Nitrogen, Ammonia	mg/L	119	0.014	0.011	0.500	0.002	0.062
Nitrogen, nitrate + nitrite	mg/L	108	0.011	0.007	0.200	0.003	0.046
Nitrogen, Total	mg/L	100	0.38	0.39	1.42	0.00	0.28
Nitrogen, Total Kjeldahl	mg/L	95	0.39	0.35	1.40	0.16	0.26
pH	None	123	8.0	8.0	8.6	7.0	0.2
Phosphorus, orthophosphate	mg/L	114	0.007	0.007	0.067	0.001	0.013
Phosphorus, Total	mg/L	106	0.034	0.032	0.170	0.013	0.023
Salinity	ppth	87	29.05	31.70	37.20	14.40	5.75
Specific Conductivity	umho/cm	124	43585	47217	385822	3532	32069
Temperature	deg C	124	25.3	26.4	33.3	11.7	4.4
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	91	5.9	6.0	28.0	1.0	5.6
Turbidity	NTU	114	3.0	2.9	12.0	0.7	1.8
Zinc	mg/L	6	0.0041	0.0042	0.0050	0.0034	0.0009

Table 5-6
Monitoring Data Summary - Lake Worth Lagoon South Watershed
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LWL-18		05/11/00	-		09/26/17	Samples 131	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	7	0.0033	0.0025	0.0087	0.0023	0.0024
Cadmium	mg/L	15	0.0020	0.0008	0.0050	0.0002	0.0022
Chlorophyll-a (corrected)	ug/L	103	8.4	5.0	58.1	1.6	9.1
Copper	mg/L	37	0.0053	0.0033	0.0500	0.0017	0.0080
Dissolved Oxygen	mg/L	12	92.1	87.9	131.9	62.4	18.3
Fecal Coliform	cfu/100mL	8	40	17	180	4	59
Lead	mg/L	14	0.0056	0.0025	0.0250	0.0008	0.0070
Nitrogen, Ammonia	mg/L	123	0.037	0.024	0.410	0.003	0.048
Nitrogen, nitrate + nitrite	mg/L	115	0.036	0.020	0.210	-0.005	0.043
Nitrogen, Total	mg/L	106	0.52	0.44	1.51	0.00	0.28
Nitrogen, Total Kjeldahl	mg/L	106	0.86	0.44	39.00	0.07	3.75
pH	None	130	7.8	7.9	8.6	6.5	0.2
Phosphorus, orthophosphate	mg/L	121	0.024	0.015	0.160	0.001	0.026
Phosphorus, Total	mg/L	115	0.053	0.043	0.230	0.003	0.035
Salinity	ppth	87	28.55	30.30	36.70	9.37	6.57
Specific Conductivity	umho/cm	131	43122	46172	64472	3790	10222
Temperature	deg C	130	26.5	26.7	33.6	16.3	4.1
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	99	10.9	8.0	56.0	1.0	9.1
Turbidity	NTU	120	4.2	4.0	17.0	0.7	2.2
Zinc	mg/L	14	0.0204	0.0100	0.1160	0.0019	0.0297

Table 5-6
Monitoring Data Summary - Hillsboro
Period of Record

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1		02/22/06 - 12/12/18			Samples 44		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	0	None	None	None	None	None
Chlorophyll-a (corrected)	ug/L	39	5.4	5.1	27.1	1.2	4.8
Copper	mg/L	0	None	None	None	None	None
Dissolved Oxygen	mg/L	4	74.5	74.9	83.9	65.6	7.8
Fecal Coliform	cfu/100mL	0	None	None	None	None	None
Lead	mg/L	0	None	None	None	None	None
Nitrogen, Ammonia	mg/L	4	0.066	0.058	0.143	0.041	0.047
Nitrogen, nitrate + nitrite	mg/L	4	0.111	0.086	0.488	0.045	0.210
Nitrogen, Total	mg/L	32	0.80	0.81	1.75	0.25	0.38
Nitrogen, Total Kjeldahl	mg/L	3	1.00	1.26	1.65	0.48	0.60
pH	None	4	7.5	7.5	7.6	7.4	0.1
Phosphorus, orthophosphate	mg/L	0	None	None	None	None	None
Phosphorus, Total	mg/L	29	0.098	0.100	0.176	0.061	0.025
Salinity	ppth	42	11.06	18.00	33.70	0.18	9.77
Specific Conductivity	umho/cm	43	18083.74	28600	49200	659	15028
Temperature	deg C	4	26.2	27.3	31.6	20.1	5.2
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	0	None	None	None	None	None
Turbidity	NTU	4	1.7	1.7	2.3	1.4	0.4
Zinc	mg/L	0	None	None	None	None	None

2		02/22/06 - 12/12/18			Samples 44		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	0	None	None	None	None	None
Chlorophyll-a (corrected)	ug/L	41	7.1	7.2	37.2	0.8	9.1
Copper	mg/L	0	None	None	None	None	None
Dissolved Oxygen	mg/L	4	70.7	77.0	95.8	44.2	21.5
Fecal Coliform	DZu/100mL	0	None	None	None	None	None
Lead	mg/L	0	None	None	None	None	None
Nitrogen, Ammonia	mg/L	4	0.053	0.051	0.084	0.038	0.020
Nitrogen, nitrate + nitrite	mg/L	4	0.065	0.041	0.315	0.034	0.138
Nitrogen, Total	mg/L	33	1.24	1.27	1.68	0.67	0.21
Nitrogen, Total Kjeldahl	mg/L	3	1.13	1.29	1.48	0.75	0.38
pH	None	4	7.6	7.6	7.7	7.5	0.1
Phosphorus, orthophosphate	mg/L	0	None	None	None	None	None
Phosphorus, Total	mg/L	27	0.091	0.100	0.270	0.032	0.052
Salinity	ppth	14	0.31	0.34	0.38	0.22	0.05
Specific Conductivity	umho/cm	43	620.86	634	806	424	93
Temperature	deg C	4	26.3	27.1	31.7	20.6	5.0
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	0	None	None	None	None	None
Turbidity	NTU	4	1.2	1.1	3.1	0.6	1.2
Zinc	mg/L	0	None	None	None	None	None

Table 5-6
Monitoring Data Summary - Hillsboro
Period of Record

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3		02/22/06 - 12/12/18			Samples 45		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	0	None	None	None	None	None
Chlorophyll-a (corrected)	ug/L	40	7.1109	10.4	33.2	0.8	8.6
Copper	mg/L	0	None	None	None	None	None
Dissolved Oxygen	mg/L	4	61.7	66.3	83.3	39.6	18.1
Fecal Coliform	cfu/100mL	0	None	None	None	None	None
Lead	mg/L	0	None	None	None	None	None
Nitrogen, Ammonia	mg/L	4	0.087	0.083	0.210	0.042	0.075
Nitrogen, nitrate + nitrite	mg/L	4	0.039	0.027	0.156	0.022	0.066
Nitrogen, Total	mg/L	31	1.42	1.42	1.68	1.04	0.15
Nitrogen, Total Kjeldahl	mg/L	3	1.30	1.37	1.53	1.06	0.24
pH	None	4	7.6	7.6	7.8	7.5	0.1
Phosphorus, orthophosphate	mg/L	0	None	None	None	None	None
Phosphorus, Total	mg/L	27	0.098	0.103	0.257	0.039	0.055
Salinity	ppth	15	0.31	0.31	0.38	0.21	0.05
Specific Conductivity	umho/cm	44	647.21	668	834	413	100
Temperature	deg C	4	26.1	27.0	31.6	20.4	4.9
Total Hardness	mg/L	0	None	None	None	None	None
Total Suspended Solids	mg/L	0	None	None	None	None	None
Turbidity	NTU	4	0.8	0.9	1.2	0.5	0.3
Zinc	mg/L	0	None	None	None	None	None

S-39		01/03/00 - 12/12/18			Samples 213		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	197	71.62	120.00	347.40	0.50	62.93
Arsenic	mg/L	2	2.9626	3.1535	4.2340	2.0730	1.5281
Cadmium	mg/L	2	0.1500	0.1500	0.1500	0.1500	0
Chlorophyll-a (corrected)	ug/L	0	None	None	None	None	None
Copper	mg/L	0	None	None	None	None	None
Dissolved Oxygen	mg/L	12	70.4	82.3	90.6	29.2	19.2
Fecal Coliform	cfu/100mL	0	None	None	None	None	None
Lead	mg/L	2	0.4000	0.4000	0.4000	0.4000	0.0000
Nitrogen, Ammonia	mg/L	201	0.015	0.016	0.167	0.003	0.021
Nitrogen, nitrate + nitrite	mg/L	211	0.010	0.009	0.875	0.002	0.086
Nitrogen, Total	mg/L	24	0.17	0.97	1.62	0.01	0.64
Nitrogen, Total Kjeldahl	mg/L	212	1.14	1.33	2.71	0.03	0.45
pH	None	212	7.7	7.7	8.5	6.8	0.3
Phosphorus, orthophosphate	mg/L	0	None	None	None	None	None
Phosphorus, Total	mg/L	212	0.018	0.018	0.169	0.001	0.020
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	0	None	None	None	None	None
Temperature	deg C	212	25.1	26.0	31.5	13.7	4.0
Total Hardness	mg/L	133	98.79	141.40	353.83	0.05	64.42
Total Suspended Solids	mg/L	85	1.9	1.5	11.0	0.5	1.7
Turbidity	NTU	210	1.2	1.2	11.3	0.1	1.6
Zinc	mg/L	2	2.0000	2.0000	2.0000	2.0000	0.0000

Table 5-6
Monitoring Data Summary - L-8
Period of Record

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SITE Culv10a		01/10/00 - 12/12/18			Samples 213		
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	212	114.40	114.00	360.90	0.50	43.30
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	0	None	None	None	None	None
Chlorophyll-a (corrected)	ug/L	8	1.3	1.3	6.0	0.5	2.2
Copper	mg/L	5	2.3733	3.0270	4.5710	0.6000	1.4254
Dissolved Oxygen	mg/L	211	6.6	6.8	99.8	0.5	18.0
Fecal Coliform	cfu/100mL	0	None	None	None	None	None
Lead	mg/L	5	0.8600	0.4000	4.7300	0.4000	1.8752
Nitrogen, Ammonia	mg/L	212	0.036	0.030	2.221	0.005	0.228
Nitrogen, nitrate + nitrite	mg/L	212	0.188	0.286	6.557	0.002	0.507
Nitrogen, Total	mg/L	6	2.02	1.98	2.56	1.57	0.41
Nitrogen, Total Kjeldahl	mg/L	207	1.52	1.48	4.78	0.03	0.70
pH	None	211	7.8	7.9	9.2	6.4	0.4
Phosphorus, orthophosphate	mg/L	212	0.046	0.052	0.134	0.002	0.024
Phosphorus, Total	mg/L	212	0.141	0.140	0.669	0.002	0.100
Salinity	ppth	3	0.16	0.16	0.17	0.15	0.01
Specific Conductivity	umho/cm	211	505.73	468	3390	104	310
Temperature	deg C	211	23.9	25.3	31.7	9.0	4.6
Total Hardness	mg/L	69	154.54	146.80	407.86	46.40	60.03
Total Suspended Solids	mg/L	212	24.9	24.0	360.0	0.5	57.0
Turbidity	NTU	212	27.5	28.1	284.0	0.1	48.4
Zinc	mg/L	5	3.1486	2.0000	8.2950	2.0000	2.7690

Table 5-6
Monitoring Data Summary - S-2-6-7
Period of Record

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SITE S-2		10/24/16	-		12/12/18	Samples 13	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	12	143	115	317	101	68
Arsenic	mg/L	0	None	None	None	None	None
Cadmium	mg/L	0	None	None	None	None	None
Chlorophyll-a (corrected)	ug/L	0	None	None	None	None	None
Copper	mg/L	0	None	None	None	None	None
Dissolved Oxygen	% Saturation	12	53.5	66.6	87.6	17.6	25.9
Fecal Coliform	cfu/100mL	0	None	None	None	None	None
Lead	mg/L	0	None	None	None	None	None
Nitrogen, Ammonia	mg/L	12	0.103	0.124	0.558	0.005	0.182
Nitrogen, nitrate + nitrite	mg/L	12	0.306	0.214	2.824	0.058	0.837
Nitrogen, Total	mg/L	5	3.48	3.18	7.63	2.11	2.20
Nitrogen, Total Kjeldahl	mg/L	7	1.09	1.07	1.28	1.02	0.09
pH	None	12	7.7	7.7	8.7	7.4	0.3
Phosphorus, orthophosphate	mg/L	12	0.047	0.046	0.184	0.016	0.046
Phosphorus, Total	mg/L	12	0.108	0.105	0.447	0.056	0.103
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	12	535	434	1151	383	253
Temperature	deg C	12	24.3	23.8	30.3	19.7	3.2
Total Hardness	mg/L	2	134	135	136	133	2
Total Suspended Solids	mg/L	12	9.8	8.5	67.0	4.0	17.9
Turbidity	NTU	12	10.1	8.1	65.0	3.7	17.3
Zinc	mg/L	0	None	None	None	None	None

SITE 39		04/18/17	-		12/12/18	Samples 4	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation
Alkalinity	mg/L	0	None	None	None	None	None
Arsenic	mg/L	2	2.2350	2.2350	2.2350	2.2350	0.0000
Cadmium	mg/L	2	0.1950	0.1950	0.1950	0.1950	0.0000
Chlorophyll-a (corrected)	ug/L	3	4.2	3.0	8.4	3.0	3.1
Copper	mg/L	2	0.9750	0.9750	0.9750	0.9750	0.0000
Dissolved Oxygen	% Saturation	3	33.5	50.4	76.3	9.8	33.5
Fecal Coliform	cfu/100mL	0	None	None	None	None	None
Lead	mg/L	2	2.1000	2.1000	2.1000	2.1000	0.0000
Nitrogen, Ammonia	mg/L	3	0.143	0.105	0.567	0.049	0.284
Nitrogen, nitrate + nitrite	mg/L	0	None	None	None	None	None
Nitrogen, Total	mg/L	0	None	None	None	None	None
Nitrogen, Total Kjeldahl	mg/L	3	0.09	0.09	0.26	0.03	0.12
pH	None	3	7.8	7.7	8.2	7.6	0.3
Phosphorus, orthophosphate	mg/L	3	0.061	0.047	0.204	0.024	0.098
Phosphorus, Total	mg/L	3	0.121	0.121	0.254	0.058	0.100
Salinity	ppth	0	None	None	None	None	None
Specific Conductivity	umho/cm	3	567	586	771	404	184
Temperature	deg C	3	28.6	29.1	34.1	23.6	5.3
Total Hardness	mg/L	2	245	248	282	213	49
Total Suspended Solids	mg/L	2	4.1	4.1	4.7	3.5	0.8
Turbidity	NTU	3	7.1	4.6	27.0	2.9	13.5
Zinc	mg/L	2	0.0034	0.0046	0.0077	0.0015	0.0044

Table 5-6
Monitoring Data Summary - S-2-6-7
Period of Record

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SITE 43		04/18/17	-		12/12/18	Samples	4	
		Count	Geometric Mean	Median	Max	Min	Standard Deviation	
Alkalinity	mg/L	0	None	None	None	None	None	
Arsenic	mg/L	2	0.0832	1.1191	2.2350	0.0031	1.5782	
Cadmium	mg/L	2	0.0118	0.0979	0.1950	0.0007	0.1374	
Chlorophyll-a (corrected)	ug/L	3	5.2	4.0	13.7	2.6	6.0	
Copper	mg/L	2	0.0338	0.4881	0.9750	0.0012	0.6886	
Dissolved Oxygen	% Saturation	3	49.8	56.3	80.2	27.4	26.4	
Fecal Coliform	cfu/100mL	0	None	None	None	None	None	
Lead	mg/L	2	2.1000	2.1000	2.1000	2.1000	0.0000	
Nitrogen, Ammonia	mg/L	3	0.114	0.105	0.260	0.054	0.107	
Nitrogen, nitrate + nitrite	mg/L	3	0.088	0.067	0.245	0.042	0.111	
Nitrogen, Total	mg/L	0	None	None	None	None	None	
Nitrogen, Total Kjeldahl	mg/L	3	1.45	1.22	2.25	1.10	0.63	
pH	None	3	8.4	8.5	9.1	7.7	0.7	
Phosphorus, orthophosphate	mg/L	3	0.018	0.044	0.045	0.003	0.024	
Phosphorus, Total	mg/L	3	0.094	0.139	0.167	0.036	0.069	
Salinity	ppth	0	None	None	None	None	None	
Specific Conductivity	umho/cm	3	613	605	948	402	276	
Temperature	ECg C	3	27.9	28.5	32.6	23.5	4.6	
Total Hardness	mg/L	2	291	303	386	220	117	
Total SuspenECd Solids	mg/L	2	8.2	8.3	8.7	7.8	0.6	
Turbidity	NTU	3	11.0	7.0	35.0	5.4	16.6	
Zinc	mg/L	2	0.0048	0.0083	0.0150	0.0015	0.0095	

TABLE 5-7
Summary of Geometric Mean Values
January 1999 - September 2017

Watershed	Site	Total Nitrogen mg/L	Total Phosphorus mg/L	Chlorophyll-a ug/L
C-15	31E	1.57	0.248	21.76
	31C	1.26	0.125	16.09
	C15S40	1.02	0.107	13.45
C-16	22	1.02	0.053	12.25
	24	1.00	0.060	13.01
	27B	1.50	0.165	14.62
	27A	1.21	0.125	14.22
	28	1.03	0.073	7.47
C-17	12A	1.43	0.051	13.24
	C17S44	0.88	0.040	9.16
C-18	16	0.99	0.033	4.09
	15	0.96	0.021	2.25
	92	0.80	0.022	3.25
	81	0.76	0.021	3.63
C-51	38B	1.64	0.101	6.49
	37B	1.22	0.073	4.20
	C51S155	1.12	0.064	1.67
Loxahatchee River	69	1.01	0.036	2.87
	62	0.79	0.046	5.43
	51	0.34	0.025	3.93
	72	0.60	0.037	8.71
	30	0.29	0.026	4.04
Lake Worth Lagoon North	LWL-1	0.36	0.034	5.37
	11	0.44	0.035	3.27
	13	0.51	0.040	4.01
	LWL-4	0.28	0.023	2.42
Lake Worth Lagoon Central Watershed	LWL-8	0.51	0.048	5.07
	18C	0.80	0.064	5.60
	18D	0.59	0.061	5.57
	LWL-11	0.48	0.047	6.10
Lagoon South	LWL-13	0.38	0.034	4.87
	LWL-18	0.52	0.053	8.42
Hillsboro	1	0.80	0.098	5.44
	2	1.24	0.091	7.09
	3	1.42	0.098	7.11
	S39	0.17	0.018	None
L-8	Culv10	2.02	0.14	1.29
S-2-6-7	S-2	3.48	0.11	None
	39	None	0.12	4.23
	43	None	0.09	5.22

- C-15, a Class III Freshwater has a minimum level of chlorophyll-a (corrected) AGM of 20µg/L
- Northern Lake Worth Lagoon has a minimum level of chlorophyll-a (corrected) AGM of 2.9µg/L
- Northern Lake Worth Lagoon has a minimum level of Total Nitrogen AGM of .54 mg/L
- Northern Lake Worth Lagoon has a minimum level of Total Phosphorus AGM of .044 mg/L
- Central Lake Worth Lagoon has a minimum level of Total Nitrogen AGM of .66 mg/L
- Central Lake Worth Lagoon has a minimum level of Total Phosphorus AGM of .049 mg/L

Table 5-8 (page 1 of 4) Total Nitrogen (Annual Geometric Mean)

	C-15				C-16						C-17		
	31E	31C	31B	Basin	22	24	27B	27A	28	Basin	12A	C17S44	Basin
2008	●	●	●	●	●	●	●	●	●	●	●	●	●
2009			●	●					●	●		●	●
2010	●	●	●	●	●	●	●	●	●	●	●	●	●
2011	●	●	●	●	●	●	●	●	●	●	●	●	●
2012	●	●	●	●	●	●	●	●	●	●	●	●	●
2013	●	●	●	●	●	●	●	●	●	●	●	●	●
2014	●	●	●	●	●	●	●	●	●	●	●	●	●
2015	●	●	●	●	●	●	●	●	●	●	●	●	●
2016	●	●	●	●	●	●	●	●	●	●	●	●	●
2017	●	●	●	●	●	●	●	●	●	●	●	●	●
FDEP Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (mg/l)

2008	1.90	1.63	1.08	1.50	1.45	1.39	1.77	0.82	0.98	1.23	1.35	1.08	1.20
2009			0.92	0.92					1.04	1.04		0.94	0.94
2010	2.13	1.58	0.88	1.44	1.29	1.29	1.96	1.53	0.89	1.35	1.67	0.93	1.25
2011	1.56	1.01	1.09	1.20	1.10	1.32	1.44	1.09	0.88	1.15	1.31	0.91	1.09
2012	1.30	1.08	0.97	1.11	1.01	1.00	1.44	1.16	1.01	1.11	1.16	0.91	1.02
2013	1.20	1.00	0.97	1.05	0.80	0.76	1.18	0.92	1.01	0.92	0.92	0.89	0.91
2014	1.30	0.84	0.76	0.94	0.82	0.72	1.14	0.86	0.74	0.85	0.93	0.39	0.60
2015	1.21	0.76	0.88	0.93	0.91	0.83	1.31	0.80	1.46	1.03	1.07	0.77	0.91
2016	1.61	1.09	1.02	1.21	0.96	0.85	1.33	1.22	0.82	1.02	0.98	0.88	0.93
2017	0.92	1.09	1.07	1.02	0.84	1.05	1.43	1.22	0.57	0.97	1.03	0.69	0.84

Table 5-8 (page 2 of 4) Total Nitrogen (Annual Geometric Mean)

	C-18					C-51				Lox	Lox		
	16	15	C18G92	C18S46	Basin	38B	37B	C51S155	Basin	69	30	51	62
2008	●	●			●	●	●	●	●	●			
2009			●		●			●	●	●	●	●	●
2010	●	●	●	●	●	●	●	●	●	●	●	●	●
2011	●	●	●	●	●	●	●	●	●	●	●	●	●
2012	●	●	●	●	●	●	●	●	●	●	●	●	●
2013	●	●	●	●	●	●	●	●	●	●	●	●	●
2014	●	●	●	●	●	●	●	●	●	●	●	●	●
2015	●	●	●	●	●	●	●	●	●	●	●	●	●
2016	●		●	●	●	●	●	●	●	●	●	●	●
2017	●		●	●	●	●	●	●	●	●	●	●	●
FDEP Criteria	<=1.54	<=1.54	<=1.54	<=1.54	<=1.54	No Criteria	No Criteria	No Criteria	No Criteria	<=1.54	<=0.66	<=0.8	<=1.26

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (mg/l)

2008	1.43	1.13			1.27	1.68	1.28	0.90	1.25				
2009			0.99		0.99			1.18	1.18	1.05	0.02	0.23	0.48
2010	1.32	1.30	0.87	0.86	1.06	1.83	1.60	1.25	1.54	0.94	0.21	0.15	0.72
2011	1.27	1.27	0.93	0.86	1.07	2.13	1.26	0.88	1.33	0.67	0.34	0.87	0.76
2012	1.08	0.93	0.95	0.90	0.96	1.40	0.76	0.95	1.00	1.30	0.21	0.22	0.57
2013	0.87	0.64	0.88	0.82	0.79	1.15	1.26	1.96	1.42	0.81	0.15	0.15	0.62
2014	0.66	0.66	0.23	0.25	0.39	1.39	1.16	0.73	1.06	0.91	0.24	0.35	0.79
2015	0.77	0.76	0.80	0.74	0.77	1.19	1.09	0.97	1.08	0.85	0.20	0.20	0.58
2016	0.94		0.97	0.91	0.94	1.37	1.02	1.14	1.17	0.91	0.25	0.25	0.72
2017	0.88		0.87	0.97	0.91	1.14	0.80	0.79	0.90	1.01	0.25	0.22	0.57

Table 5-8 (page 3 of 4) Total Nitrogen (Annual Geometric Mean)

	Lox	LWL-N					LWL-C					LWL-S		
	72	LWL-1	11	13	LWL-4	Basin	LWL-8	18C	18D	LWL-11	Basin	LWL-13	LWL-18	Basin
2008														
2009	●			●		●		●	●		●			
2010	●	●	●	●		●	●	●	●	●	●	●	●	●
2011	●	●	●	●		●	●	●	●	●	●	●	●	●
2012	●	●	●	●		●	●	●	●	●	●	●	●	●
2013	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2014	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2015	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2016	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2017	●	●	●	●	●	●	●	●	●	●	●	●	●	●
FDEP Criteria	<=1.26	<=0.54	<=0.54	<=0.54	<=0.54	<=0.54	<=0.66	<=0.66	<=0.66	<=0.66	<=0.66	<=0.59	<=0.59	<=0.59

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (mg/l)

2008														
2009	0.40			0.49		0.49		0.79	0.53		0.64			
2010	0.50	0.32	0.45	0.52		0.42	0.48	0.99	0.65	0.45	0.61	0.37	0.40	0.3841
2011	0.38	0.22	0.45	0.50		0.36	0.14	0.83	0.52	0.26	0.35	0.22	0.24	0.2303
2012	0.51	0.33	0.72	0.81		0.58	0.42	0.94	0.84	0.42	0.61	0.35	0.42	0.3854
2013	0.41	0.28	0.53	0.59	0.23	0.38	0.54	0.93	0.90	0.48	0.68	0.41	0.44	0.4217
2014	0.57	0.19	0.25	0.33	0.14	0.22	0.32	0.65	0.52	0.16	0.37	0.14	0.15	0.1442
2015	0.52	0.32	0.22	0.25	0.21	0.25	0.39	0.62	0.30	0.39	0.41	0.30	0.46	0.3718
2016	0.70	0.33	0.23	0.37	0.31	0.31	0.55	0.45	0.30	0.53	0.45	0.32	0.46	0.3882
2017	0.69	0.34	0.13	0.14	0.25	0.20	0.67	0.21	0.15	0.66	0.35	0.99	0.56	0.7437

Table 5-8 (page 4 of 4) Total Nitrogen (Annual Geometric Mean)

	Hillsboro					L-8	S-2-6-7				
	1	2	3	S39	Basin	Culv10	S-2	39	43	Basin	
2008	●	●	●		●						
2009	●	●	●		●	●					
2010	●	●	●		●						
2011	●	●	●		●						
2012	●	●	●		●						
2013	●	●	●		●						
2014	●	●	●		●						
2015	●	●	●		●						
2016	●	●	●		●						
2017	●	●	●		●			●	●	●	
FDEP Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria

● No numeric criteria

Values Used (mg/l)

2008	8.38	13.48	14.96		11.91					
2009	8.27	10.65	5.80		7.99	0.5				
2010	4.00	5.80	13.00		6.71					
2011	4.14	4.54	8.76		5.48					
2012	3.71	10.50	8.86		7.01					
2013	7.00	5.27	4.58		5.52					
2014	6.85	4.62	7.26		6.13					
2015	4.33	4.61	3.61		4.16					
2016	3.55	2.76	3.10		3.12					
2017	3.13	2.22	0.85		1.81		4.23	5.22	4.70	

Table 5-9 (page 1 of 4) Total Phosphorus (Annual Geometric Mean)

	C-15				C-16						C-17		
	31E	31C	31B	Basin	22	24	27B	27A	28	Basin	12A	C17S44	Basin
2008	●	●	●	●	●	●	●	●	●	●	●	●	●
2009													
2010	●	●	●	●	●	●	●	●	●	●	●	●	●
2011	●	●	●	●	●	●	●	●	●	●	●	●	●
2012	●	●	●	●	●	●	●	●	●	●	●	●	●
2013	●	●	●	●	●	●	●	●	●	●	●	●	●
2014	●	●	●	●	●	●	●	●	●	●	●	●	●
2015	●	●	●	●	●	●	●	●	●	●	●	●	●
2016	●	●	●	●	●	●	●	●	●	●	●	●	●
2017	●	●	●	●	●	●	●	●	●	●	●	●	●
FDEP Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (mg/l)

2008	0.33	0.16	0.17	0.21	0.04	0.05	0.17	0.10	0.08	0.08	0.05	0.06	0.05
2009													
2010	0.39	0.12	0.11	0.17	0.06	0.07	0.19	0.14	0.06	0.09	0.01	0.05	0.02
2011	0.19	0.08	0.09	0.11	0.03	0.09	0.13	0.08	0.04	0.07	0.06	0.05	0.05
2012	0.24	0.12	0.09	0.14	0.05	0.05	0.14	0.12	0.06	0.08	0.06	0.05	0.05
2013	0.25	0.15	0.09	0.15	0.06	0.07	0.07	0.10	0.06	0.07	0.06	0.05	0.05
2014	0.28	0.12	0.10	0.15	0.12	0.06	0.18	0.11	0.07	0.10	0.05	0.04	0.05
2015	0.16	0.07	0.05	0.08	0.05	0.07	0.16	0.05	0.05	0.07	0.04	0.04	0.04
2016	0.30	0.16	0.13	0.19	0.06	0.05	0.33	0.14	0.14	0.11	0.06	0.04	0.05
2017	0.18	0.12	0.02	0.08	0.01	0.02	0.11	0.07	0.03	0.03	0.05	0.03	0.04

Table 5-9 (page 2 of 4) Total Phosphorus (Annual Geometric Mean)

	C-18					C-51				Lox	Lox		
	16	15	C18G92	C18S46	Basin	38B	37B	C51S155	Basin	69	30	51	62
2008	●	●			●	●	●	●	●	●	●	●	●
2009										●	●	●	●
2010	●	●	●	●	●	●	●	●	●	●	●	●	●
2011	●	●	●	●	●	●	●	●	●	●	●	●	●
2012	●	●	●	●	●	●	●	●	●	●	●	●	●
2013	●	●	●	●	●	●	●	●	●	●	●	●	●
2014	●	●	●	●	●	●	●	●	●	●	●	●	●
2015	●	●	●	●	●	●	●	●	●	●	●	●	●
2016	●	●	●	●	●	●	●	●	●	●	●	●	●
2017	●	●	●	●	●	●	●	●	●	●	●	●	●
FDEP Criteria	<=0.12	<=0.12	<=0.12	<=0.12	<=0.12	No Criteria	No Criteria	No Criteria	No Criteria	<=0.12	<=0.035	<=0.03	<=0.075

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (mg/l)

2008	0.04	0.01			0.02	0.09	0.08	0.05	0.07				
2009										0.04	0.02	0.02	0.05
2010	0.05	0.04	0.02	0.02	0.03	0.11	0.11	0.07	0.09	0.04	0.03	0.02	0.05
2011	0.03	0.02	0.02	0.02	0.02	0.07	0.06	0.04	0.05	0.06	0.05	0.06	0.02
2012	0.03	0.01	0.02	0.02	0.02	0.13	0.04	0.03	0.06	0.04	0.03	0.03	0.04
2013	0.03	0.00	0.02	0.02	0.02	0.09	0.08	0.06	0.08	0.03	0.02	0.03	0.06
2014	0.01	0.01	0.04	0.02	0.02	0.11	0.14	0.06	0.10	0.04	0.02	0.03	0.06
2015	0.02	0.01	0.02	0.02	0.02	0.11	0.08	0.08	0.09	0.03	0.02	0.02	0.05
2016	0.02	0.01	0.03	0.03	0.02	0.08	0.09	0.06	0.08	0.03	0.02	0.02	0.05
2017	0.03	0.15	0.04	0.02	0.04	0.18	0.05	0.06	0.08	0.04	0.02	0.02	0.04

Table 5-9 (page 3 of 4) Total Phosphorus (Annual Geometric Mean)

	Lox	LWL-N					LWL-C					LWL-S		
	72	LWL-1	11	13	LWL-4	Basin	LWL-8	18C	18D	LWL-11	Basin	LWL-13	LWL-18	Basin
2008														
2009	●			●		●		●	●		●			
2010	●	●	●	●		●	●	●	●	●	●	●	●	●
2011	●	●	●	●		●	●	●	●	●	●	●	●	●
2012	●	●	●	●		●	●	●	●	●	●	●	●	●
2013	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2014	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2015	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2016	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2017	●	●	●	●	●	●	●	●	●	●	●	●	●	●
FDEP Criteria	<=0.075	<=0.044	<=0.044	<=0.044	<=0.044	<=0.044	<=0.049	<=0.049	<=0.049	<=0.049	<=0.049	<=0.05	<=0.05	<=0.05

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (mg/l)

2008														
2009	0.03			0.19		0.19		0.17	0.20		0.18			
2010	0.04	0.03	0.03	0.03		0.03	0.04	0.06	0.06	0.04	0.05	0.03	0.04	0.0346
2011	0.03	0.02	0.05	0.06		0.04	0.01	0.07	0.07	0.03	0.04	0.03	0.03	0.0269
2012	0.04	0.04	0.03	0.04		0.04	0.04	0.01	0.04	0.04	0.03	0.03	0.04	0.037
2013	0.04	0.03	0.07	0.06	0.02	0.04	0.05	0.08	0.08	0.06	0.07	0.04	0.05	0.0436
2014	0.04	0.03	0.06	0.04	0.02	0.03	0.05	0.07	0.06	0.05	0.06	0.03	0.04	0.0368
2015	0.04	0.03	0.06	0.06	0.02	0.04	0.04	0.08	0.07	0.04	0.05	0.02	0.05	0.034
2016	0.05	0.03	0.04	0.04	0.02	0.03	0.05	0.08	0.06	0.04	0.06	0.03	0.05	0.0369
2017	0.03	0.03	0.01	0.01	0.02	0.01	0.06	0.05	0.02	0.06	0.04	0.07	0.07	0.0725

Table 5-9 (page 4 of 4) Total Phosphorus (Annual Geometric Mean)

	Hillsboro					L-8	S-2-6-7			
	1	2	3	S39	Basin	Culv10	S-2	39	43	Basin
2008	●	●	●	●	●	●				
2009	●	●	●	●	●	●				
2010	●	●	●	●	●	●				
2011	●	●	●	●	●	●				
2012	●	●	●	●	●	●				
2013	●	●	●	●	●	●				
2014	●	●	●	●	●	●				
2015				●	●	●				
2016	●	●	●	●	●	●				
2017				●	●	●	●	●	●	●
FDEP Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria	No Criteria

● No numeric criteria

Values Used (mg/l)

2008	0.11	0.16	0.15	0.02	0.08	0.08				
2009	0.11	0.12	0.15	0.02	0.08	0.16				
2010	0.10	0.08	0.09	0.01	0.06	0.15				
2011	0.08	0.06	0.07	0.01	0.04	0.12				
2012	0.10	0.09	0.14	0.02	0.07	0.10				
2013	0.08	0.08	0.07	0.02	0.05	0.14				
2014	0.11	0.10	0.07	0.01	0.06	0.16				
2015				0.01	0.01	0.15				
2016	0.18	0.10	0.13	0.01	0.08	0.15				
2017				0.01	0.01	0.19	0.11	0.12	0.09	

Table 5-10 (page 1 of 4) Chlorophyll-A (Annual Geometric Mean)

	C-15				C-16						C-17		
	31E	31C	31B	Basin	22	24	27B	27A	28	Basin	12A	C17S44	Basin
2008	●	●		●	●	●	●	●		●	●		●
2009													
2010	●	●		●	●	●	●	●		●	●		●
2011	●	●		●	●	●	●	●		●	●		●
2012	●	●		●	●	●	●	●		●	●		●
2013	●	●		●	●	●	●	●		●	●		●
2014	●	●	●	●	●	●	●	●	●	●	●		●
2015	●	●	●	●	●	●	●	●	●	●	●		●
2016	●	●	●	●	●	●	●	●	●	●	●		●
2017	●	●	●	●	●	●	●	●	●	●	●		●
FDEP Criteria	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (ug/l)

2008	23.25	22.05		22.64	20.81	21.93	28.39	22.51		23.24	12.28		12.28
2009													
2010	33.53	7.63		15.99	21.80	13.51	19.74	24.55		19.43	17.26		17.26
2011	28.22	23.48		25.74	17.83	20.25	15.35	20.92		18.45	12.41		12.41
2012	24.95	16.18		20.09	17.67	18.51	18.54	20.44		18.76	17.74		17.74
2013	43.87	24.19		32.57	28.64	15.83	7.38	17.32		15.51	12.50		12.50
2014	39.23	28.66	27.53	31.39	22.70	17.75	35.79	18.36	15.53	21.03	20.44		20.44
2015	16.28	9.10	18.72	14.05	9.86	13.62	26.83	8.03	8.27	11.91	12.94		12.94
2016	9.72	8.42	17.18	11.20	12.73	20.70	7.45	8.11	5.56	9.76	11.78		11.78
2017	16.15	15.39	19.16	16.82	18.04	6.14	9.60	8.04	4.57	8.29	8.10		8.10

Table 5-10 (page 2 of 4) Chlorophyll-A (Annual Geometric Mean)

	C-18					C-51				Lox	Lox				
	16	15	C18G92	C18S46	Basin	38B	37B	C51S155	Basin	69	30	51	62	72	Basin
2008	●	●			●	●	●		●						
2009										●	●	●	●	●	●
2010	●	●			●	●	●		●	●	●	●	●	●	●
2011	●	●			●	●	●		●	●				●	●
2012	●	●			●	●	●		●	●	●	●	●	●	●
2013	●	●			●	●	●		●	●	●	●	●	●	●
2014	●	●			●	●	●	●	●	●	●	●	●	●	●
2015	●	●			●	●	●	●	●	●	●	●	●	●	●
2016	●	●	●	●	●	●	●		●	●	●	●	●	●	●
2017	●	●	●	●	●	●	●		●	●	●	●	●	●	●
FDEP Criteria	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=20	<=4.7	<=4	<=5.5	<=5.5	<=4.9

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (ug/l)

2008	8.68	5.90			7.15	13.42	10.88		12.08						
2009									4.98	3.98	2.78	7.04	10.14	5.30	
2010	5.62	2.99			4.10	7.97	8.25		8.11	5.67	6.00	4.19	6.58	11.53	6.61
2011	6.44	1.52			3.13	19.35	4.84		9.68	2.94				3.48	3.48
2012	6.17	1.52			3.06	8.64	4.21		6.03	2.01	3.39	4.17	4.64	9.86	5.04
2013	5.65	2.09			3.44	5.16	4.36		4.75	2.36	3.50	4.28	6.10	8.66	5.30
2014	2.14	2.14			2.14	4.07	2.79	0.03	0.66	3.00	4.14	4.49	5.50	11.23	5.82
2015	2.54	1.26			1.79	5.64	2.06		3.41	1.92	4.02	4.07	5.94	10.83	5.70
2016	5.63	2.34	6.51	8.05	5.13	10.17	3.93		6.32	2.47	3.53	2.95	4.76	7.07	4.33
2017	4.80	2.02	3.44	6.71	3.87	3.16	3.98		3.55	2.09	3.59	2.29	5.33	7.71	4.29

Table 5-10 (page 3 of 4) Chlorophyll-A (Annual Geometric Mean)

	LWL-N					LWL-C					LWL-S		
	LWL-1	11	13	LWL-4	Basin	LWL-8	18C	18D	LWL-11	Basin	LWL-13	LWL-18	Basin
2008					●		●	●		●			
2009			●		●		●	●		●			
2010	●	●	●		●	●	●	●	●	●	●	●	●
2011	●	●	●		●	●	●	●	●	●	●	●	●
2012	●	●	●		●	●	●	●	●	●	●	●	●
2013		●	●		●		●	●		●			
2014		●	●	●	●		●	●		●			
2015	●	●	●	●	●	●	●	●	●	●	●	●	●
2016		●	●		●		●	●		●			
2017		●	●		●	●	●	●	●	●	●	●	●
FDEP Criteria	<=2.9	<=2.9	<=2.9	<=2.9	<=2.9	<=10.2	<=10.2	<=10.2	<=10.2	<=10.2	<=5.7	<=5.7	<=5.7

- Meeting criteria
- Not meeting criteria
- No numeric criteria

Values Used (ug/l)

2008						1/4	1/4		2/8				
2009			4.48		4.48	3/11	3/11		6/22				
2010	4.51	2.16	4.08		3.41	1/12	1/12	1/12	3/12	7/60	4.8	6.7	5.8
2011	3.48	2.89	4.05		3.44	0/2	1/11	1/11	0/2	2/28	3	3	3
2012	4.73	2.85	4.12		3.81	1/11	1/12	1/12	1/10	5/47	4.3	5.5	4.9
2013		3.90	4.55		4.22		4/12	5/12		9/12			
2014		5.23	7.51		6.26		6/9	8/9		14/18			
2015	5.10	3.28	3.41	1.81	3.19	1/10	2/7	1/7	2/10	6/44	4.08	5.11	4.6
2016		7.06	3.82		5.19		1/5	1/5		2/5			
2017		2.81	3.92		3.32	1/7	1/6	1/6	2/7	5/26	5.4	7.9	6.7

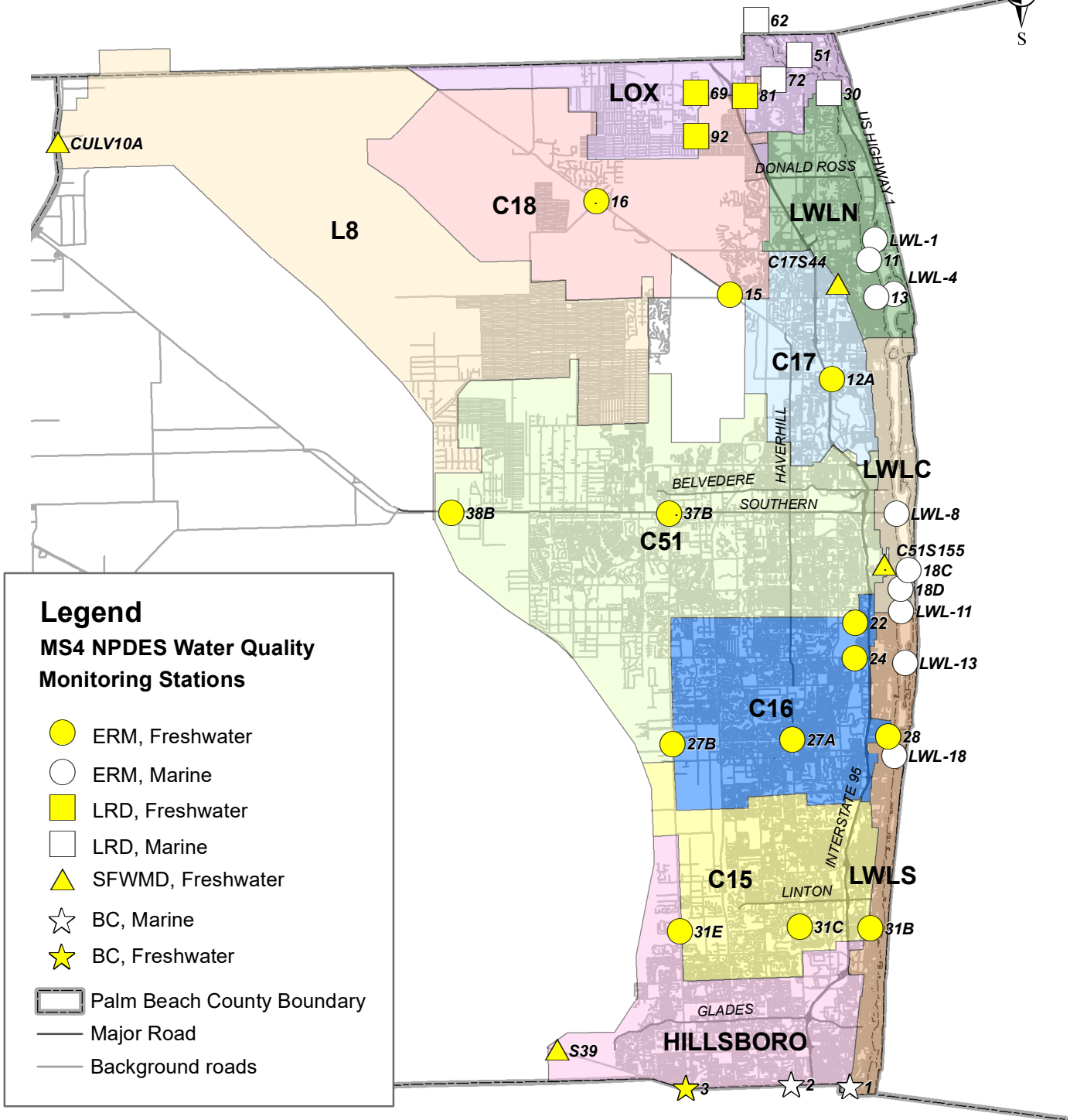
Note: Chlorophyll-a criteria for LWL-S shall not be exceeded in more than 10 percent of the measurements

Table 5-10 (page 4 of 4) Chlorophyll-A (Annual Geometric Mean)

	Hillsboro					L-8	S-2-6-7			
	1	2	3	S39	Basin	Culv10	S-2	39	43	Basin
2008	●	●	●		●					
2009	●	●	●		●	●				
2010	●	●	●		●					
2011	●	●	●		●					
2012	●	●	●		●					
2013	●	●	●		●					
2014	●	●	●		●					
2015	●	●	●		●					
2016	●	●	●		●					
2017	●	●	●		●			●	●	●
FDEP Criteria	<=11	<=11	<=20	<=20	<=15.5	<=20	<=20	<=20	<=20	<=20

- Meeting criteria
- Not meeting criteria
- No numeric criteria

2008	8.38	13.48	14.96		11.91					
2009	8.27	10.65	5.80		7.99	0.5				
2010	4.00	5.80	13.00		6.71					
2011	4.14	4.54	8.76		5.48					
2012	3.71	10.50	8.86		7.01					
2013	7.00	5.27	4.58		5.52					
2014	6.85	4.62	7.26		6.13					
2015	4.33	4.61	3.61		4.16					
2016	3.55	2.76	3.10		3.12					
2017	3.13	2.22	0.85		1.81			4.23	5.22	4.70

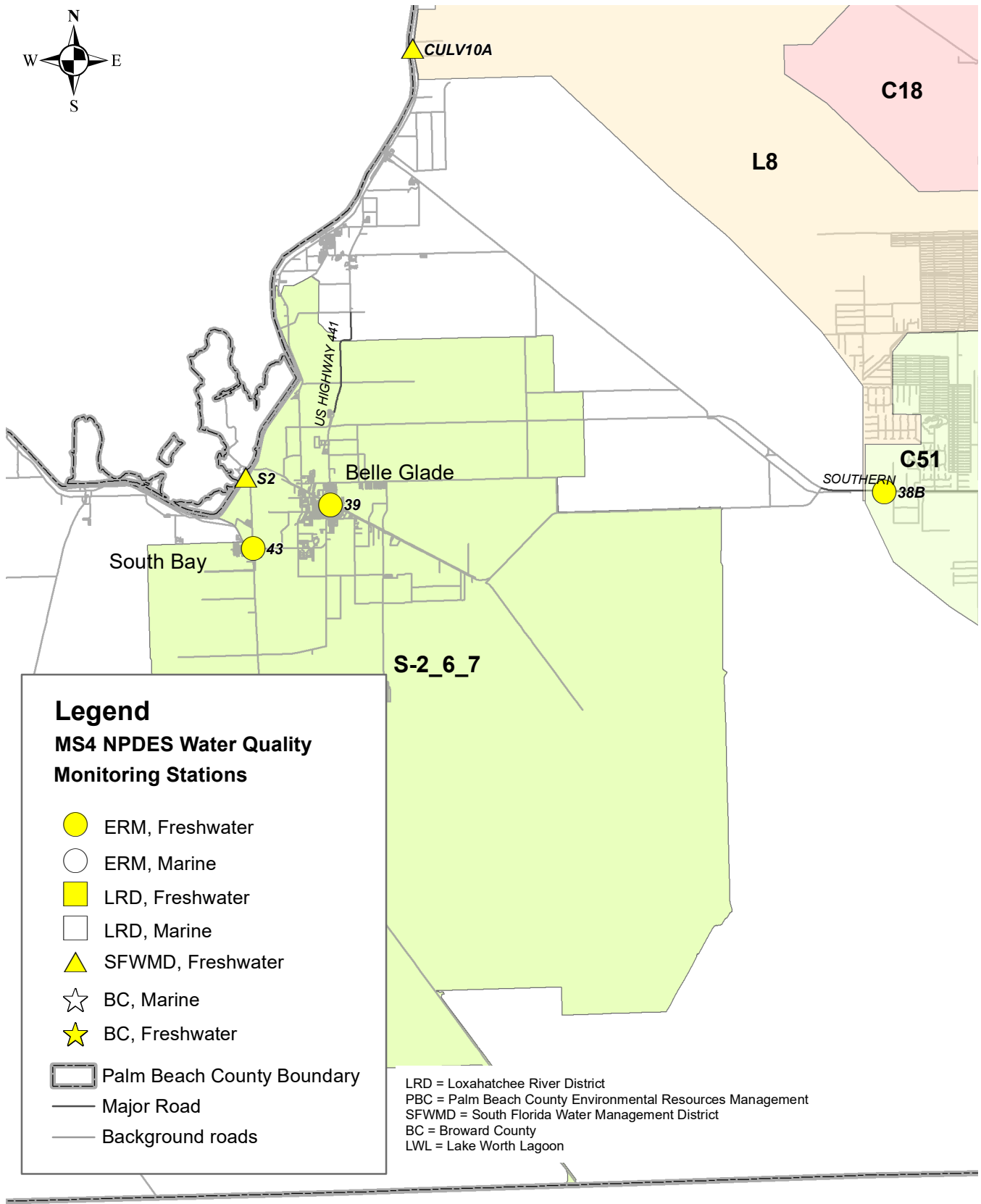


Legend

MS4 NPDES Water Quality Monitoring Stations

- ERM, Freshwater
- ERM, Marine
- LRD, Freshwater
- LRD, Marine
- ▲ SFWMD, Freshwater
- ☆ BC, Marine
- ★ BC, Freshwater
- Palm Beach County Boundary
- Major Road
- Background roads

LRD = Loxahatchee River District
 PBC = Palm Beach County Environmental Resources Management
 SFWMD = South Florida Water Management District
 BC = Broward County
 LWL = Lake Worth Lagoon



Legend

MS4 NPDES Water Quality Monitoring Stations

- ERM, Freshwater
- ERM, Marine
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- LRD, Marine
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LRD = Loxahatchee River District
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 BC = Broward County
 LWL = Lake Worth Lagoon

Palm Beach County (Western Area) Watershed Boundaries and Water Quality Monitoring Stations Figure 5-1



Figure 5-2
Total Nitrogen
C-15 Watershed

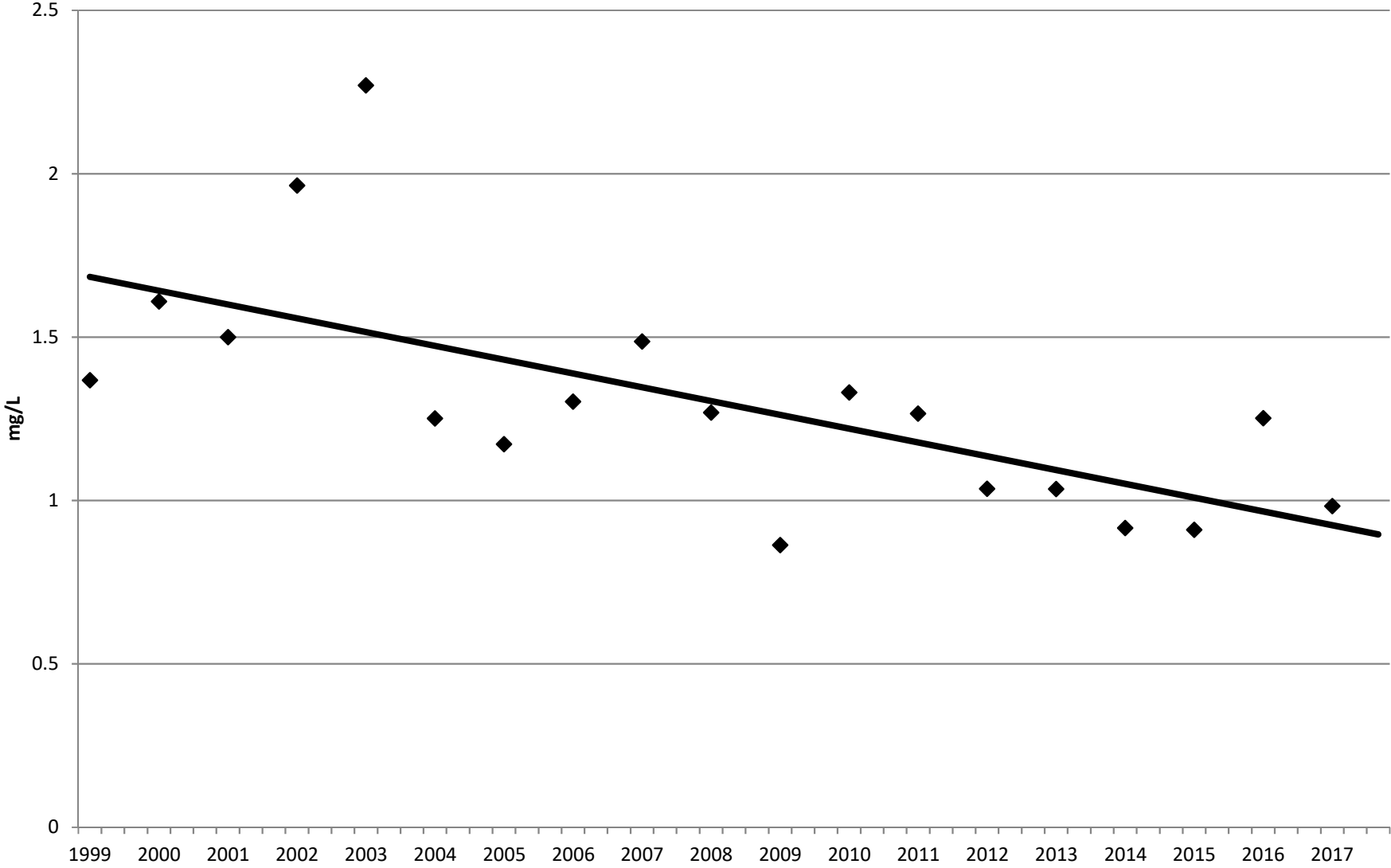


Figure 5-2
Total Nitrogen
C-16 Watershed

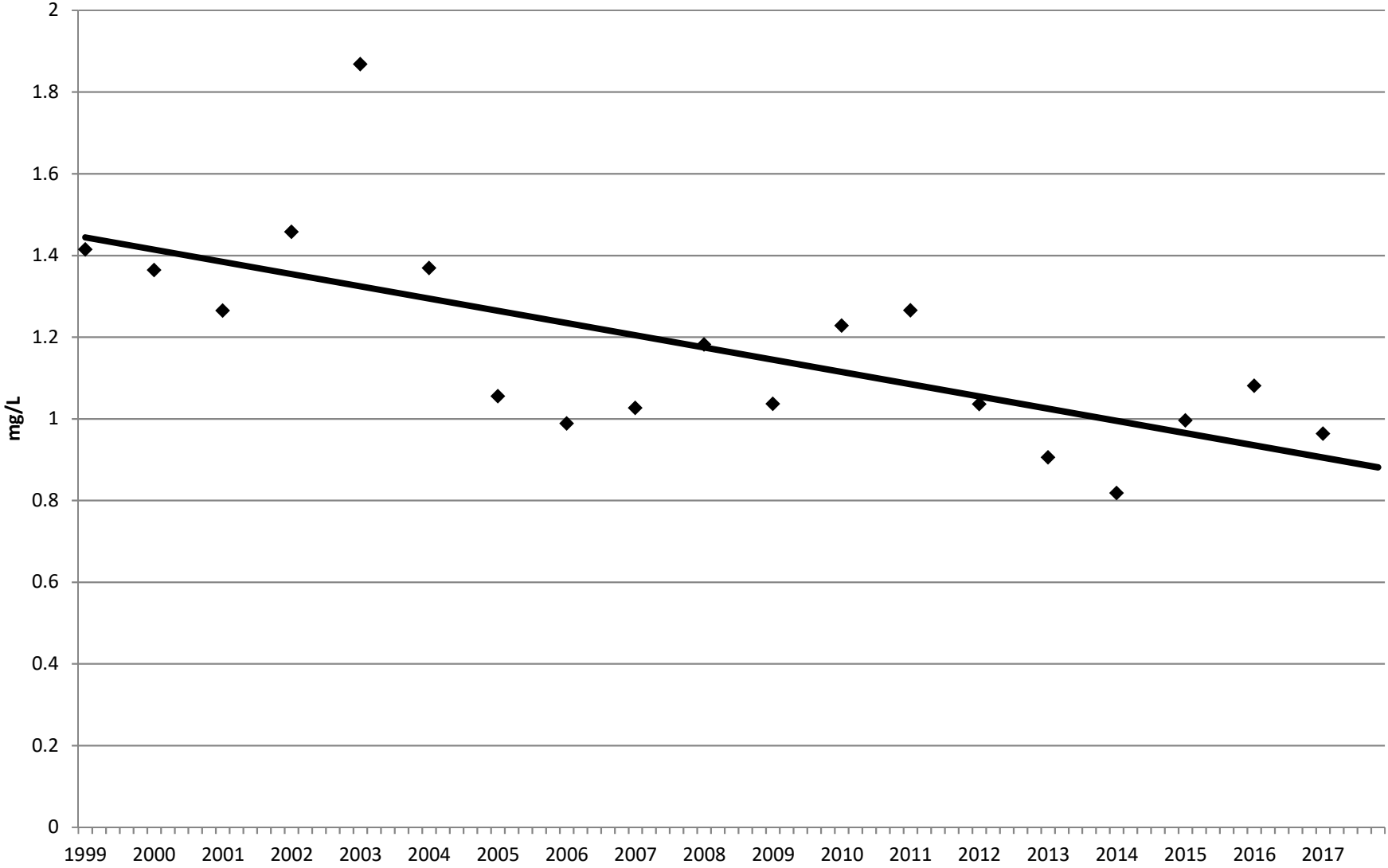


Figure 5-2
Total Nitrogen
C-17 Watershed

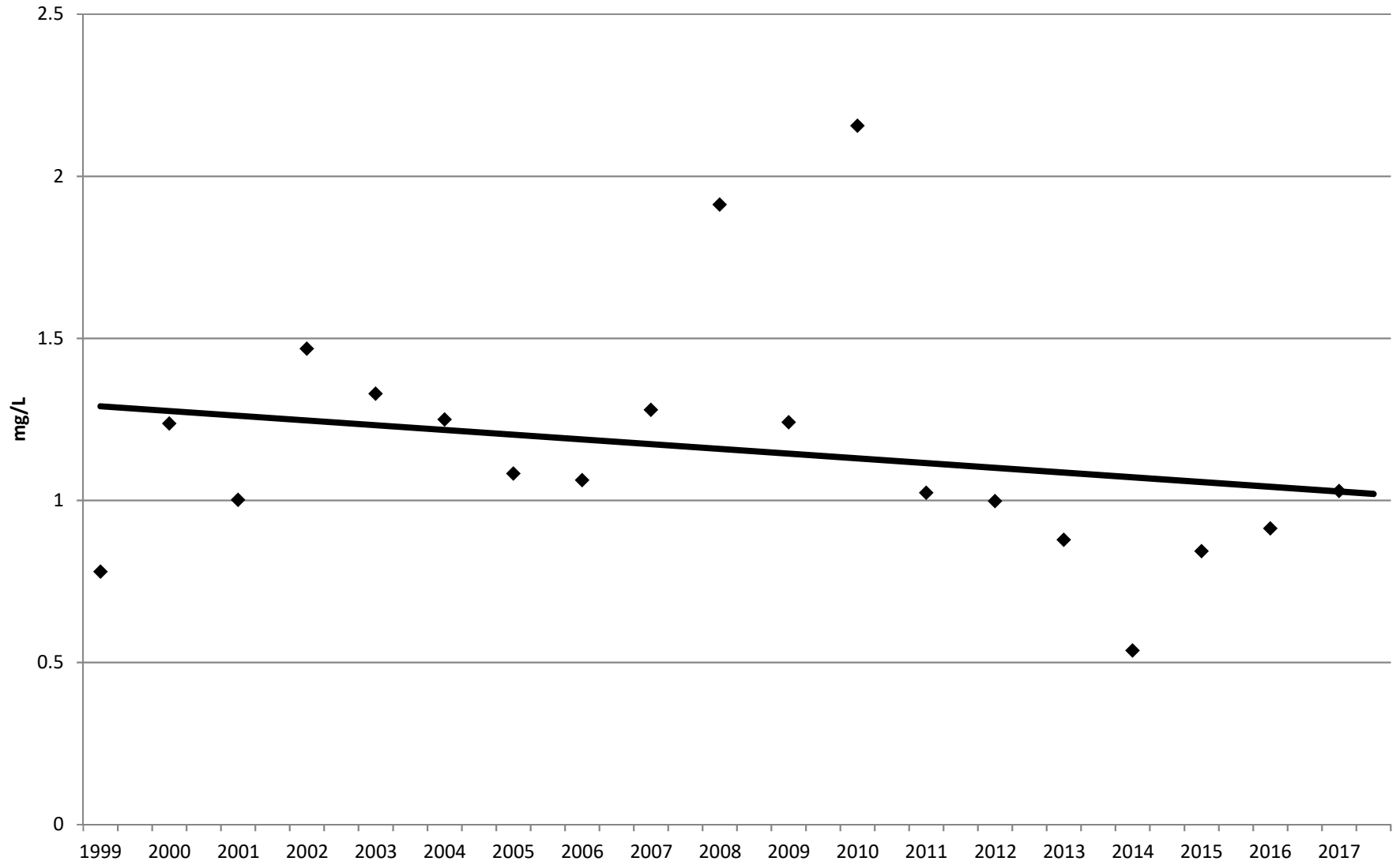


Figure 5-2
Total Nitrogen
C-18 Watershed

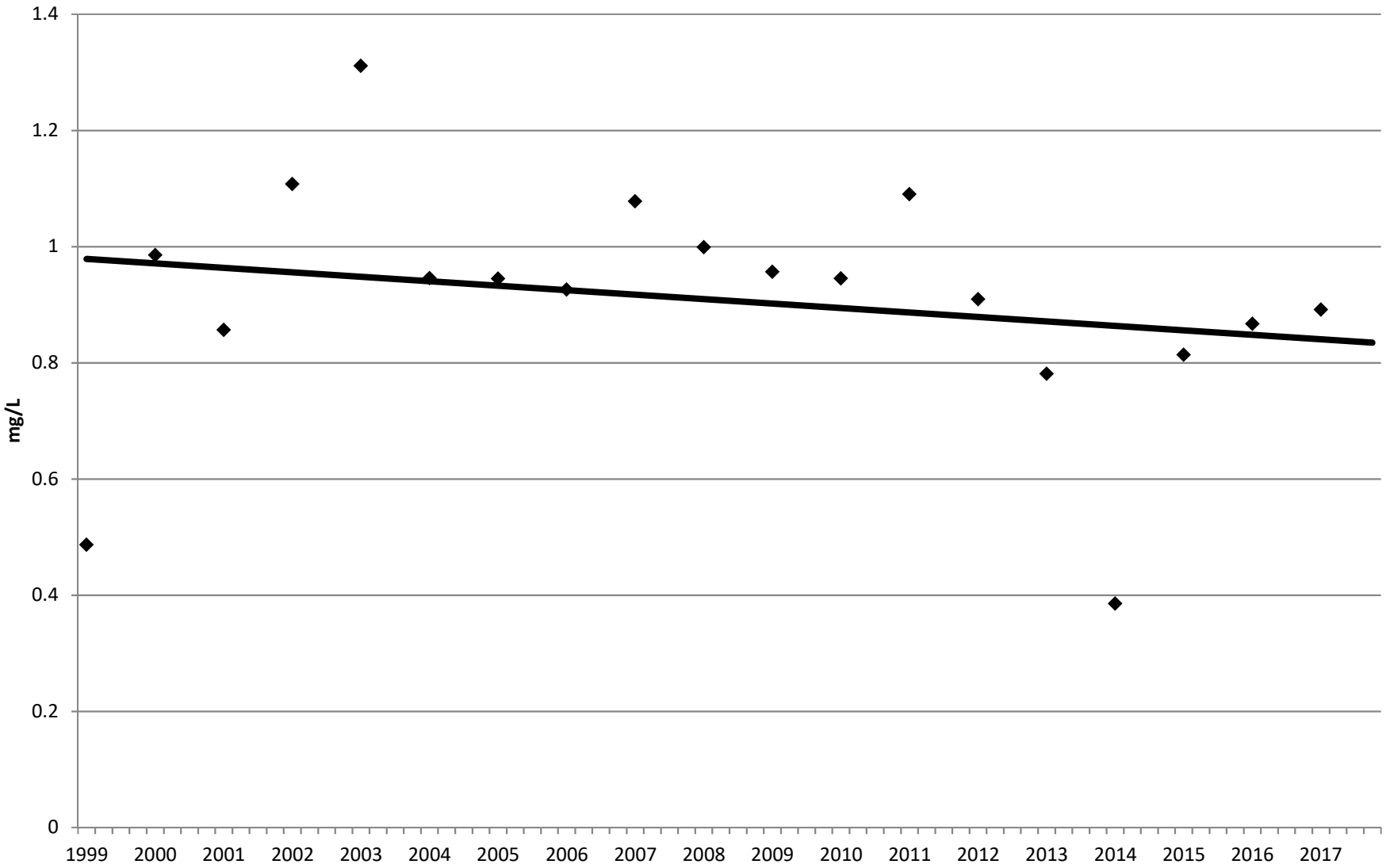


Figure 5-2
Total Nitrogen
C-51 Watershed

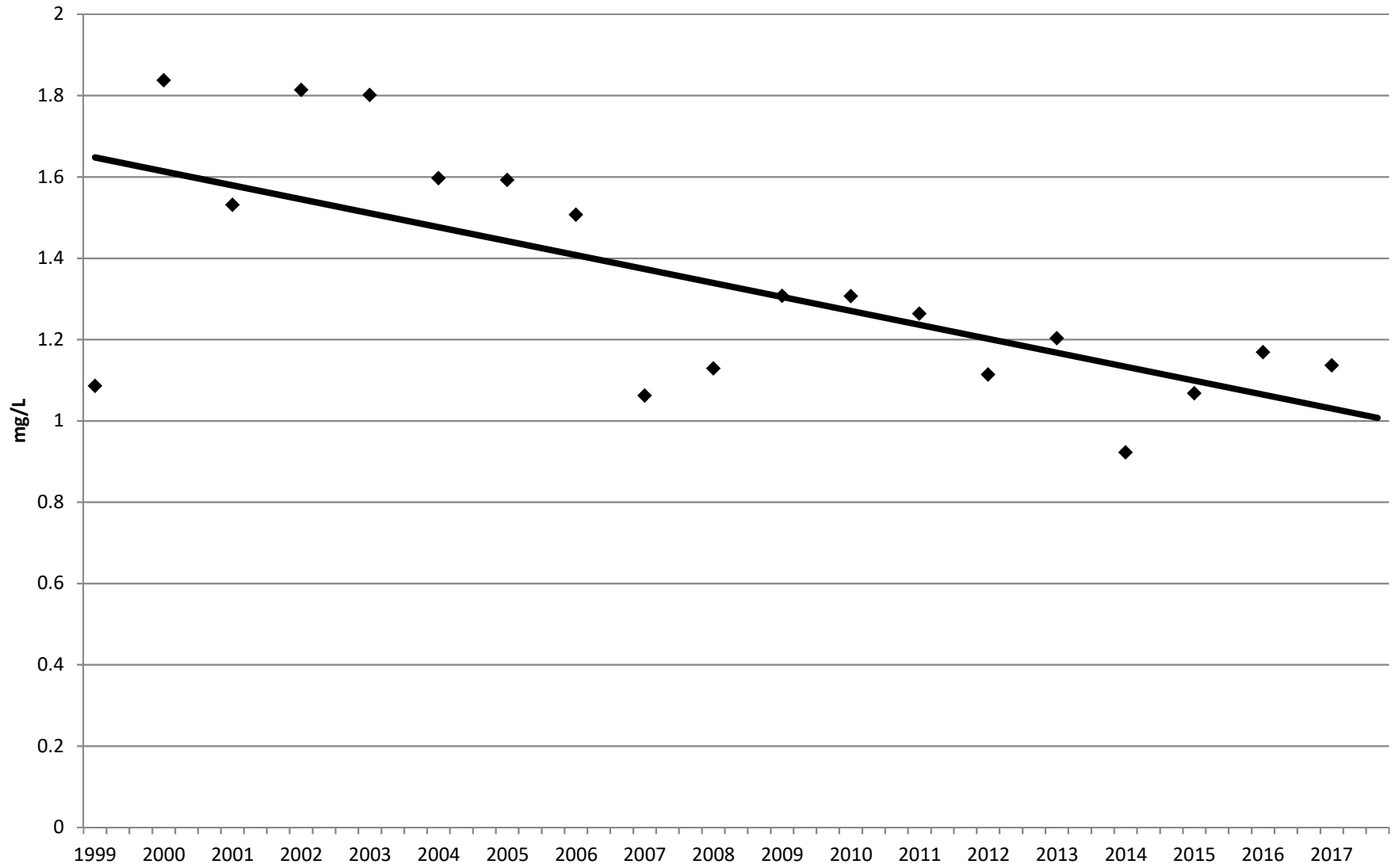


Figure 5-2
Total Nitrogen
Loxahatchee

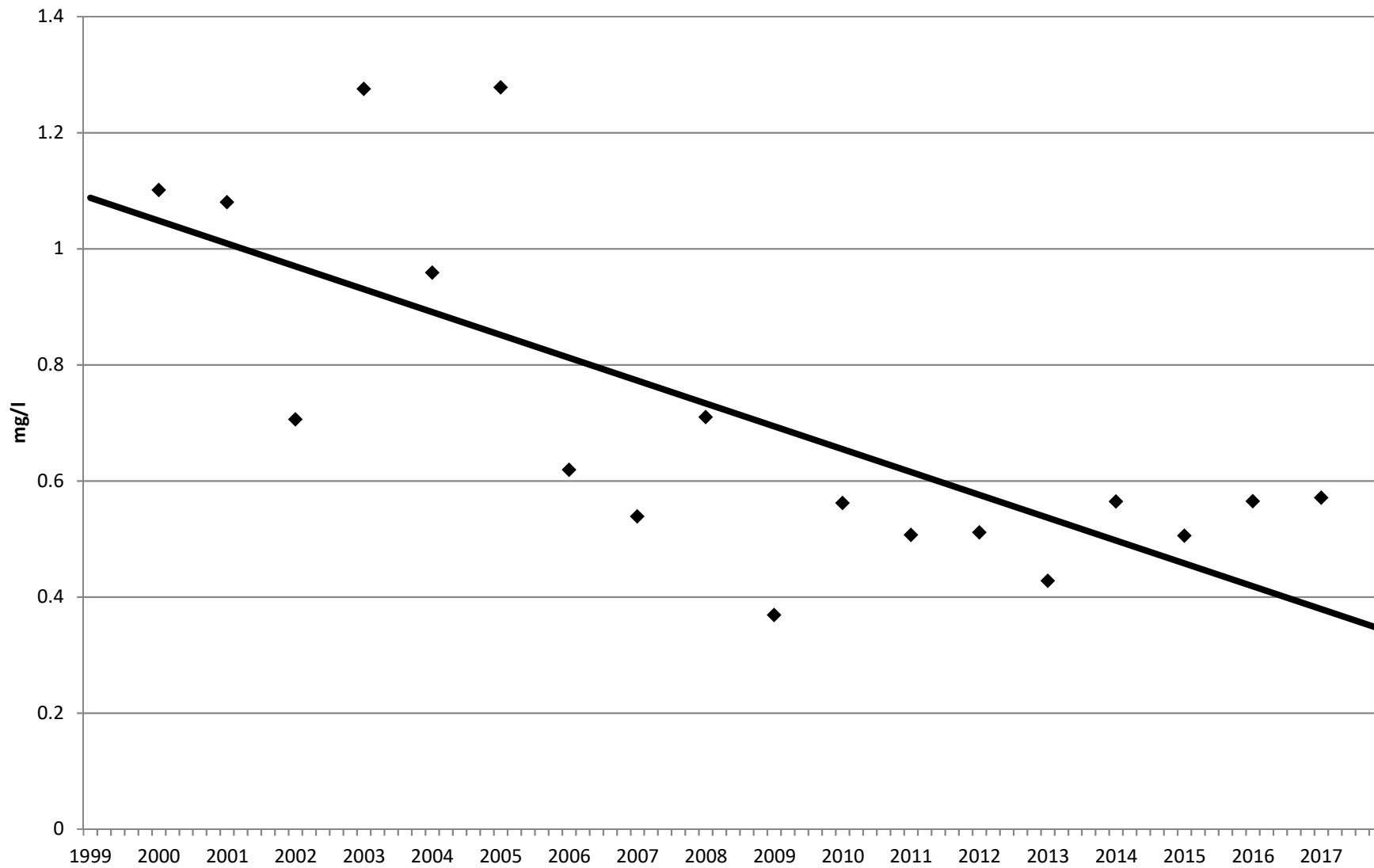


Figure 5-2
Total Nitrogen
Lake Worth Lagoon-N

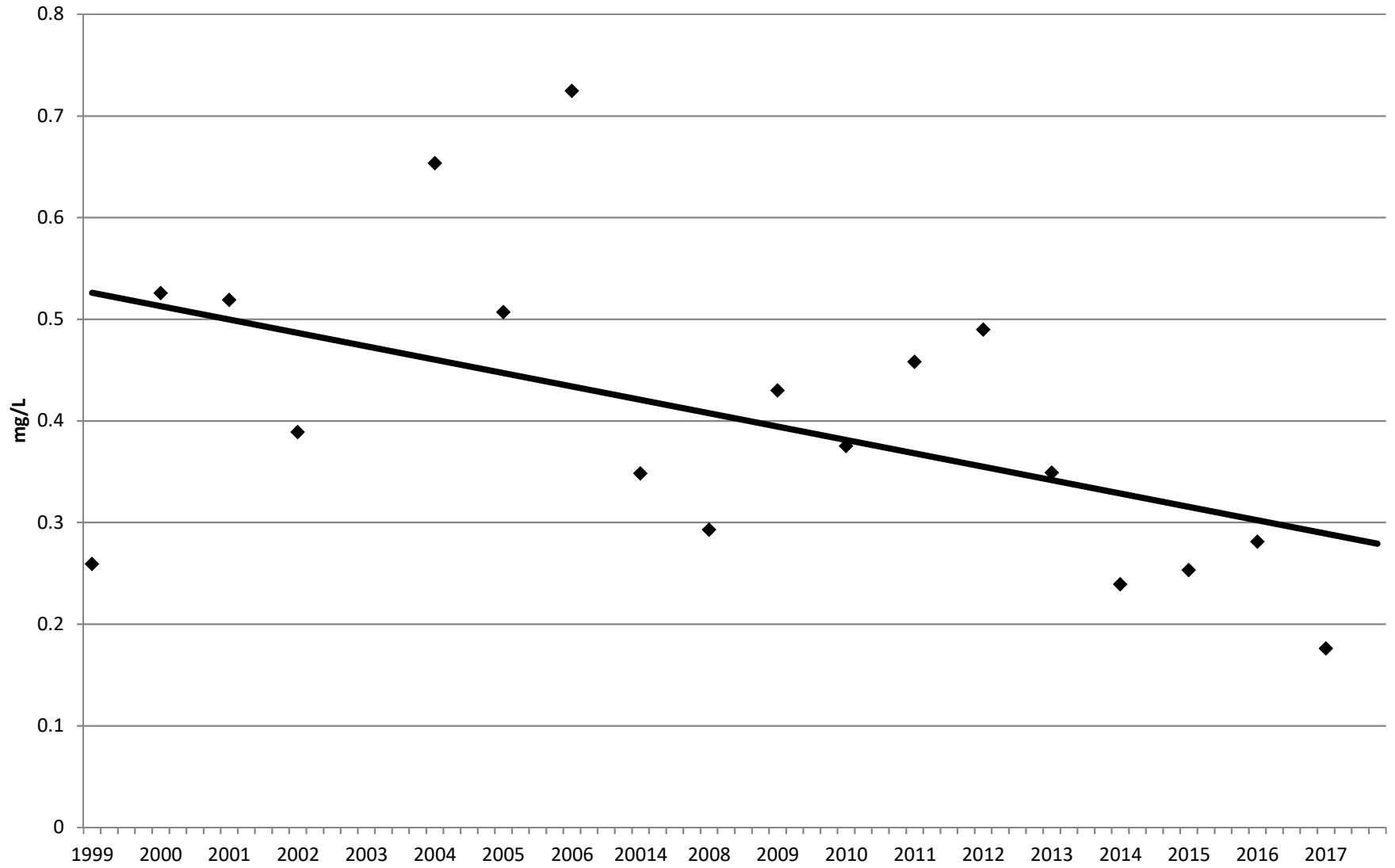


Figure 5-2
Total Nitrogen
Lake Worth Lagoon-C

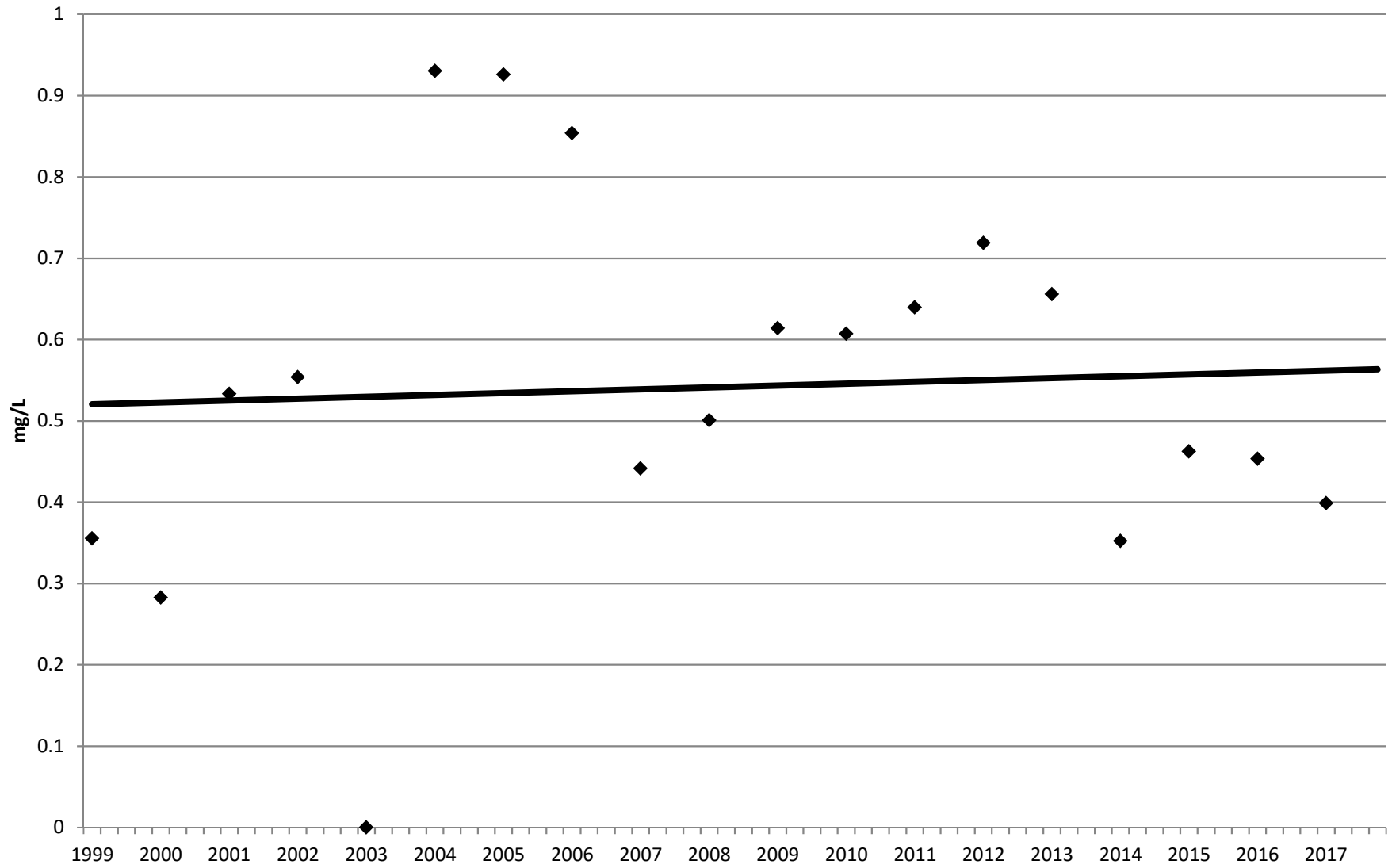


Figure 5-2
Total Nitrogen
Lake Worth Lagoon-S

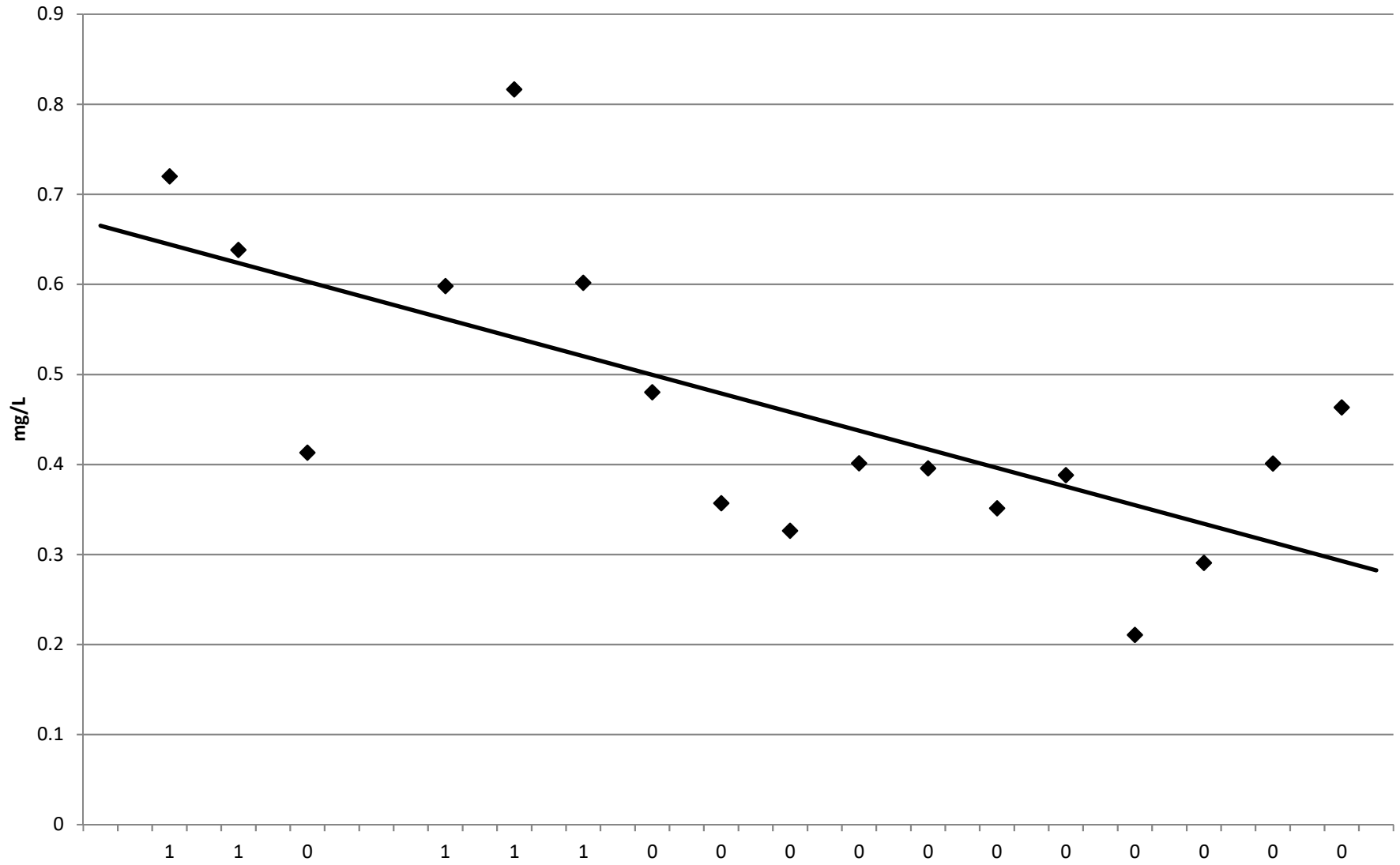


Figure 5-2
Total Nitrogen
Hillsboro

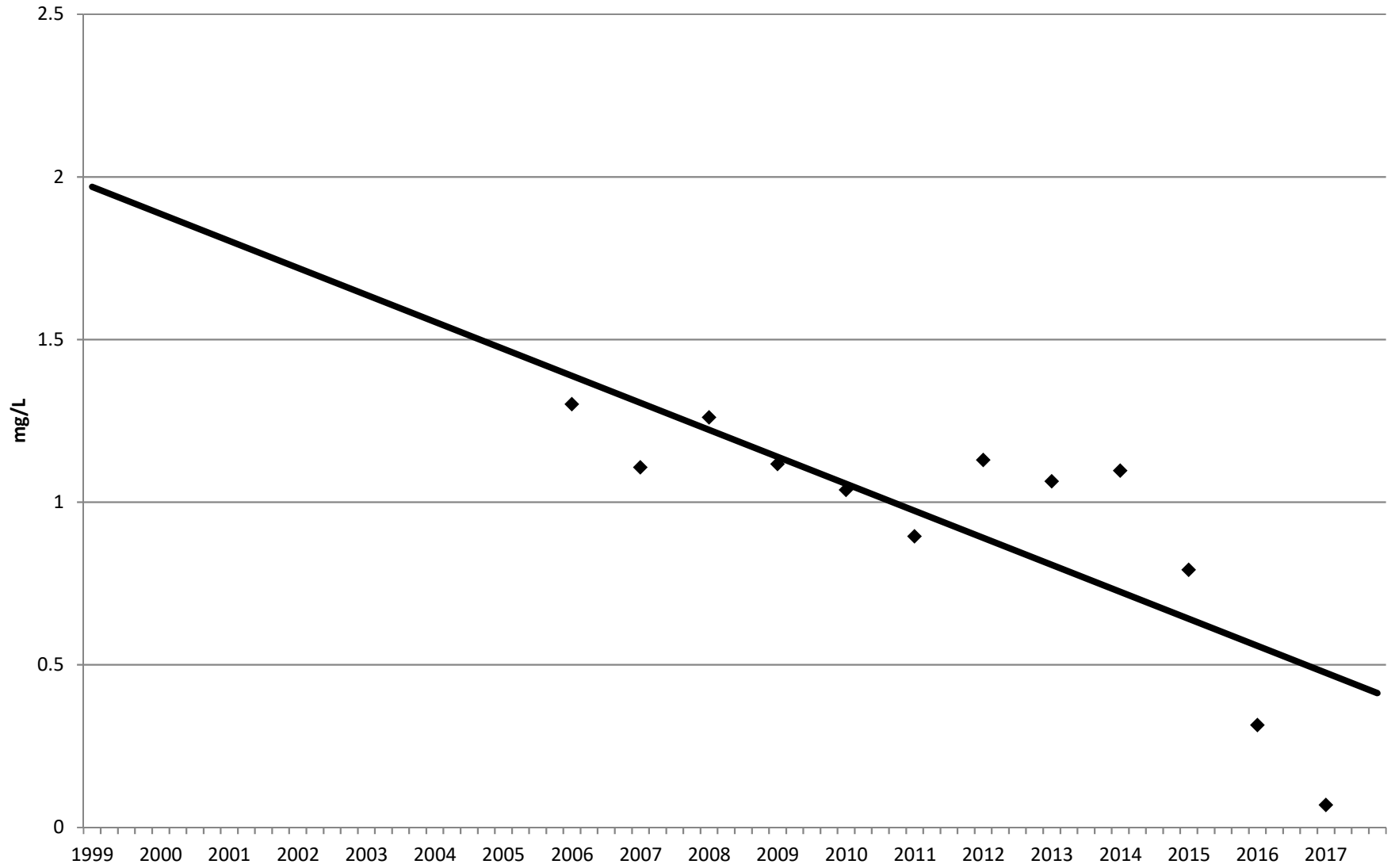


Figure 5-2
Total Nitrogen
L-8

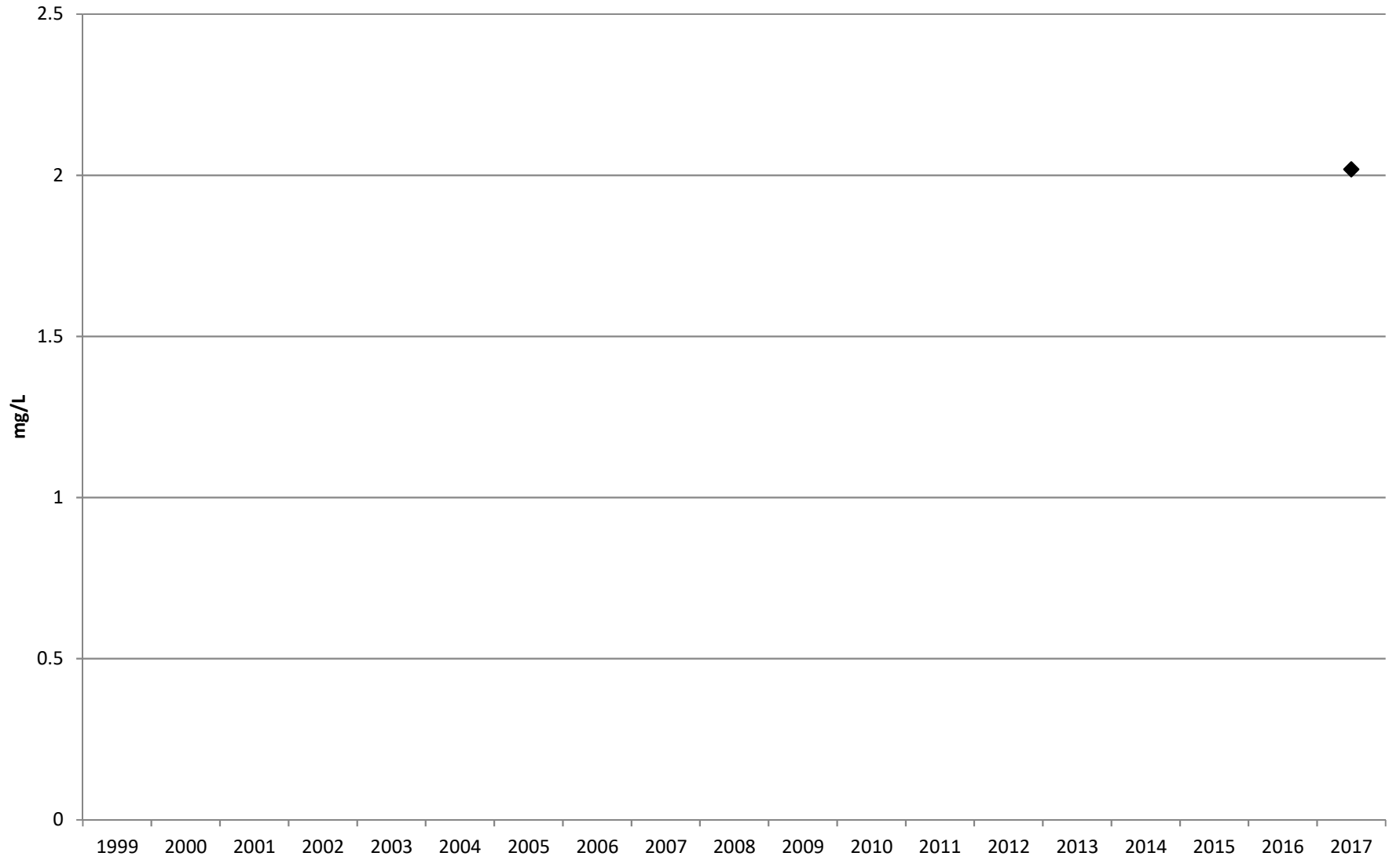


Figure 5-2
Total Nitrogen
S-2-6-7

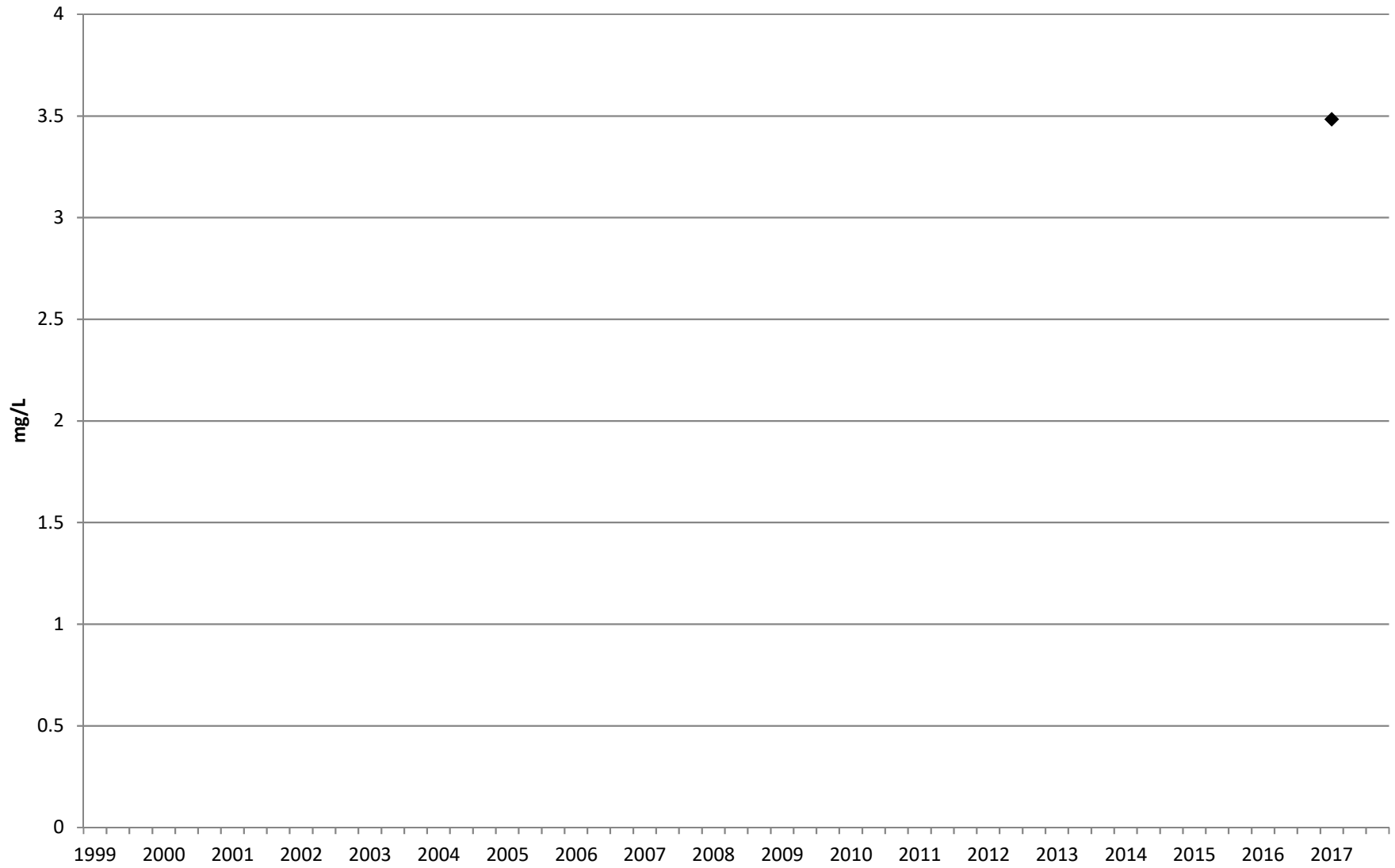


Figure 5-3
Total Phosphorus
C-15 Watershed

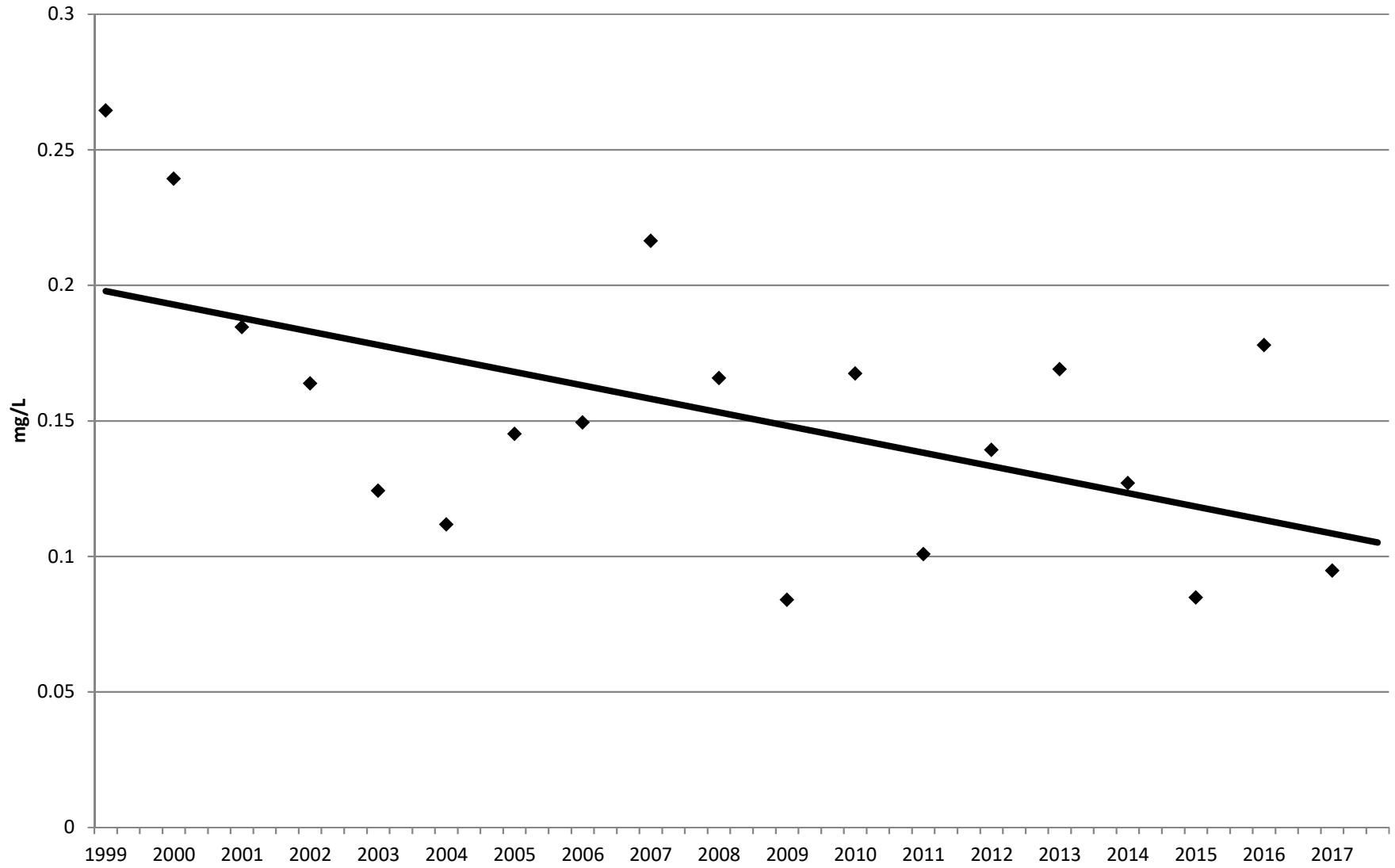


Figure 5-3
Total Phosphorous
C-16 Watershed

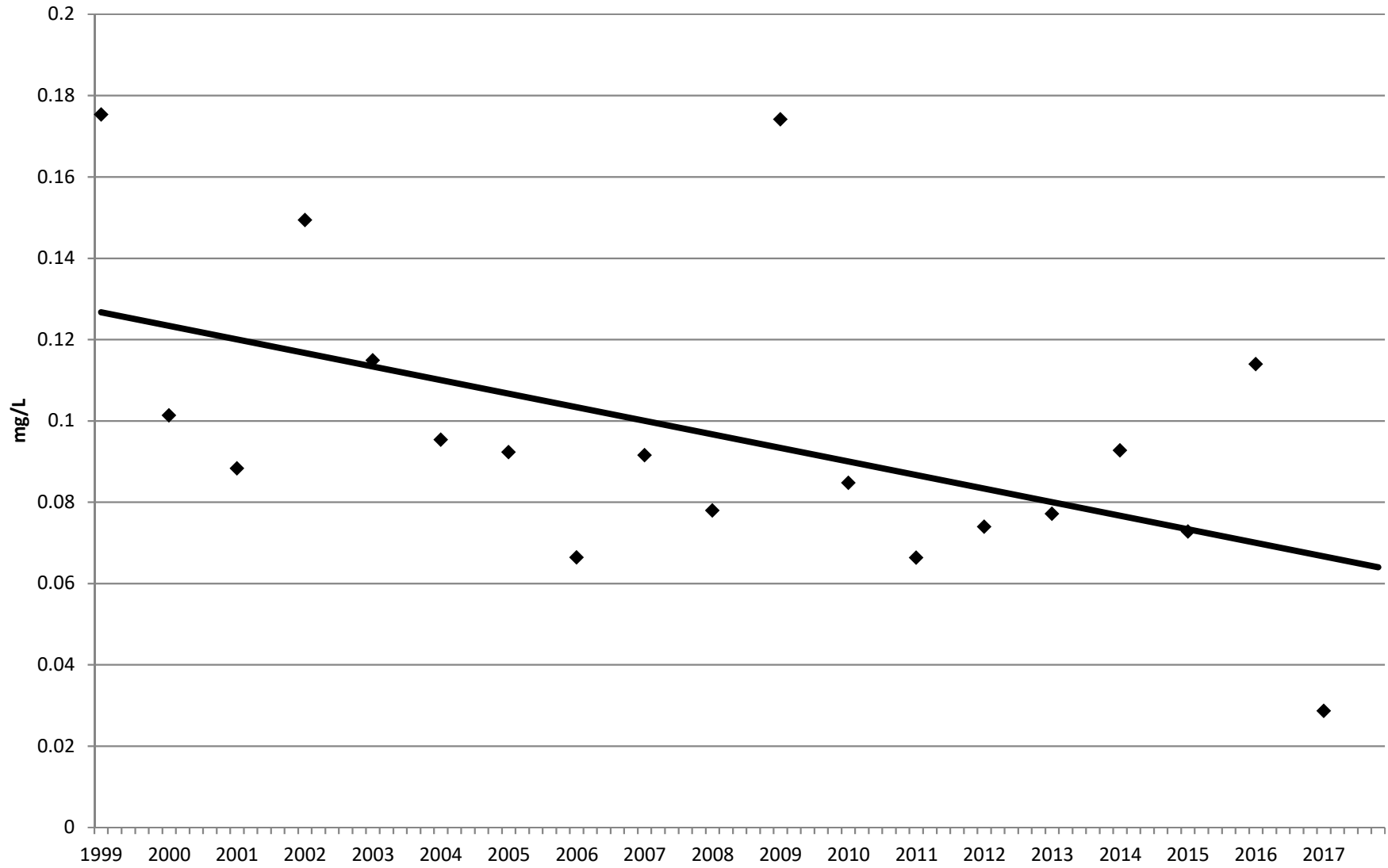


Figure 5-3
Total Phosphorus
C-17 Watershed

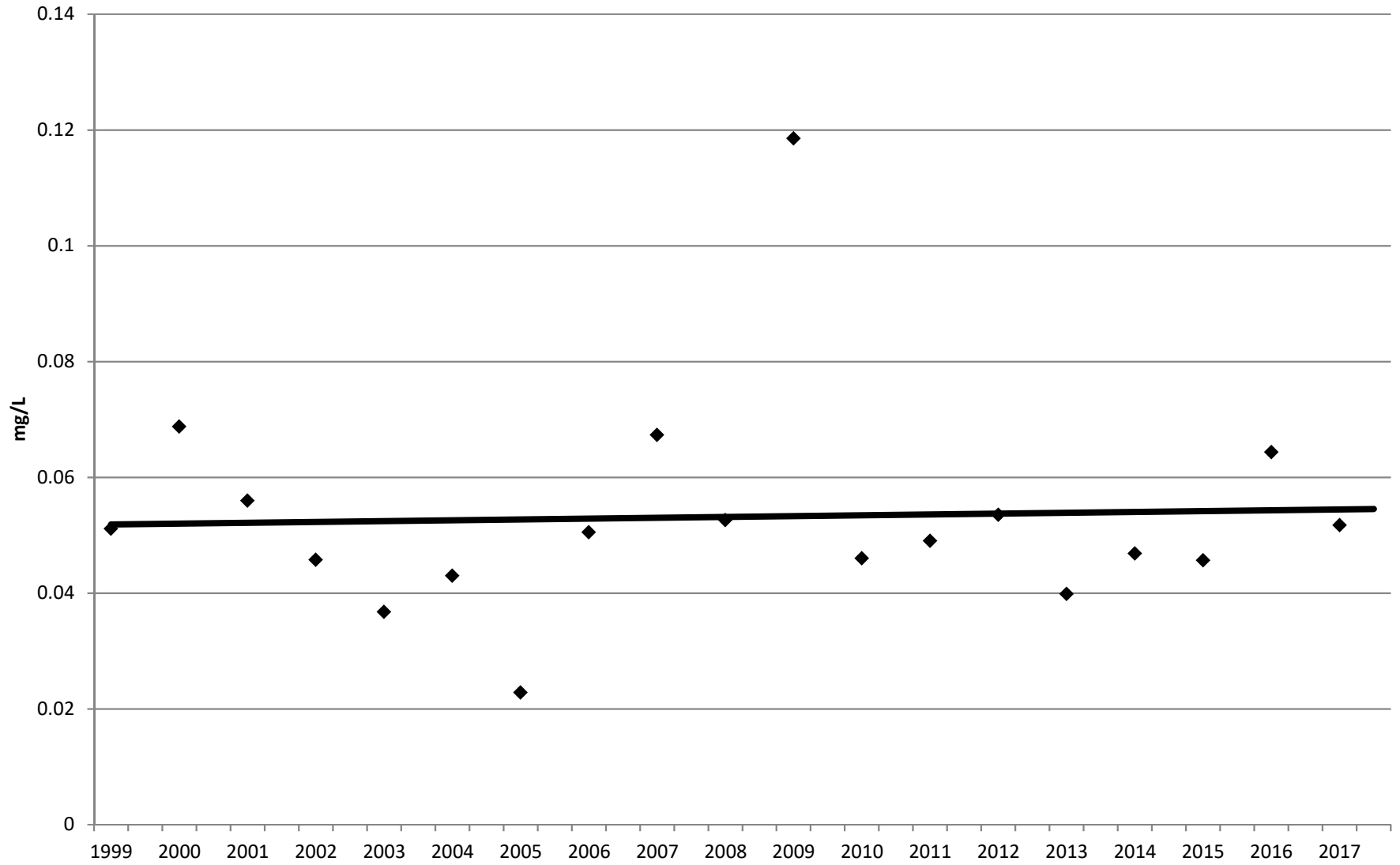


Figure 5-3
Total Phosphorus
C-18 Watershed

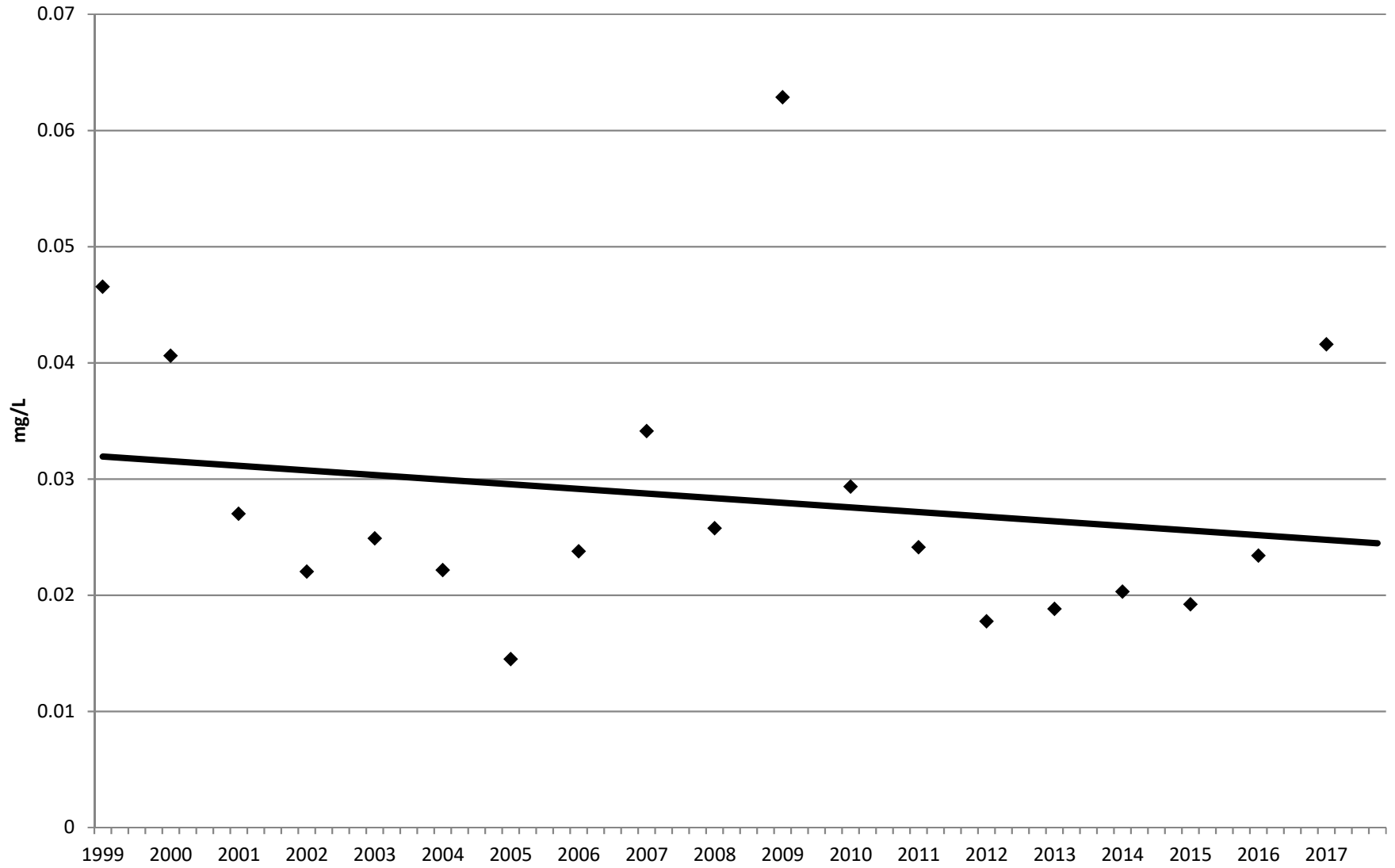


Figure 5-3
Total Phosphorus
C-51 Watershed

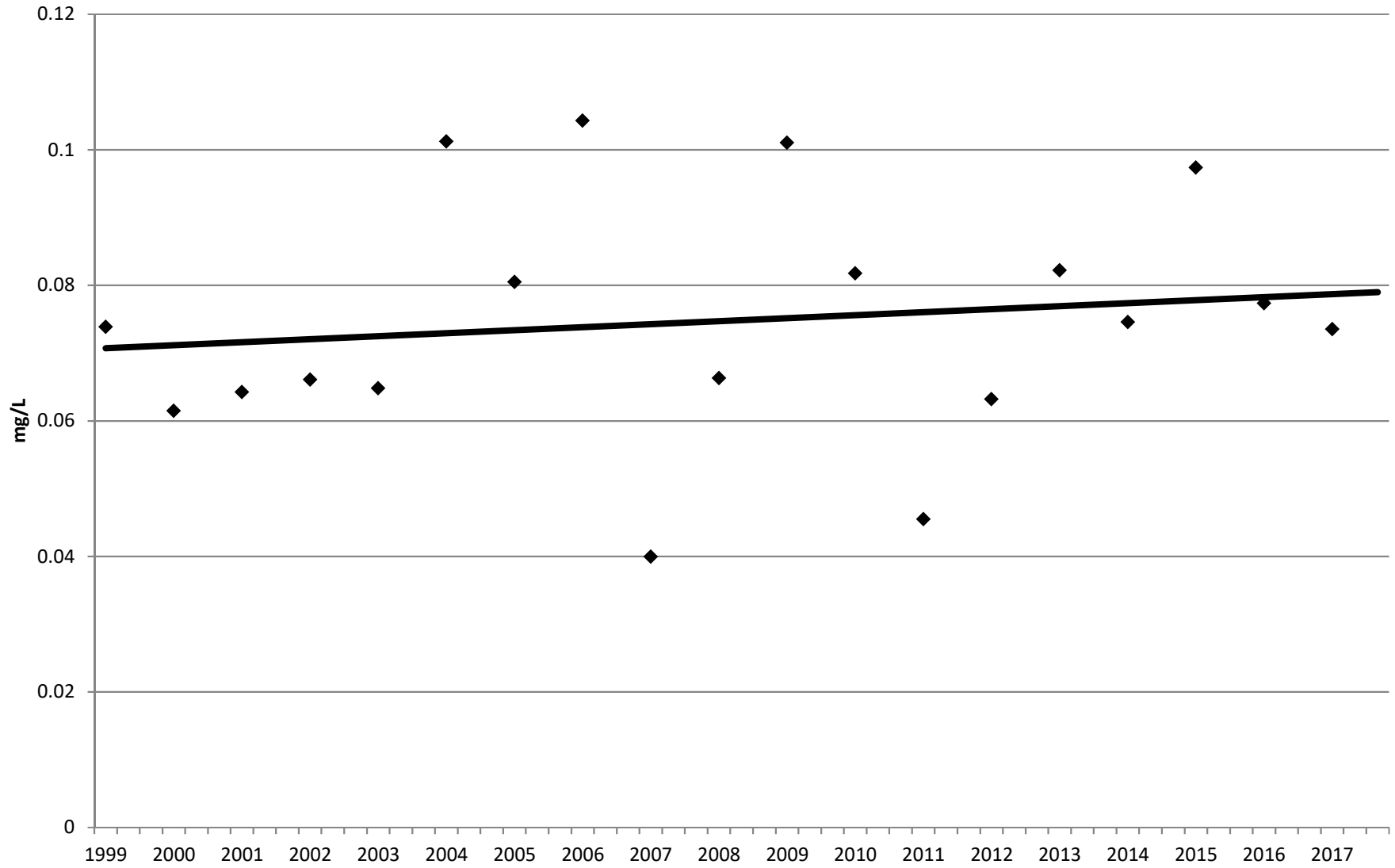


Figure 5-3
Total Phosphorus
Loxahatchee

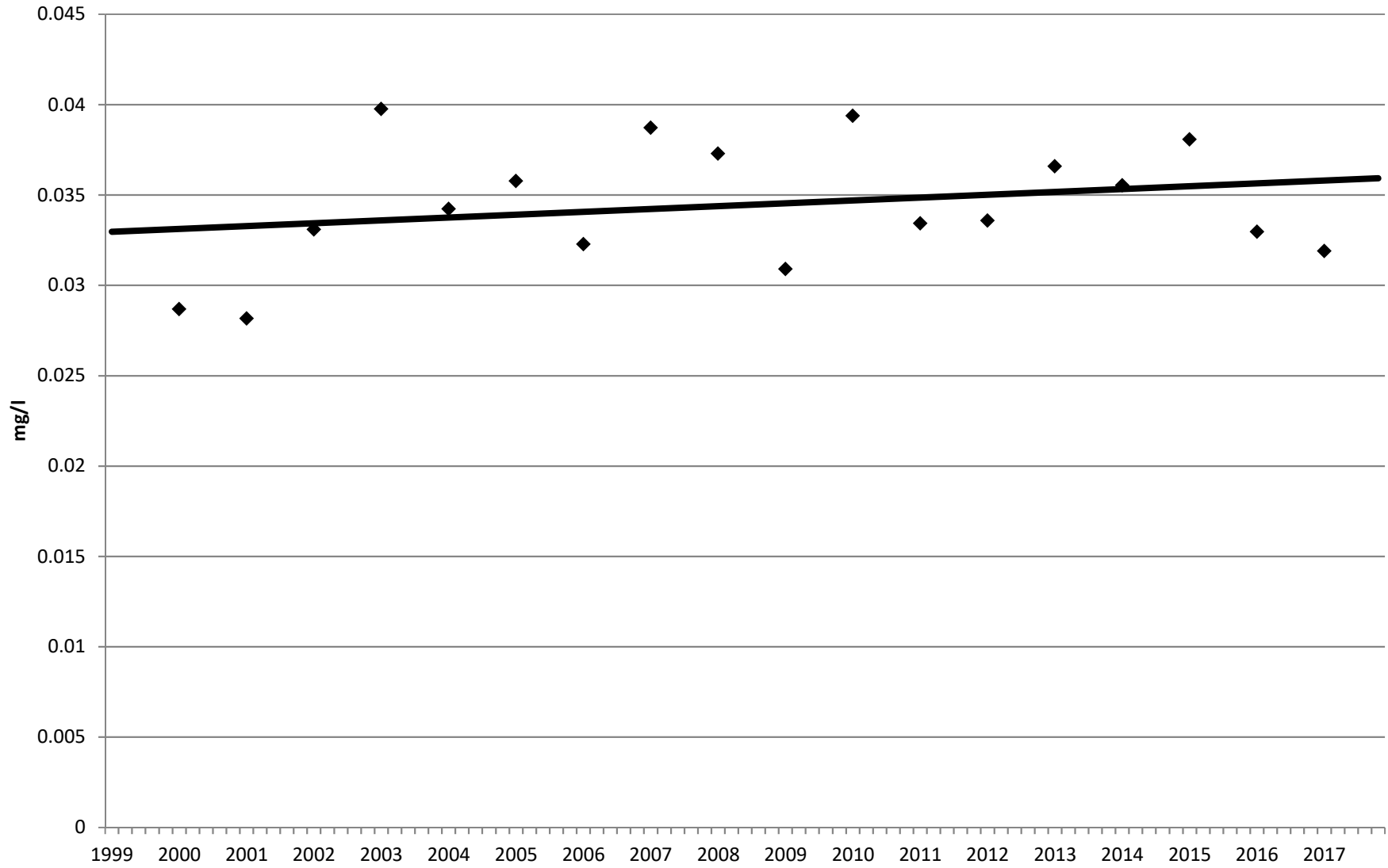


Figure 5-3
Total Phosphorus
Lake Worth Lagoon-N

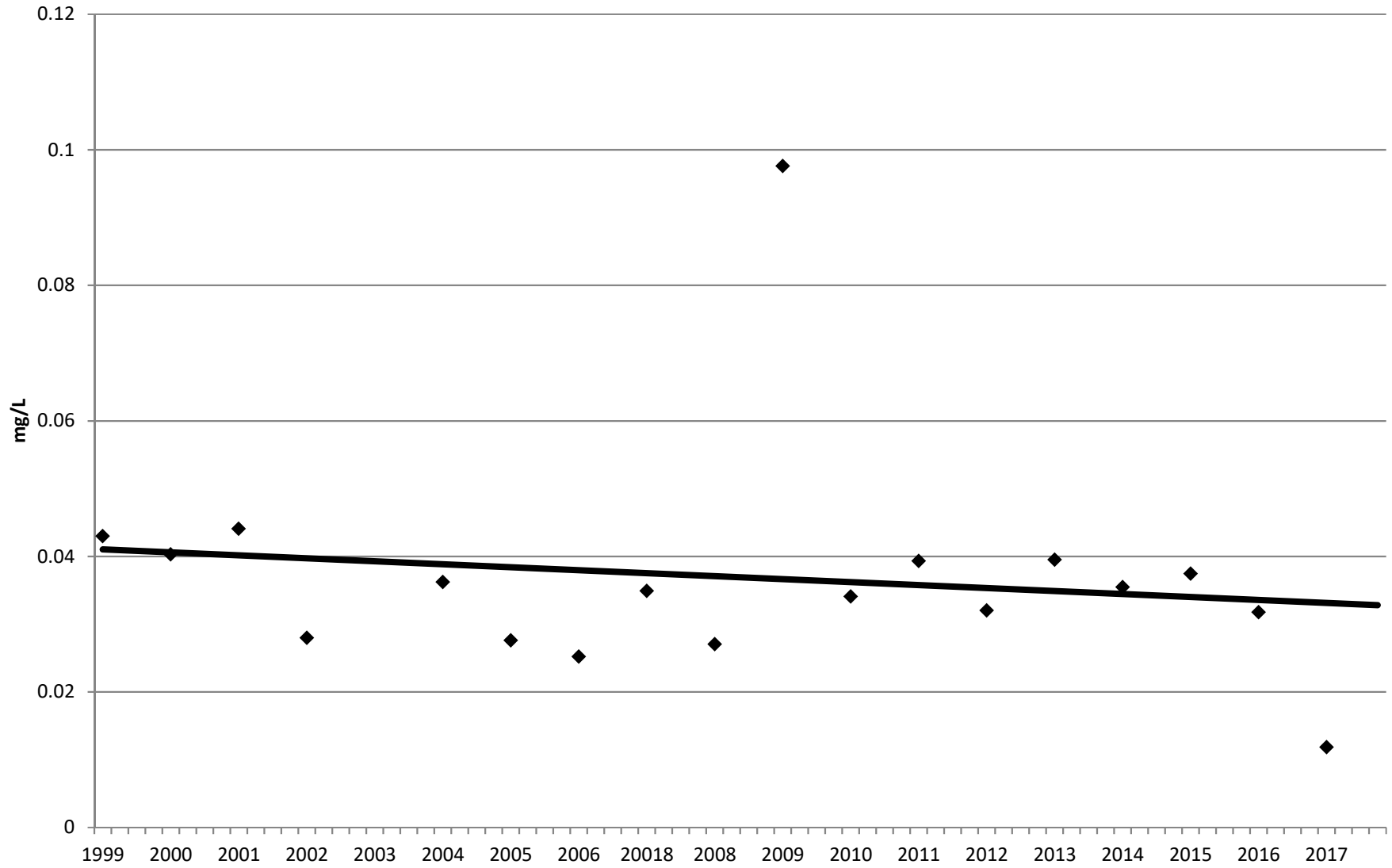


Figure 5-3
Total Phosphorus
Lake Worth Lagoon-C

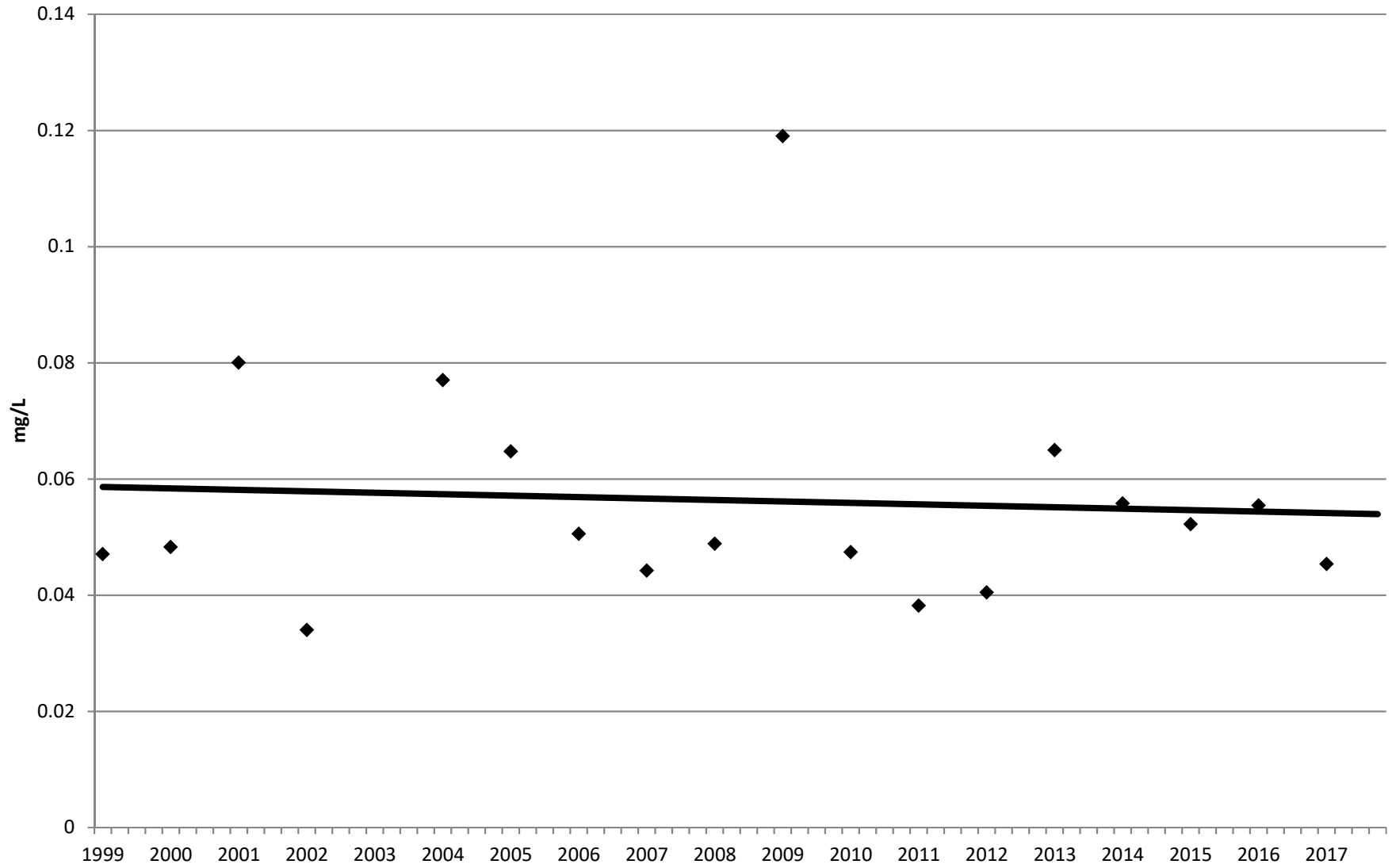


Figure 5-3
Total Phosphorus
Lake Worth Lagoon-S

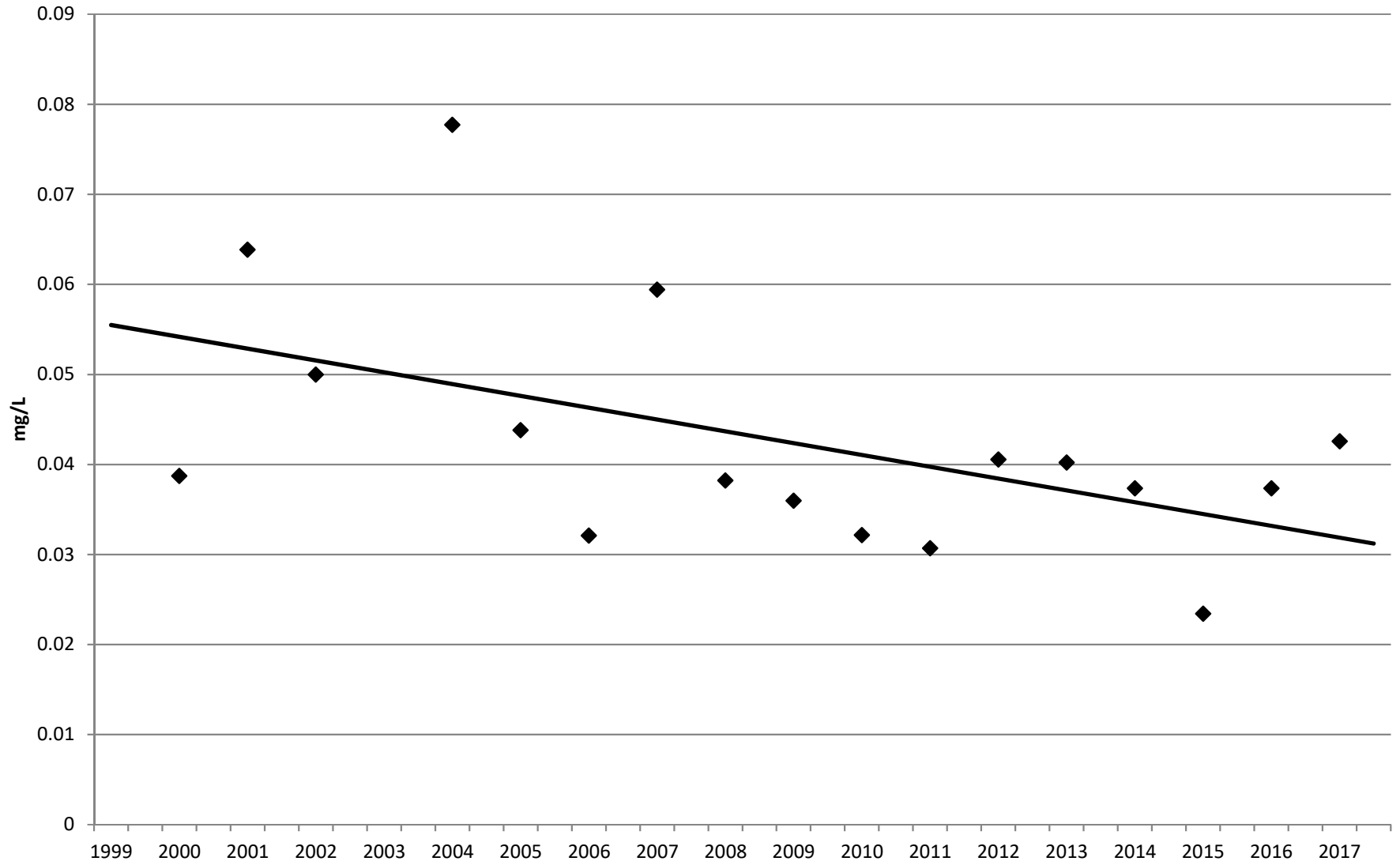


Figure 5-3
Total Phosphorus
Hillsboro

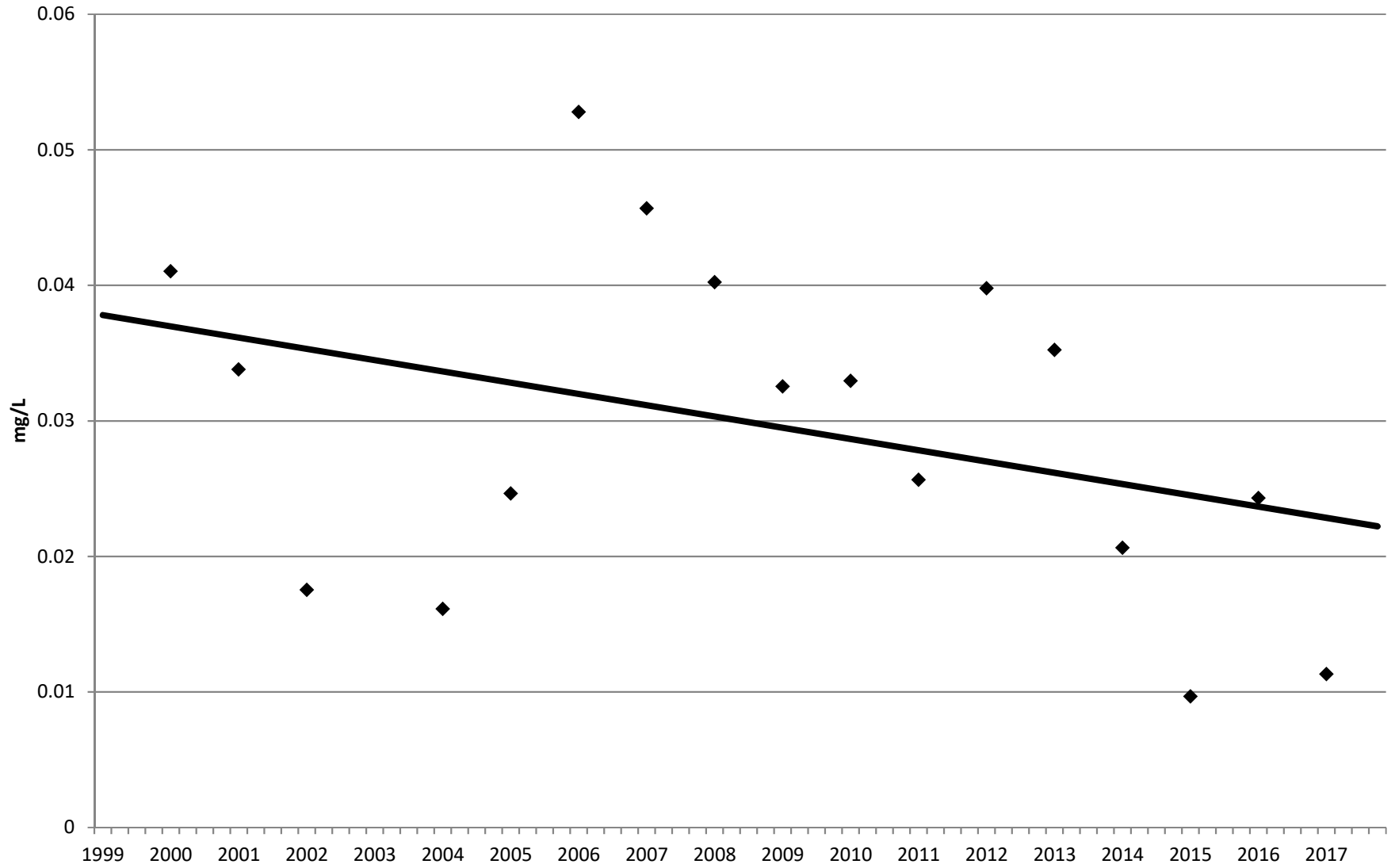


Figure 5-3
Total Phosphorus
L-8

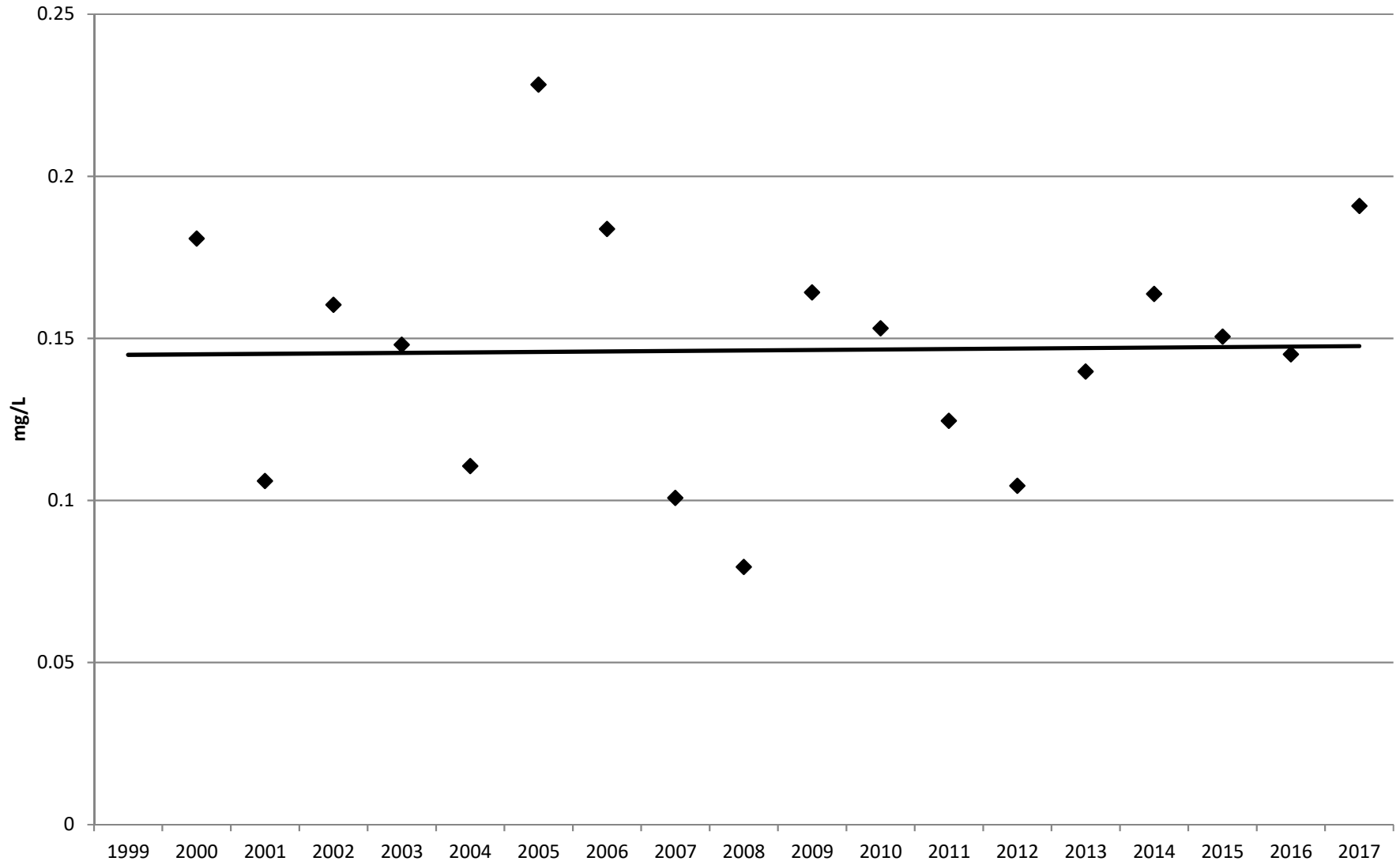


Figure 5-3
Total Phosphorus
S-2-6-7

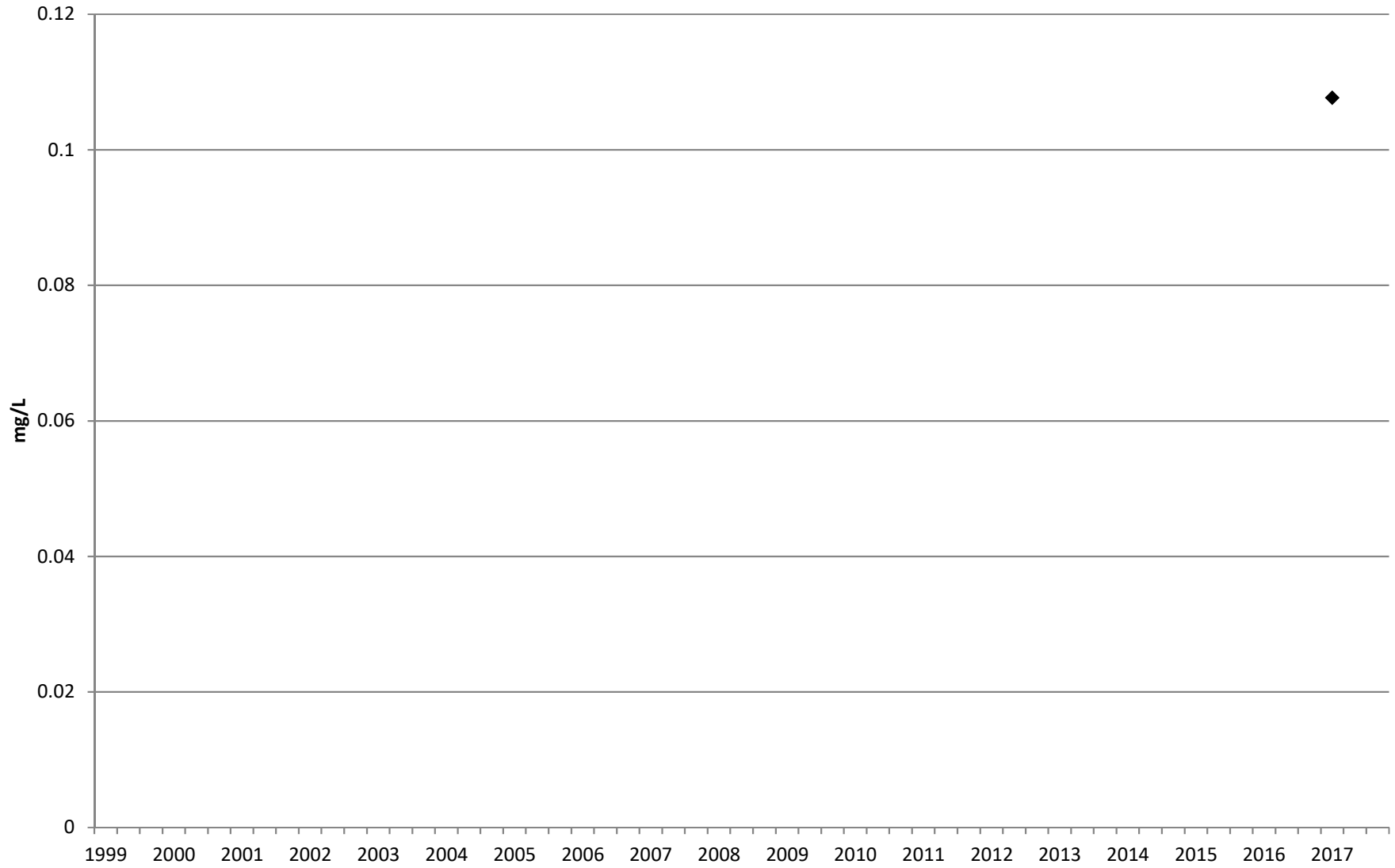


Figure 5-4
Chlorophyll-A
C-15 Watershed

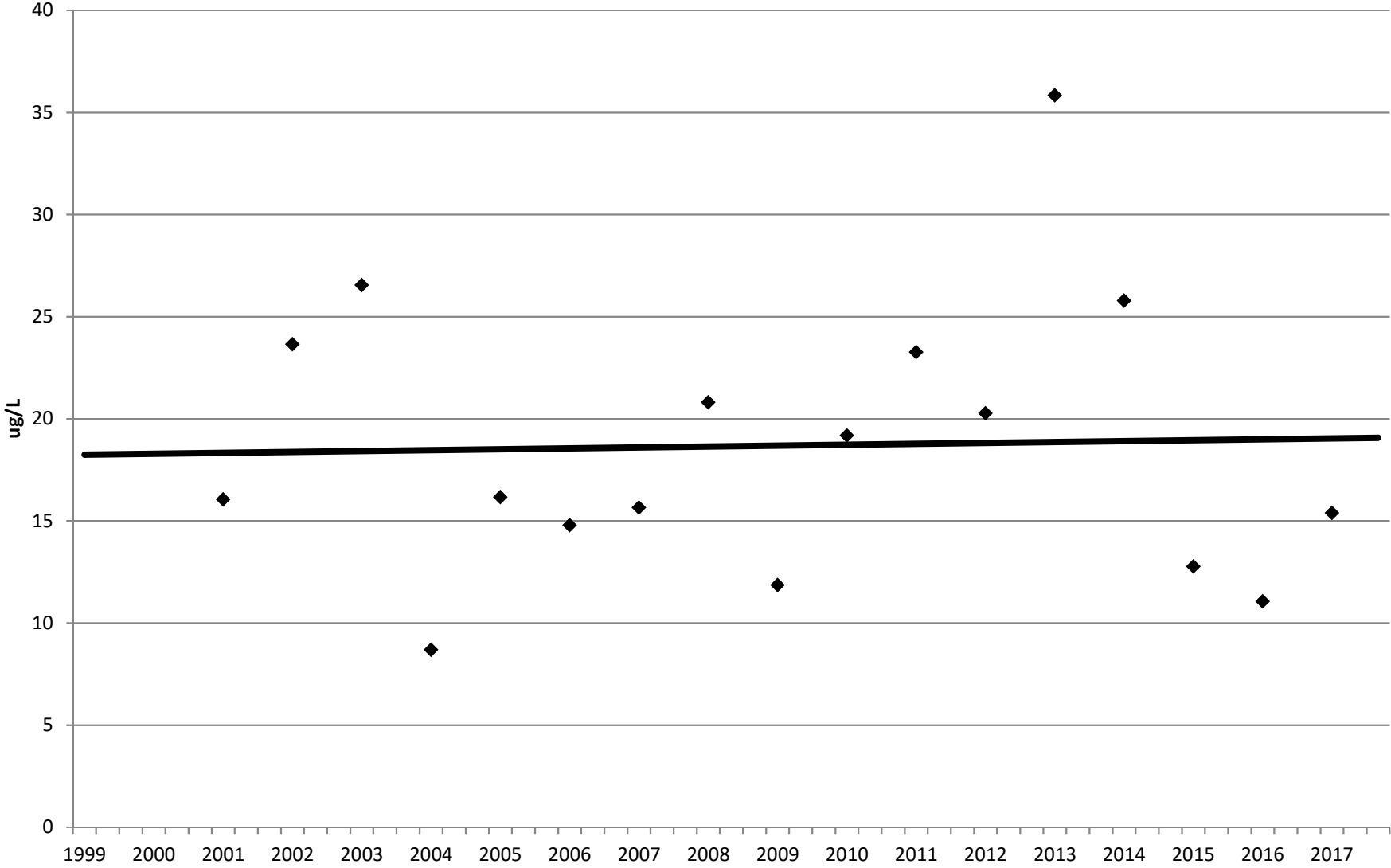


Figure 5-4
Chlorophyll-A
C-16 Watershed

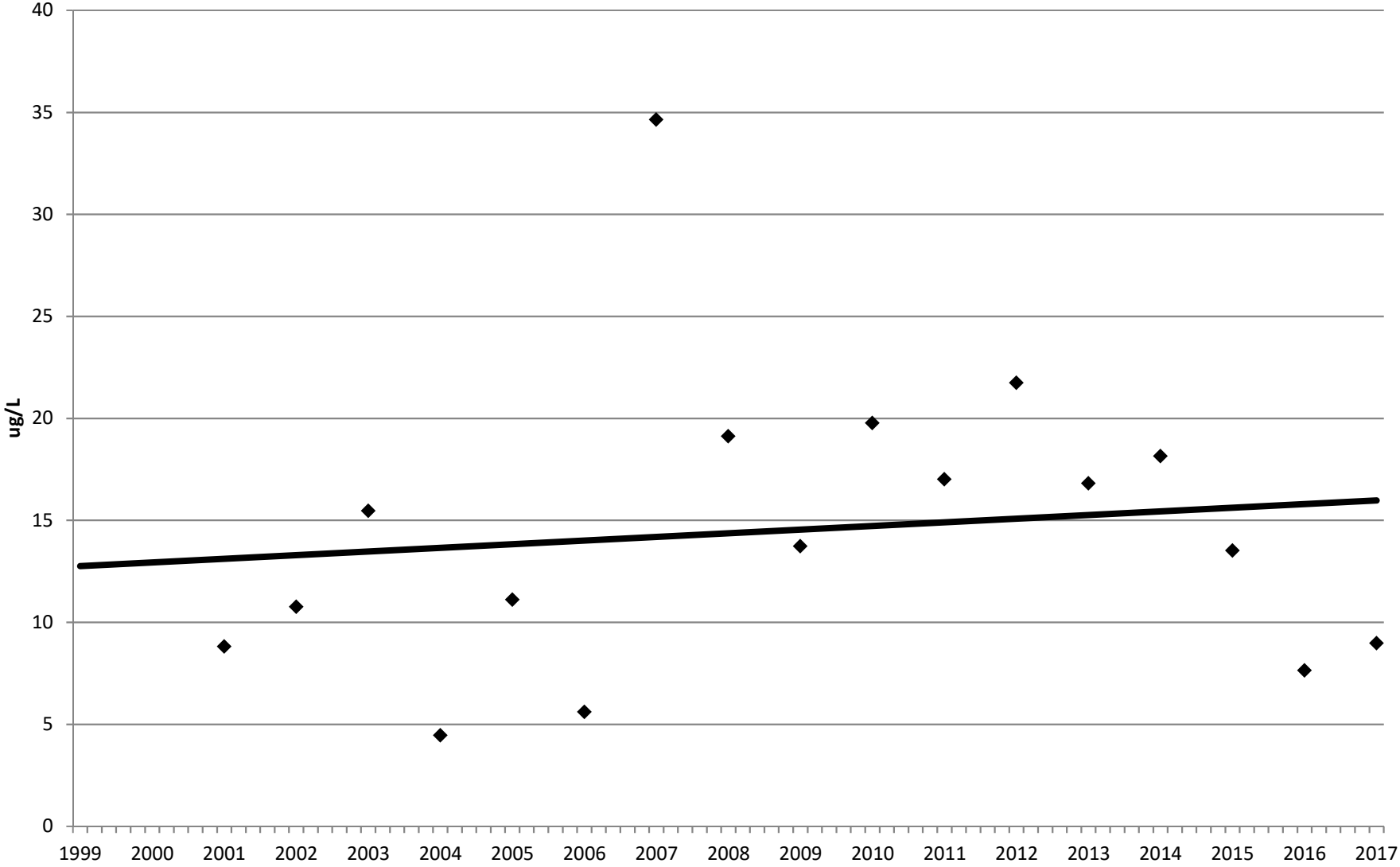


Figure 5-4
Chlorophyll-A
C-17 Watershed

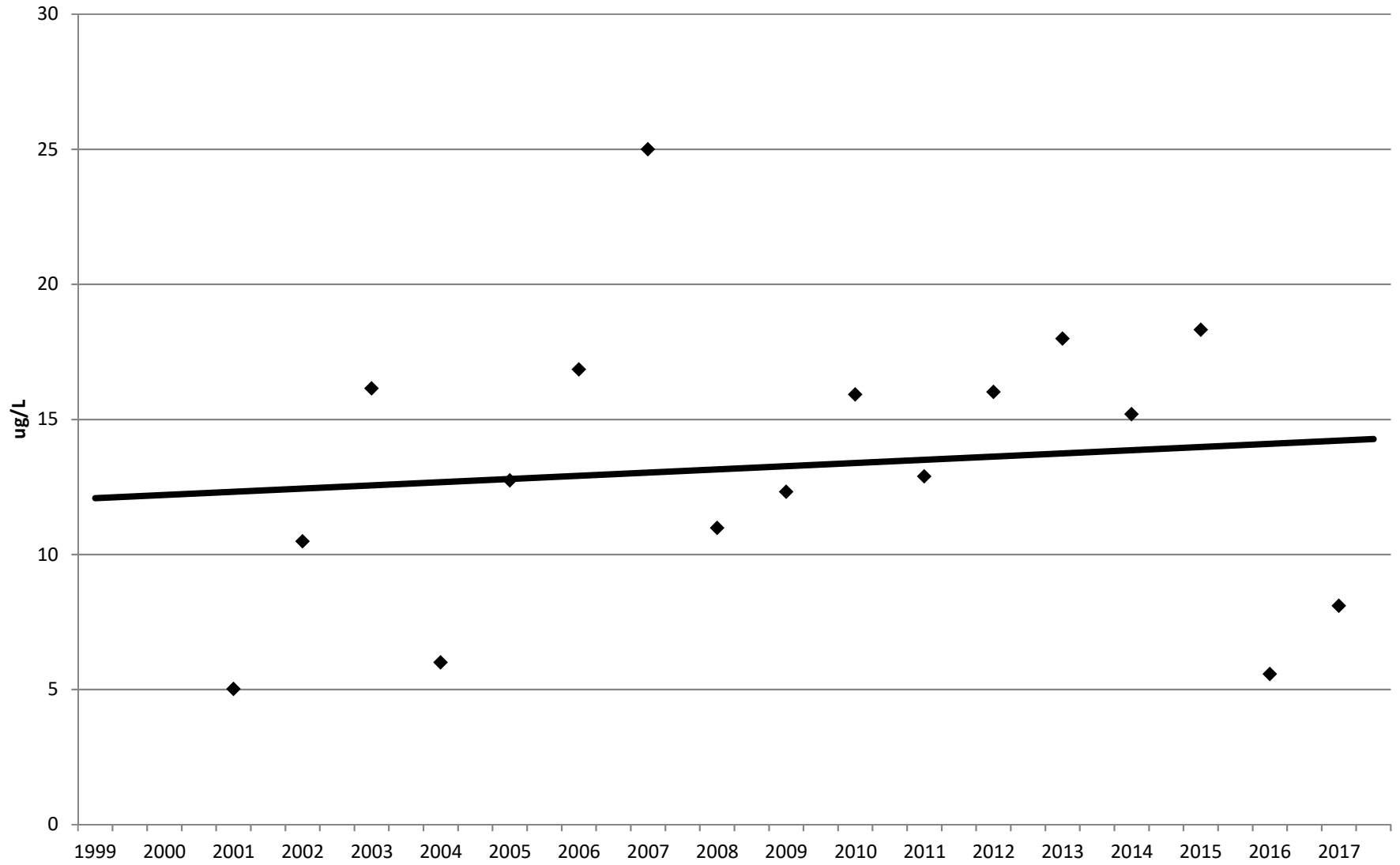


Figure 5-4
Chlorophyll-A
C-18 Watershed

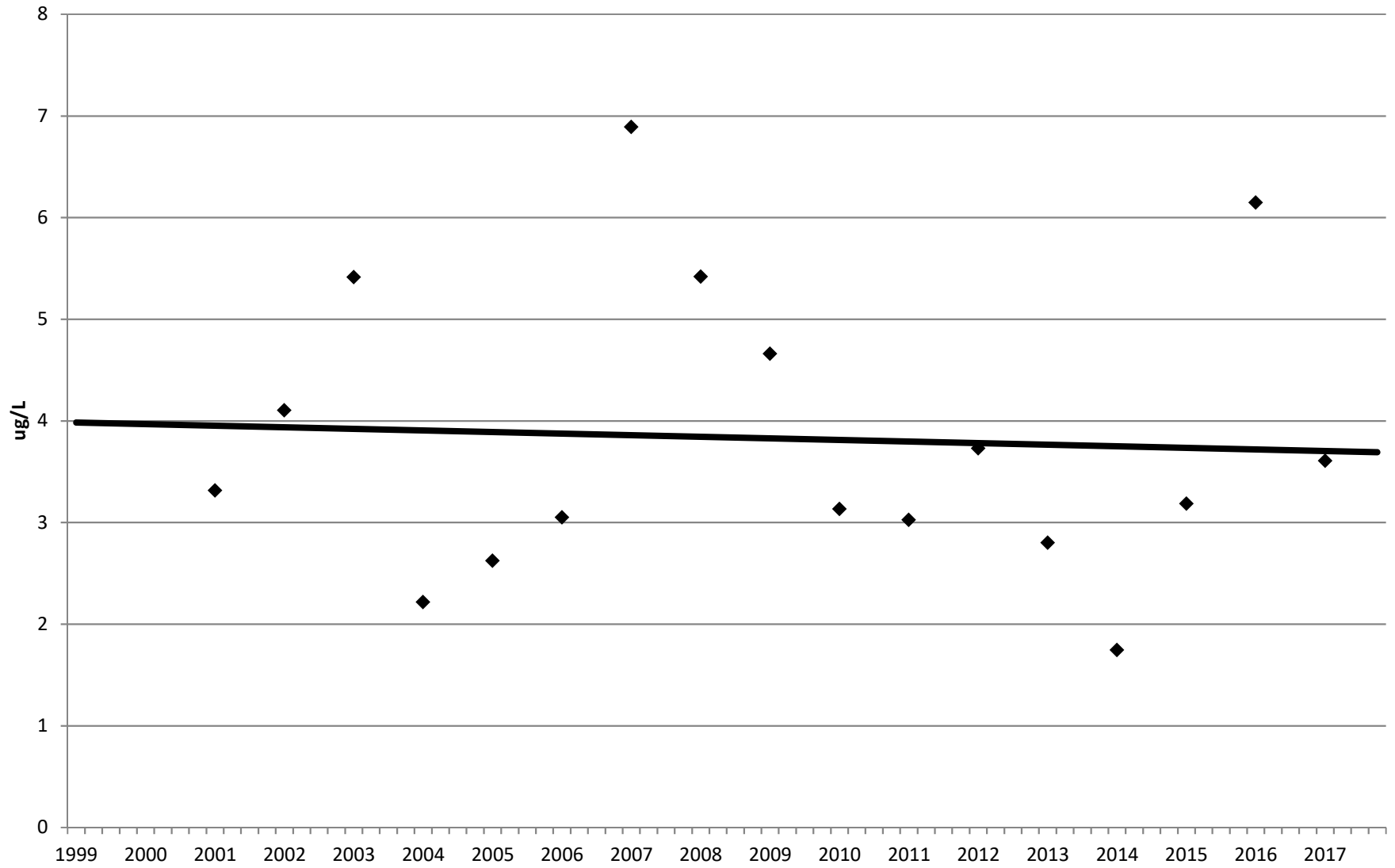


Figure 5-4
Chlorophyll-A
C-51 Watershed

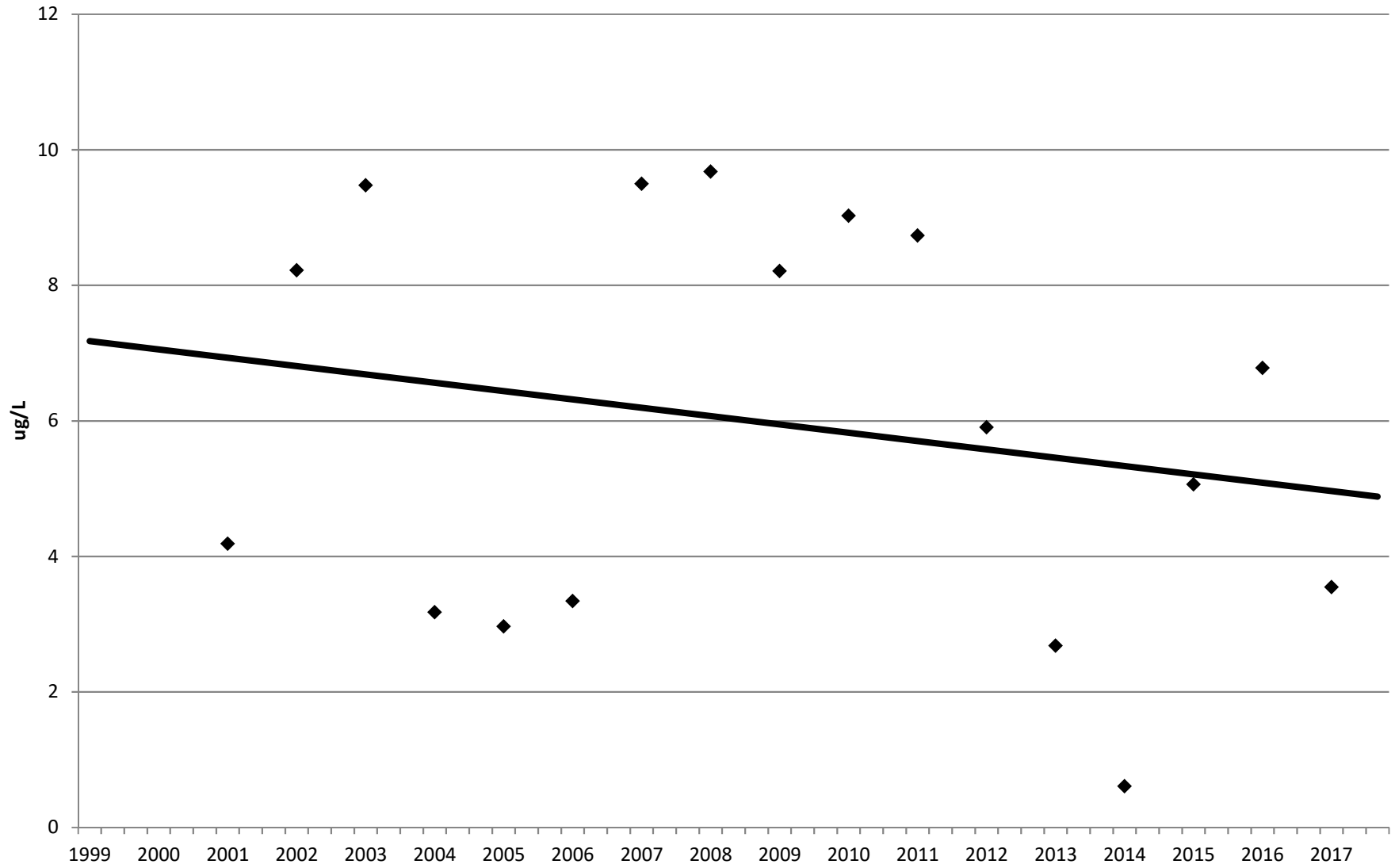


Figure 5-4
Chlorophyll-A
Loxahatchee

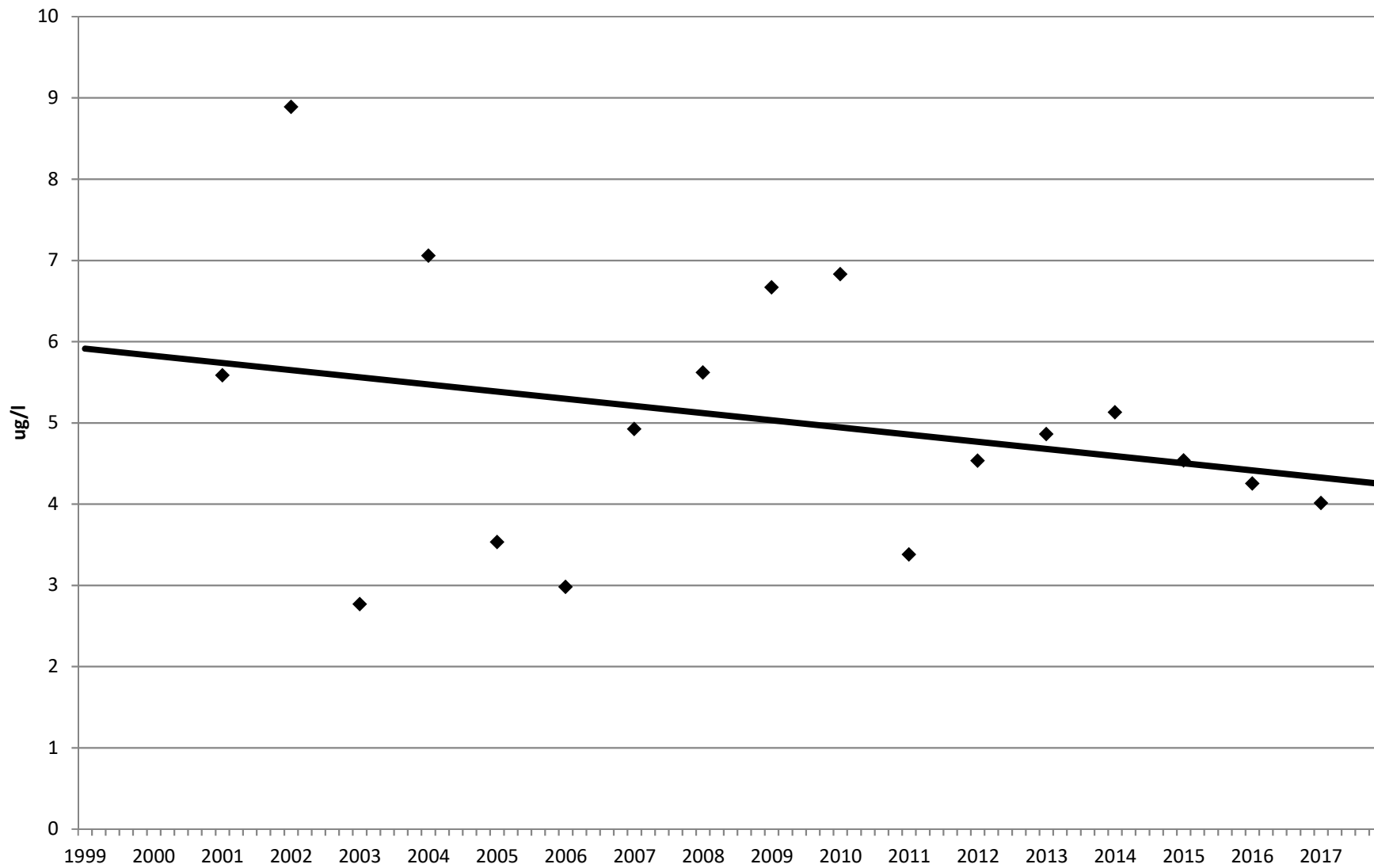


Figure 5-4
Chlorophyll-A
Lake Worth Lagoon-N

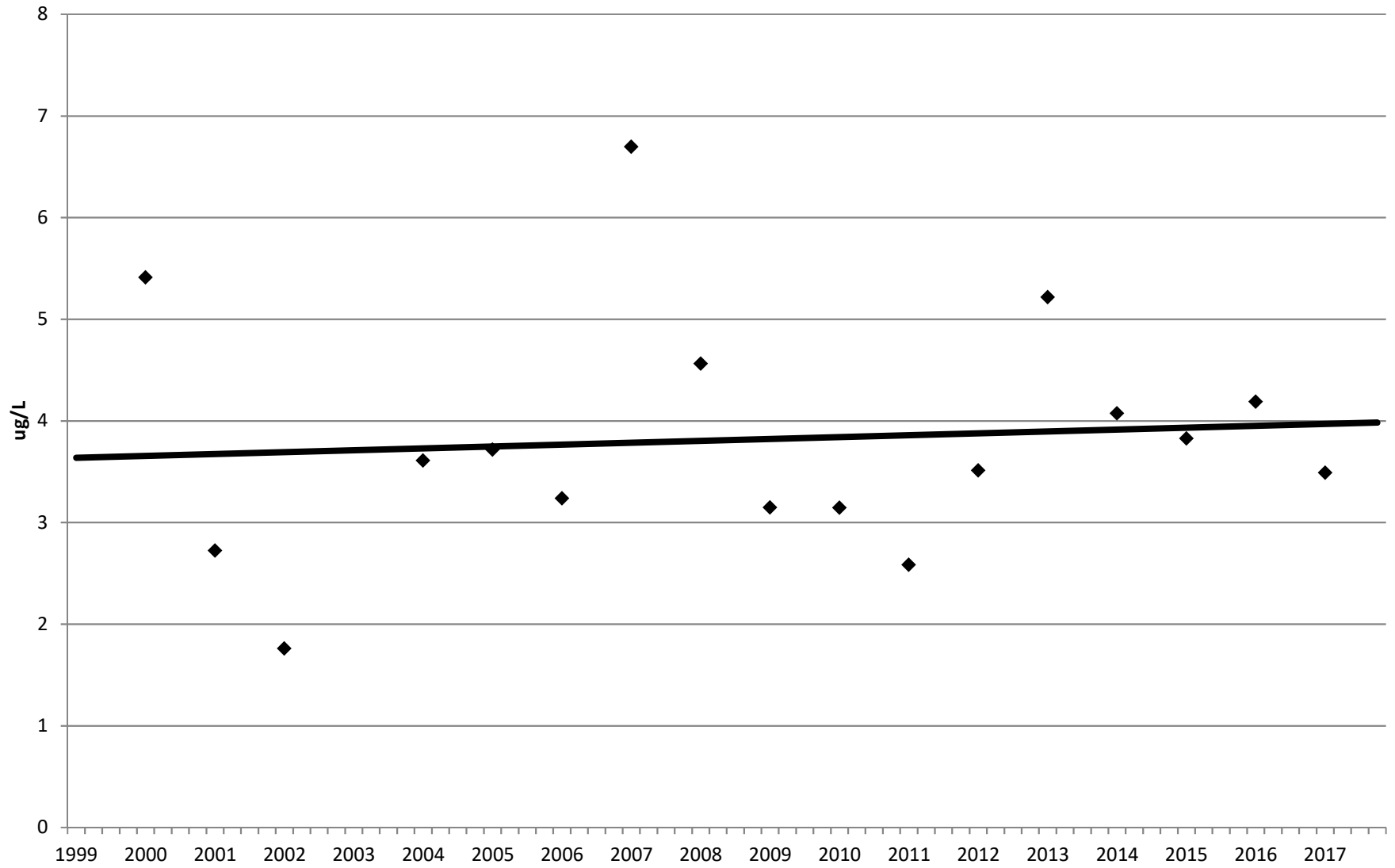


Figure 5-4
Chlorophyll-A
Lake Worth Lagoon-C

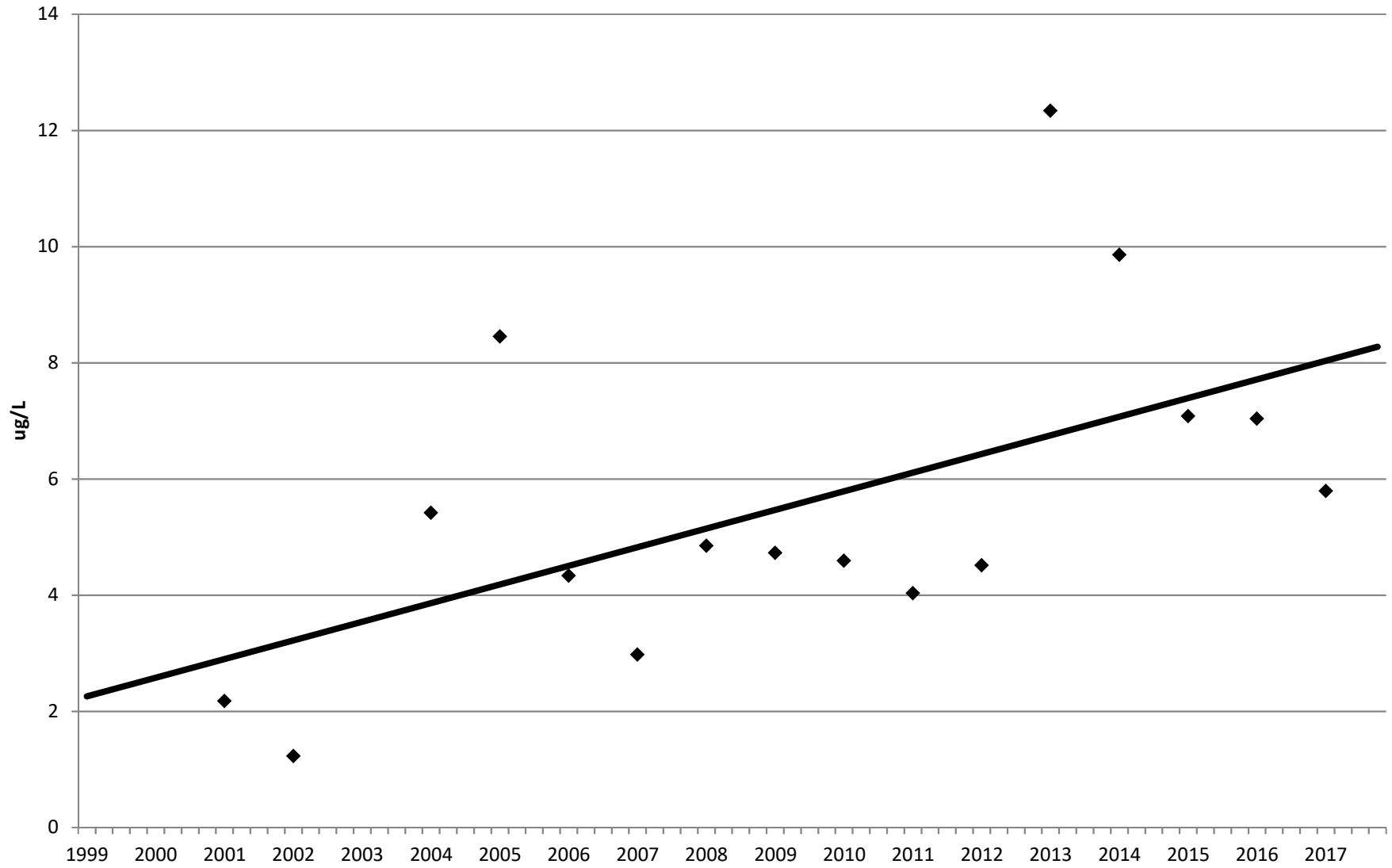


Figure 5-4
Chlorophyll-A
Lake Worth Lagoon-S

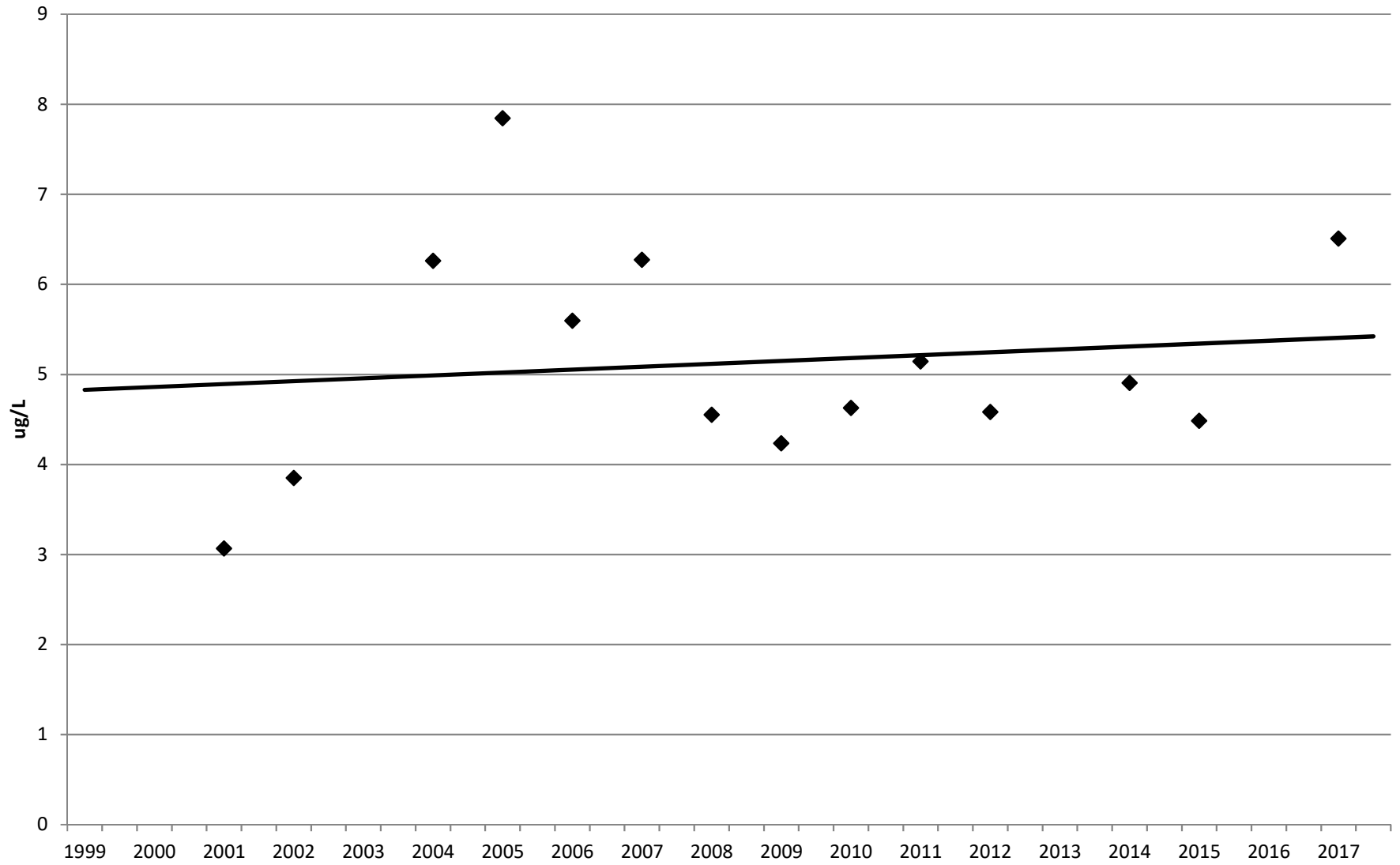


Figure 5-4
Chlorophyll-A
Hillsboro

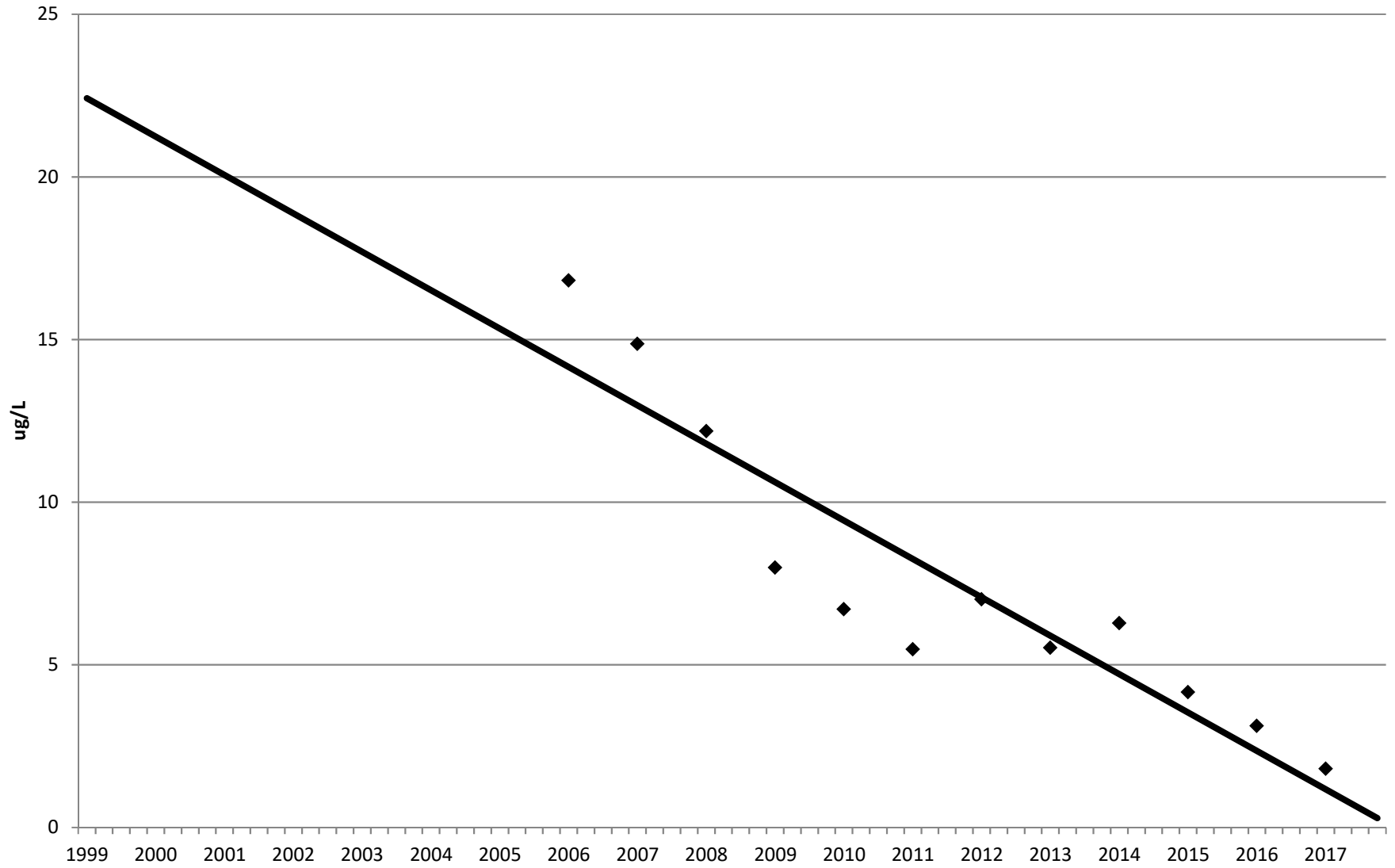


Figure 5-4
Chlorophyll-A
L-8

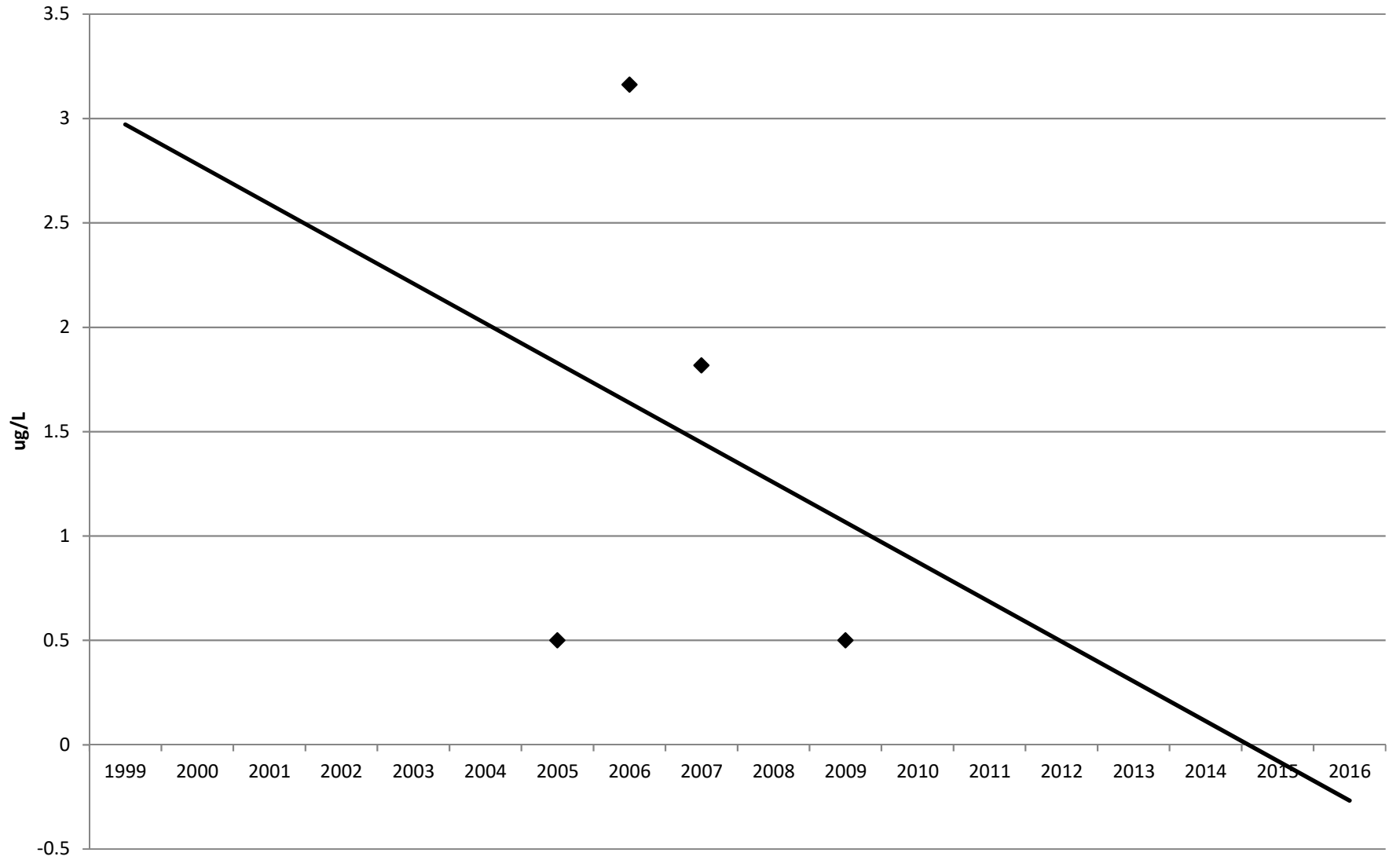


Figure 5-4
Chlorophyll-A
S-2-6-7

