



Annual Report Form For Individual NPDES Permits For Municipal Separate Storm Sewer Systems (RULE 62-624.600(2), F.A.C.)

- This Annual Report Form must be completed and submitted to the Department to satisfy the annual reporting requirements established in Rule 62-621.600, F.A.C.
- Submit this fully completed and signed form and any REQUIRED attachments by email to the NPDES Stormwater Program Administrator or to the MS4 coordinator (<http://www.dep.state.fl.us/water/stormwater/npdes/contacts.htm>). Files larger than 10MB may be placed on the FTP site at: ftp://ftp.dep.state.fl.us/pub/NPDES_Stormwater/. After uploading files, email the MS4 coordinator or NPDES Program Administrator to notify them the report is ready for downloading; or by mail to the address in the box at right.
- Refer to the Form Instructions for guidance on completing each section.
- **Please print or type information in the appropriate areas below.**

Submit the form and attachments to:
 Florida Department of Environmental Protection
 Mail Station 3585
 2600 Blair Stone Road
 Tallahassee, Florida 32399-2400

SECTION I. BACKGROUND INFORMATION

A.	Permittee Name:		
B.	Permit Name: Palm Beach County MS4		
C.	Permit Number: FLS000018-004		
D.	Annual Report Year: <input type="checkbox"/> Year 1 <input type="checkbox"/> Year 2 <input type="checkbox"/> Year 3 <input checked="" type="checkbox"/> Year 4 <input type="checkbox"/> Year 5 <input type="checkbox"/> Other, specify Year:		
E.	Reporting Time Period (month/year): 10 /1/ 2019 through 09 /30/ 2020		
F.	Name of the Responsible Authority: Poonam Kalkat		
	Title: Director of Public Utilities		
	Mailing Address: P.O Box 3368		
	City: West Palm Beach	Zip Code: 33402	County: Palm Beach
	Telephone Number: 561-822-2200		Fax Number: 561-822-2193
E-mail Address: pkalkat@wpb.org			
G.	Name of the Designated Stormwater Management Program Contact (if different from Section I.F above): Stephon Harris		
	Title: Utilities Operations & Maintenance Superintendent		
	Department: Public Utilities		
	Mailing Address: P.O Box 3368		
	City: WPB	Zip Code: 33402	County: Palm Beach
	Telephone Number: 561.822.2168		Fax Number: 561-822-2193
E-mail Address: harrisS@wpb.org			

SECTION II. MS4 MAJOR OUTFALL INVENTORY (Not Applicable in Year 1)

A.	Number of outfalls ADDED to the outfall inventory in the current reporting year (insert "0" if none): 0 (Does this number include non-major outfalls? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable)
B.	Number of outfalls REMOVED from the outfall inventory in the current reporting year (insert "0" if none): 0 (Does this number include non-major outfalls? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable)
C.	Is the change in the total number of outfalls due to lands annexed or vacated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable

SECTION III. PART V.B. ASSESSMENT PROGRAM

A.	<p>Provide a brief statement as to the status of water quality monitoring plan implementation. Status may include sampling frequency changes, monitoring location changes, or sampling waiver conditions. <i>DEP Note: If permittee participates in a collaborative monitoring plan, permittee may refer to a joint response as defined by the interlocal agreement.</i></p> <p>Name and date of the approved plan: 5/15/2018 Status: The monitoring program is carried out jointly by PBC co -permittees. See the PBC Joint annual Report. The information relevant to the permittees MS4 is addressed with in the Annual assessment Report document provided here within</p>
B.	<p>Provide a brief discussion of the monitoring and loading results to date which includes a summary of the water quality monitoring data and / or stormwater pollutant loading changes from the reporting year. <i>DEP Note: Results must be specific to the permittee's SWMP.</i></p> <p>See provided MS4 assessment program dated March 25, 2020 which was included with City's year 3 ARF data</p>
C.	<p>Attach a monitoring data summary as required by the permit. An analysis of the data discussing changes in water quality and/or stormwater pollutant loading from previous reporting years. <i>DEP Note: Analysis must be specific to the permittee's SWMP.</i></p> <p>Same as B</p>

SECTION IV. FISCAL ANALYSIS

A.	Total expenditures for the NPDES stormwater management program for the current reporting year: \$12,219,262
B.	Total budget for the NPDES stormwater management program for the subsequent reporting year: \$15,430,000
C.	<p>Did the current reporting year resources decrease from the previous year? Y <input type="checkbox"/> / N <input checked="" type="checkbox"/></p> <p>If program resources decreased, provide a discussion of the impacts on the implementation of the SWMP.</p> <p>NA</p>

SECTION V. MATERIALS TO BE SUBMITTED WITH THIS ANNUAL REPORT FORM

Only the following materials are to be submitted to the Department along with this fully completed and signed Annual Report Form (check the appropriate box to indicate whether the item is attached or is not applicable):

Attached	N/A	Required Attachments	Permit Citation	Attachment Number/Title
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Any additional information required to be submitted in this current annual reporting year in accordance with Part III.A of your permit that is not otherwise included in Section VII below.	Part III.A	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	An explanation of why the minimum inspection frequency in Table II.A.1.a. was not met, if applicable.	Part II.A.1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	A list of the flood control projects that did not include stormwater treatment and an explanation for each of why it did not (if applicable).	Part III.A.4	
<input type="checkbox"/>	<input type="checkbox"/>	A monitoring data summary as directed in Section III.C above and in accordance with Rule 62-624.600(2)(c), F.A.C.	Part V.B.3	See provided MS4 assessment program dated March 25, 2020 which was included with City's year 3 ARF
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 1 ONLY: An inventory of all known major outfalls and a map depicting the location of the major outfalls (hard copy or CD-ROM) in accordance with Rule 62-624.600(2)(a), F.A.C.	Part III.A.1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 2: A summary review of codes and regulations to reduce the stormwater impact from development.	Part III.A.2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Year 3 ONLY: The estimates of pollutant loadings and event mean concentrations for each major outfall or each major watershed in accordance with Rule 62-624.600(2)(b), F.A.C.	Part V.A	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 3: Summary of TMDL Monitoring Results (if applicable).	Part VIII.B.2	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 3: Bacteria Pollution Control Plan (if applicable).	Part VIII.B.3	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: A follow-up report on plan implementation of changes to codes and regulations to reduce the stormwater impact from development.	Part III.A.2	Exhibit III A.2
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: A report on any amendments to the applicable legal authority (if applicable).	Part III.A.7.a	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	YEAR 4: Permit re-application information in accordance with Rule 62-624.420(2), F.A.C. <ul style="list-style-type: none"> The monitoring plan (with revisions, if applicable). If the total annual pollutant loadings have not decreased over the past two permit cycles, revisions to the SWMP, as appropriate. 	Part V.B.3 Part V.A.3	Refer to year 4 joint annual report
<input type="checkbox"/>	<input checked="" type="checkbox"/>	YEAR 4: TMDL Supplemental SWMP (if applicable).	Part VIII.B.3	

DO NOT SUBMIT ANY OTHER MATERIALS
(such as records and logs of activities, monitoring raw data, public outreach materials, etc.)

SECTION VI. CERTIFICATION STATEMENT AND SIGNATURE

The Responsible Authority listed in Section I.F above must sign the following certification statement, as per Rule 62-620.305, F.A.C.:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name of Responsible Authority (type or print): Poonam Kalkat

Title: Director of Public Utilities

Signature:  Date: 1 / 28 / 21

SECTION VII. STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE

A.	B.	C.	D.	E.	F.				
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments				
Part III.A.1	Structural Controls and Stormwater Collection Systems Operation								
	<p>Report the current known inventory.</p> <p>Report the number of inspection and maintenance activities conducted for each applicable type of structure included in Table II.A.1.a, and the percentage of the total inventory of each type of structure inspected and maintained.</p> <p><i>Note: Delete structures that are not in your MS4's inventory. The permittee may choose its own unit of measurement for each structural control to be consistent with the unit of measurement in the documentation. Unit options include miles, linear feet, acres, etc.</i></p>								
	Type of Structure	Number of Structures	Number of Inspections	Percent Inspected	Number of Maintenance Activities	Percent Maintained			
	Dry retention systems	3	3	100	1	100	Hiperweb	Stormwater	
	Exfiltration trench / French drains (lf)	7325	1	100	1	100	Hiperweb	Stormwater	
	Grass treatment swales (miles)	1	1	100	1	100	Hiperweb	Stormwater	
	Dry detention systems	3	3	100	3	100	Hiperweb	Stormwater	
	Wet detention systems	4	4	100	4	100	Hiperweb	Stormwater	
	Alum Injection systems	1	144	100	24	100	Hiperweb	WTP	
	Pollution control boxes	13	13	100	13	100	Hiperweb	Stormwater	
	pump stations	7	148	100	43	100	Hiperweb	WTP	
	Major outfalls	47	47	100	47	100	Hiperweb	Stormwater	
	Weirs or other control structures	3	3	100	3	100	Inspection sheets	Stormwater	
	pipes / culverts (miles)	160	40	30	40	26	Hiperweb	Stormwater	
	Canals	7	7	100	7	100	Hiperweb	Stormwater	
	Inlets / catch basins / grates	5681	5681	100	26	100	Hiperweb	Stormwater	
	Ditches / conveyance swales (miles)	5	5	100	5	100	Hiperweb	Stormwater	
	<p>If the minimum inspection frequencies set forth in Table II.A.1.a. were not met, provide as an attachment an explanation of why they were not and a description of the actions that will be taken to ensure that they will be met.</p>	<input type="checkbox"/>							

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Part III.A.1 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.					
	Strengths: inspection program help to identify where maintenance is needed					
	Limitations: none					
	SWMP revisions implemented to address limitations: none					
Part III.A.2	Areas of New Development and Significant Redevelopment					
	Report the number of significant development projects, including new and redevelopment, reviewed and approved by the permittee for post-development stormwater considerations.					
	Number of significant development projects reviewed		30	PPRC meetings	Engineering services	
	Number of significant development projects approved		30	PPRC meetings	Engineering services	
	Provide in the Year 2 Annual Report the summary report of the review activity. Provide in the Year 4 Annual Report the follow-up report on plan implementation.					
	Year 4 ONLY: Attach the follow-up report on plan implementation		<input checked="" type="checkbox"/>	City ordinance 4756-17	Development services	See Exhibit III.A.2
Part III.A.2 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.					
	Strengths: the review of land development regulation ensures they are as relevant as possible					
	Limitations: none					
	SWMP revisions implemented to address limitations: none					
Part III.A.3	Roadways					
	Report on the litter control program, including the frequency of litter collection, an estimate of the total number of road miles cleaned or amount of area covered by the activities, and an estimate of the quantity of litter collected.					
	<i>Note: If the permittee does not contract activities, delete CONTRACTOR activities.</i>					
	PERMITTEE Litter Control: Frequency of litter collection		Daily	Daily work sheets	Park maintenance	
	PERMITTEE Litter Control: Estimated amount of area maintained (lf)		600	Daily work sheets	Park maintenance	
	PERMITTEE Litter Control: Estimated amount of litter collected (cy)		900	Daily work sheets	Park maintenance	Parks were closed /limited use due to Covid April -July
	OPTIONAL: If an Adopt-A-Road or similar program is implemented, report the total number of road miles cleaned and an estimate of the quantity of litter collected. If you do not participate in an Adopt-A-Road program, report "0".					
	Trash Pick-up Events: Total miles cleaned		1	Special events	Public works/ sanitation	
	Trash Pick-up Events: Estimated amount of litter collected (cy)		90	Debris special projects	Public works/ sanitation	
	Adopt-A-Road: Total miles cleaned		0			

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	Adopt-A-Road: Estimated amount of litter collected (cy)	0			
	Report on the street sweeping program, including the frequency of the sweeping, total miles swept, an estimate of the quantity of sweepings collected, and the total nitrogen and total phosphorus loadings that were removed by the collection of sweepings. If no street sweeping program is implemented, provide the explanation of why not in column F.				
	Frequency of street sweeping	Weekly	MS4 Load reduction tool	Public Works Sweeper division	
	Total miles swept	33,776	MS4 Load reduction tool	Public Works Sweeper division	
	Estimated quantity of sweeping material collected (pounds)	3,423,920	MS4 Load reduction tool	Public Works Sweeper division	
	Total phosphorous loadings removed (pounds)	1,236	MS4 Load reduction tool	Public Works Sweeper division	
	Total nitrogen loadings removed (pounds)	1,928	MS4 Load reduction tool	Public Works Sweeper division	
	Report the equipment yards and maintenances shops that support road maintenance activities, and the number of inspections conducted for each facility.				
	Name of Facility	Number of Inspections			
	Fleet Maintenance Complex – 1045 Charlotte Ave WPB	26	Hiperweb	Storm water	
	Fleet Maintenance Complex – 1045 Charlotte Ave WPB	12 per year	F drive	Eco Advisors	

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
Part III.A.3 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: street sweeping program removes significant amounts of pollutant loading				
	Limitations: none noted				
	SWMP revisions implemented to address limitations: none				
Part III.A.4	Flood Control Projects				
	Report the total number of flood control projects that were constructed by the permittee during the reporting period and the number of those projects that did NOT include stormwater treatment. The permittee shall provide a list of the projects where stormwater treatment was not included with an explanation for each of why it was not.				
	Report on any stormwater retrofit planning activities and the associated implementation of retrofitting projects to reduce stormwater pollutant loads from existing drainage systems that do not have treatment BMPs.				
	Flood control projects completed during the reporting period	1	Daily reports	PU engineering	Downtown alley initiative
	Flood control projects completed that did <u>not</u> include stormwater treatment	1	Construction plans	PU engineering	In sufficient R/W for W/Q improvement
	Stormwater retrofit projects planned/under construction	3	Construction plans	Engineering services	Planned: Currie park Under construction: 1) Banyan blvd. 2) Clematis st.
	Stormwater retrofit projects completed	1	Daily reports	Engineering services	Clematis street
	If there were projects that did not include stormwater treatment, provide as an attachment a list of the projects and an explanation for each of why it did not.	<input type="checkbox"/>	Construction plans	Engineering services	See comments above
Part III.A.4 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: compliance with SFWMD permits and City's MS4 permit program which normally requires water quality improvements				
	Limitations: none				
	SWMP revisions implemented to address limitations: none				

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Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
Part III.A.5	Municipal Waste Treatment, Storage, and Disposal Facilities Not Covered by an NPDES Stormwater Permit				
	Report the applicable facilities and the number of the inspections conducted for each facility.				
	Name of Facility	Number of Inspections			
	City of West palm Beach Complex fleet management area	12	Hiperweb	Stormwater	
	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
Part III.A.5 Summary	Strengths: fleet maintainance facility help control an potential pollution				
	Limitations: none				
	SWMP revisions implemented to address limitations: none				
Part III.A.6	Pesticides, Herbicides, and Fertilizer Application				
	Report the number of permittee personnel applicators and contracted commercial applicators of pesticides and herbicides who are FDACS certified / licensed.				
	Report the number of permittee personnel who have been trained through the Green Industry BMP Program and the number of contracted commercial applicators of fertilizer who are FDACS certified / licensed.				
	PERSONNEL: FDACS public applicators of pesticides/herbicides	17	State certification, Fla dept of Agriculture & Consumer Services	Parks Maintenance (6) Water shed (11)	
	CONTRACTORS: FDACS commercial applicators of pesticides/ herbicides	2	State certification, Fla dept of Agriculture & Consumer Services	Parks Maintenance (2)	
	PERSONNEL: Green Industry BMP Program training completed	4	State certification, Fla dept of Agriculture & Consumer Services	Parks Maintenance (4)	City does not hire contractors for fertilizer applications
	CONTRACTORS: FDACS certified / licensed applicators of fertilizer	5	State certification, Fla dept of Agriculture & Consumer Services	Parks Maintenance (5)	

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	Provide a copy of the adopted ordinance with the Year 2 Annual Report. If this provision is not applicable because the permittee is not within the watershed of a nutrient-impaired water body, indicate that in Column F.				
	Year 2 ONLY: Attach copy of adopted Florida-friendly ordinance	<input type="checkbox"/>			
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage citizens to reduce their use of pesticides, herbicides and fertilizers including the type and number of activities conducted, the type and number of materials distributed, and the number of Web site visits (if applicable).				
	Public Education and Outreach Program	The public outreach and education plan is carried out as a joint effort by the Palm Beach County Co-permittees. Please see the Palm Beach County Joint Annual Report for the public education and outreach information.			
	Brochures/Flyers/Fact sheets distributed Neighborhood presentations: Number conducted				
		345 incidents	Fines	Public works /environmental compliance/code enforcement/police	Operations Clean Streets
Part III.A.6 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: staff trained and certified applicators from FDACs, also private contractors are certified FDACs				
	Limitations: none				
	SWMP revisions implemented to address limitations: none				
Part III.A.7.a	Illicit Discharges and Improper Disposal — Inspections, Ordinances, and Enforcement Measures				
	Report amendments in Year 4.				
	Year 4 ONLY: Attach a report on amendments to applicable legal authority	0	Ordinance #3132-98	Public works	Most Current ordinance
Part III.A.7.c	Illicit Discharges and Improper Disposal — Investigation of Suspected Illicit Discharges and/or Improper Disposal				
	Report on the proactive inspection program, including the number of inspections conducted by the permittee, the number of illicit activities found, and the number and type of enforcement actions taken.				
	Proactive inspections for suspected illicit discharges	837	Inspection forms/ Community Plus	Code/ Stormwater Drainage	
	Illicit discharges found during a proactive inspection	837	Inspection forms/ Community Plus	Code/ Stormwater Drainage	
	NOV/WL/citation/fines issued for illicit discharges found during proactive inspection	837	Inspection forms/	Code/ Stormwater Drainage	

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			Community Plus		
	Report on the reactive investigation program as it relates to responding to reports of suspected illicit discharges, including the number of reports received, the number of investigations conducted, the number of illicit activities found, and the number and type of enforcement actions taken.				
	Reports of suspected illicit discharges received	268	Inspection forms/ Community Plus	Code/ Stormwater Drainage	
	Reactive investigations of reports of suspected illicit discharges etc.	268	Inspection forms/ Community Plus	Code/ Stormwater Drainage	
	Illicit discharges etc. found during reactive investigation	268	Inspection forms/ Community Plus	Code/ Stormwater Drainage	
	NOV/WL/citation/fines issued for illicit discharges etc. found during reactive investigation	268	Inspection forms/ Community Plus	Code/ Stormwater Drainage	
	Report the type of training activities, and the number of permittee personnel and contractors trained (both in-house and outside training) within the reporting year.				
	Personnel trained	8	Sign in sheets	Code enforcement	
	Contractors trained	0	Sign in sheet	Code enforcement	
Part III.A.7.d	Illicit Discharges and Improper Disposal — Spill Prevention and Response				
	Report on the spill prevention and response activities, including the number of spills addressed.				
	Hazardous and non-hazardous material spills responded to	142	ESO FIRE NFIRS	WPBFR	
	Report the type of training activities, and the number of permittee personnel and contractors trained (both in-house and outside training) within the reporting year.				
	Personnel trained	219	Target Solutions	WPBFR	
	Contractors trained	0	Target solutions	WPBFR	Hazmat approved contractors to clean-up spills
Part III.A.7.e	Illicit Discharges and Improper Disposal — Public Reporting				
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage the public reporting of suspected illicit discharges and improper disposal of materials, including the type and number of activities conducted, the type and number of				

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	materials distributed, and the number of Web site visits (if applicable).				
Part III.A.7.f	Illicit Discharges and Improper Disposal — Oils, Toxics, and Household Hazardous Waste Control				
	Report on the public education and outreach activities that are performed or sponsored by the permittee within the permittee's jurisdiction to encourage the proper use and disposal of oils, toxics, and household hazardous waste, including the type and number of activities conducted, the type and number of materials distributed, the amount of waste collected / recycled / properly disposed, and the number of Web site visits (if applicable).				
	Public Education and Outreach Program	The public outreach and education plan is carried out as a joint effort by the Palm Beach County Co-permittees. Please see the Palm Beach County Joint Annual Report for the public education and outreach information.			
Part III.A.7.g	Illicit Discharges and Improper Disposal — Limitation of Sanitary Sewer Seepage				
	Report on the type and number of activities undertaken to reduce or eliminate SSOs and inflow/ infiltration, the number of SSOs or inflow / infiltration incidents found and the number resolved, and the name of the owner of the sanitary sewer system within the permittee's jurisdiction. Report only the SSOs and inflow / infiltration incidents into the MS4.				
	Owner of the sanitary sewer system	City of West palm Beach			
	Activity to reduce/eliminate SSOs and I&I: (feet)	2,582	PO/CIP's	Utility services	contracted
	Activity to reduce/eliminate SSOs and I&I: (septic)	0	PO/CIP's	Utility services	contracted
	SSO incidents discovered	1	SSO logbook	Utility services	Sanitary collections
	SSO incidents resolved	1	SSO logbook	Utility services	Sanitary collections
	Inflow / infiltration incidents discovered	0	Hiperweb	Utility services	
	Inflow / infiltration incidents resolved	0	Hiperweb	Utility services	
Part III.A.7 Summary	For activities required by Part III.A.7: Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.				
	Strengths: in house training for municipal staff is beneficial to reducing SSOs and illicit discharges				
	Limitations: none				
	SWMP Revisions implemented to address limitations: none				
Part III.A.8.a	Industrial and High-Risk Runoff — Identification of Priorities and Procedures for Inspections				
	Report on the high-risk facilities inventory, including the type and total number of high risk facilities and the number of facilities newly added each year.				
	Report on the high-risk facilities inspection program, including the number of inspections conducted and the number and type of enforcement actions taken.				
	Type of Facility	Number of Facilities	Number of Inspections	Enforcement Actions	

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	Operating municipal landfills	0	0	0	https://florida.dep.gov/waste/permitting-compliance-assistance/content/solid-waste-section	Environmental compliance	Inspections for these facilities will occur in year 5
	Hazardous waste treatment, storage, disposal and recovery (HWTSDR) facilities	0	0	0	https://enviro.epa.gov/	Environmental compliance	Inspections for these facilities will occur in year 5
	EPCRA Title III, Section 313 facilities (TRI)	76	0	0	https://enviro.epa.gov/	Environmental compliance	Inspections for these facilities will occur in year 5
	Facilities determined as high risk by the permittee	0	0	0	Inspection forms	Environmental compliance	
Part III.A.8.b	Industrial and High-Risk Runoff — Monitoring for High Risk Industries						
	Report the number of high risk facilities sampled.						
	High risk facilities sampled	0		Inspection report	Environmental compliance		
Part III.A.8 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.						
	Strengths: none						
	Limitations: none						
	SWMP revisions implemented to address limitations: none						
Part III.A.9.a	Construction Site Runoff — Site Planning and Non-Structural and Structural Best Management Practices						
	Report the number of permittee and private pre-construction site plans reviewed for stormwater, erosion, and sedimentation controls, and the number approved.						
	PERMITTEE SITES: Construction site plans reviewed	2	Engineering permit application	Plan reviewers - ESD			
	PERMITTEE SITES: Construction site plans approved	2	Stamped plans	Plan reviewers - ESD			
	PRIVATE SITES: Construction site plans reviewed	13	Engineering permit application	Plan reviewers - ESD			
	PRIVATE SITES: Construction site plans approved	13	Stamped plans	Plan reviewers -			

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A.	B.	C.	D.	E.	F.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity	Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
	<p>Report the number of development permit applicants notified of the ERP and CGP, and the number of applicants who confirmed ERP and CGP coverage.</p> <p>Notified of ERP stormwater permit requirements</p> <p>Confirmed ERP coverage</p> <p>Notified of CGP stormwater permit requirements</p> <p>Confirmed CGP coverage</p>	<p>29</p> <p>12</p> <p>29</p> <p>8</p>	<p>Letter</p> <p>SFWMD website or copy of permit</p> <p>Letter</p> <p>FDEP website</p>	<p>ESD</p> <p>Plan reviewers - ESD</p> <p>Sr SW engineer ESD</p> <p>Plan reviewers - ESD</p> <p>Sr SW engineer ESD</p>	
Part III.A.9.b	Construction Site Runoff — Inspection and Enforcement				
	<p>Report on the inspection program for privately-operated and permittee-operated construction sites, including the number of active construction sites during the reporting year, the number of inspections of active construction sites, the percentage of active construction sites inspected, and the number and type of enforcement actions / referrals taken.</p>				
	<p>PERMITTEE SITES: Active construction sites</p>	6	Daily Work Report	Engineering Service dept Construction coord	
	<p>PERMITTEE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs</p>	357	Daily Work Report	Engineering Service dept Construction coord	
	<p>PERMITTEE SITES: Percentage of active construction sites inspected</p>	100	Daily Work Report	Engineering Service dept Construction coord	
	<p>PRIVATE SITES: Active construction sites</p>	13	Daily Work Report	Engineering Service dept Construction coord	
	<p>PRIVATE SITES: Pre-, During, and Post inspections of active construction sites for E&S and waste control BMPs</p>	713	Daily Work Report	Engineering Service dept Construction coord	
	<p>PRIVATE SITES: Percentage of active construction sites inspected</p>	50	Daily Work Report	Engineering Service dept Construction coord	
	<p>Enforcement Action</p>	0	Daily Work Report	Engineering	

SECTION VII. STORMWATER MANAGEMENT PROGRAM (SWMP) SUMMARY TABLE						
A.	B.		C.	D.	E.	F.
Permit Citation/ SWMP Element	Permit Requirement/Quantifiable SWMP Activity		Number of Activities Performed	Documentation / Record	Entity Performing the Activity	Comments
					Service dept Construction coord	
Part III.A.9.c	Construction Site Runoff — Site Operator Training					
	Report the type of training activities, the number of inspectors, site plan reviewers and site operators trained (both in-house and outside training).					
		DEP Certification	Annual Training			
	Permittee construction site inspectors	7	7	Sign in sheet -in house	wpb/in house	
	Permittee construction site plan reviewers		2	Sign in sheet -in house	wpb/in house	
	Permittee construction site operators		0	Sign in sheet -in house	wpb/in house	
Part III.A.9 Summary	Provide an evaluation of the Stormwater Management Program according to Part VI.B.2 of the permit.					
	Strengths: keeps us up- to - date on latest BMPs					
	Limitations: none					
	SWMP revisions implemented to address limitations: none					

SECTION VIII. CHANGES TO THE STORMWATER MANAGEMENT PROGRAM (SWMP) ACTIVITIES (Not Applicable in Year 4)		
A.	Permit Citation/ SWMP Element	Proposed Changes to the Stormwater Management Program Activities Established as Specific Requirements Under Part III.A of the Permit (Including the Rationale for the Change) — REQUIRES DEP APPROVAL PRIOR TO CHANGE IF PROPOSING TO REPLACE OR DELETE AN ACTIVITY.
	N/A	
	N/A	
	N/A	
B.	Permit Citation/ SWMP Element	Changes to the Stormwater Management Program Activities NOT Established as Specific Requirements Under Part III.A of the Permit (Including the Rationale for the Change)
	N/A	
	N/A	
	N/A	

SECTION IX. TMDL Status Report

A.	YEAR 1 Provide a table summarizing the status of the TMDL process. Include a list of prioritized TMDLs and their monitoring and implementation schedule; and include the Identification number of the outfall prioritized for TMDL monitoring.								
	WBID Number	Segment/ Waterbody/ Basin	Pollutant of Concern	TMDL DEP / EPA	Percent Reduction (WLA)	Priority Rank	Priority Outfall	Monitoring Summary / BPCP Due Date	Supplemental SWMP Due Date
	N/A			<input type="checkbox"/> / <input type="checkbox"/>		1		(Year 3 AR)	(Year 4 AR; N/A) if BPCP)
	N/A			<input type="checkbox"/> / <input type="checkbox"/>					
B.	YEAR 3 and annually thereafter, provide a summary of the estimated load reductions that have occurred for the pollutant(s) of concern being discharged from the MS4 to the TMDL water body during the reporting period and cumulatively since the date the Supplemental SWMP was implemented. Year 3: Submit a Monitoring data summary or BPCP (if applicable). Year 4: Submit a Supplemental SWMP (if applicable).								
	WBID Number	Pollutant of Concern	Monitoring Summary / BPCP Submitted	Supplemental SWMP Submitted	Projected load reductions OR Actual load reductions to date				
	N/A		(Year 3 AR)	(Year 4 AR; N/A if BPCP)					
	N/A								
C.	Provide a brief statement as to the status of TMDL implementation according to Part VIII.B of the permit (e.g. status of monitoring to validate WLA):								
	N/A`								



MS4 Assessment Program to Satisfy Part V. – Monitoring Requirements

Submitted by City of West Palm Beach – MS4 Permit No. FLS000018-004

February 18, 2021

Introduction

Part V of the Municipal Separate Storm Sewer System (MS4) permit for Palm Beach County and co-permittees (FLS000018-004) calls for the creation of an assessment program to determine the overall effectiveness of the Stormwater Management Program (SWMP). This Assessment Program shall include the three following components:

- Water Quality Monitoring Plan,
- Pollutant Loading Estimate Plan, and
- Evaluation and Response Plan

The intent of the program is identify where local sources of urban stormwater are adversely affecting surface water resources so that decisions can be made to mitigate these effects accordingly. The City of West Palm Beach has gone to great lengths to protect the potable water supply conveyed via M-Canal from Grassy Waters Preserve (Water Catchment Area) to Lake Mangonia and Clear Lake where the City's water treatment plant is located. These measures include diverting most of the stormwater within the City away from these waterbodies and ultimately to Lake Worth Lagoon via the C-17 and C-51 canals or directly through 48 direct outfalls to the Lake Worth Lagoon. The City has identified four receiving waterbodies to monitor the effects from stormwater contributions from its MS4: Lake Worth Lagoon (divided into two segments, north and central), Grassy Waters Preserve, Lake Mangonia, and Clear Lake (Figure 1).

This report satisfies Part V, Assessment Program (3.) *Reporting of Assessment Results* and includes:

- The status of the Assessment Program
- Summary of results
- Analysis of changes from previous monitoring years

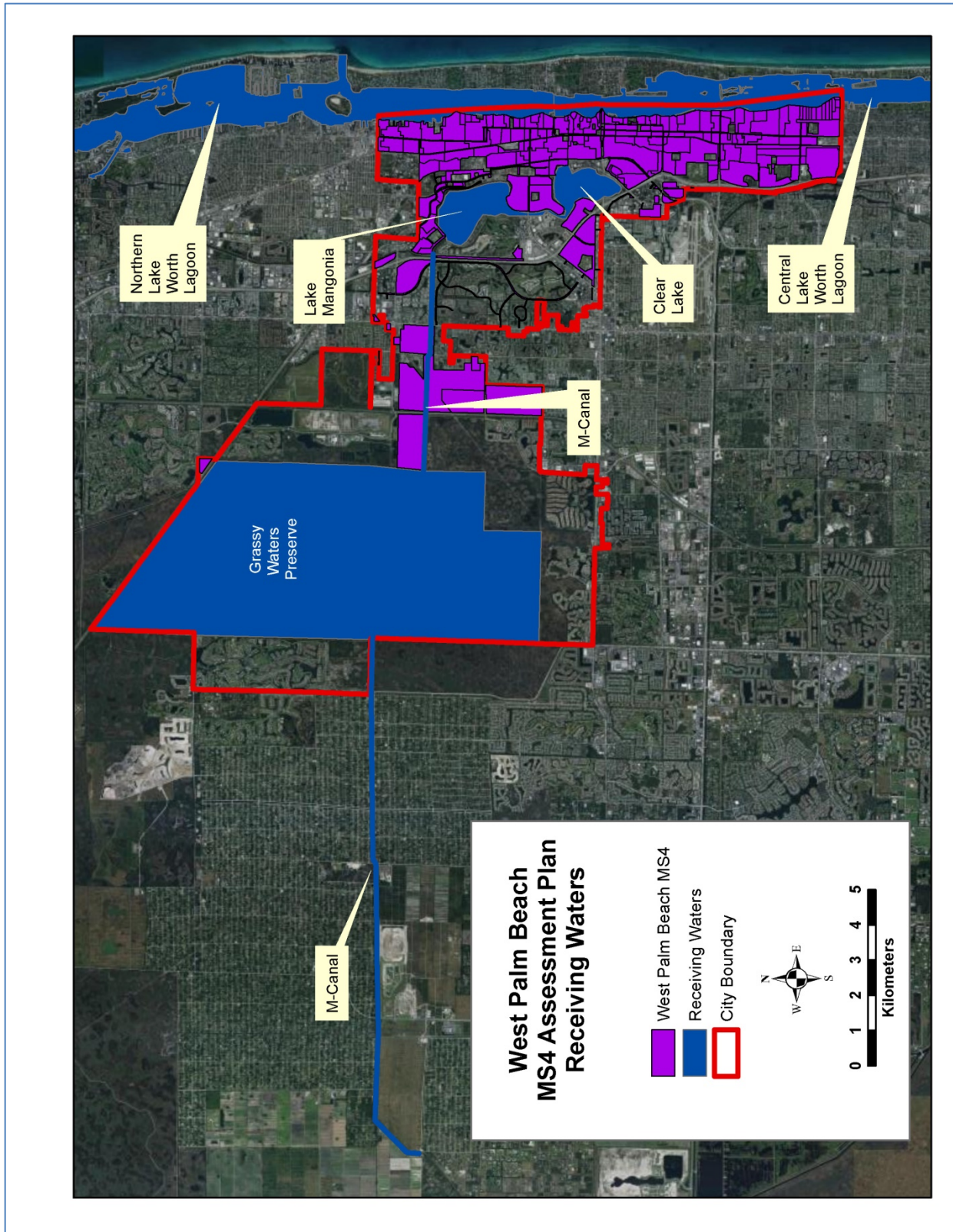


Figure 1. Receiving Waterbodies for City of West Palm Beach.

Status of the Monitoring Program

The City of West Palm Beach’s MS4 Assessment Plan was submitted to the Florida Department of Environmental Protection (DEP) for approval as part of the Year 1 annual report in March of 2018 and was approved in July 25, 2018. This report covers Year 4 of the Cycle 4 MS4 permit representing the period between October 2019 and September 2020. Since the plan was approved in late July 2018, there were only two months to implement the plan. Fortunately, many of the City’s monitoring locations have been sampled since early as 2011 and the Palm Beach County sites in Lake Worth Lagoon cover the same period.

The City of West Palm Beach maintains a database within the City’s Laboratory Information Management System, or LIMS, from which the data was exported for these analyses. The Palm Beach County data for Lake Worth Lagoon were extracted from the DEP Impaired Water Rule (IWR) RUN 60 dataset, DEP Watershed Information Network (WIN) database, and the South Florida Water Management District’s DBHYDRO database. All of the data has undergone thorough inspection and quality assured. Ultimately all of the data will be uploaded and incorporated into the appropriate State Database.

The following sections describe the monitoring programs according to their receiving waterbodies.

Receiving Waters

Lake Worth Lagoon

Lake Worth Lagoon is currently monitored by Palm Beach County Environmental Resources Management (PBCERM) via an Inter-local agreement between the Palm Beach County MS4 Co-Permittees and the Northern Palm Beach County Improvement District. The City, along with other entities discharges stormwater to both the North and Central Estuarine Nutrients Regions of Lake Worth Lagoon. DEP refers to these waterbodies as WBIDs 3226E1 and 3226F1 respectively. Both of these segments were listed as impaired for nutrient parameters and copper during the 2016 assessment cycle. The impairment isn’t likely due to a single discharge location as the Lagoon integrates pollutants from numerous sources.

The monitoring locations for Lake Worth Lagoon are listed in Table 1 and shown in Figure 2.

Waterbody	Station ID	Latitude	Longitude	Agency	Frequency
North Lake Worth Lagoon	LWL-1	26.68690	-80.044161	PBCERM	Monthly
North Lake Worth Lagoon	11	26.8313	-80.0602	PBCERM	Monthly
North Lake Worth Lagoon	13	26.8085	-80.0561	PBCERM	Monthly
North Lake Worth Lagoon	LWL-4	26.8004	-80.0443	PBCERM	Monthly
Central Lake Worth	LWL-8	26.6754	-80.0469	PBCERM	Monthly
Central Lake Worth	18C	26.6407	-80.0400	PBCERM	Monthly
Central Lake Worth	18D	26.6293	-80.0457	PBCERM	Monthly
Central Lake Worth	LWL-11	26.6155	-80.0458	PBCERM	Monthly
Central Lake Worth	LWL-13	26.5839	-80.0443	PBCERM	Monthly



Figure 2. Sampling Locations in the Lake Worth Lagoon

For this analysis, data from PBCERM were extracted from DEP IWR Run 60 and WIN databases and the SFWMD DBHYDRO database. Through another arrangement, data for stations LWL-1, LWL-4, LWL-8, LWL-11, and LWL-13 are reported by the SFWMD under the “21FLSFWM” organization code while stations 18C, 18D 11 and 13 are reported by PBCERM under the “21FLPBCH” organization code. All data were compiled into a single dataset for analysis.

Grassy Water Preserve

Grassy Waters was purchased and protected as the primary potable water supply source for the City of West Palm Beach and other municipalities who receive water from West Palm Beach. Monitoring within Grassy Waters by the City is ongoing to ensure its integrity as one of the last, least impacted parcels of the original Everglades. Recently, developments along the perimeter have been allowed to discharge treated excess stormwater into the preserve. These discharges are monitored as required by the Environmental Resource Permits, 50-03926-P (Baywinds) and 50-02120-S-06 (Ibis).

The City’s monitoring locations are shown in Table 3 and Figure 3.

Table 3. City of West Palm Beach’s Grassy Waters Monitoring Locations					
Waterbody	Station ID	Latitude	Longitude	Agency	Frequency
Grassy Waters	GW1	26.0891	-80.1693	CWPB	Monthly
Grassy Waters	GW3	26.7683	-80.1770	CWPB	Monthly
Grassy Waters	GW5	26.7239	-80.1812	CWPB	Monthly
Grassy Waters	GW7	26.7690	-80.1501	CWPB	Monthly

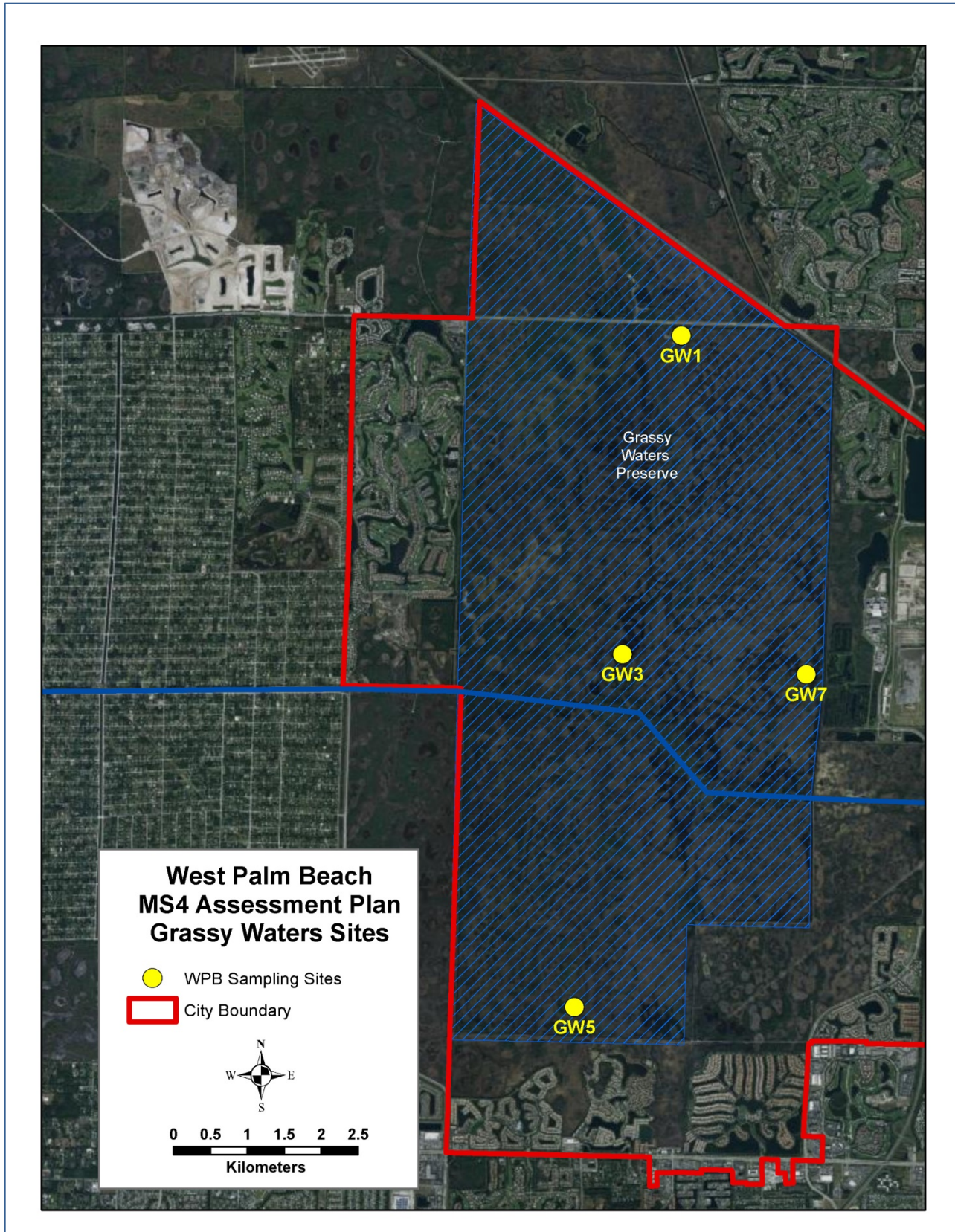


Figure 3. Sampling Locations in Grassy Waters Preserve

Clear Lake and Lake Mangonia

Clear Lake, along with the adjacent Lake Mangonia, are the two storage lakes for the potable water supply with the East Lobe of Clear Lake as the withdrawal point for the City’s water treatment plant. There are no direct stormwater inputs to either of the lakes within the City’s limits but indirect stormwater may be contributed by the L-8 canal (pumped into M-Canal at Control 2), M-Canal, C-17 Canal, Grassy Waters (as previously mentioned) and the Renaissance Stormwater Project. The C-17 Canal receives stormwater from various areas and the City utilizes it to augment the water supply when necessary. The Renaissance Stormwater Project is an alum-injection stormwater treatment facility for a portion of downtown West Palm Beach whose waters could also be used to supplement Clear Lake and is monitored as part of its Environmental Resource Permit, 50-04000-P. Lake Mangonia has been listed as impaired for fecal coliform as part of Cycle 3 of FDEP’s Assessment Program. Monitoring of the source waters along the system will ensure the integrity of the water supply while enduring the waters meet surface water quality standards. These data will be supplemented with the most recent Impaired Waters Rule database to provide data necessary to assess the status and trends with regards to Clear Lake and Lake Mangonia.

Table 5. Monitoring Locations					
Waterbody	Station ID	Latitude	Longitude	Agency	Frequency
L-8 Tieback	Control 2 (Upstream)	26.7554	-80.3457	CWPB	Monthly
M-Canal	M-Canal	26.7660	-80.2254	CWPB	Monthly
M-Canal	Control 4	26.7510	-80.1192	CWPB	Monthly
C-17 Canal	C17_CANAL_A	26.7356	-80.0902	CWPB	Monthly
C-17 Canal	C17_CANAL_B	26.7657	-80.0911	CWPB	Monthly
Lake Mangonia	Lake Mangonia Middle	26.7399	-80.0756	CWPB	Monthly
Clear Lake	Clear Lake Middle	26.7142	-80.0703	CWPB	Monthly

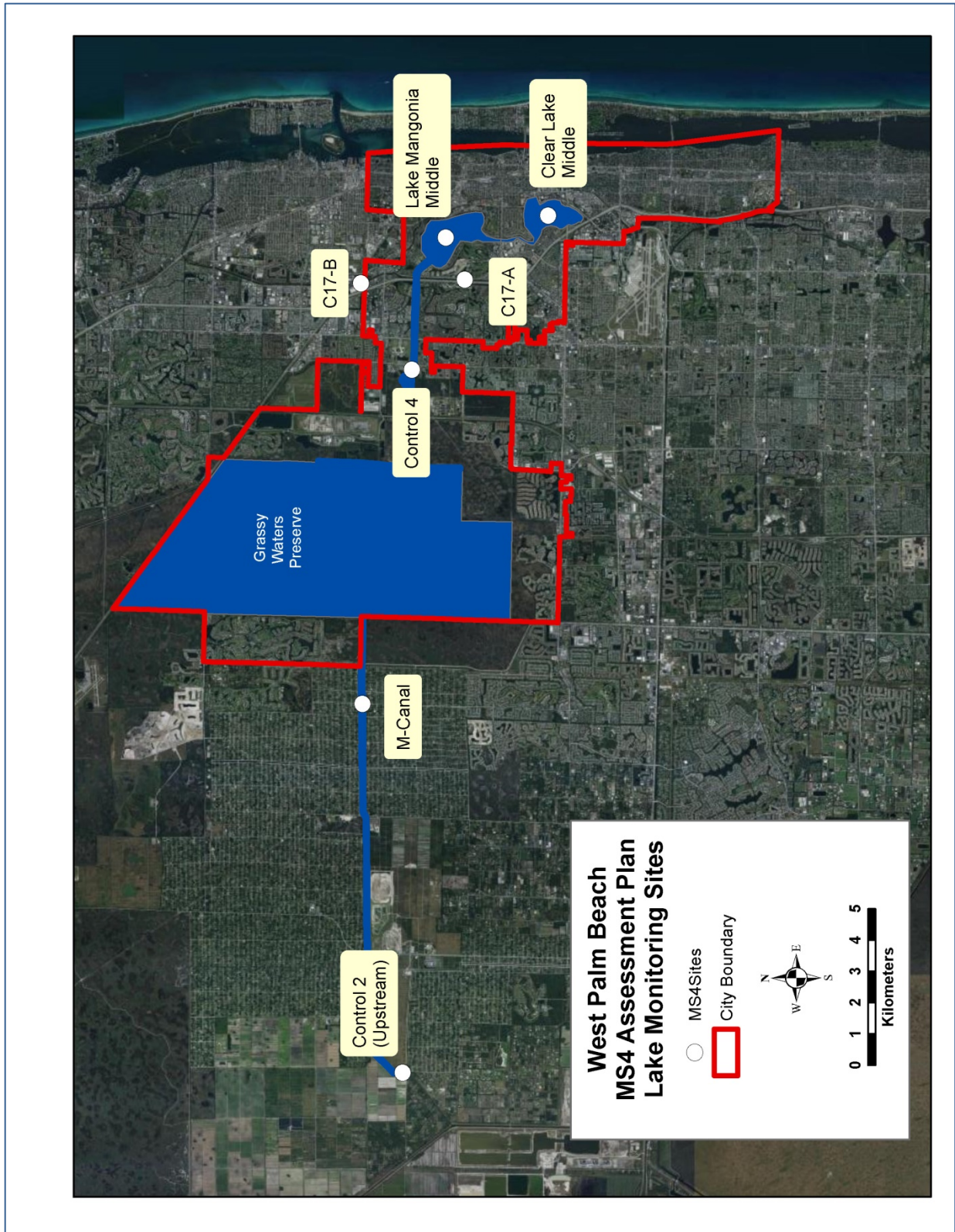


Figure 4. Sampling Locations for Clear Lake and Lake Mangonia

Data Summaries and Time-series Plots

Data summaries and time series plots for each site can be found in Appendix A.

Trend Analysis

The following parameters were selected for this analysis based on the requirements of the permit:

- Biochemical Oxygen Demand (mg/L)
- Total Copper (mg/L)
- Total Nitrogen (as N) (mg/L)
- Total Phosphorus (mg/L)
- Total Suspended Solids (TSS) (mg/L)
- Total Zinc (mg/L)

Trend analyses were performed on monthly mean data using the Season Kendall Tau method for the parameters for which sufficient data were available (Table 6). The entire period of record was included and represents the City specific baseline for which future assessments will be compared. Trends that are identified as “shallow” are defined as statistically significant trends with a rate of change less than 5% of the median value per year, and those identified as “steep” are defined as statistically significant trends with a rate of change greater than or equal to 5% of the median value per year. Thus, “shallow trends” represent water quality conditions that are changing (either increasing or decreasing) at a lesser rate of change than the rate of change for “steep trends.” These are relative terms, and the precise rates of change are presented for each station in the statistical detail appendices. The terms “steep” and “shallow” do not imply either ecological significance or the lack of ecological significance.

Table 6. – Summary table of the Seasonal Kendal-Tau analysis.							
Station	Parameter	Minimum Year	Maximum Year	Median	Count	Trend Direction	Magnitude
21FLPBCH11	Chlorophyll a	2001	2020	3.025	158	No Trend	
	Dissolved Oxygen (%)	1975	2020	90.1	226	Increasing	Small
	Dissolved Oxygen	1975	2020	6.34	229	Increasing	Small
	Total NO3 + NO2	1980	2020	0.028	102	No Trend	
	Total Nitrogen	1975	2020	0.438	207	Decreasing	Small
	Total Phosphorus	1975	2020	0.047	202	No Trend	
	Total TKN	1975	2020	0.43	204	Decreasing	Small
21FLPBCH13	Chlorophyll a	2001	2020	3.88	155	No Trend	
	Dissolved Oxygen (%)	1975	2020	85.55	228	Increasing	Small
	Dissolved Oxygen	1975	2020	6.1	229	Increasing	Small
	Total NO3 + NO2	1980	2020	0.03	105	No Trend	
	Total Nitrogen	1975	2020	0.528	213	Decreasing	Small
	Total Phosphorus	1975	2020	0.049	200	Decreasing	Small
	Total TKN	1975	2020	0.51	207	Decreasing	Small
21FLPBCH18C	Chlorophyll a	2004	2020	5.46	148	No Trend	
	Dissolved Oxygen (%)	2004	2020	96.9	154	No Trend	
	Dissolved Oxygen	2004	2020	6.79	156	No Trend	

Table 6. – Summary table of the Seasonal Kendal-Tau analysis.							
Station	Parameter	Minimum Year	Maximum Year	Median	Count	Trend Direction	Magnitude
21FLPBCH18C	Total NO3 + NO2	2004	2020	0.072	75	Decreasing	Large
	Total Nitrogen	2004	2020	0.78	143	Decreasing	Large
	Total Phosphorus	2004	2020	0.07575	146	No Trend	
	Total TKN	2004	2020	0.6865	144	Decreasing	Small
21FLPBCH18D	Chlorophyll a	2005	2020	5.52	134	No Trend	
	Dissolved Oxygen (%)	2005	2020	104.6	141	No Trend	
	Dissolved Oxygen	2005	2020	7.24	143	No Trend	
	Total NO3 + NO2	2005	2020	0.033	72	No Trend	
	Total Nitrogen	2005	2020	0.545	136	Decreasing	Large
	Total Phosphorus	2005	2020	0.0605	130	Increasing	Small
	Total TKN	2005	2020	0.521	137	Decreasing	Large
21FLSFWMLWL-13	Dissolved Oxygen	2007	2020	6.47	135	No Trend	
	Total NO3 + NO2	2007	2020	0.005	136	No Trend	
	Total Suspended Solids	2007	2020	6	132	No Trend	
21FLSFWMLWL_1	Dissolved Oxygen	2007	2020	6.67	125	No Trend	
	Total NO3 + NO2	2007	2020	0.005	123	No Trend	
	Total Suspended Solids	2007	2020	5	125	No Trend	
21FLSFWMLWL_11	Dissolved Oxygen	2007	2020	6.32	139	No Trend	
	Total NO3 + NO2	2007	2020	0.01	139	No Trend	
	Total Nitrogen	2014	2020	0.48	63	No Trend	
	Total Suspended Solids	2007	2020	8	139	No Trend	
21FLSFWMLWL_4	Chlorophyll a	2007	2015	2	86	No Trend	
	Dissolved Oxygen (%)	2007	2015	105.2	88	No Trend	
	Dissolved Oxygen	2007	2020	7.065	128	No Trend	
	Total NO3 + NO2	2007	2020	0.005	126	No Trend	
	Total Nitrogen	2007	2020	0.2325	129	No Trend	
	Total Phosphorus	2007	2015	0.0185	84	No Trend	
	Total Suspended Solids	2007	2020	6	128	No Trend	
	Total TKN	2007	2014	0.23	80	No Trend	
21FLSFWMLWL_8	Chlorophyll a	2007	2015	4.305	94	Increasing	Large
	Dissolved Oxygen (%)	2007	2015	101.35	94	No Trend	
	Dissolved Oxygen	2007	2020	6.84	141	No Trend	
	Total NO3 + NO2	2007	2020	0.02	141	No Trend	
	Total Nitrogen	2007	2020	0.4195	142	No Trend	
	Total Phosphorus	2007	2015	0.04	93	No Trend	
	Total Suspended Solids	2007	2020	9	141	No Trend	
	Total TKN	2007	2014	0.35	80	No Trend	
C17_CANAL_A	BOD	2011	2020	3.6	94	No Trend	

Table 6. – Summary table of the Seasonal Kendal-Tau analysis.							
Station	Parameter	Minimum Year	Maximum Year	Median	Count	Trend Direction	Magnitude
C17_CANAL_A	Dissolved Oxygen	2011	2020	5.8	109	Increasing	Small
	Total Copper	2011	2020	3.2	82	No Trend	
	Total NO3 + NO2	2011	2020	0.0625	100	Decreasing	Small
	Total Nitrogen	2011	2020	1.1	102	Increasing	Small
	Total Phosphorus	2011	2020	0.066	101	No Trend	
	Total Suspended Solids	2011	2020	5.6	101	Increasing	Large
	Total TKN	2011	2020	0.96	101	Increasing	Small
C17_CANAL_B	BOD	2011	2020	2.8	90	Decreasing	Small
	Dissolved Oxygen	2011	2020	6.01	107	No Trend	
	Total Copper	2011	2020	1.8	82	Decreasing	Large
	Total NO3 + NO2	2011	2020	0.088	99	Decreasing	Large
	Total Nitrogen	2011	2020	1	100	Decreasing	Small
	Total Phosphorus	2011	2020	0.058	100	No Trend	
	Total Suspended Solids	2011	2020	5	99	No Trend	
CONTROL_II	Total TKN	2011	2020	0.92	99	Decreasing	Small
	Chlorophyll a	2012	2020	4.85	70	No Trend	
	Dissolved Oxygen	2011	2020	5.11	113	No Trend	
	Total NO3 + NO2	2011	2020	0.135	76	Decreasing	Large
	Total Nitrogen	2011	2020	1.25	75	No Trend	
	Total Phosphorus	2011	2020	0.0905	76	No Trend	
CONTROL_IV	Total TKN	2011	2020	1.1	76	No Trend	
GW_1	Dissolved Oxygen	2011	2020	5.208333	111	Increasing	Small
	Chlorophyll a	2012	2020	2.3	92	Increasing	Small
	Dissolved Oxygen	2011	2020	3.655	106	No Trend	
	Total NO3 + NO2	2012	2020	0.05	77	No Trend	
	Total Nitrogen	2011	2020	0.93	105	Decreasing	Small
	Total Phosphorus	2011	2020	0.014	102	Increasing	Large
	Total Suspended Solids	2011	2020	2	106	No Trend	
GW_3	Total TKN	2011	2020	0.88	105	Decreasing	Small
	Chlorophyll a	2012	2020	3.9	85	No Trend	
	Dissolved Oxygen	2011	2020	3.7	105	No Trend	
	Total NO3 + NO2	2012	2020	0.05	76	No Trend	
	Total Nitrogen	2011	2020	1.11	105	No Trend	
	Total Phosphorus	2011	2020	0.024	103	Increasing	Large
	Total Suspended Solids	2011	2020	2	103	No Trend	
GW_5	Total TKN	2011	2020	1.03	105	No Trend	
	Chlorophyll a	2012	2020	3	84	No Trend	
	Dissolved Oxygen	2011	2020	3.1	105	Increasing	Large

Table 6. – Summary table of the Seasonal Kendal-Tau analysis.							
Station	Parameter	Minimum Year	Maximum Year	Median	Count	Trend Direction	Magnitude
GW_5	Total NO3 + NO2	2012	2020	0.05	76	No Trend	
	Total Nitrogen	2011	2020	1.04	105	No Trend	
	Total Phosphorus	2011	2020	0.014	102	Increasing	Large
	Total Suspended Solids	2011	2020	2	105	No Trend	
	Total TKN	2011	2020	1	105	No Trend	
GW_7	Chlorophyll a	2012	2020	2.8	85	No Trend	
	Dissolved Oxygen	2011	2020	3.045	104	Increasing	Large
	Total NO3 + NO2	2012	2020	0.05	77	No Trend	
	Total Nitrogen	2011	2020	1.09	103	Increasing	Small
	Total Phosphorus	2011	2020	0.012	102	Increasing	Large
	Total Suspended Solids	2011	2020	2	102	No Trend	
	Total TKN	2011	2020	1.04	103	Increasing	Small
M_CANAL	Chlorophyll a	2012	2020	4.95	70	No Trend	
	Dissolved Oxygen	2011	2020	6.895	80	Increasing	Small
	Total NO3 + NO2	2011	2020	0.15	77	No Trend	
	Total Nitrogen	2011	2020	1.2	77	No Trend	
	Total Phosphorus	2011	2020	0.0925	76	No Trend	
	Total TKN	2011	2020	1.1	77	No Trend	

As shown in the table, the stations in Lake Worth Lagoon exhibited either no trend or improving trends for all parameters except station 21FLPBCH18D with an increasing trend in phosphorus and station 21FLSFWMLWL_8 with an increasing trend in chlorophyll *a*. Increasing trends can also be seen in phosphorus concentrations at all stations in Grassy Water Preserve. Improving trends in dissolved oxygen can be found at most of the sites including: 21FLPBCH11, 21FLPBCH13, C17_CANAL_A, CONTROL_IV, GW_5, GW_7, and M_CANAL.

Detailed output from the trend analysis can be found in Appendix B. These trends will be updated as part of each annual report with the purpose of identifying areas in need of further review. The method used here requires a minimum of 60 samples to determine the trend from so additional parameters will be added as their sample counts increases.

Pollutant Loading Estimate Plan

The City reported their results from the pollutant loading analysis as part of the Year 3 Annual report.

Evaluation and Response Plan

Improving trend in dissolved oxygen concentrations and percent saturations are encouraging and indicative of cleaner waters. The City is working with the SFWMD and the North Palm Beach County Improvement District to address the increasing phosphorus trends in Grassy Waters by reducing the load

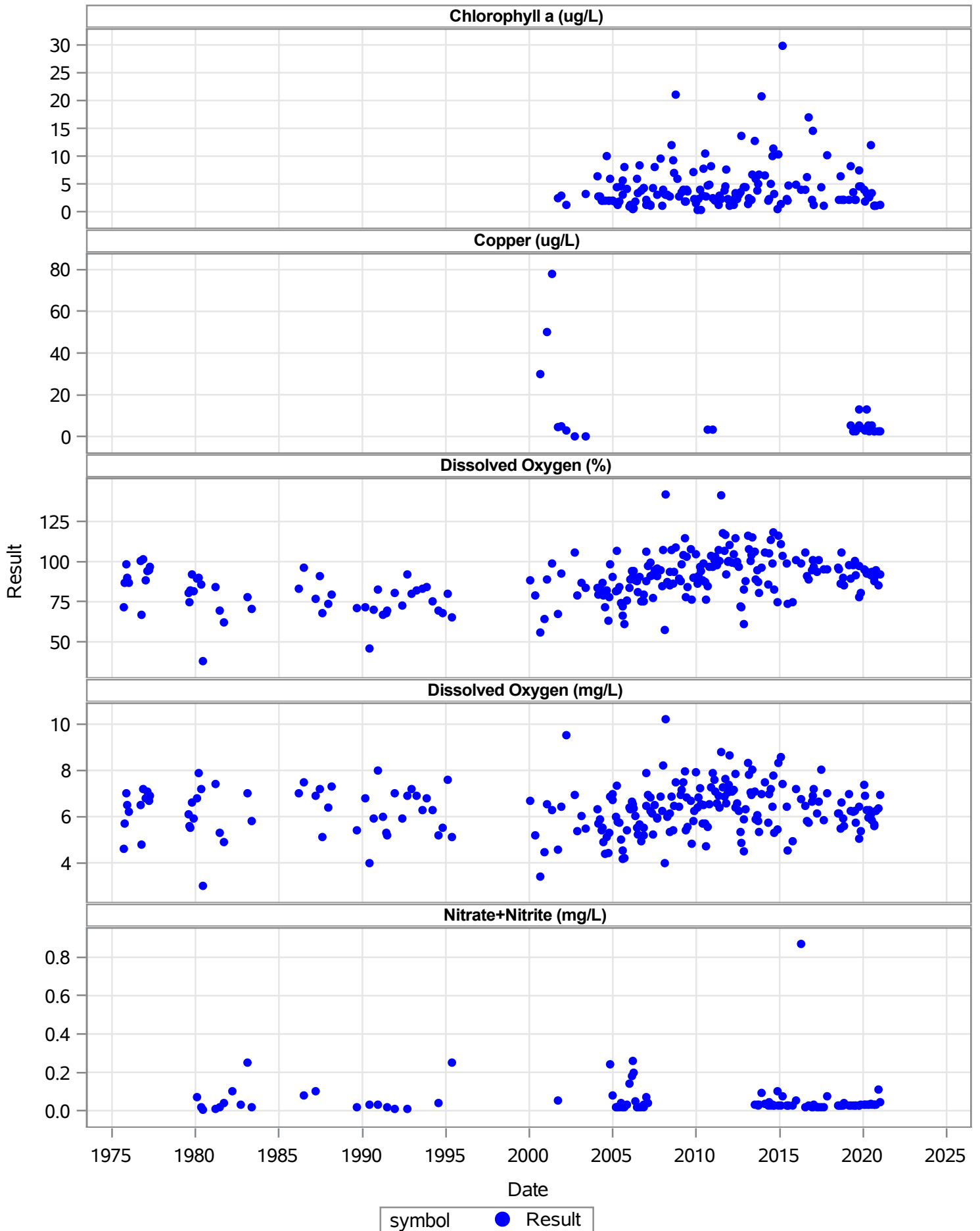
from the IBIS development that discharges through the Ibis Preserve to Grassy Waters. Several of the stations in Lake Worth Lagoon indicate improving trends in nutrients with the remaining parameters remaining flat suggesting the Stormwater Management Plan is working, though there is always room for improvement.

Appendix A

21FLPBCH11

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	15SEP75	29DEC20	0.25	29.9	4.335	3.03	162
Copper (ug/L)	15SEP75	29DEC20	0.039	78	9.27	3.45	28
Dissolved Oxygen (mg/L)	15SEP75	29DEC20	3	10.22	6.309	6.34	235
Dissolved Oxygen (%)	15SEP75	29DEC20	37.9747	141.9	89.273	89.886	232
Nitrate+Nitrite (mg/L)	15SEP75	29DEC20	0.006	0.87	0.054	0.027	103
Total Kjeldahl Nitrogen (mg/L)	15SEP75	29DEC20	0.02	2.72	0.578	0.42	207
Total Nitrogen (mg/L)	15SEP75	29DEC20	0.02	2.72	0.559	0.434	210
Total Phosphorus (mg/L)	15SEP75	29DEC20	0	0.3	0.058	0.047	207
Total Suspended Solids (mg/L)	15SEP75	29DEC20	5.4	66	29.995	28.4	19
Zinc (ug/L)	15SEP75	29DEC20	7.6	1100	72.387	11	23

21FLPBCH11



21FLPBCH11

Total Kjeldahl Nitrogen (mg/L)

2.5
2.0
1.5
1.0
0.5
0.0

Total Nitrogen (mg/L)

2.5
2.0
1.5
1.0
0.5
0.0

Total Phosphorus (mg/L)

0.30
0.25
0.20
0.15
0.10
0.05
0.00

Total Suspended Solids (mg/L)

60
40
20
0

Zinc (ug/L)

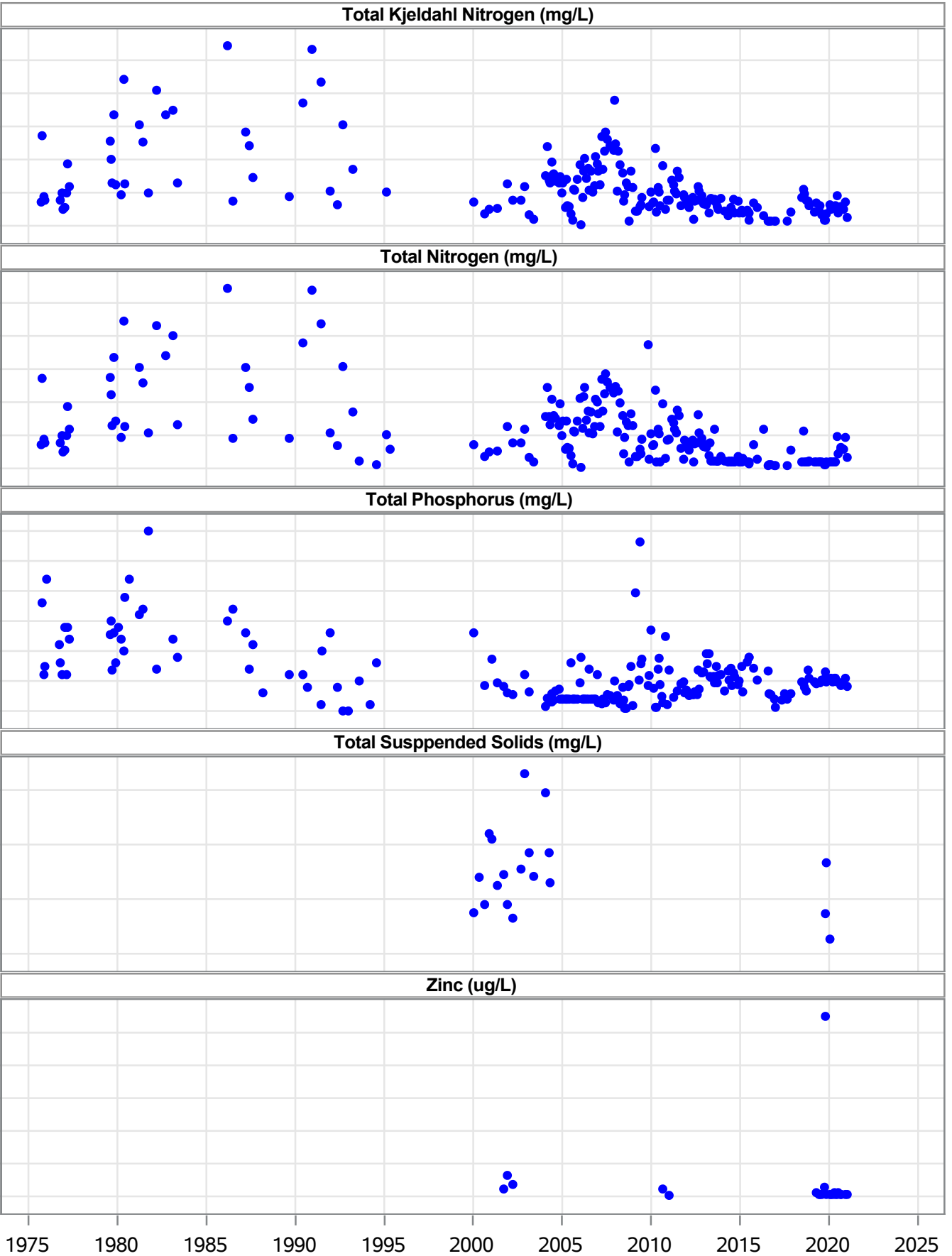
1000
800
600
400
200
0

Result

1975 1980 1985 1990 1995 2000 2005 2010 2015 2020 2025

Date

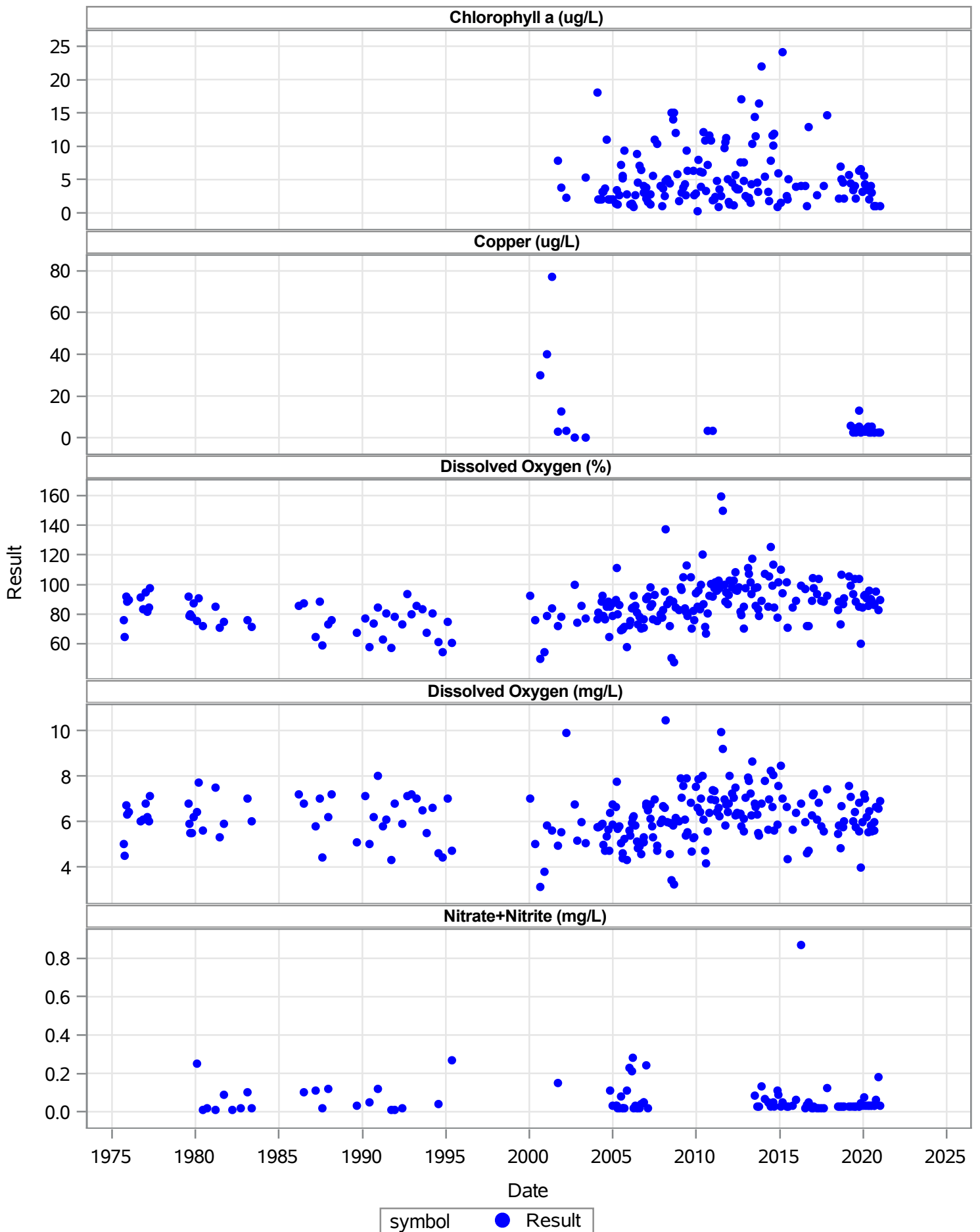
symbol ● Result



21FLPBCH13

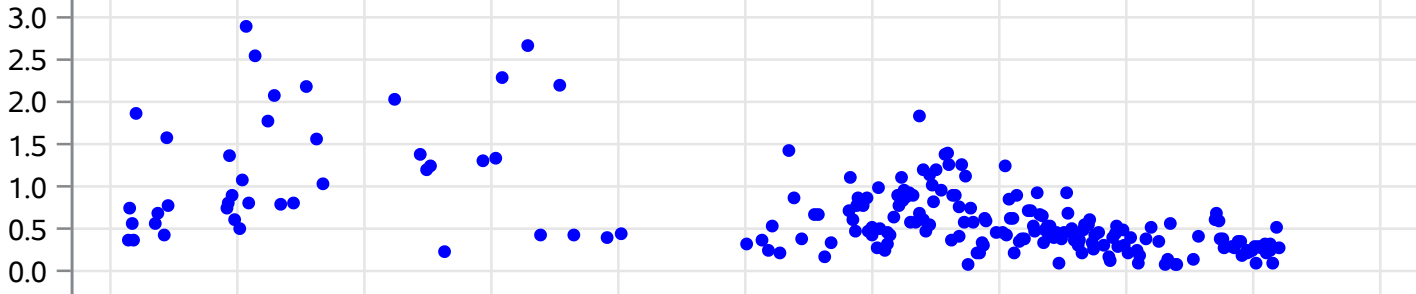
Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	15SEP75	29DEC20	0.25	24.1	5.313	3.88	159
Copper (ug/L)	15SEP75	29DEC20	0.013	77	8.575	3.2	29
Dissolved Oxygen (mg/L)	15SEP75	29DEC20	3.12	10.45	6.184	6.115	234
Dissolved Oxygen (%)	15SEP75	29DEC20	47.4	159.4	86.254	85.7	233
Nitrate+Nitrite (mg/L)	15SEP75	29DEC20	0.01	0.87	0.062	0.03	106
Total Kjeldahl Nitrogen (mg/L)	15SEP75	29DEC20	0.07	2.89	0.654	0.51	211
Total Nitrogen (mg/L)	15SEP75	29DEC20	0.0445	2.89	0.643	0.528	217
Total Phosphorus (mg/L)	15SEP75	29DEC20	0	0.6	0.068	0.049	204
Total Suspended Solids (mg/L)	15SEP75	29DEC20	4	56	25.636	24.2	22
Zinc (ug/L)	15SEP75	29DEC20	0.01	121	23.85	11	26

21FLPBCH13

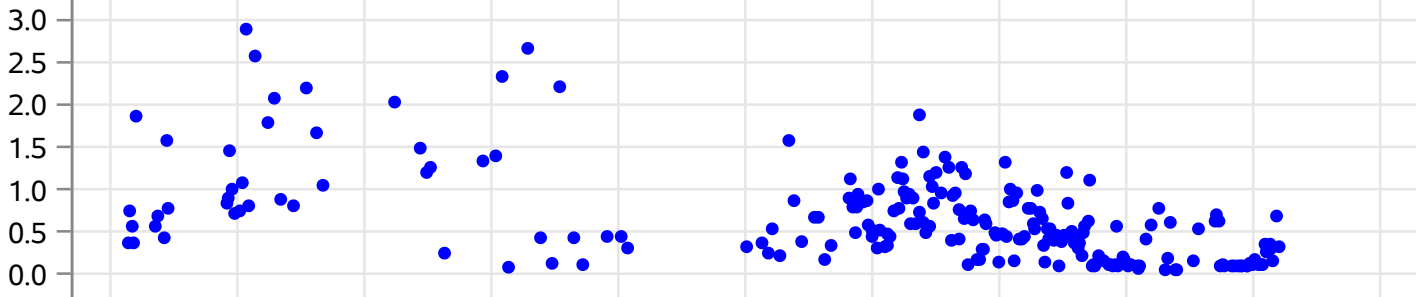


21FLPBCH13

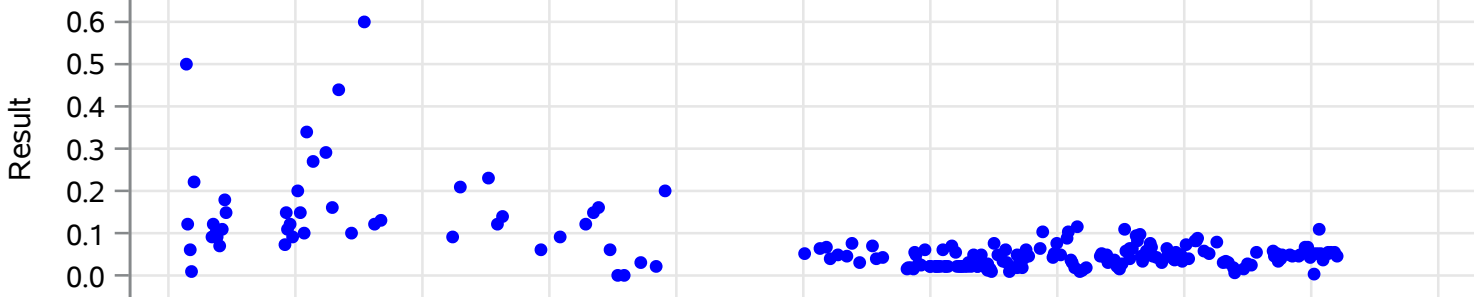
Total Kjeldahl Nitrogen (mg/L)



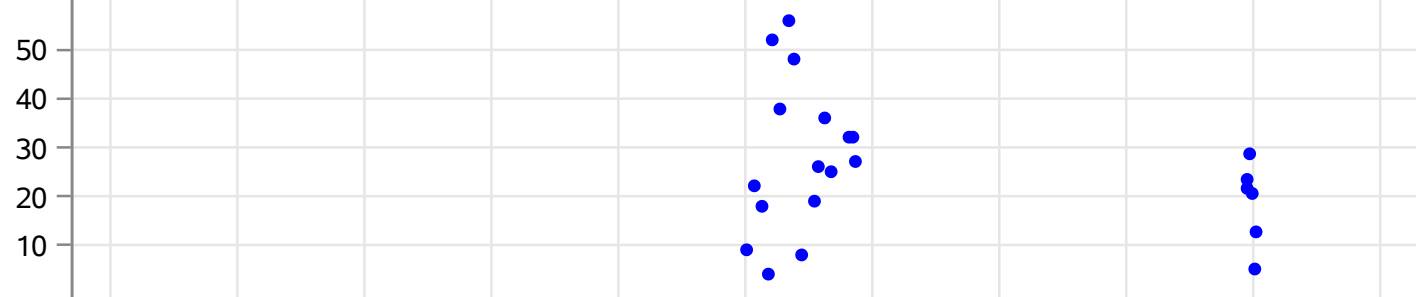
Total Nitrogen (mg/L)



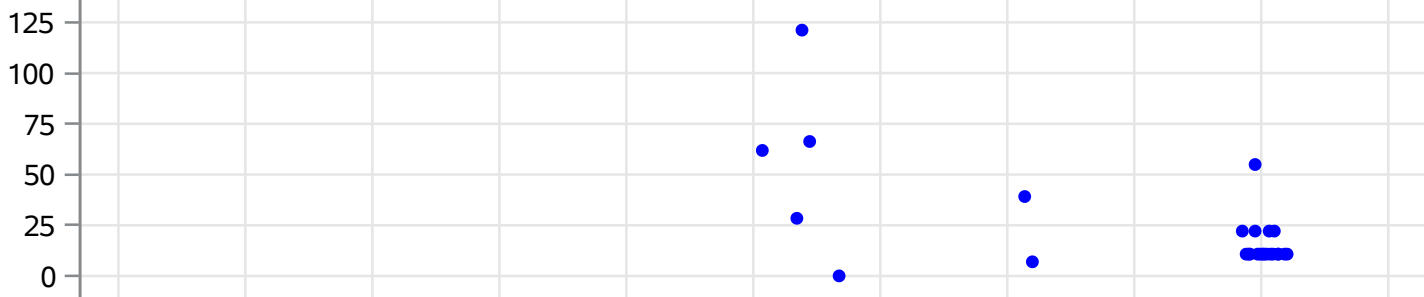
Total Phosphorus (mg/L)



Total Suspended Solids (mg/L)



Zinc (ug/L)



1975 1980 1985 1990 1995 2000 2005 2010 2015 2020 2025

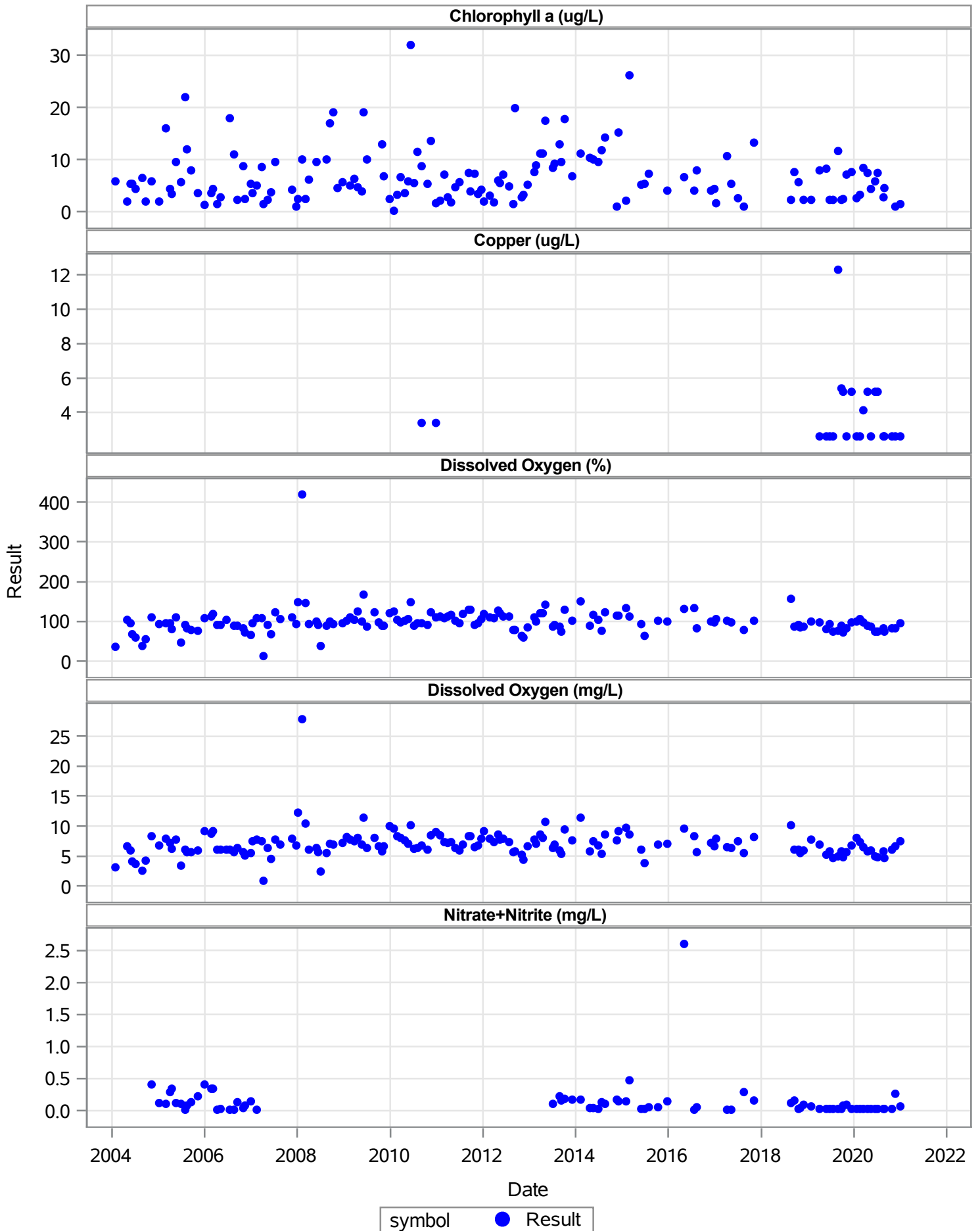
Date

symbol ● Result

21FLPBCH18C

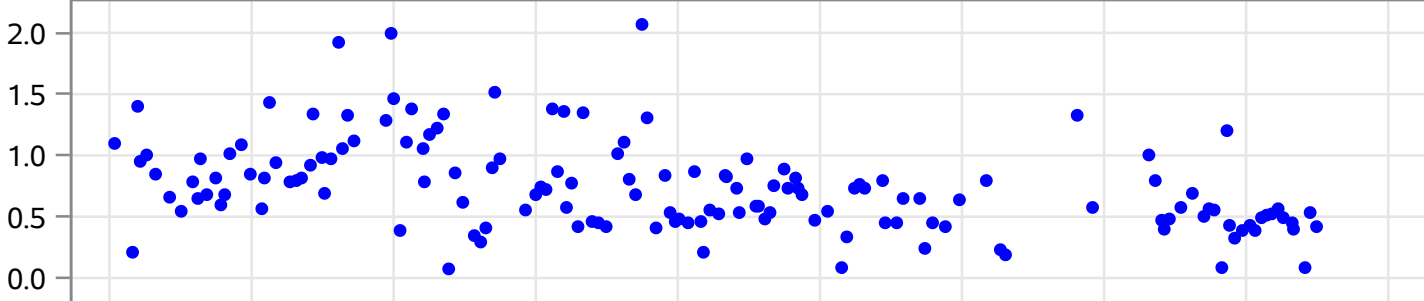
Analyte	Start Date	End Date	Minimum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	30JAN04	29DEC20	0.25	32	6.729	5.4	153
Copper (ug/L)	30JAN04	29DEC20	2.6	12.3	3.843	2.6	23
Dissolved Oxygen (mg/L)	30JAN04	29DEC20	0.84	27.88	6.996	6.795	162
Dissolved Oxygen (%)	30JAN04	29DEC20	12	419.4	99.754	96.9	160
Nitrate+Nitrite (mg/L)	30JAN04	29DEC20	0.0083	2.6	0.141	0.072	77
Total Kjeldahl Nitrogen (mg/L)	30JAN04	29DEC20	0.076	2.07	0.743	0.682	148
Total Nitrogen (mg/L)	30JAN04	29DEC20	0.068	2.2965	0.803	0.78	147
Total Phosphorus (mg/L)	30JAN04	29DEC20	0.003	0.378	0.081	0.074	151
Total Suspended Solids (mg/L)	30JAN04	29DEC20	20.2	42	37.417	40.4	6
Zinc (ug/L)	30JAN04	29DEC20	6.7	55	16.613	11	23

21FLPBCH18C

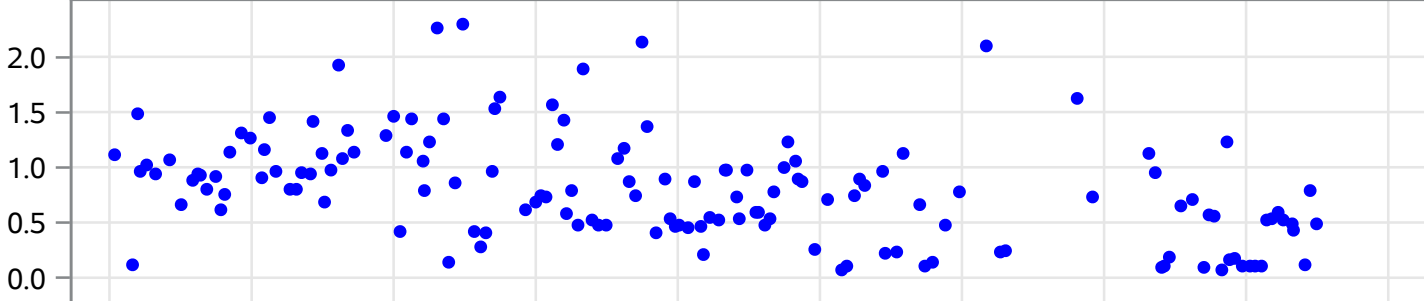


21FLPBCH18C

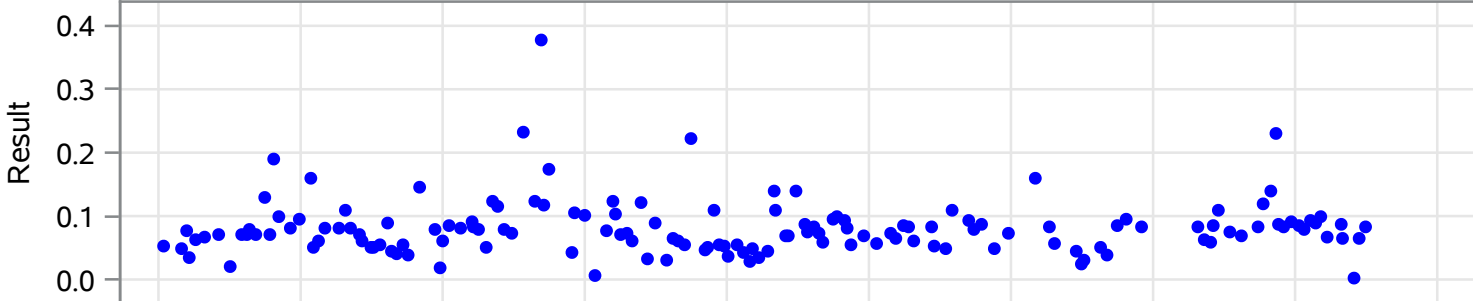
Total Kjeldahl Nitrogen (mg/L)



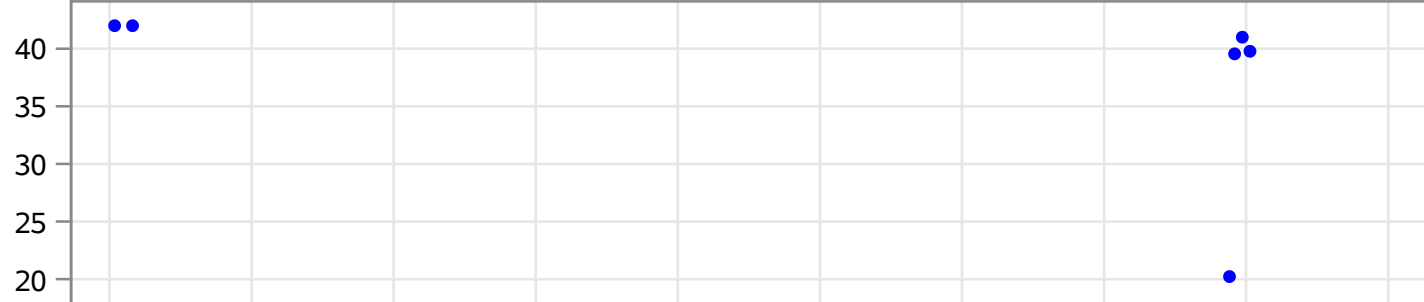
Total Nitrogen (mg/L)



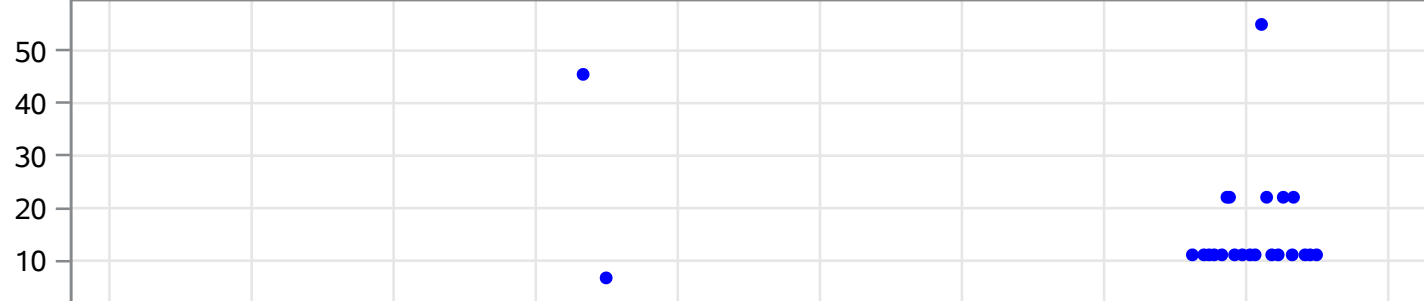
Total Phosphorus (mg/L)



Total Suspended Solids (mg/L)



Zinc (ug/L)



2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

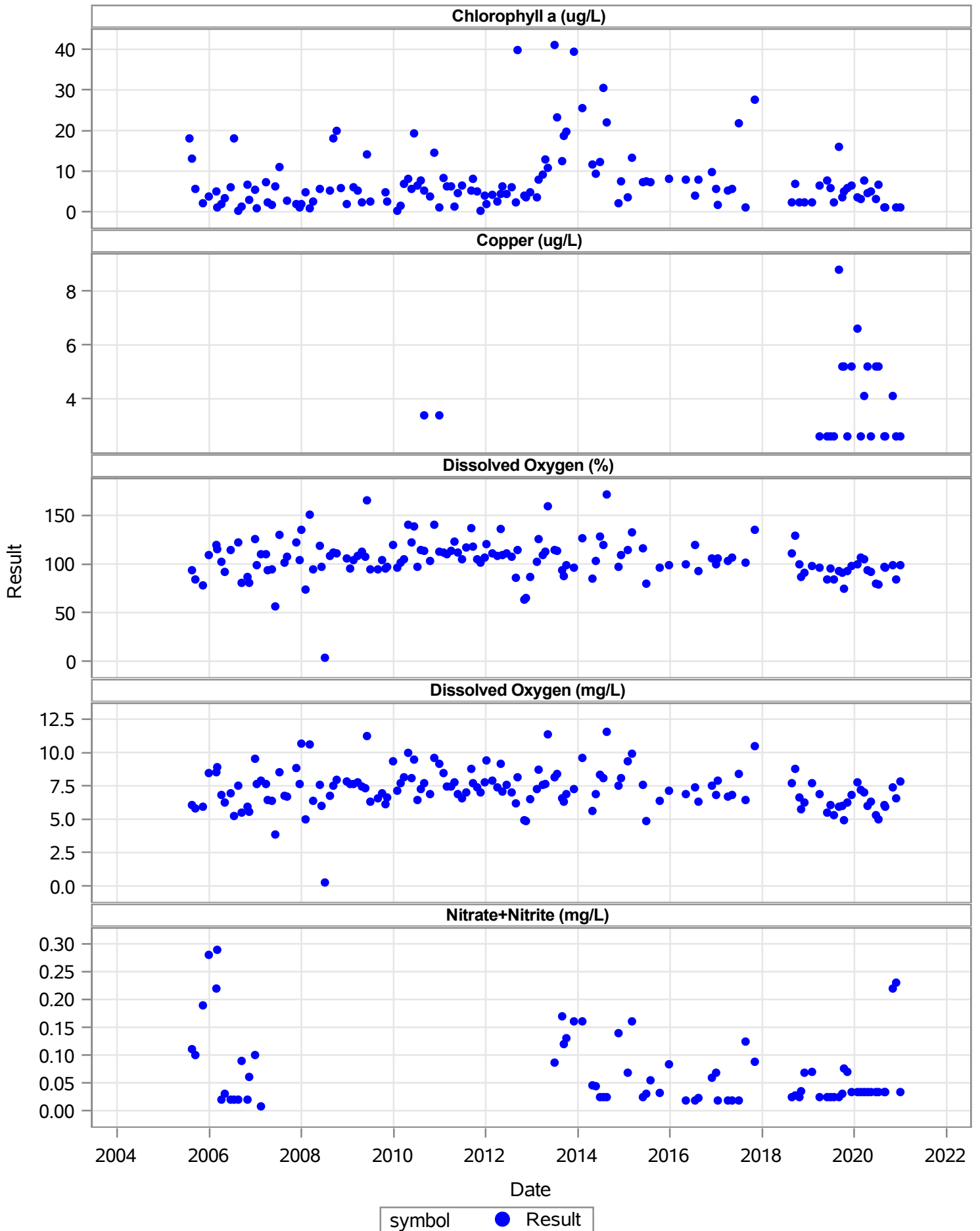
Date

symbol ● Result

21FLPBCH18D

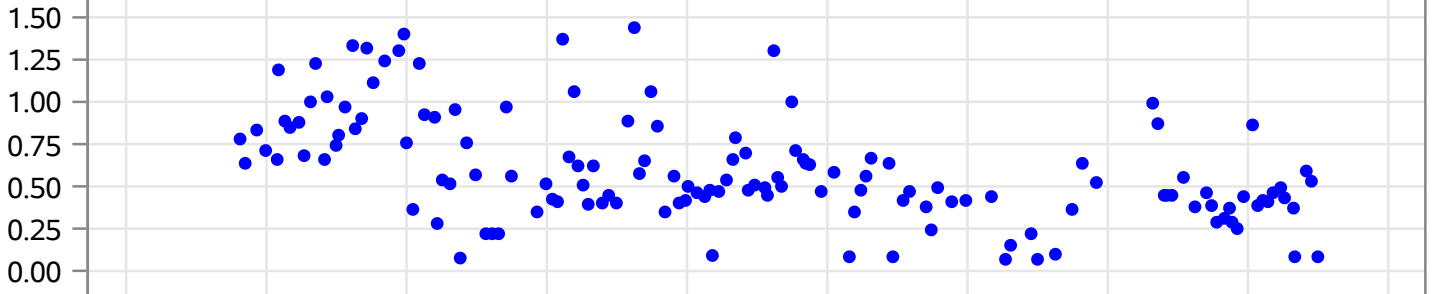
Analyte	Start Date	End Date	Minimum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	28JUL05	29DEC20	0.25	41.1	7.47	5.35	138
Copper (ug/L)	28JUL05	29DEC20	2.6	8.8	3.922	3.4	23
Dissolved Oxygen (mg/L)	28JUL05	29DEC20	0.25	11.55	7.269	7.24	148
Dissolved Oxygen (%)	28JUL05	29DEC20	3.9	171.6	104.885	104.5	146
Nitrate+Nitrite (mg/L)	28JUL05	29DEC20	0.0083	0.29	0.069	0.033	73
Total Kjeldahl Nitrogen (mg/L)	28JUL05	29DEC20	0.07	1.44	0.599	0.52	140
Total Nitrogen (mg/L)	28JUL05	29DEC20	0.0445	2.0465	0.604	0.54	139
Total Phosphorus (mg/L)	28JUL05	29DEC20	0.0033	0.19	0.062	0.061	134
Total Suspended Solids (mg/L)	28JUL05	29DEC20	24.8	86.1	48.8	35.5	3
Zinc (ug/L)	28JUL05	29DEC20	6.7	40.6	13.535	11	23

21FLPBCH18D

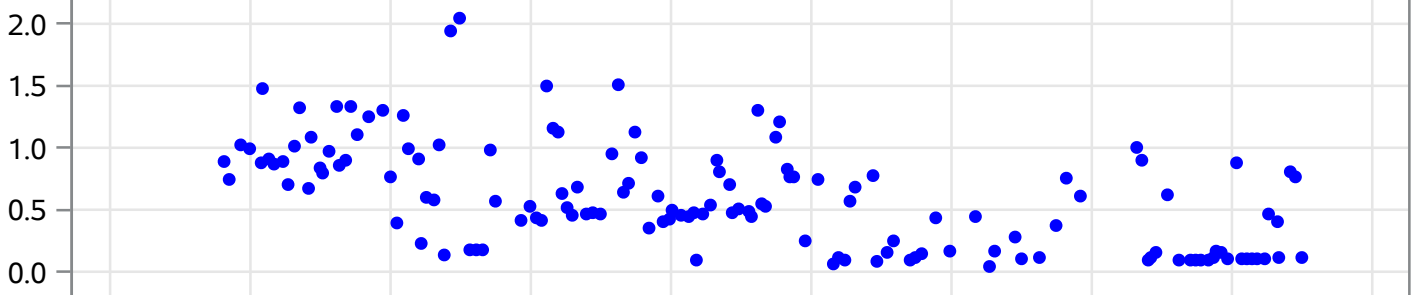


21FLPBCH18D

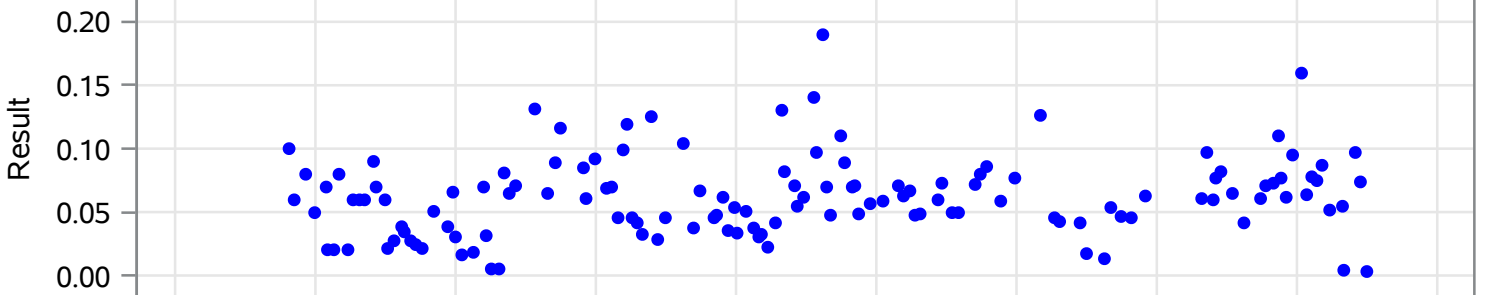
Total Kjeldahl Nitrogen (mg/L)



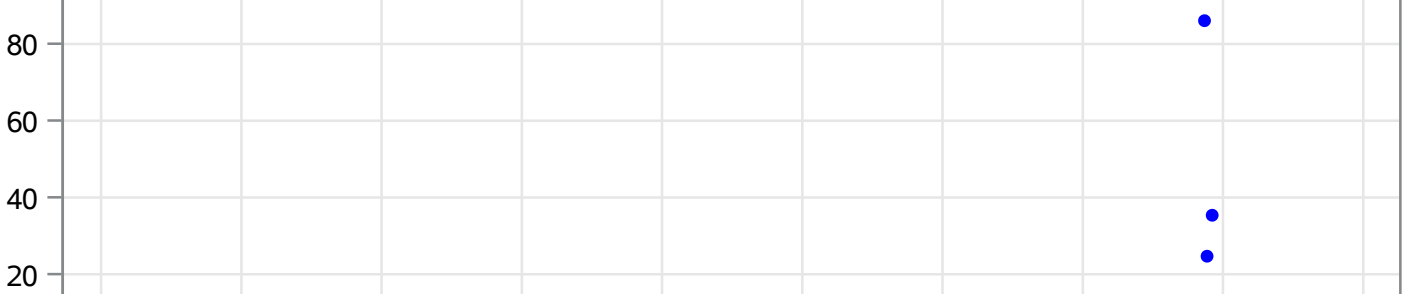
Total Nitrogen (mg/L)



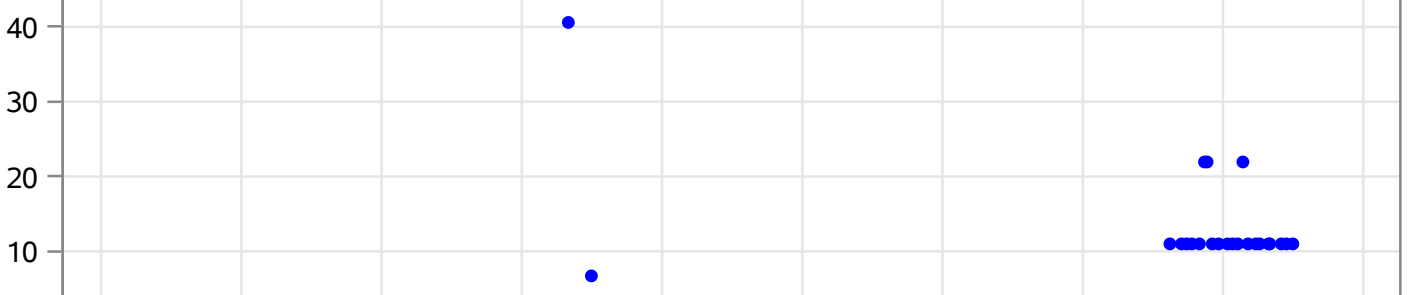
Total Phosphorus (mg/L)



Total Suspended Solids (mg/L)



Zinc (ug/L)



2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

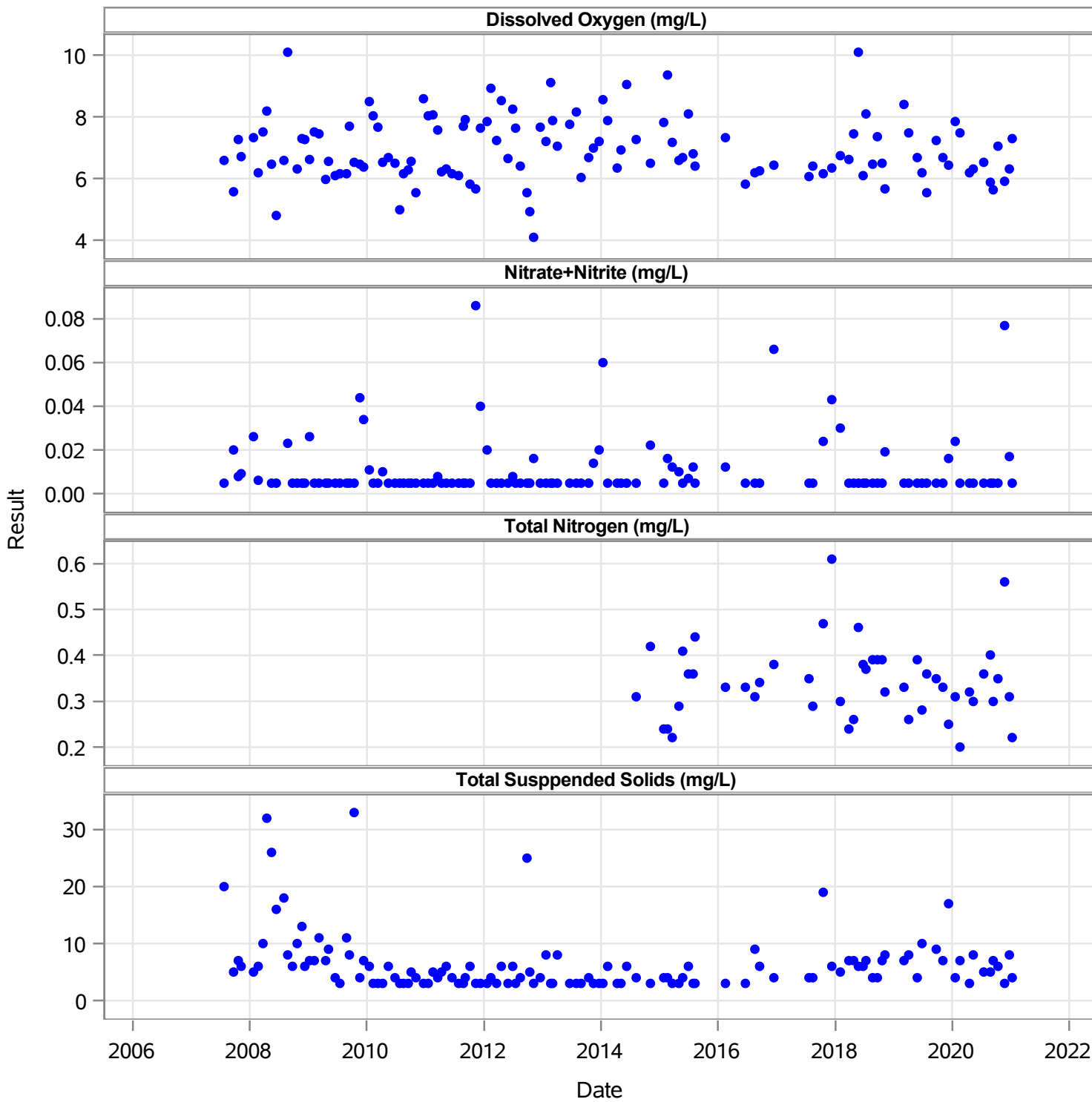
Date

symbol ● Result

21FLSFWMLWL-1

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Dissolved Oxygen (mg/L)	24JUL07	13JAN21	4.11	10.1	6.933	6.67	126
Nitrate+Nitrite (mg/L)	24JUL07	13JAN21	0.005	0.086	0.011	0.005	124
Total Nitrogen (mg/L)	24JUL07	13JAN21	0.2	0.61	0.341	0.33	48
Total Suspended Solids (mg/L)	24JUL07	13JAN21	3	33	6.421	5	126

21FLSFWMLWL-1

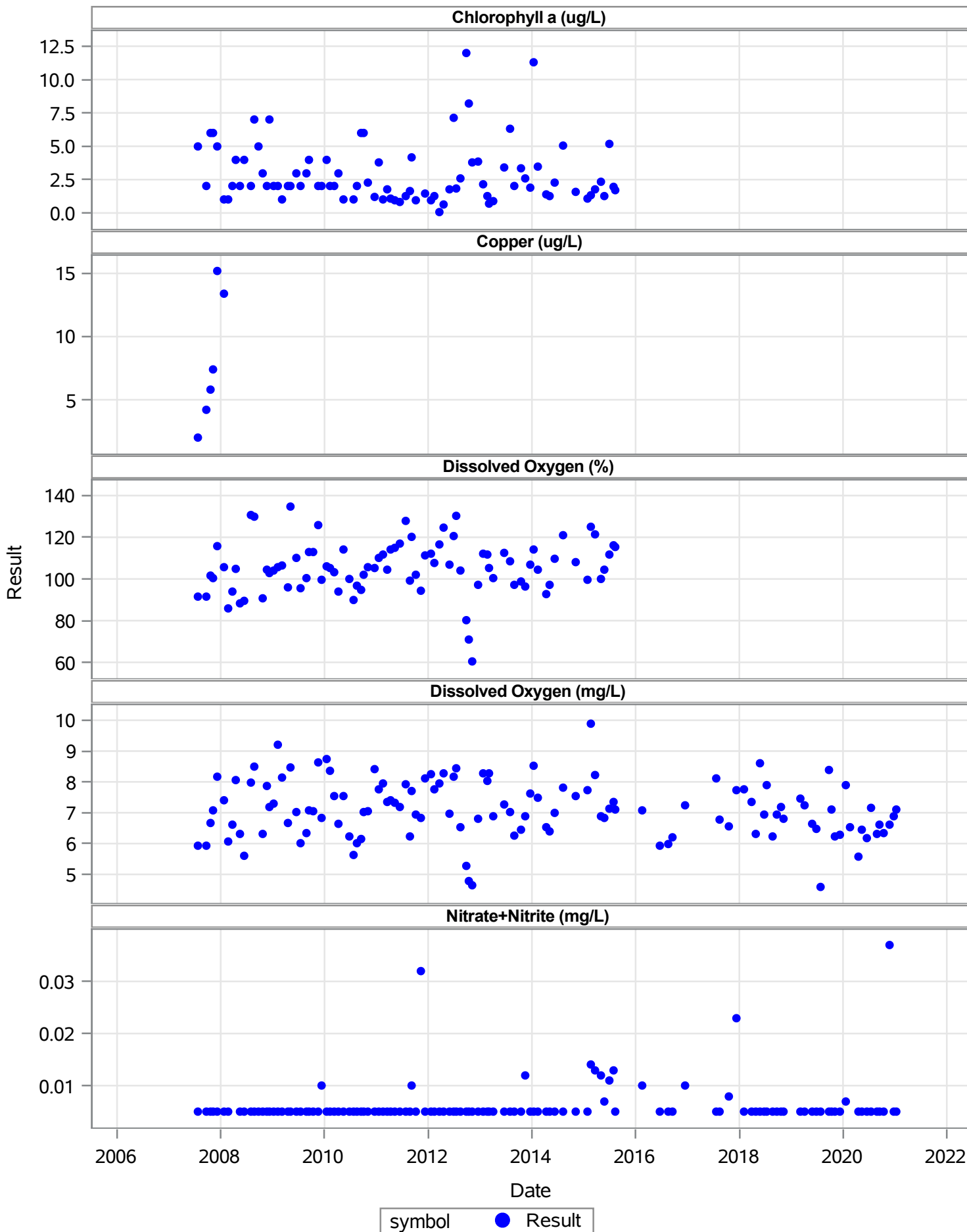


symbol ● Result

21FLSFWMLWL-4

Analyte	Start Date	End Date	Minimum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	24JUL07	13JAN21	0.053	12	2.875	2	87
Copper (ug/L)	24JUL07	13JAN21	2	15.2	8	6.6	6
Dissolved Oxygen (mg/L)	24JUL07	13JAN21	4.59	9.9	7.111	7.07	129
Dissolved Oxygen (%)	24JUL07	13JAN21	60.3	134.9	105.593	105.2	89
Nitrate+Nitrite (mg/L)	24JUL07	13JAN21	0.005	0.037	0.006	0.005	127
Total Kjeldahl Nitrogen (mg/L)	24JUL07	13JAN21	0.13	0.57	0.24	0.23	80
Total Nitrogen (mg/L)	24JUL07	13JAN21	0.0525	0.575	0.242	0.234	130
Total Phosphorus (mg/L)	24JUL07	13JAN21	0.011	0.044	0.019	0.018	85
Total Suspended Solids (mg/L)	24JUL07	13JAN21	3	48	8.558	6	129

21FLSFWMLWL-4



21FLSFWMLWL-4

Total Kjeldahl Nitrogen (mg/L)

0.5
0.4
0.3
0.2
0.1

Total Nitrogen (mg/L)

0.6
0.5
0.4
0.3
0.2
0.1

Total Phosphorus (mg/L)

0.04
0.03
0.02
0.01

Total Suspended Solids (mg/L)

50
40
30
20
10
0

Result

2006

2008

2010

2012

2014

2016

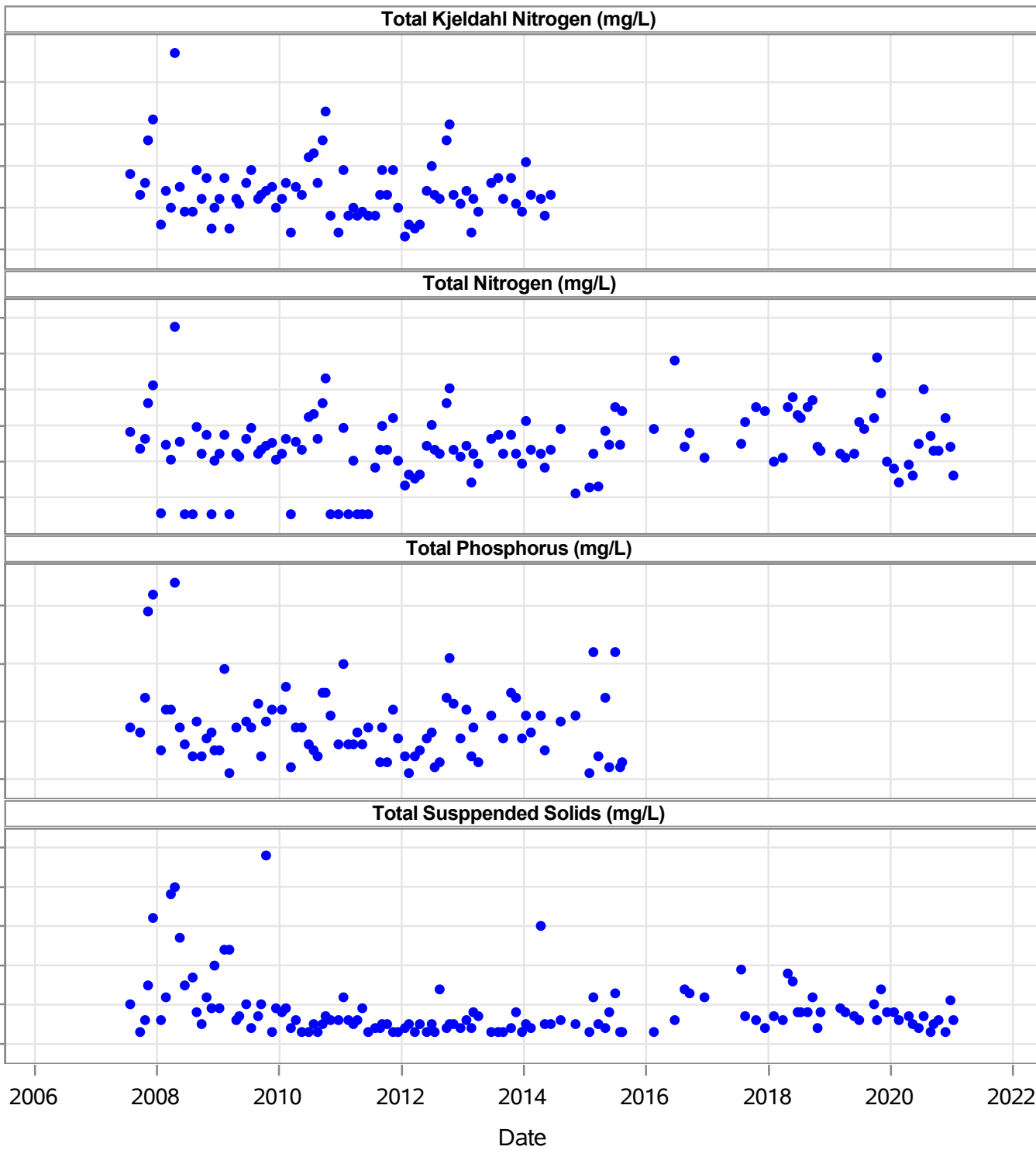
2018

2020

2022

Date

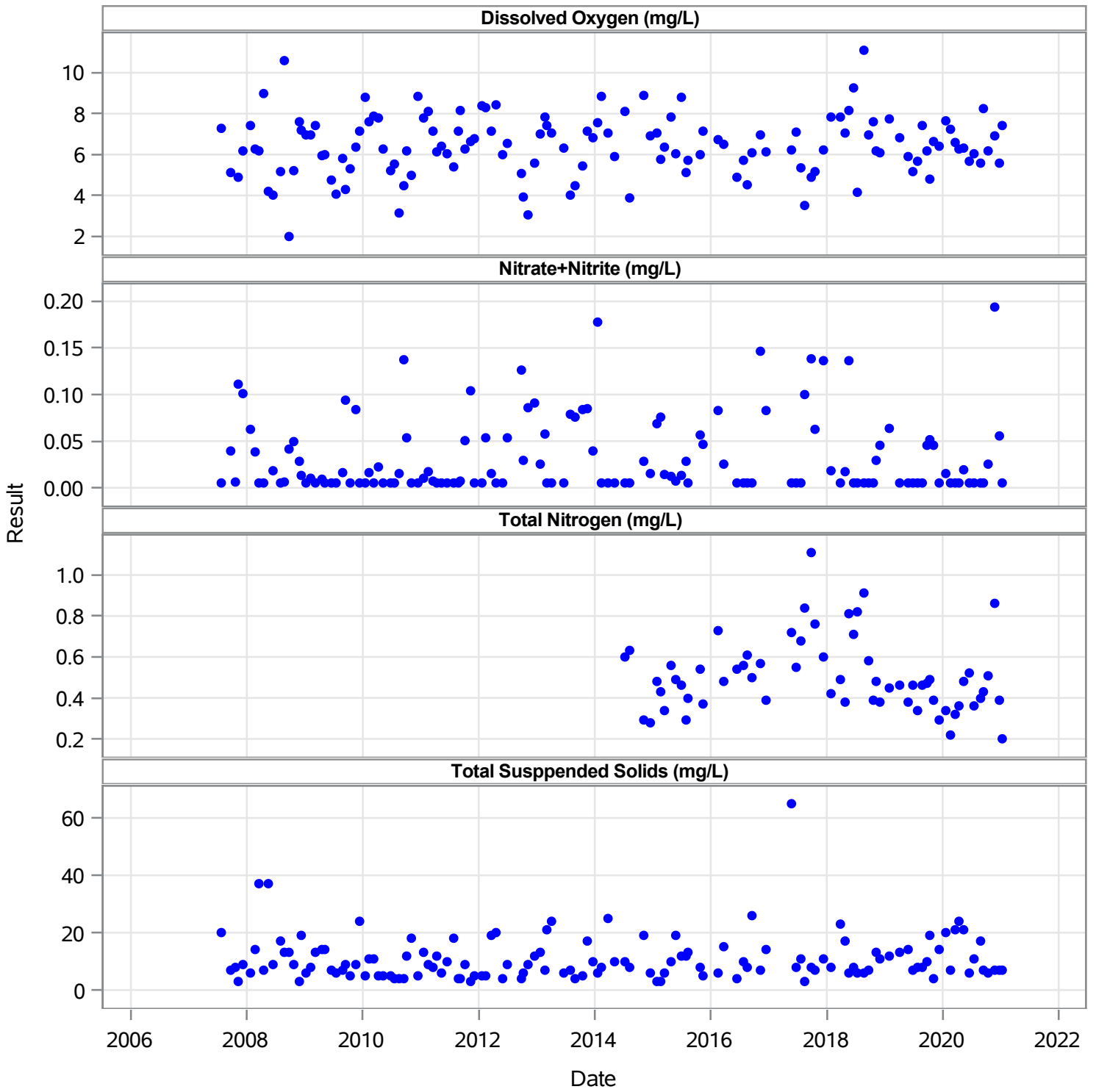
symbol ● Result



21FLSFWMLWL-11

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Dissolved Oxygen (mg/L)	24JUL07	12JAN21	1.99	11.1	6.428	6.32	139
Nitrate+Nitrite (mg/L)	24JUL07	12JAN21	0.005	0.194	0.032	0.01	139
Total Nitrogen (mg/L)	24JUL07	12JAN21	0.2	1.11	0.504	0.48	63
Total Suspended Solids (mg/L)	24JUL07	12JAN21	3	65	10.871	8	139

21FLSFWMLWL-11

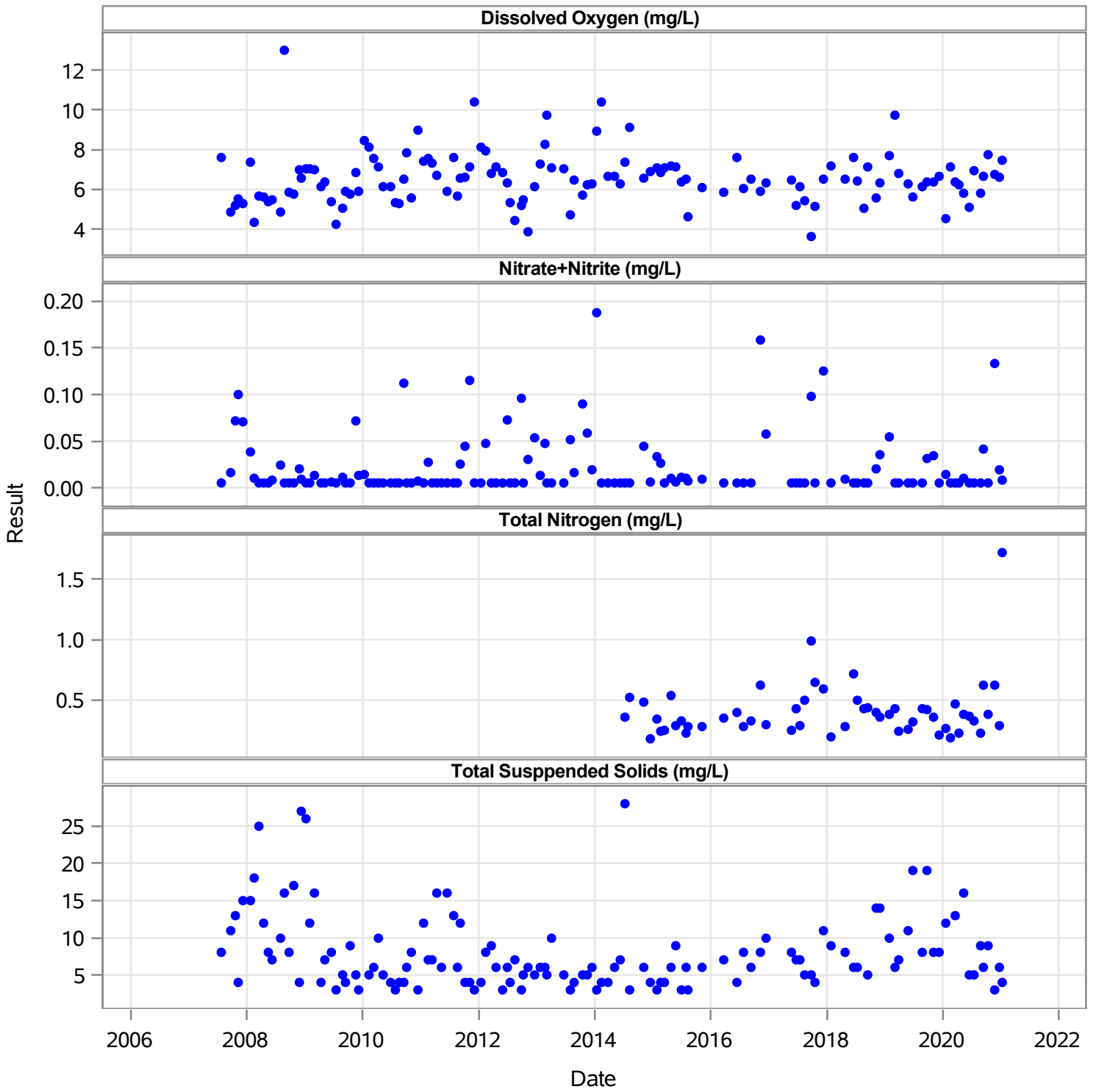


symbol ● Result

21FLSFWMLWL-13

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Dissolved Oxygen (mg/L)	25JUL07	11JAN21	3.63	13	6.546	6.47	135
Nitrate+Nitrite (mg/L)	25JUL07	11JAN21	0.005	0.188	0.022	0.005	136
Total Nitrogen (mg/L)	25JUL07	11JAN21	0.18	1.72	0.407	0.36	56
Total Suspended Solids (mg/L)	25JUL07	11JAN21	3	28	7.955	6	132

21FLSFWMLWL-13

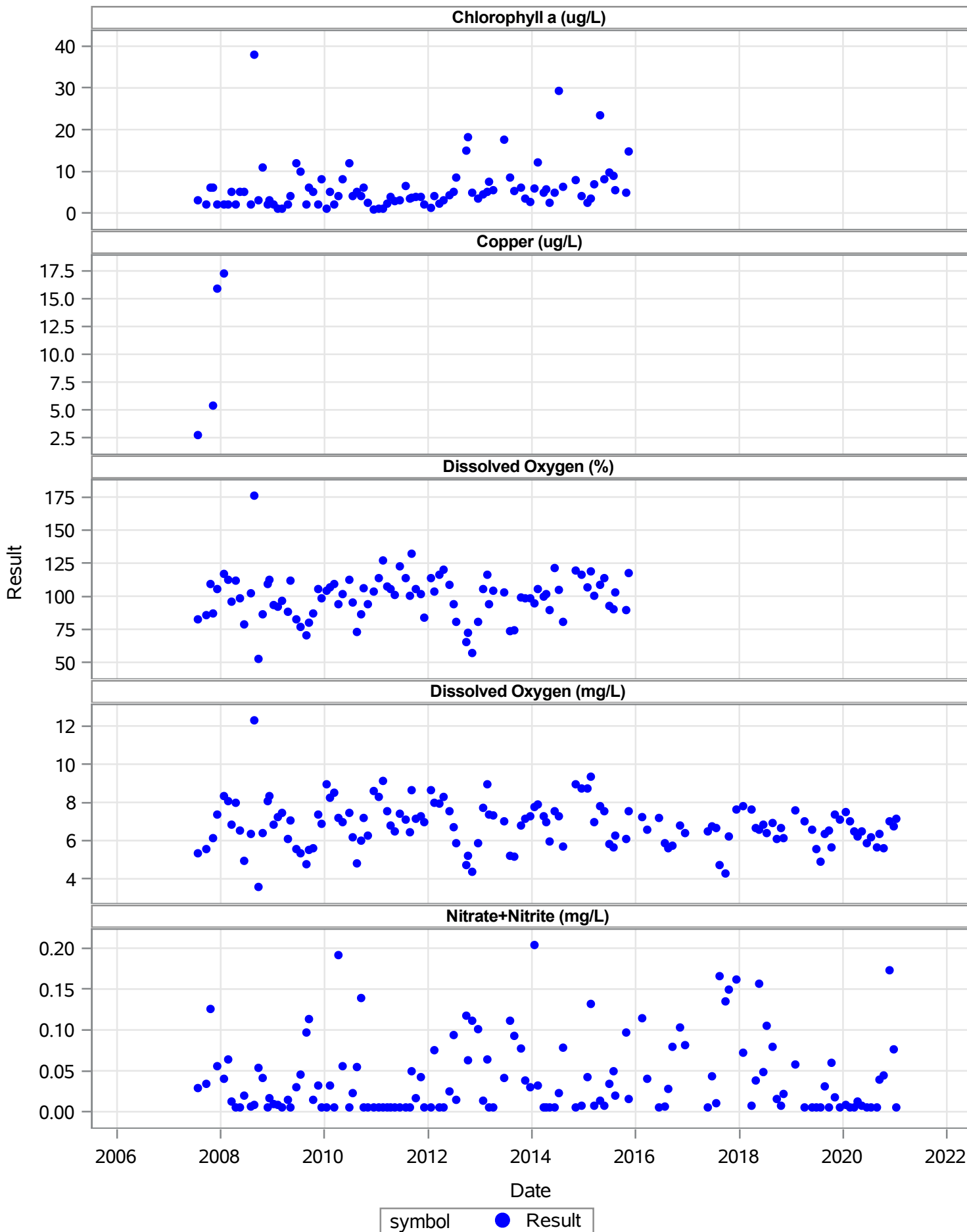


symbol ● Result

21FLSFWMLWL-8

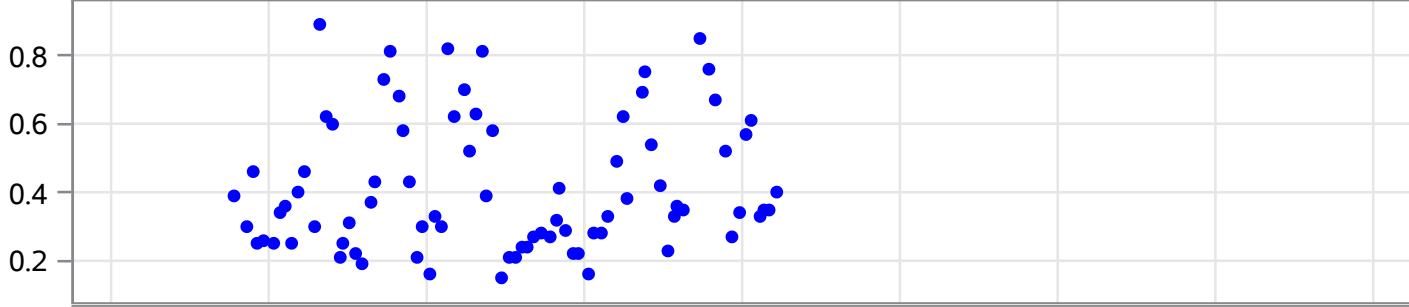
Analyte	Start Date	End Date	Minimum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	24JUL07	12JAN21	0.9	38	5.878	4.305	94
Copper (ug/L)	24JUL07	12JAN21	2.7	17.3	10.325	10.65	4
Dissolved Oxygen (mg/L)	24JUL07	12JAN21	3.57	12.3	6.827	6.84	141
Dissolved Oxygen (%)	24JUL07	12JAN21	52.9	176.1	99.522	101.35	94
Nitrate+Nitrite (mg/L)	24JUL07	12JAN21	0.005	0.204	0.041	0.02	141
Total Kjeldahl Nitrogen (mg/L)	24JUL07	12JAN21	0.15	0.89	0.416	0.35	80
Total Nitrogen (mg/L)	24JUL07	12JAN21	0.0525	1.35	0.483	0.42	142
Total Phosphorus (mg/L)	24JUL07	12JAN21	0.014	0.094	0.044	0.04	93
Total Suspended Solids (mg/L)	24JUL07	12JAN21	3	37	10.709	9	141

21FLSFWMLWL-8

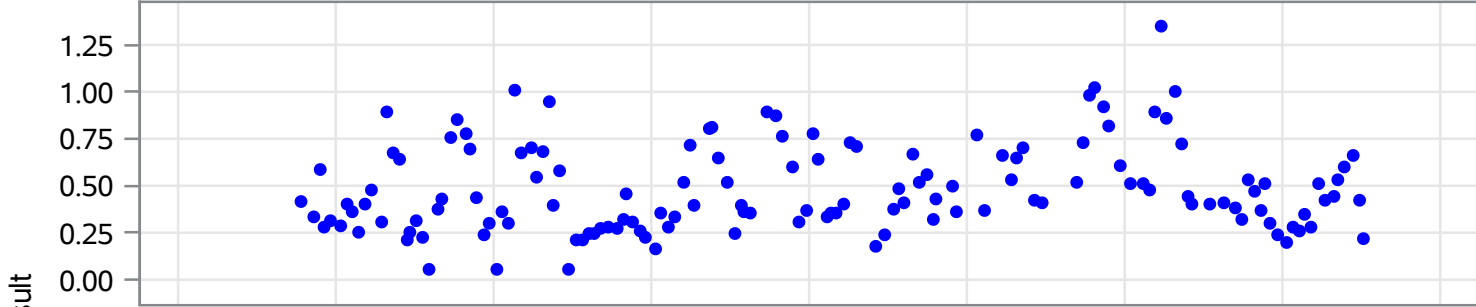


21FLSFWMLWL-8

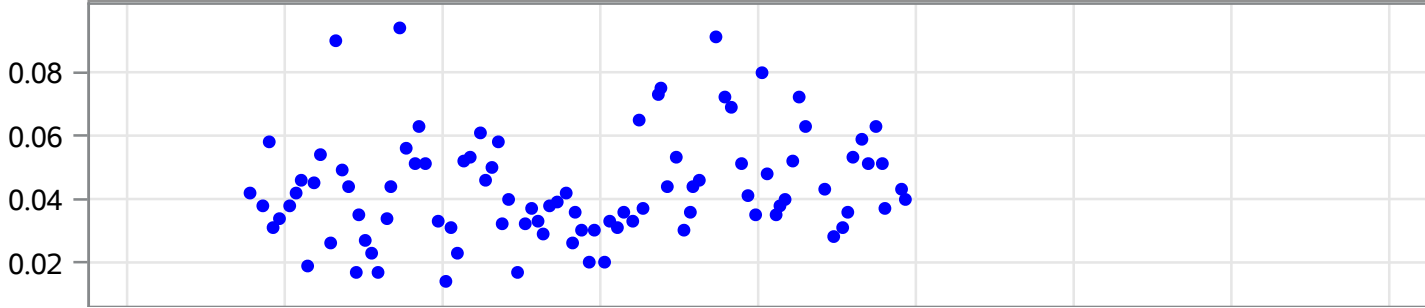
Total Kjeldahl Nitrogen (mg/L)



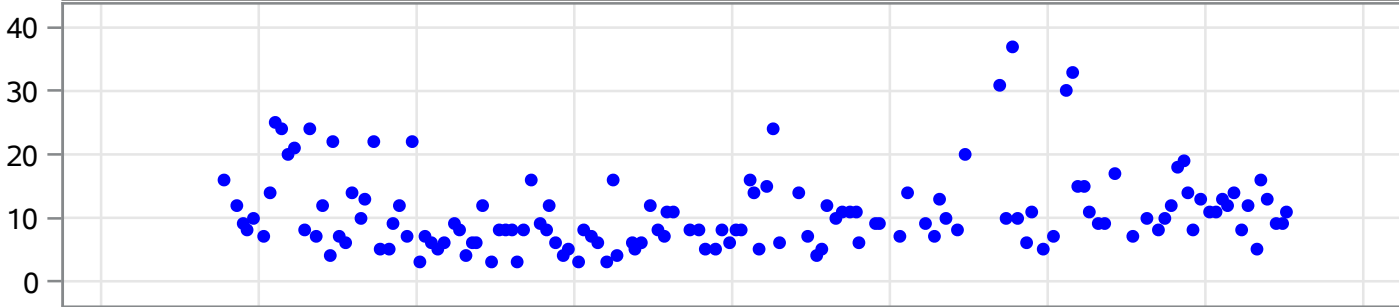
Total Nitrogen (mg/L)



Total Phosphorus (mg/L)



Total Suspended Solids (mg/L)



2006 2008 2010 2012 2014 2016 2018 2020 2022

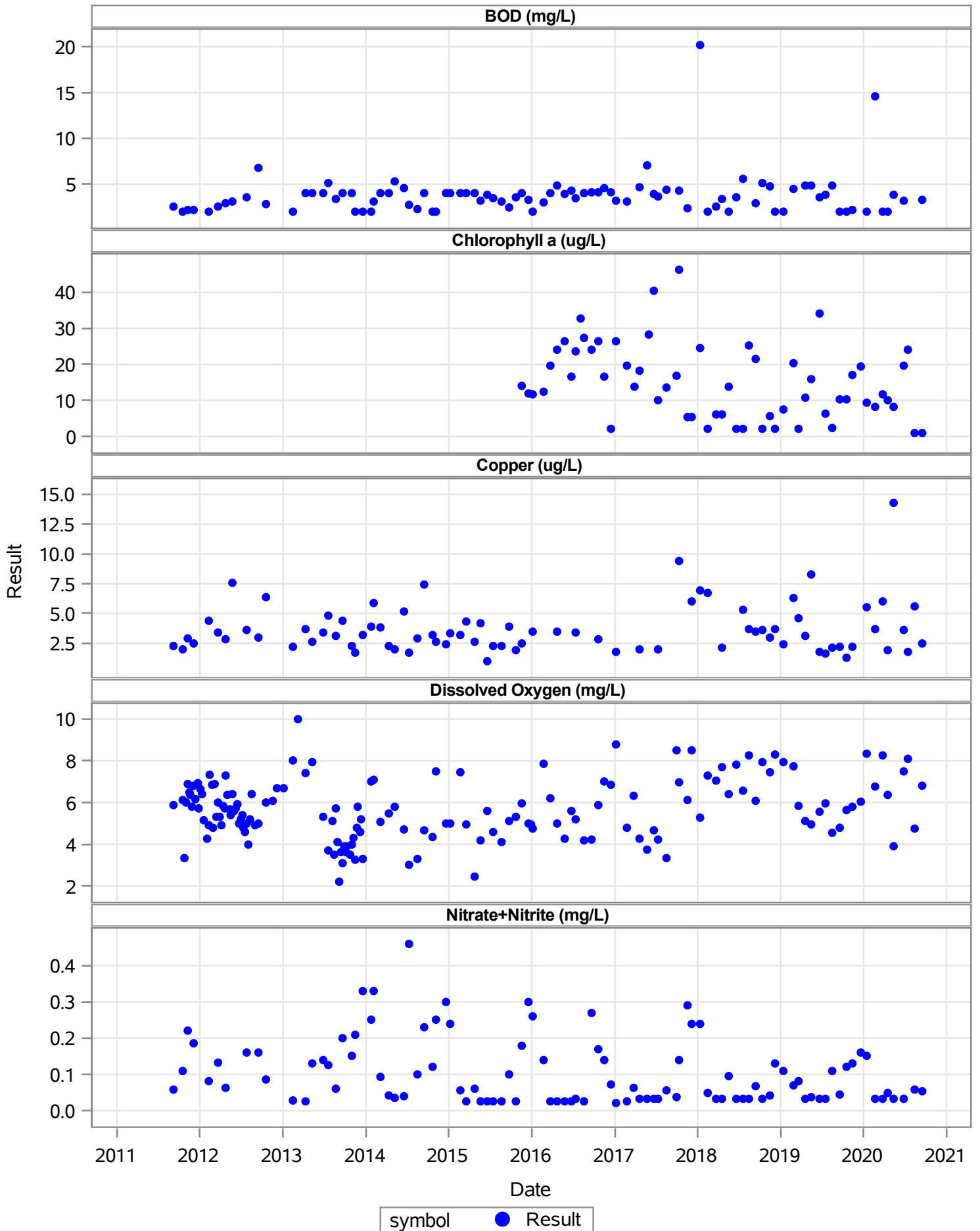
Date

symbol ● Result

C17_CANAL_A

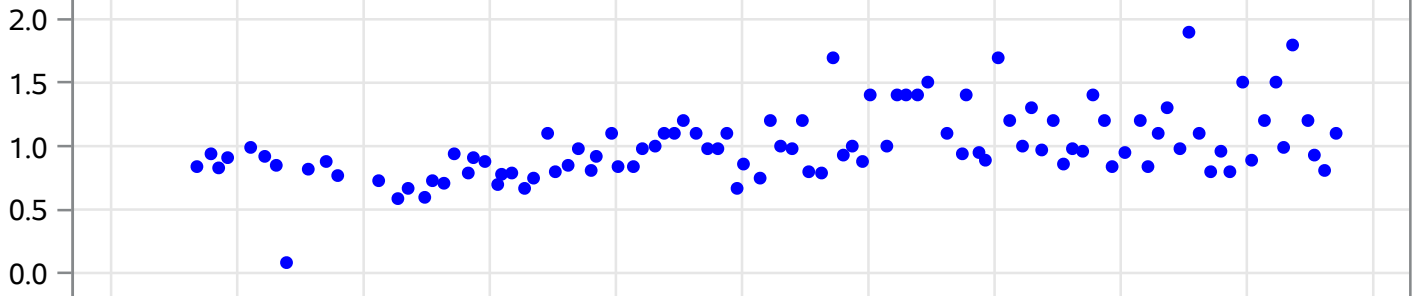
Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
BOD (mg/L)	07SEP11	16SEP20	2	20.2	3.761	3.6	94
Chlorophyll a (ug/L)	07SEP11	16SEP20	1	46.3	14.968	13.65	60
Copper (ug/L)	07SEP11	16SEP20	0.99	14.3	3.668	3.2	82
Dissolved Oxygen (mg/L)	07SEP11	16SEP20	2.2	9.98	5.666	5.6	157
Nitrate+Nitrite (mg/L)	07SEP11	16SEP20	0.02	0.46	0.104	0.063	100
Total Kjeldahl Nitrogen (mg/L)	07SEP11	16SEP20	0.086	1.9	1.005	0.96	101
Total Nitrogen (mg/L)	07SEP11	16SEP20	0.086	1.97	1.101	1.1	102
Total Phosphorus (mg/L)	07SEP11	16SEP20	0.034	0.29	0.075	0.066	101
Total Suspended Solids (mg/L)	07SEP11	16SEP20	1	56.6	8.758	5.6	101
Zinc (ug/L)	07SEP11	16SEP20	2.5	20	4.91	4.3	58

C17_CANAL_A

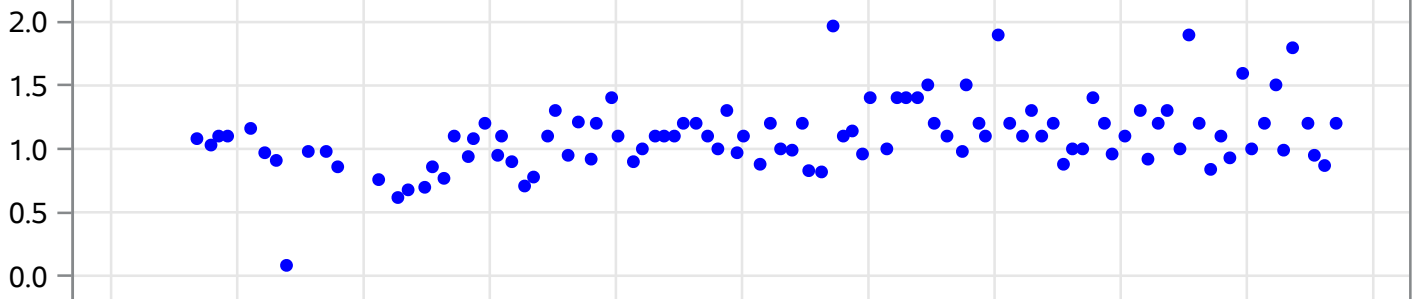


C17_CANAL_A

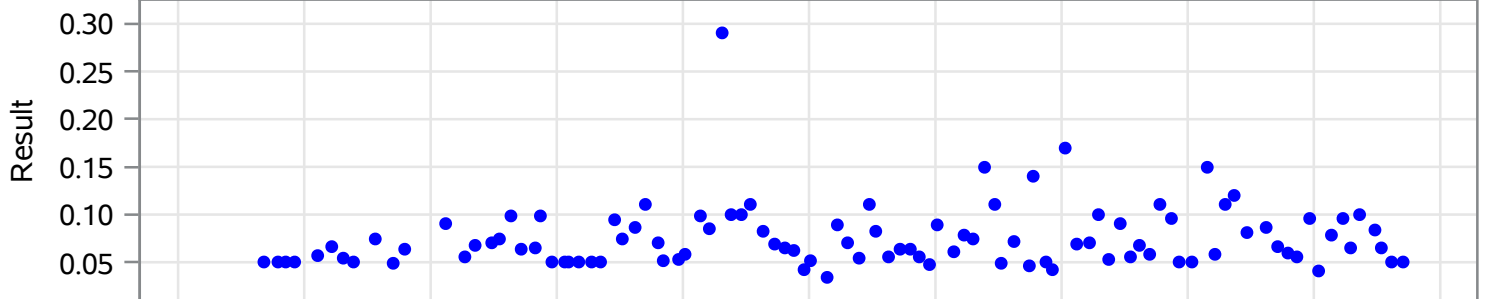
Total Kjeldahl Nitrogen (mg/L)



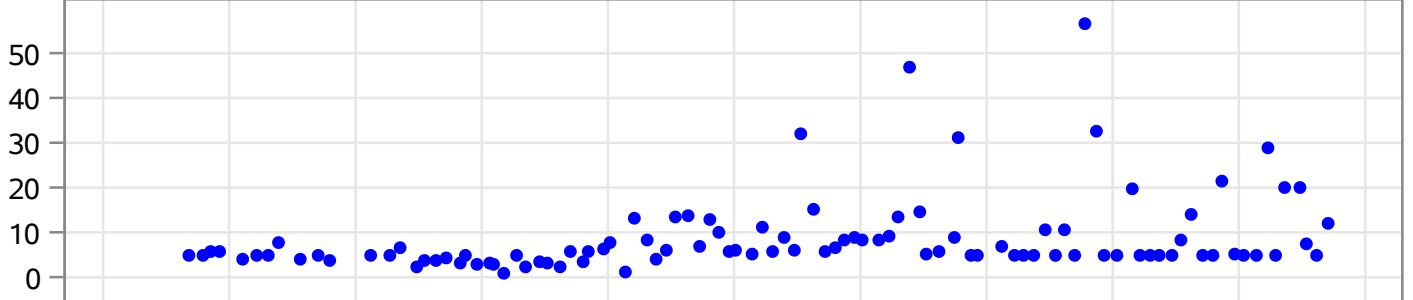
Total Nitrogen (mg/L)



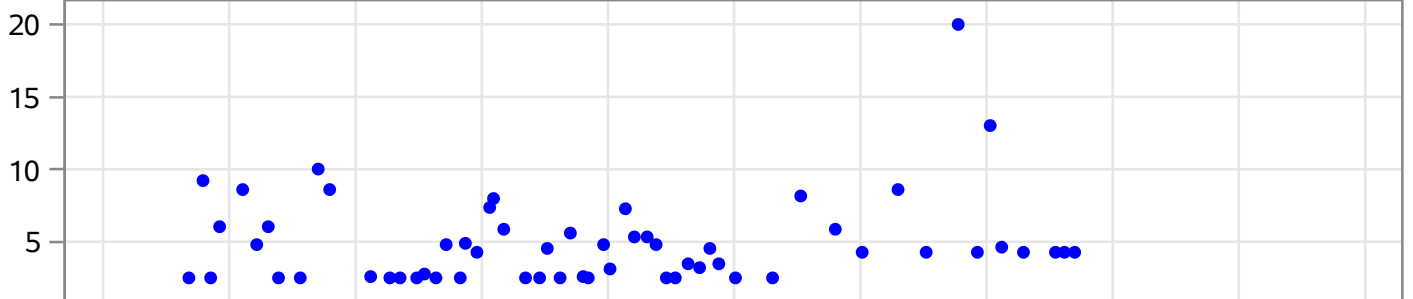
Total Phosphorus (mg/L)



Total Suspended Solids (mg/L)



Zinc (ug/L)



2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

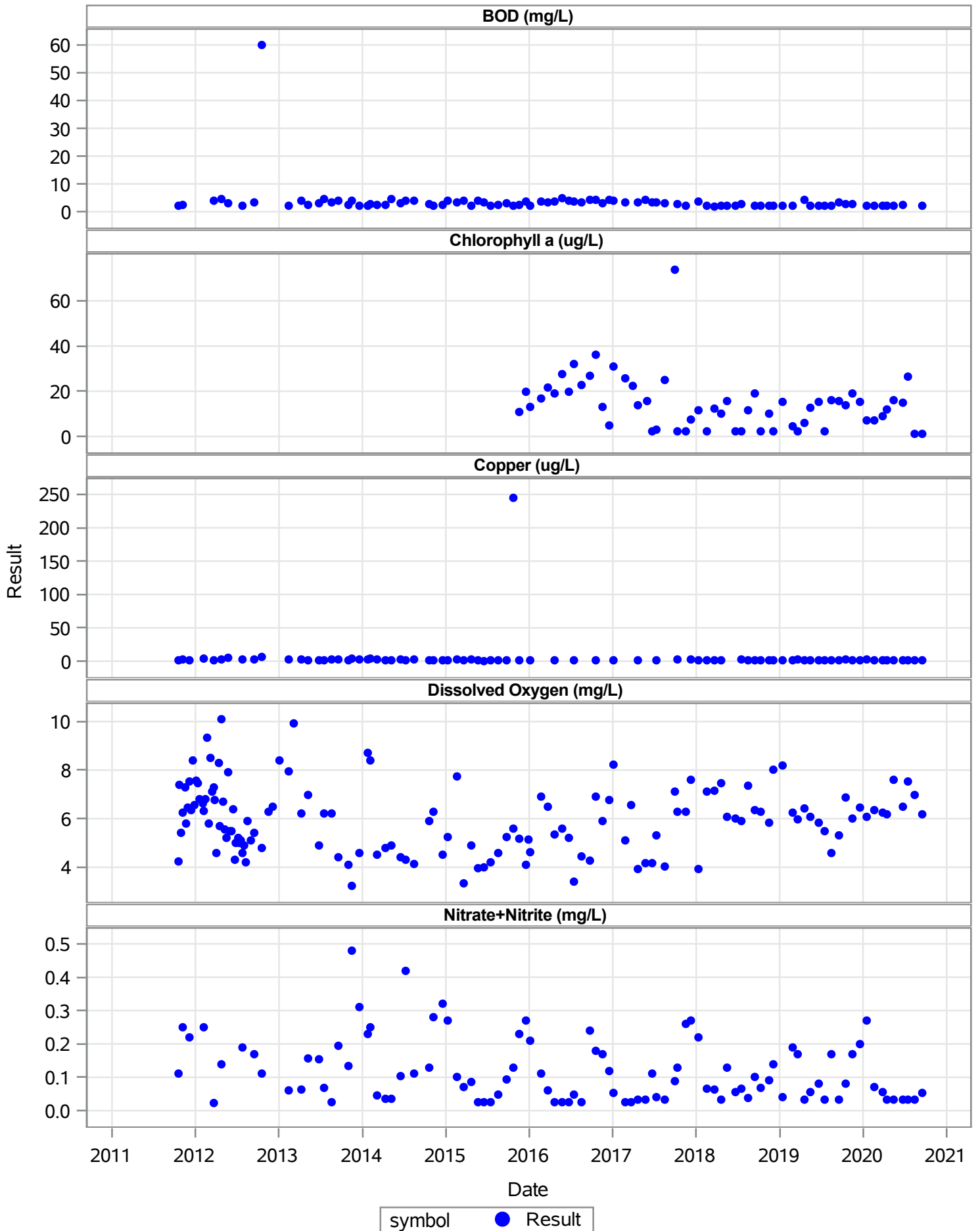
Date

symbol ● Result

C17_CANAL_B

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
BOD (mg/L)	18OCT11	16SEP20	1.8	60	3.579	2.8	90
Chlorophyll a (ug/L)	18OCT11	16SEP20	1	73.8	14.289	13.2	59
Copper (ug/L)	18OCT11	16SEP20	0.5	245	4.856	1.8	82
Dissolved Oxygen (mg/L)	18OCT11	16SEP20	3.23	10.1	5.987	6.01	141
Nitrate+Nitrite (mg/L)	18OCT11	16SEP20	0.022	0.48	0.118	0.088	99
Total Kjeldahl Nitrogen (mg/L)	18OCT11	16SEP20	0.086	1.3	0.92	0.92	99
Total Nitrogen (mg/L)	18OCT11	16SEP20	0.086	1.54	1.029	1	100
Total Phosphorus (mg/L)	18OCT11	16SEP20	0.016	0.26	0.063	0.058	100
Total Suspended Solids (mg/L)	18OCT11	16SEP20	2.2	26.5	6.237	5	99
Zinc (ug/L)	18OCT11	16SEP20	2.5	1200	26.429	4.3	58

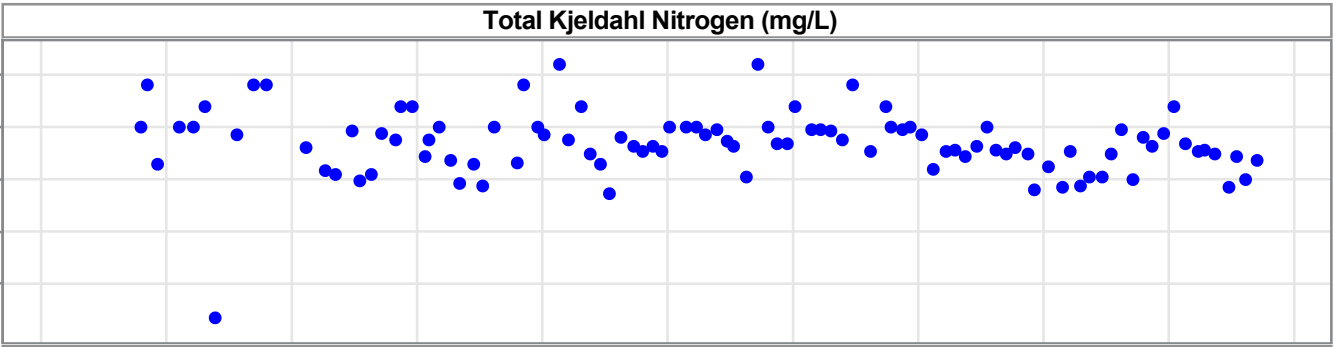
C17_CANAL_B



C17_CANAL_B

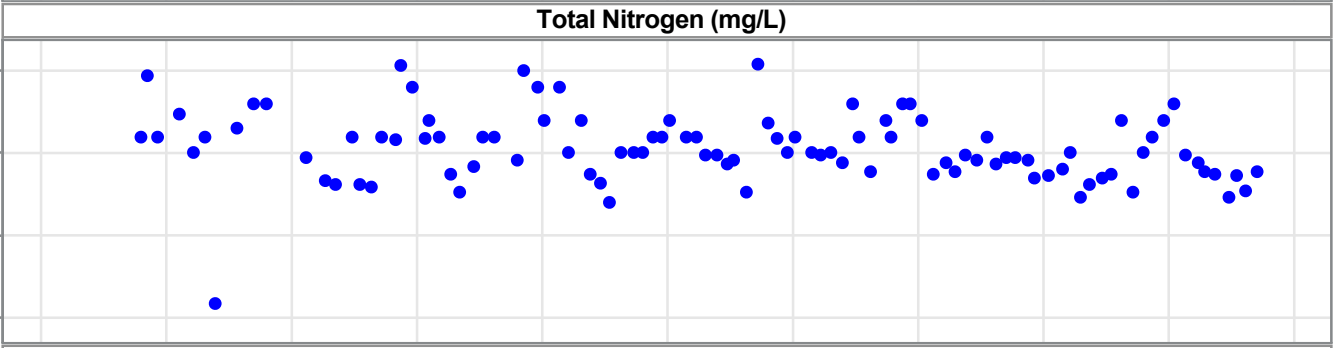
Total Kjeldahl Nitrogen (mg/L)

1.25
1.00
0.75
0.50
0.25



Total Nitrogen (mg/L)

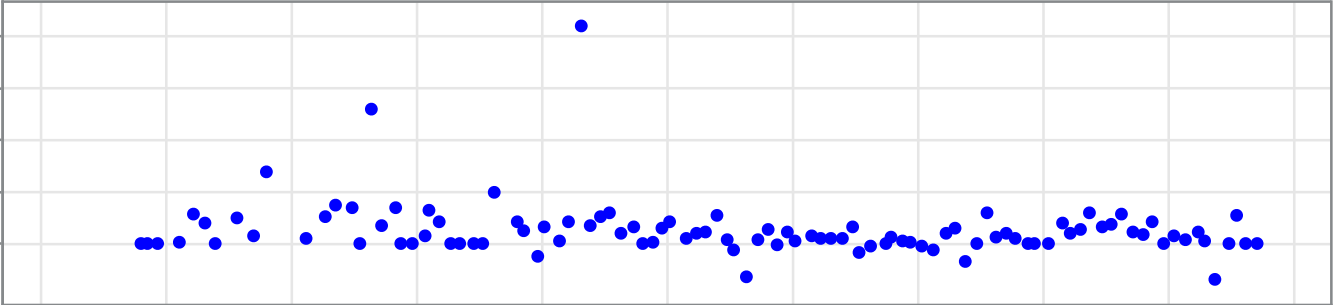
1.5
1.0
0.5
0.0



Total Phosphorus (mg/L)

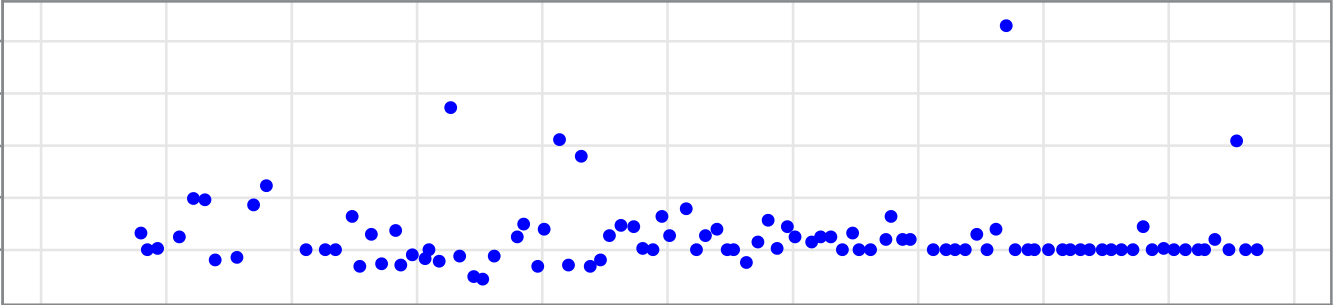
Result

0.25
0.20
0.15
0.10
0.05



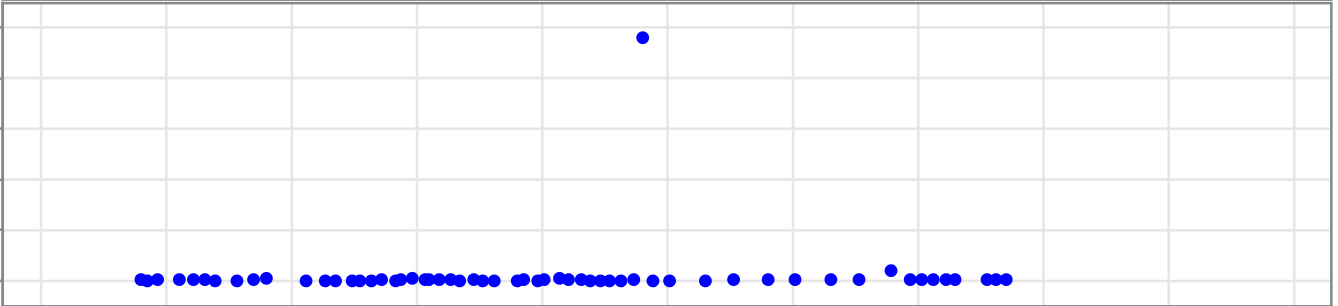
Total Suspended Solids (mg/L)

25
20
15
10
5



Zinc (ug/L)

1250
1000
750
500
250
0



2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

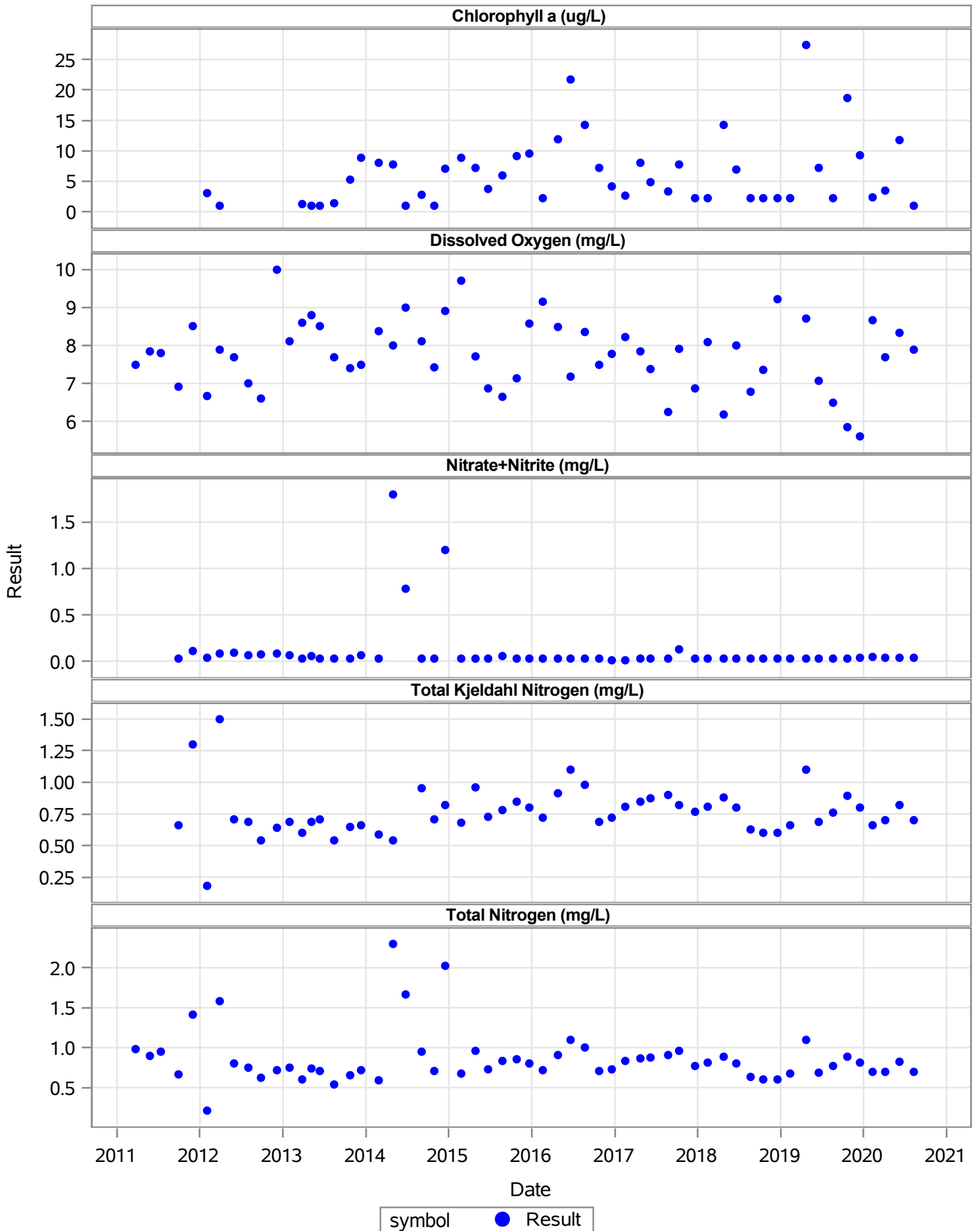
Date

symbol ● Result

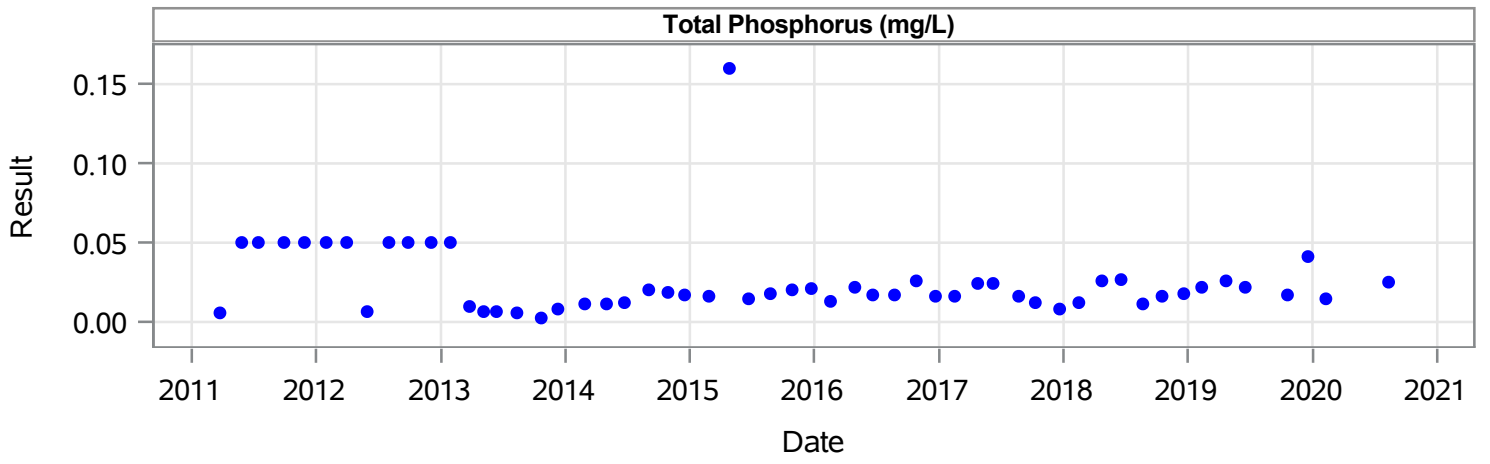
CLEAR_LAKE_MIDDLE

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	24MAR11	11AUG20	1	27.4	6.256	4.5	48
Dissolved Oxygen (mg/L)	24MAR11	11AUG20	5.6	10	7.759	7.81	57
Nitrate+Nitrite (mg/L)	24MAR11	11AUG20	0.011	1.8	0.103	0.025	55
Total Kjeldahl Nitrogen (mg/L)	24MAR11	11AUG20	0.18	1.5	0.767	0.72	54
Total Nitrogen (mg/L)	24MAR11	11AUG20	0.21	2.3	0.861	0.785	58
Total Phosphorus (mg/L)	24MAR11	11AUG20	0.0028	0.16	0.025	0.018	55

CLEAR_LAKE_MIDDLE



CLEAR_LAKE_MIDDLE

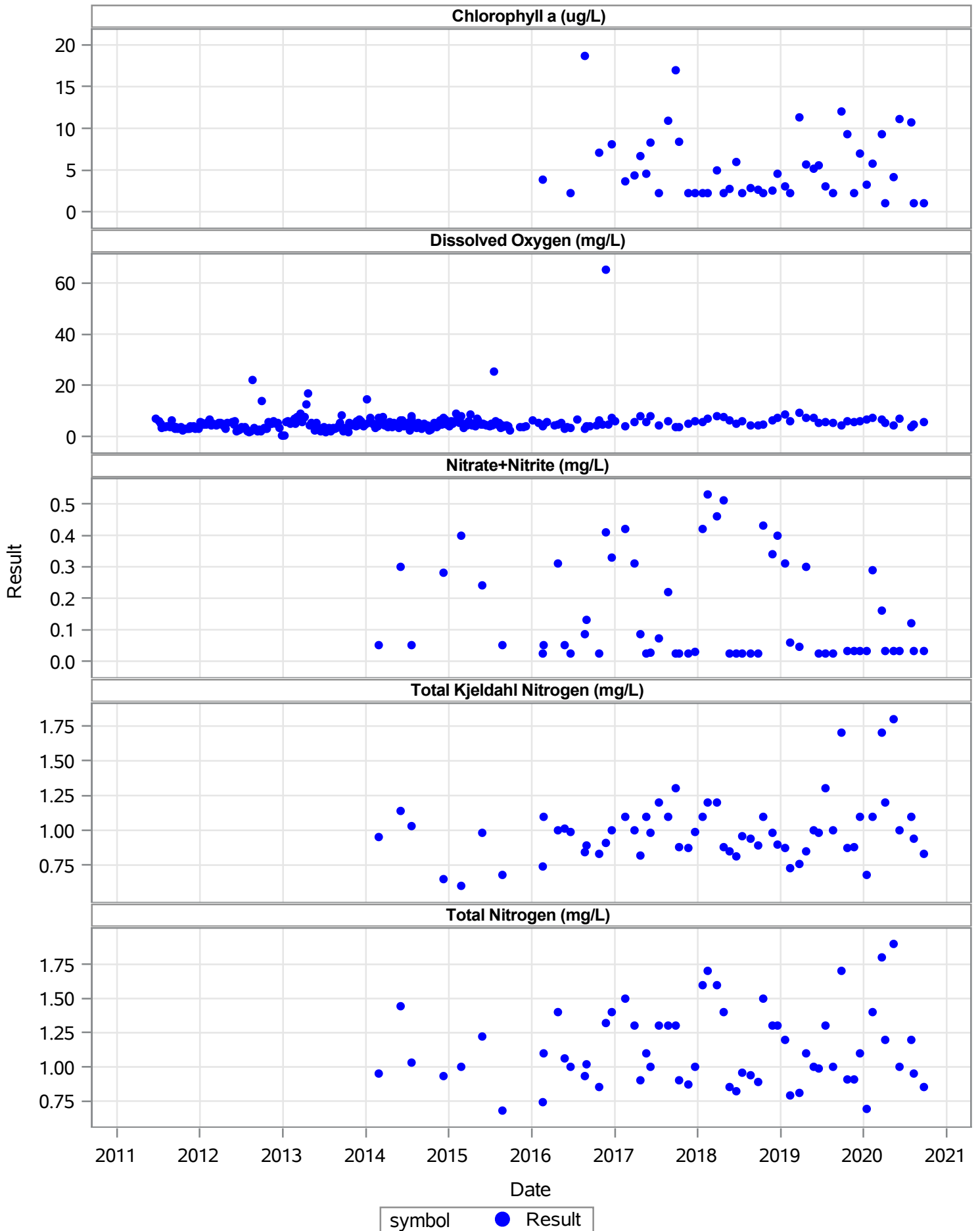


symbol ● Result

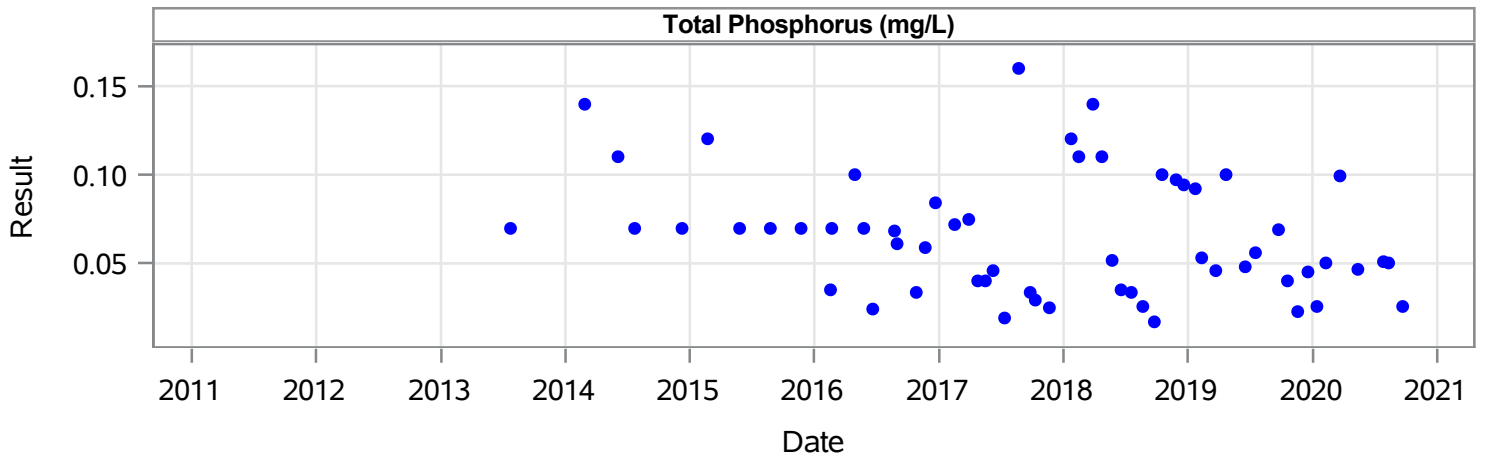
CONTROL_IV

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	16MAY11	22SEP20	1	18.7	5.373	4.1	49
Dissolved Oxygen (mg/L)	16MAY11	22SEP20	0.2	65.2	5.165	4.64	297
Nitrate+Nitrite (mg/L)	16MAY11	22SEP20	0.025	0.53	0.152	0.05	59
Total Kjeldahl Nitrogen (mg/L)	16MAY11	22SEP20	0.6	1.8	0.998	0.98	61
Total Nitrogen (mg/L)	16MAY11	22SEP20	0.68	1.9	1.134	1.03	61
Total Phosphorus (mg/L)	16MAY11	22SEP20	0.017	0.16	0.065	0.06	58

CONTROL_IV



CONTROL_IV

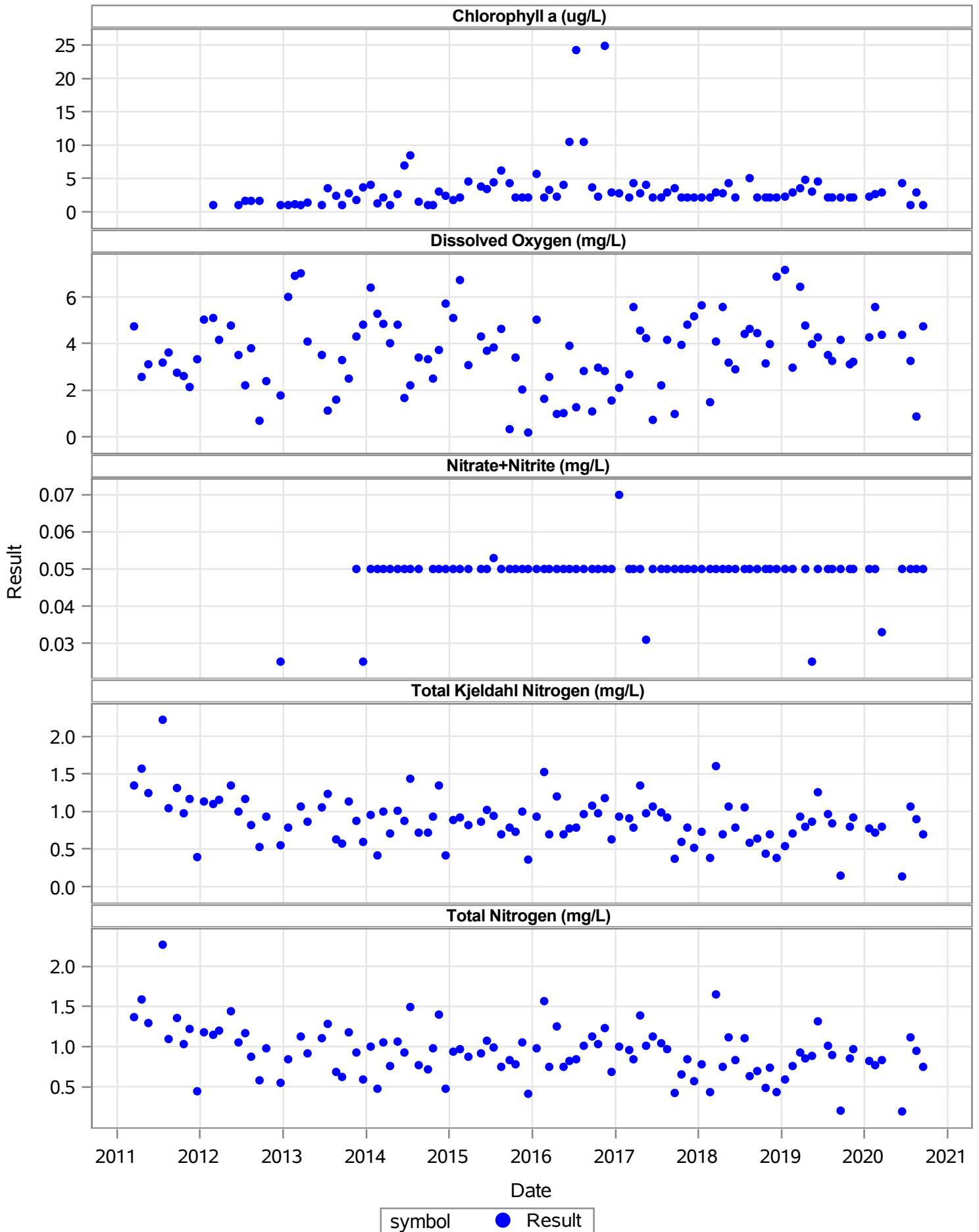


symbol ● Result

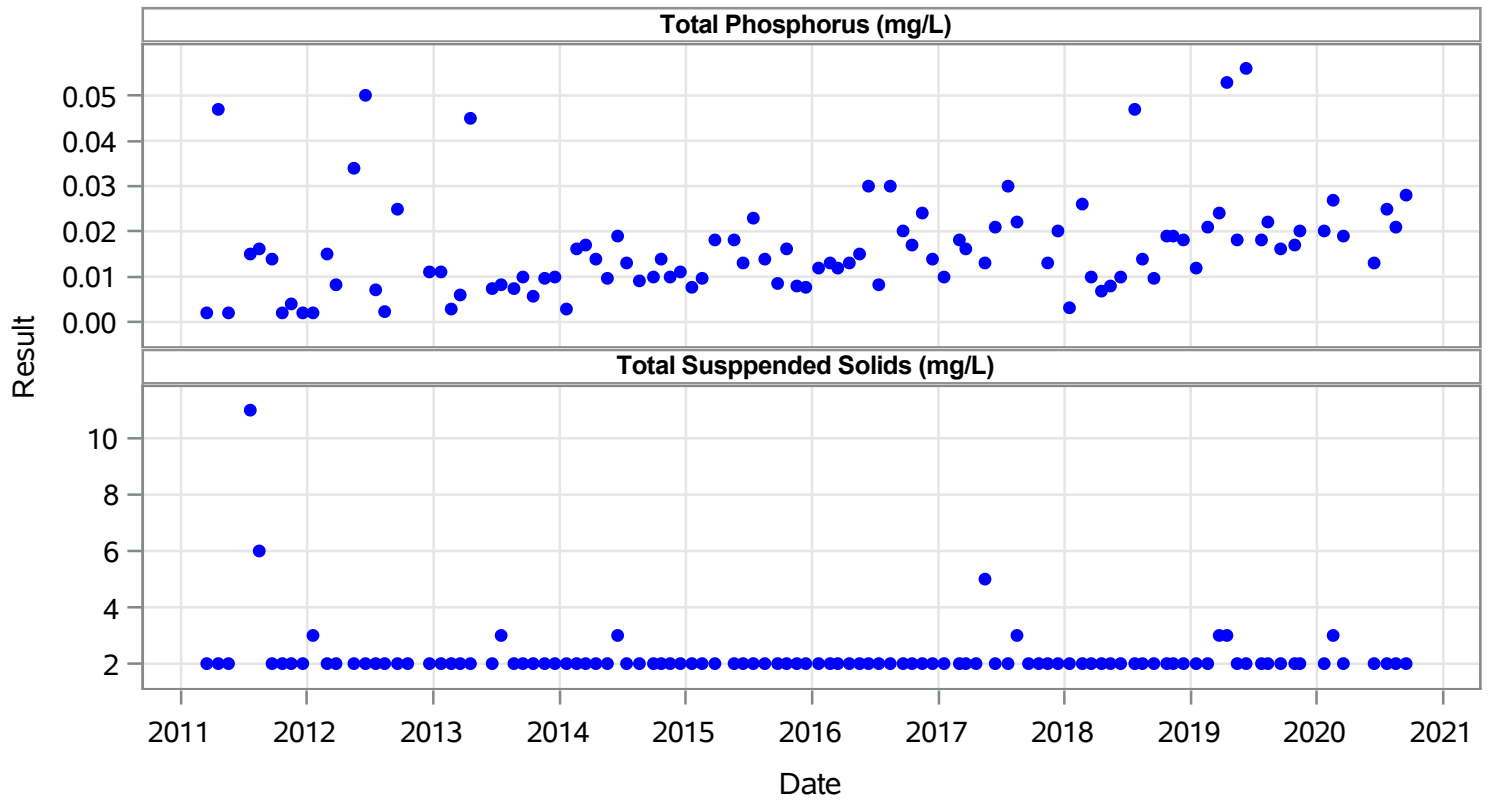
GW_1

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	15MAR11	15SEP20	1	24.9	3.347	2.3	93
Dissolved Oxygen (mg/L)	15MAR11	15SEP20	0.2	7.16	3.599	3.63	107
Nitrate+Nitrite (mg/L)	15MAR11	15SEP20	0.025	0.07	0.049	0.05	78
Total Kjeldahl Nitrogen (mg/L)	15MAR11	15SEP20	0.14	2.22	0.886	0.885	106
Total Nitrogen (mg/L)	15MAR11	15SEP20	0.19	2.27	0.933	0.93	106
Total Phosphorus (mg/L)	15MAR11	15SEP20	0.002	0.056	0.016	0.014	103
Total Susppended Solids (mg/L)	15MAR11	15SEP20	2	11	2.215	2	107

GW_1



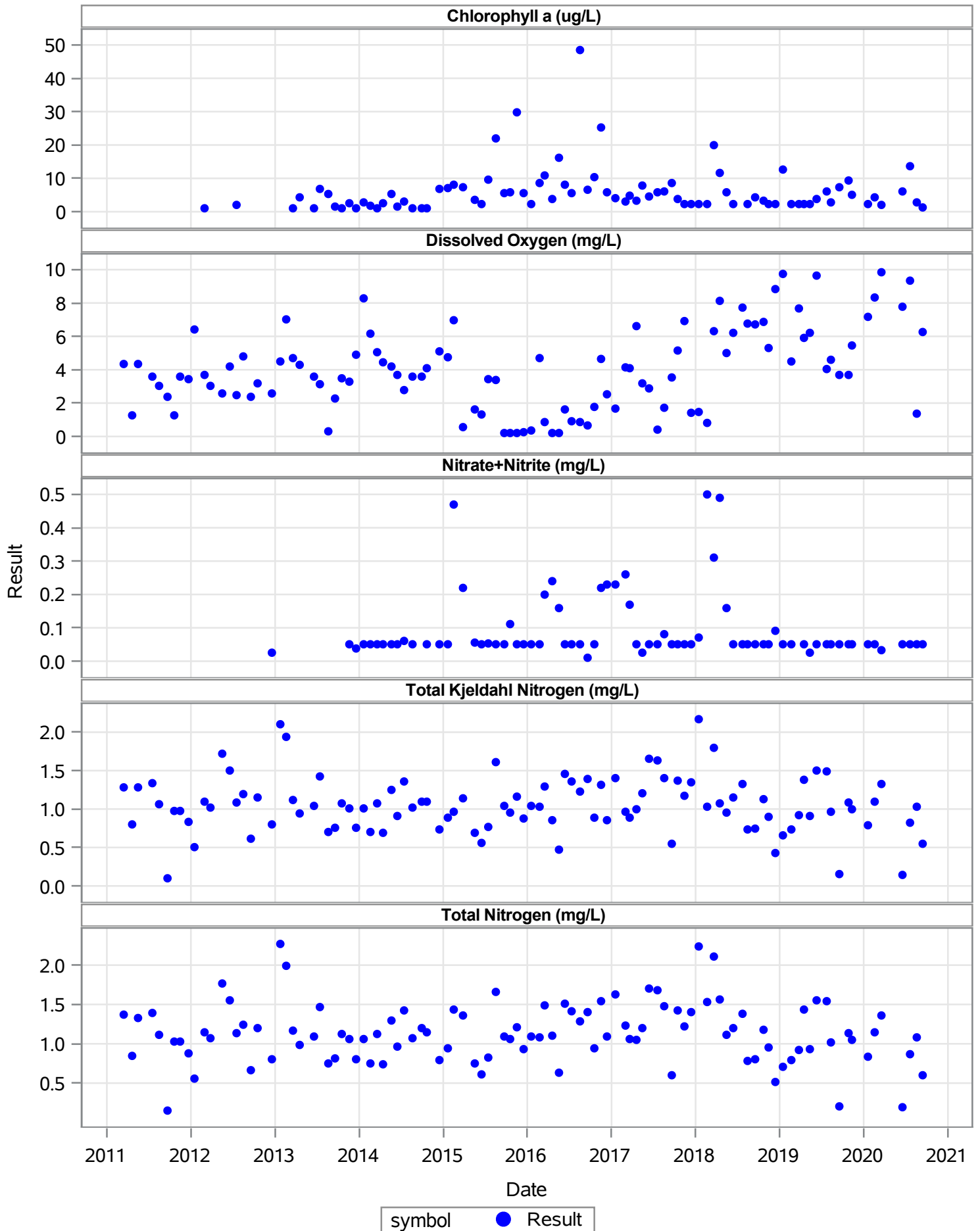
GW_1



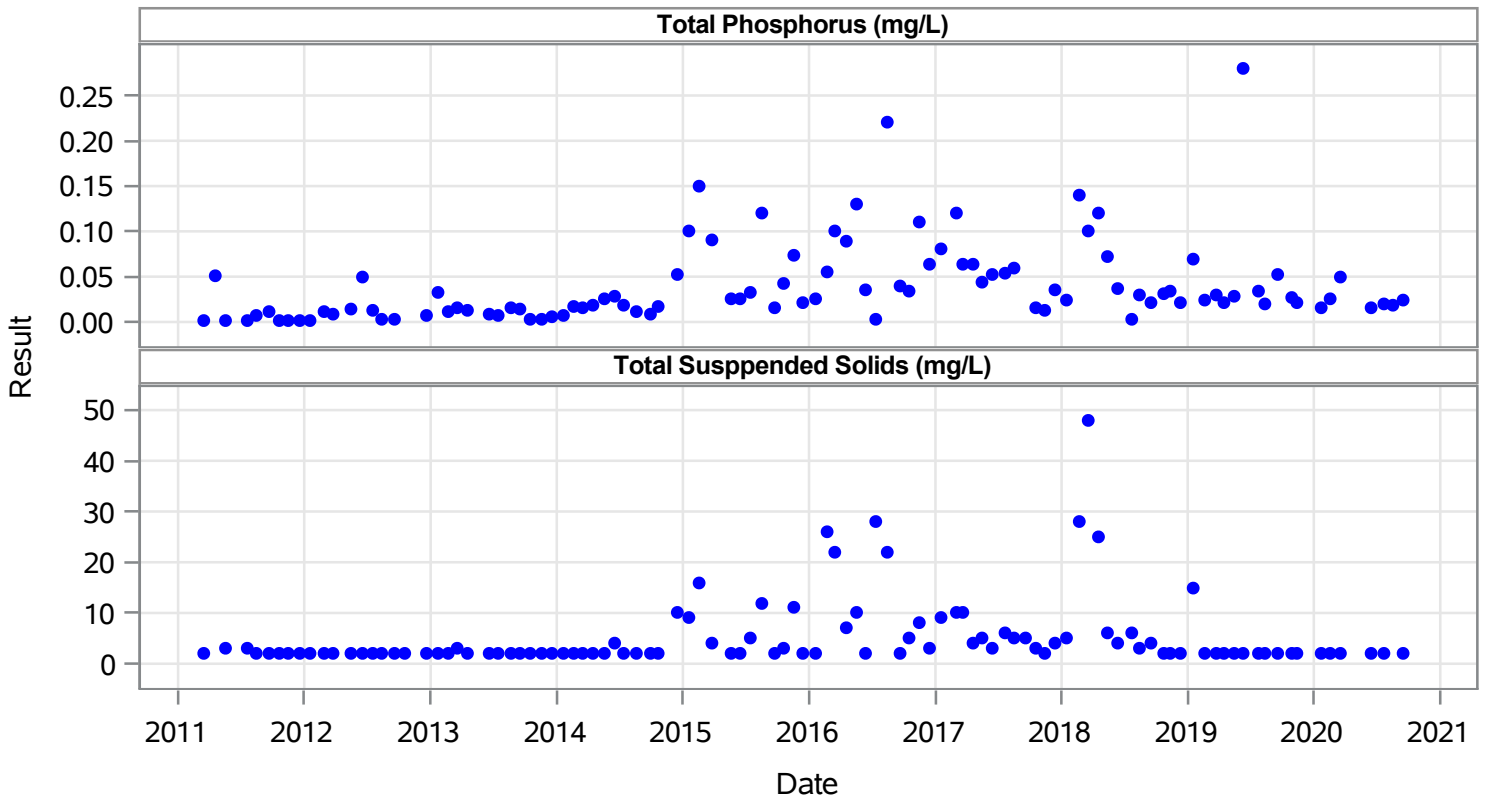
GW_3

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	15MAR11	15SEP20	1	48.4	6.017	4	86
Dissolved Oxygen (mg/L)	15MAR11	15SEP20	0.2	9.85	4.006	3.7	106
Nitrate+Nitrite (mg/L)	15MAR11	15SEP20	0.01	0.5	0.091	0.05	77
Total Kjeldahl Nitrogen (mg/L)	15MAR11	15SEP20	0.1	2.17	1.053	1.03	106
Total Nitrogen (mg/L)	15MAR11	15SEP20	0.15	2.27	1.134	1.105	106
Total Phosphorus (mg/L)	15MAR11	15SEP20	0.002	0.28	0.04	0.025	104
Total Susppended Solids (mg/L)	15MAR11	15SEP20	2	48	5.25	2	104

GW_3



GW_3

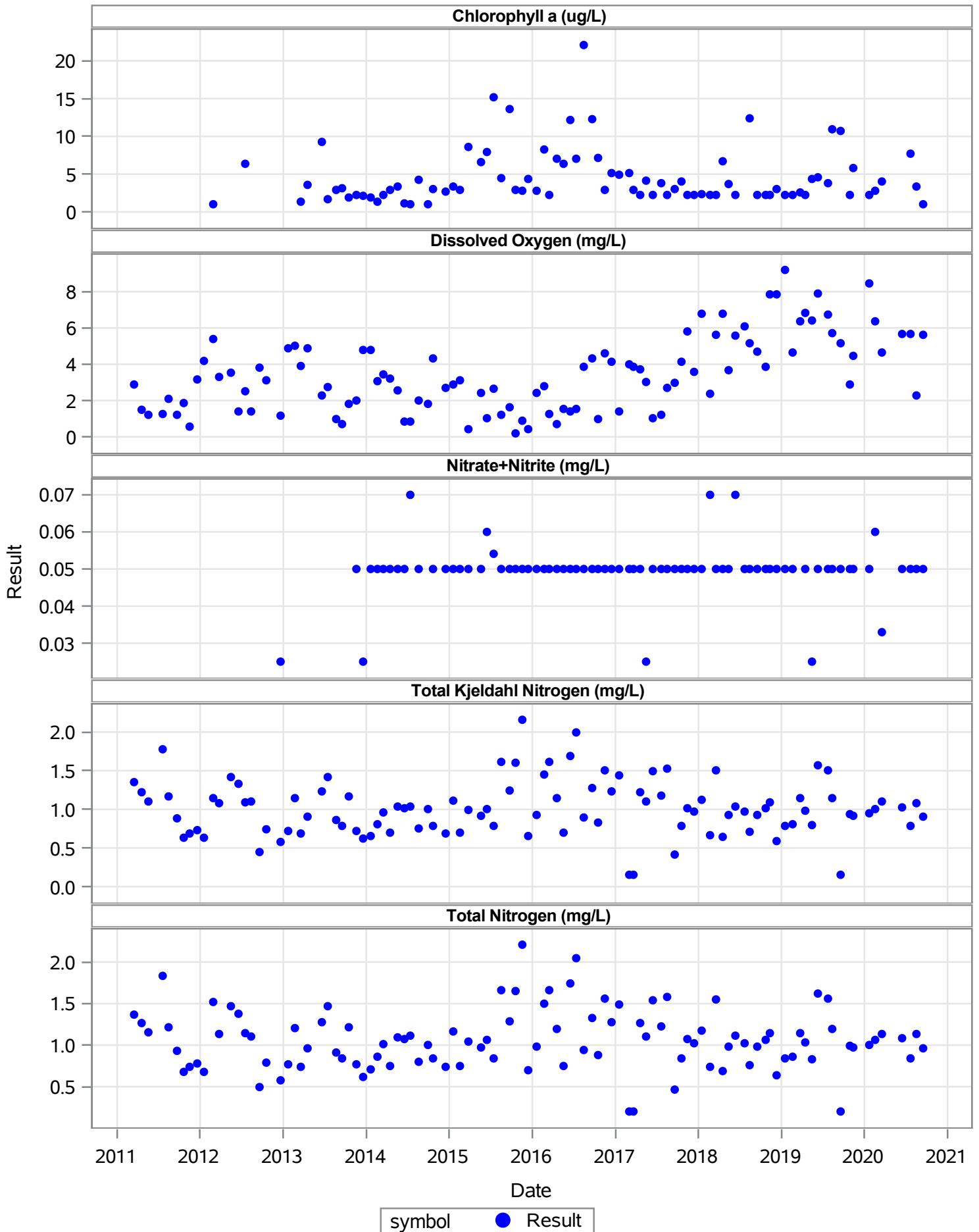


symbol ● Result

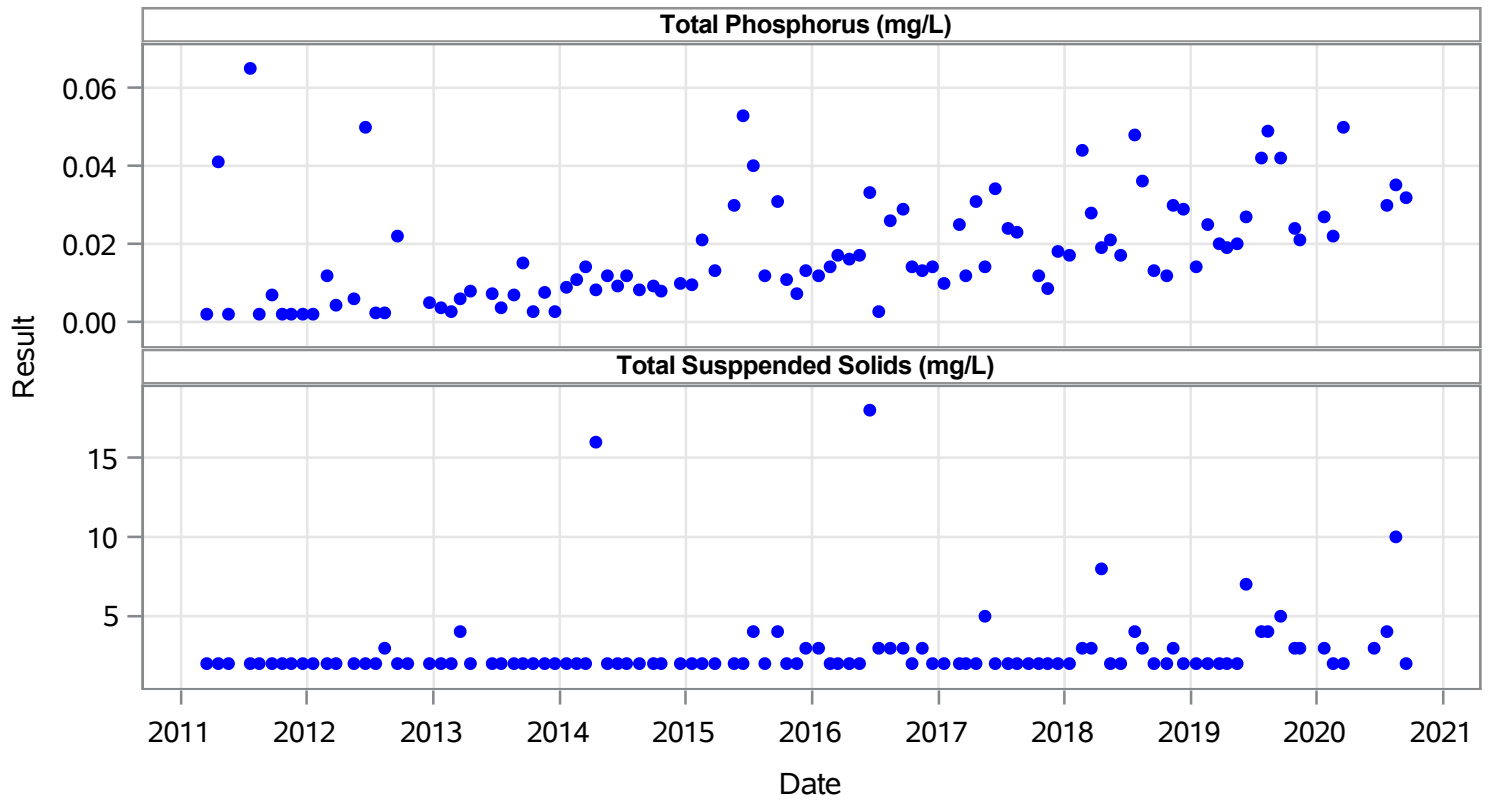
GW_5

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	15MAR11	15SEP20	1	22.1	4.481	3	85
Dissolved Oxygen (mg/L)	15MAR11	15SEP20	0.2	9.2	3.433	3.1	106
Nitrate+Nitrite (mg/L)	15MAR11	15SEP20	0.025	0.07	0.05	0.05	77
Total Kjeldahl Nitrogen (mg/L)	15MAR11	15SEP20	0.15	2.16	1.011	0.995	106
Total Nitrogen (mg/L)	15MAR11	15SEP20	0.2	2.21	1.061	1.035	106
Total Phosphorus (mg/L)	15MAR11	15SEP20	0.002	0.065	0.018	0.014	103
Total Susppended Solids (mg/L)	15MAR11	15SEP20	2	18	2.792	2	106

GW_5



GW_5

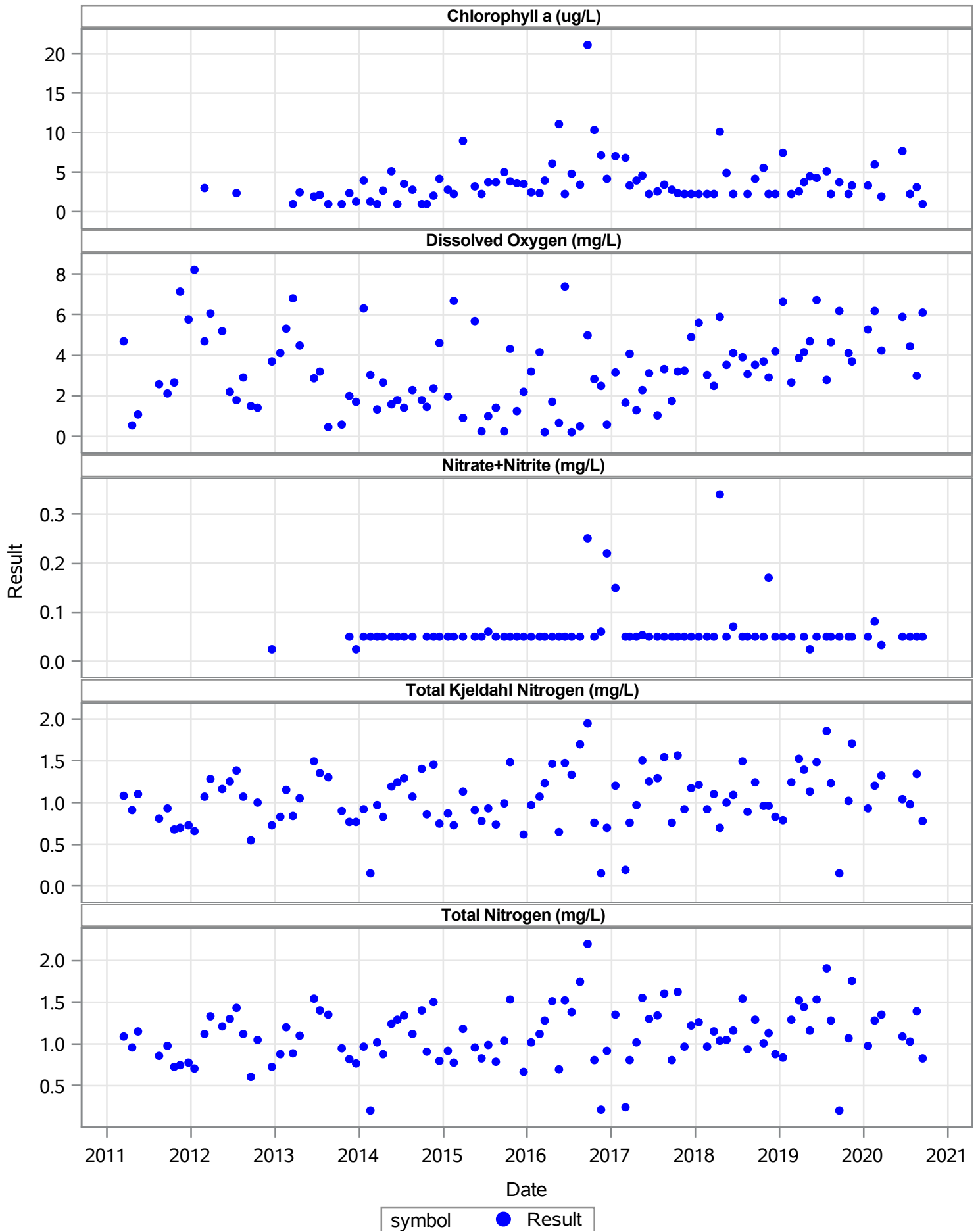


symbol ● Result

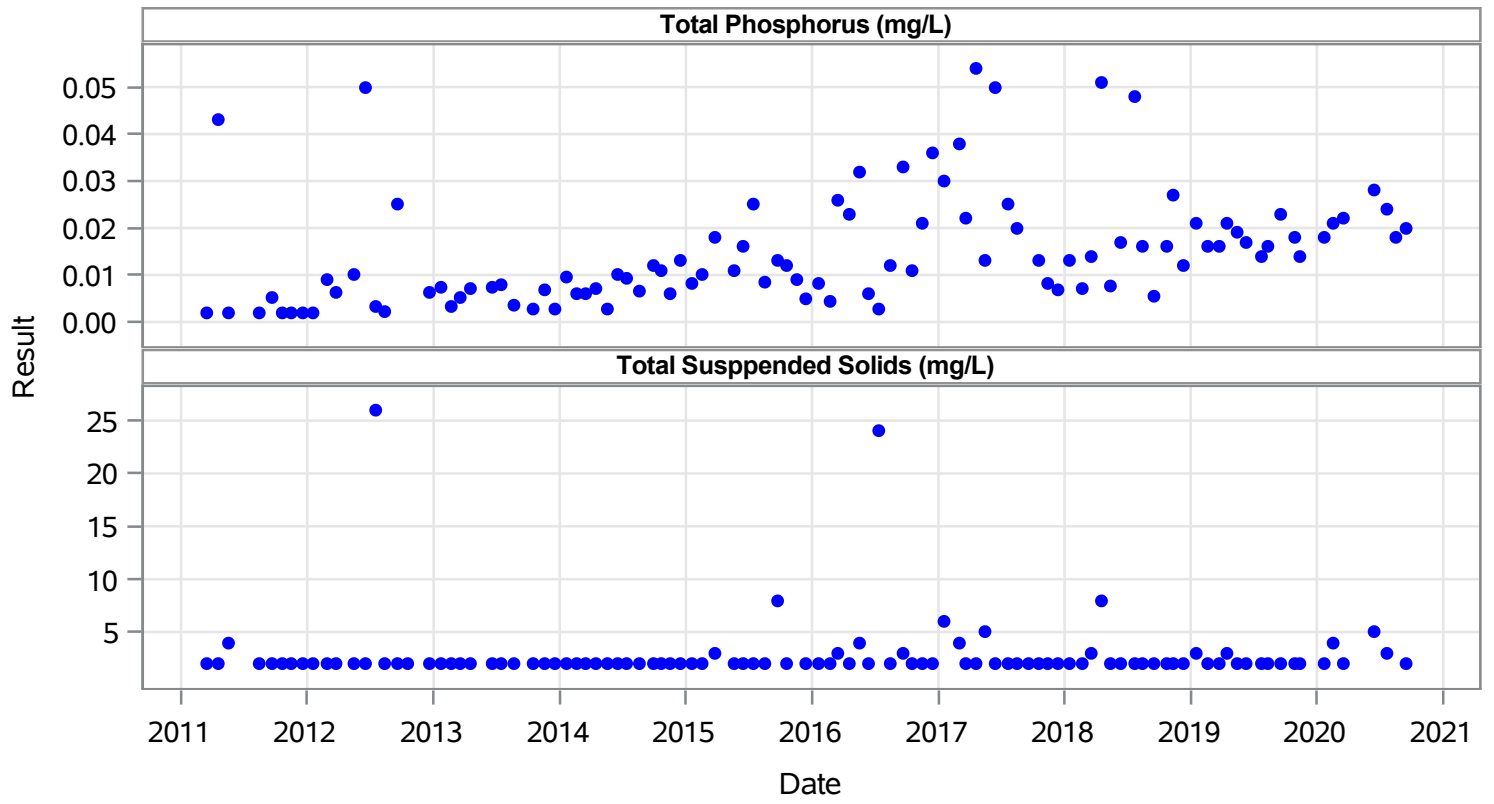
GW_7

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	15MAR11	15SEP20	1	21.1	3.717	2.9	86
Dissolved Oxygen (mg/L)	15MAR11	15SEP20	0.2	8.22	3.29	3.07	105
Nitrate+Nitrite (mg/L)	15MAR11	15SEP20	0.025	0.34	0.061	0.05	78
Total Kjeldahl Nitrogen (mg/L)	15MAR11	15SEP20	0.15	1.95	1.047	1.03	104
Total Nitrogen (mg/L)	15MAR11	15SEP20	0.2	2.2	1.104	1.09	104
Total Phosphorus (mg/L)	15MAR11	15SEP20	0.002	0.054	0.015	0.012	103
Total Susppended Solids (mg/L)	15MAR11	15SEP20	2	26	2.806	2	103

GW_7



GW_7

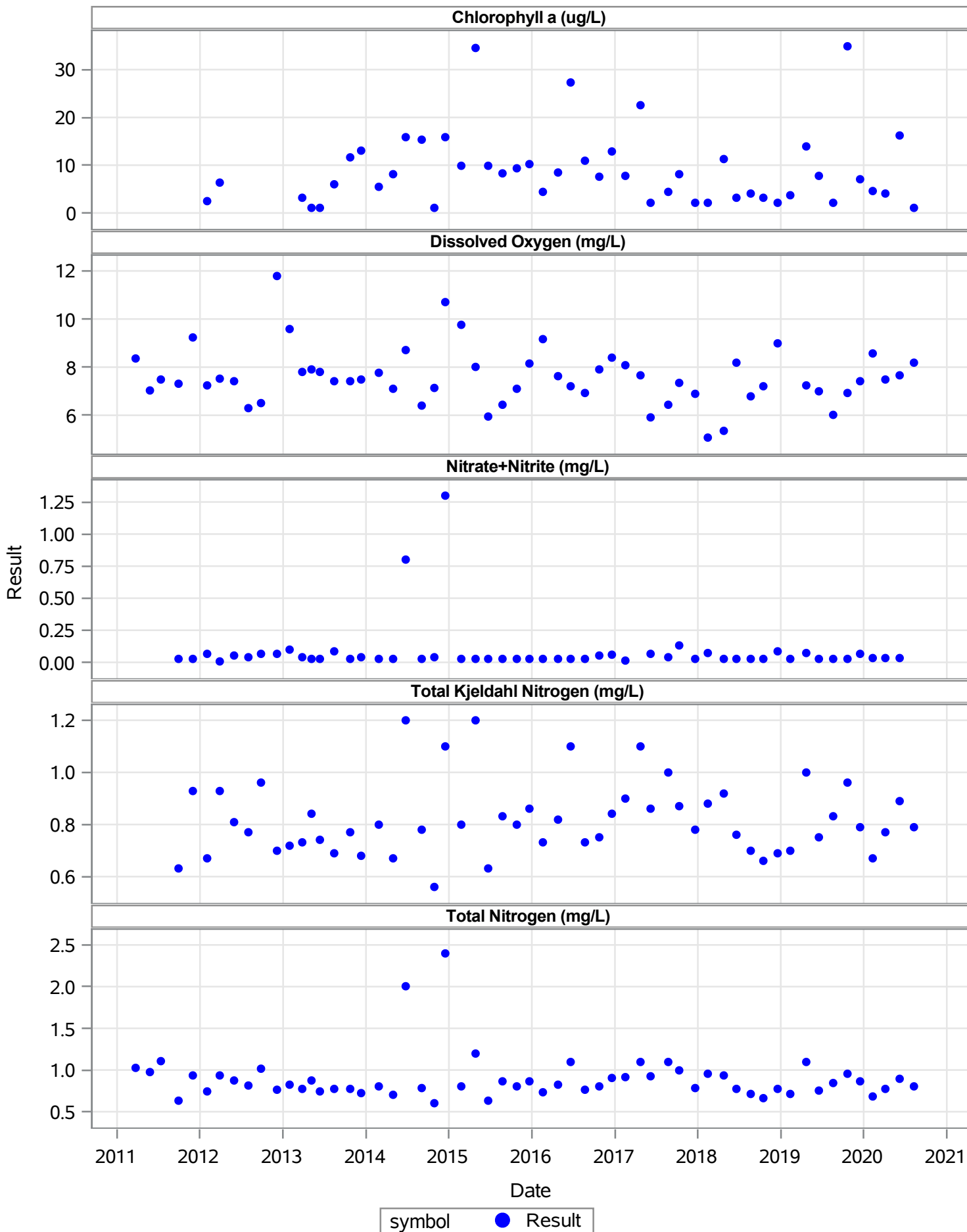


symbol ● Result

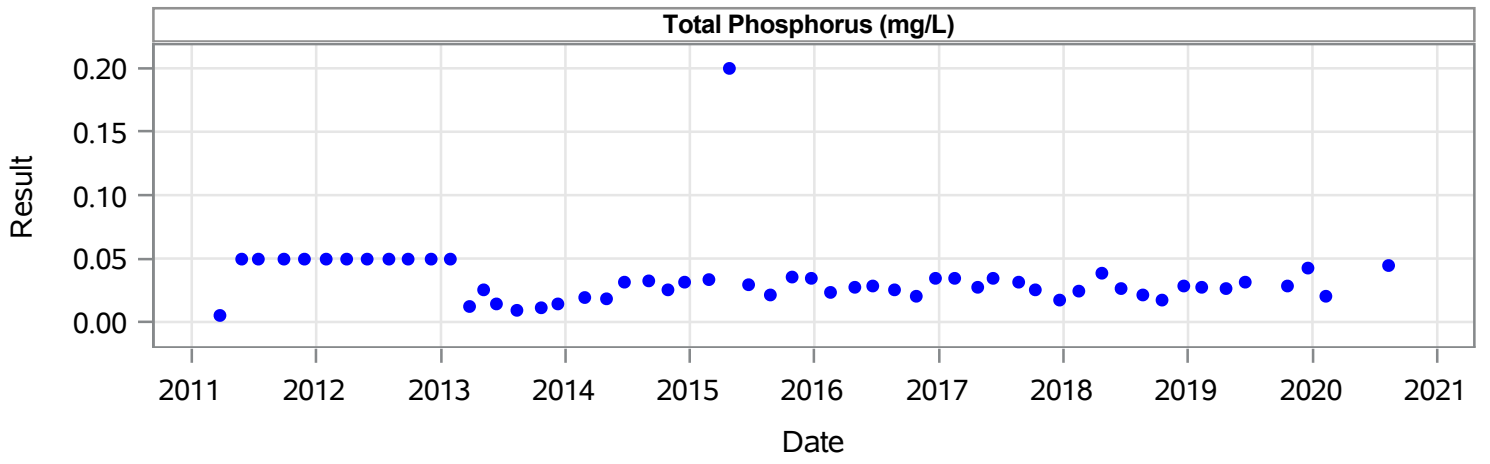
LAKE_MANGONIA_MIDDLE

Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	24MAR11	11AUG20	1	34.9	8.94	7.7	48
Dissolved Oxygen (mg/L)	24MAR11	11AUG20	5.07	11.8	7.586	7.4	57
Nitrate+Nitrite (mg/L)	24MAR11	11AUG20	0.01	1.3	0.078	0.027	53
Total Kjeldahl Nitrogen (mg/L)	24MAR11	11AUG20	0.56	1.2	0.819	0.79	55
Total Nitrogen (mg/L)	24MAR11	11AUG20	0.6	2.4	0.893	0.815	58
Total Phosphorus (mg/L)	24MAR11	11AUG20	0.0055	0.2	0.034	0.028	55

LAKE_MANGONIA_MIDDLE



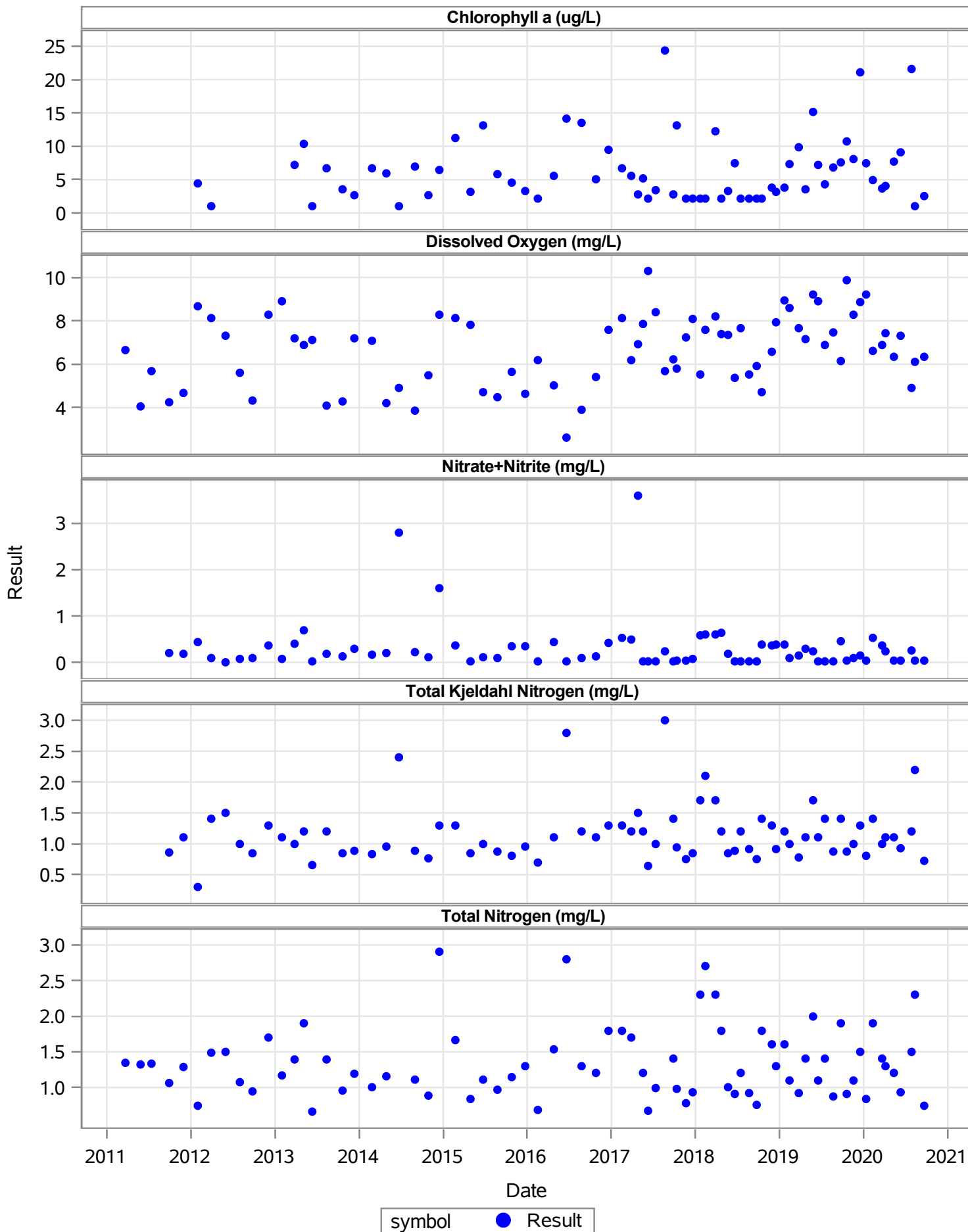
LAKE_MANGONIA_MIDDLE



M_CANAL

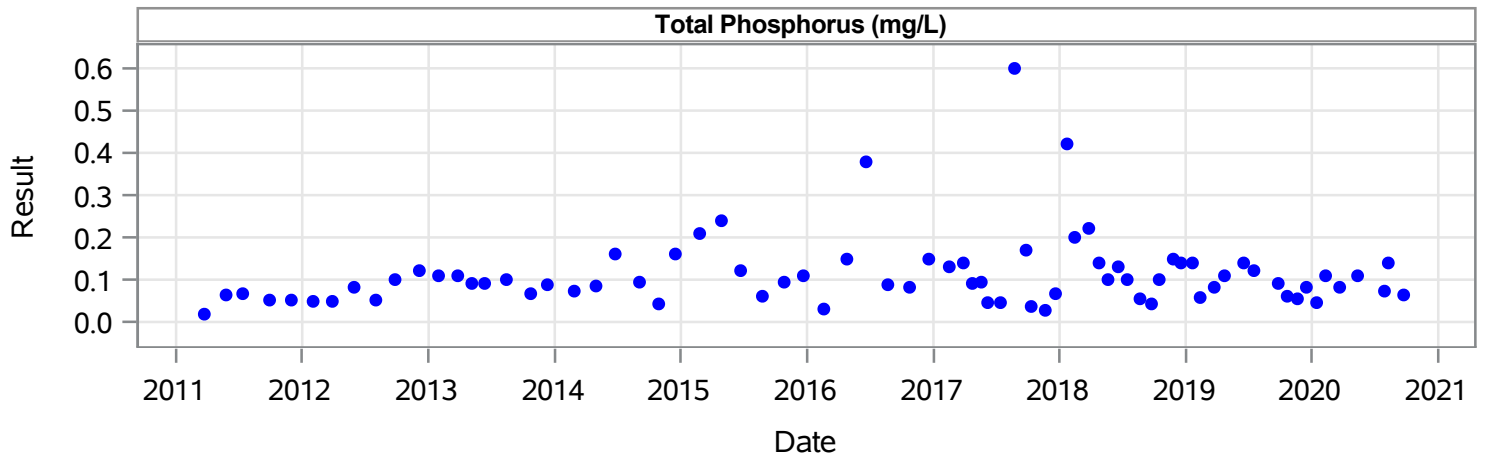
Analyte	Start Date	End Date	Minumum Value	Maximum Value	Mean	Median	Number of obs
Chlorophyll a (ug/L)	24MAR11	22SEP20	1	24.3	6.301	4.95	70
Dissolved Oxygen (mg/L)	24MAR11	22SEP20	2.62	10.3	6.663	6.895	80
Nitrate+Nitrite (mg/L)	24MAR11	22SEP20	0.01	3.6	0.302	0.15	77
Total Kjeldahl Nitrogen (mg/L)	24MAR11	22SEP20	0.3	3	1.158	1.1	77
Total Nitrogen (mg/L)	24MAR11	22SEP20	0.66	2.9	1.335	1.2	77
Total Phosphorus (mg/L)	24MAR11	22SEP20	0.018	0.6	0.112	0.093	76

M_CANAL



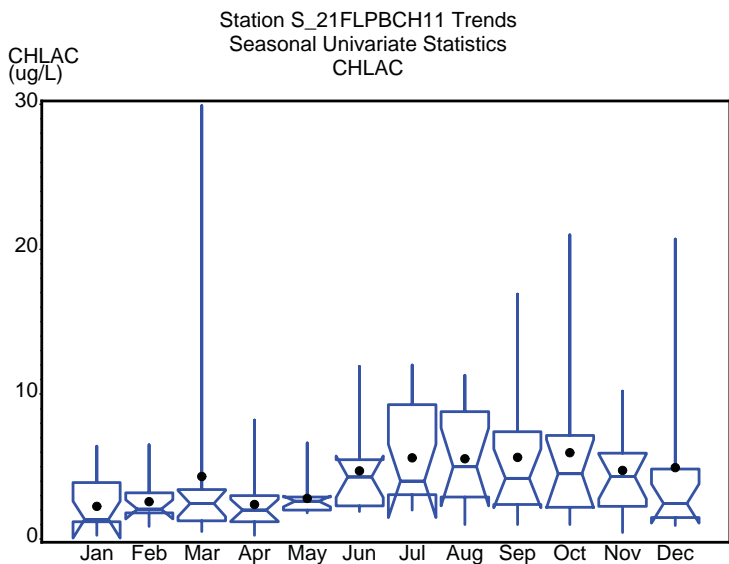
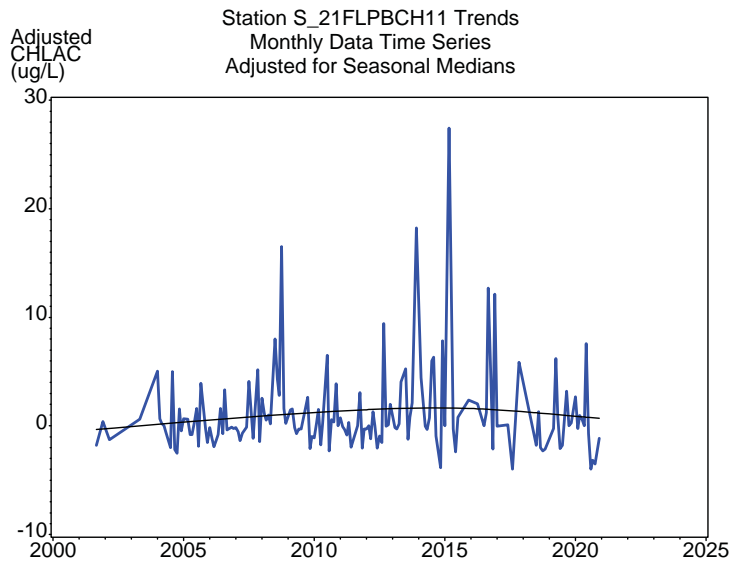
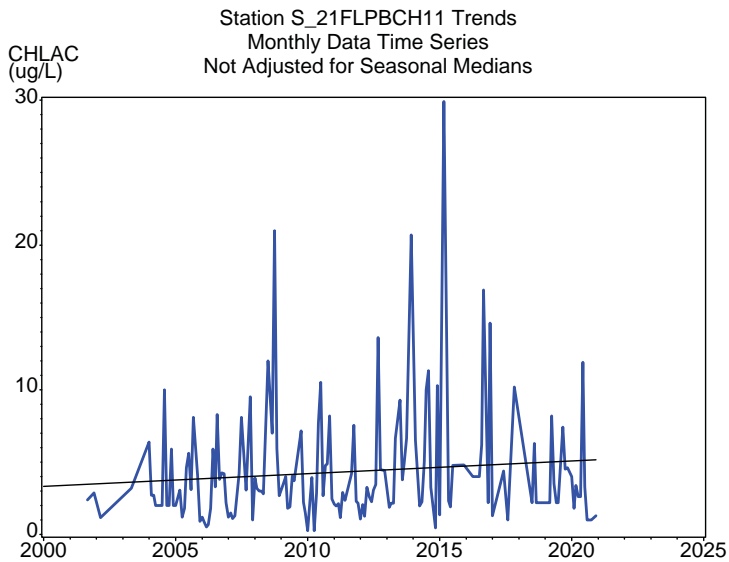
M_CANAL

Total Phosphorus (mg/L)



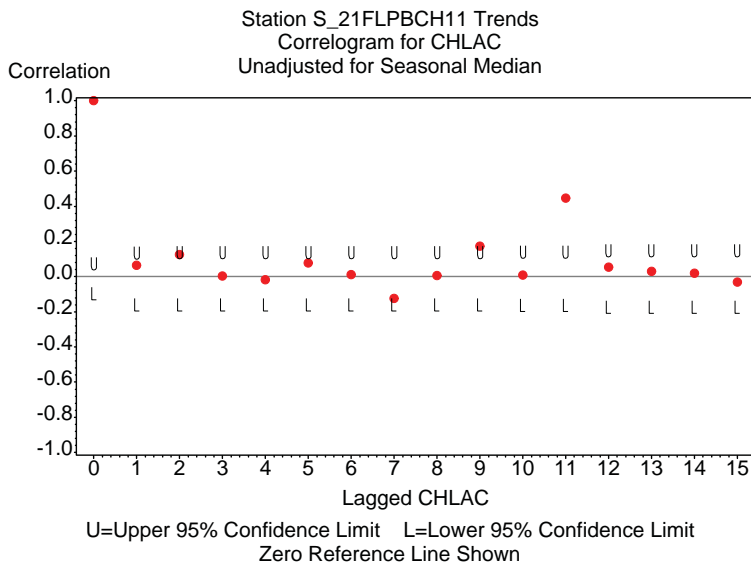
symbol ● Result

Appendix B



Station S_21FLPBCH11 Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.064	0.074	0.147	-0.147
2	0.125	0.074	0.148	-0.148
3	0.003	0.074	0.148	-0.148
4	-0.019	0.074	0.148	-0.148
5	0.077	0.074	0.148	-0.148
6	0.012	0.074	0.149	-0.149
7	-0.124	0.074	0.149	-0.149
8	0.005	0.075	0.149	-0.149
9	0.173	0.075	0.149	-0.149
10	0.008	0.075	0.151	-0.151
11	0.447	0.075	0.151	-0.151
12	0.054	0.080	0.160	-0.160
13	0.031	0.080	0.160	-0.160
14	0.019	0.080	0.160	-0.160
15	-0.031	0.080	0.160	-0.160

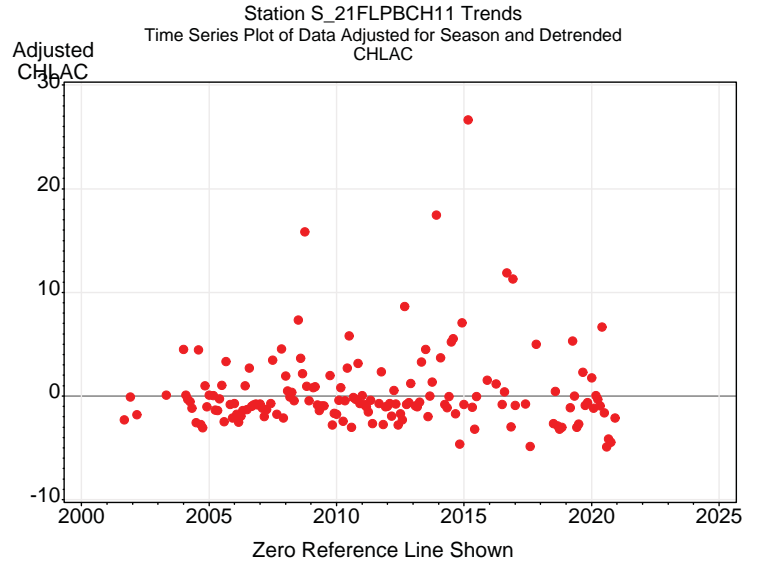


Station S_21FLPBCH11 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.06	0.325	0.402	0.023

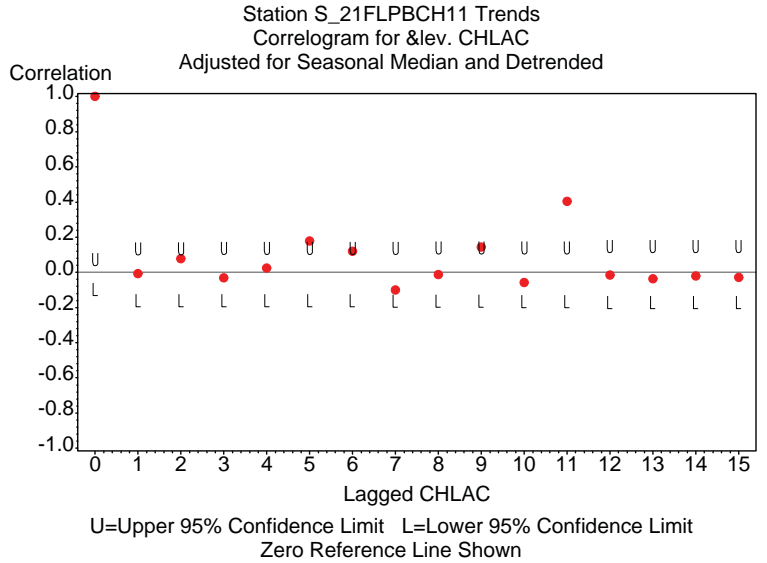
Station S_21FLPBCH11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

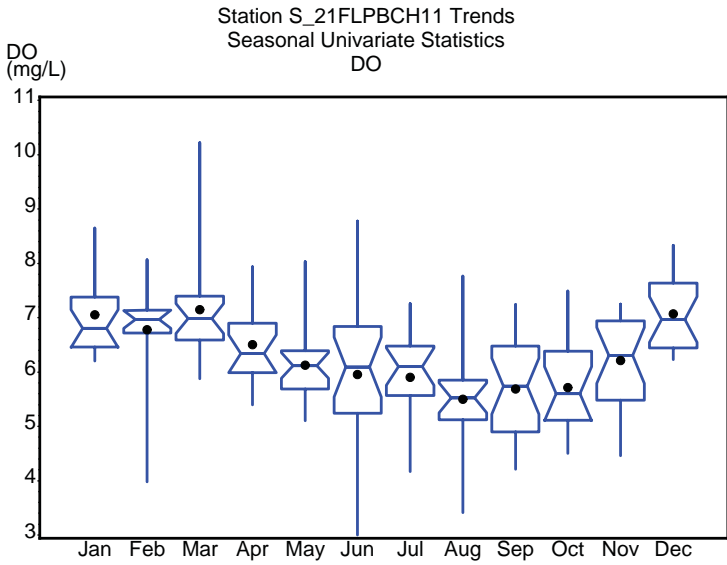
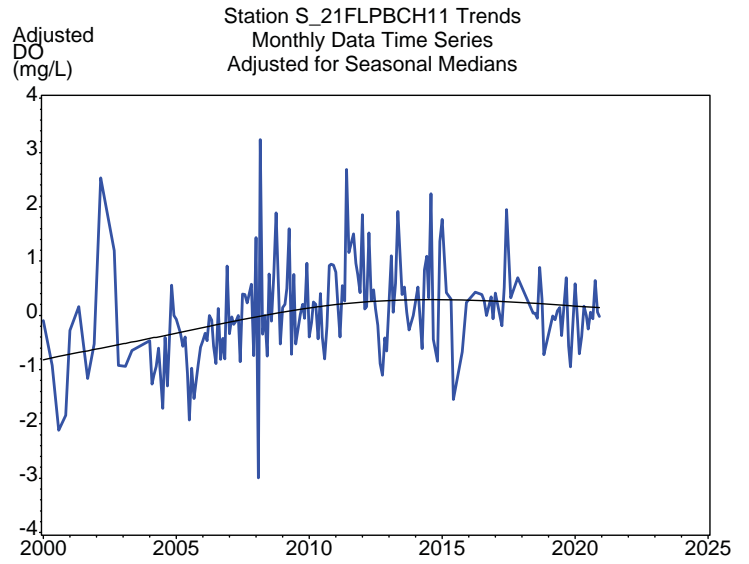
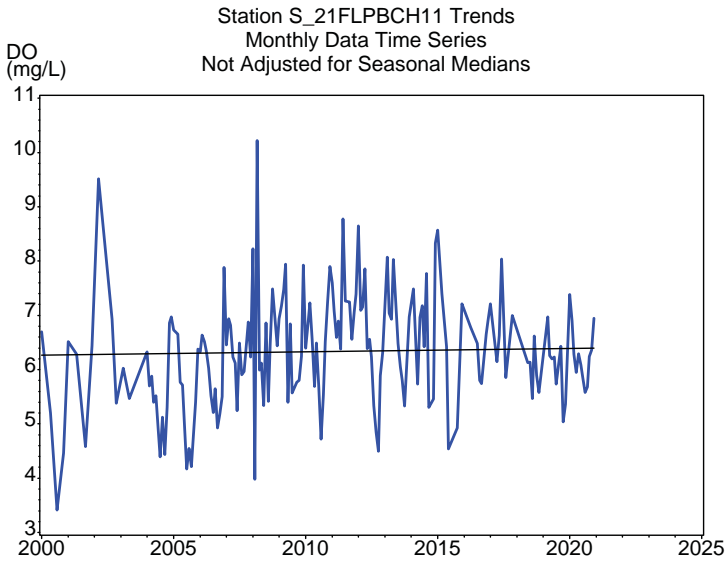
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.06	0.325	0.402	0.023



Station S_21FLPBCH11 Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

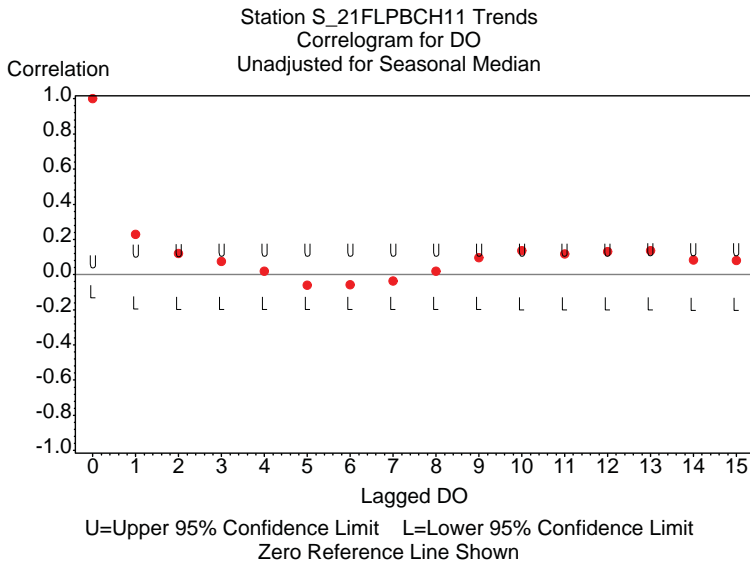
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	-0.006	0.074	0.147	-0.147
2	0.077	0.074	0.147	-0.147
3	-0.031	0.074	0.148	-0.148
4	0.024	0.074	0.148	-0.148
5	0.179	0.074	0.148	-0.148
6	0.119	0.075	0.149	-0.149
7	-0.100	0.075	0.150	-0.150
8	-0.013	0.075	0.151	-0.151
9	0.145	0.075	0.151	-0.151
10	-0.057	0.076	0.152	-0.152
11	0.404	0.076	0.152	-0.152
12	-0.016	0.080	0.159	-0.159
13	-0.037	0.080	0.159	-0.159
14	-0.021	0.080	0.159	-0.159
15	-0.029	0.080	0.159	-0.159





Station S_21FLPBCH11 Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.228	0.074	0.147	-0.147
2	0.119	0.075	0.150	-0.150
3	0.075	0.075	0.151	-0.151
4	0.018	0.075	0.151	-0.151
5	-0.059	0.075	0.151	-0.151
6	-0.057	0.076	0.151	-0.151
7	-0.036	0.076	0.151	-0.151
8	0.020	0.076	0.151	-0.151
9	0.096	0.076	0.151	-0.151
10	0.136	0.076	0.152	-0.152
11	0.117	0.076	0.153	-0.153
12	0.131	0.077	0.153	-0.153
13	0.136	0.077	0.154	-0.154
14	0.084	0.078	0.155	-0.155
15	0.080	0.078	0.155	-0.155



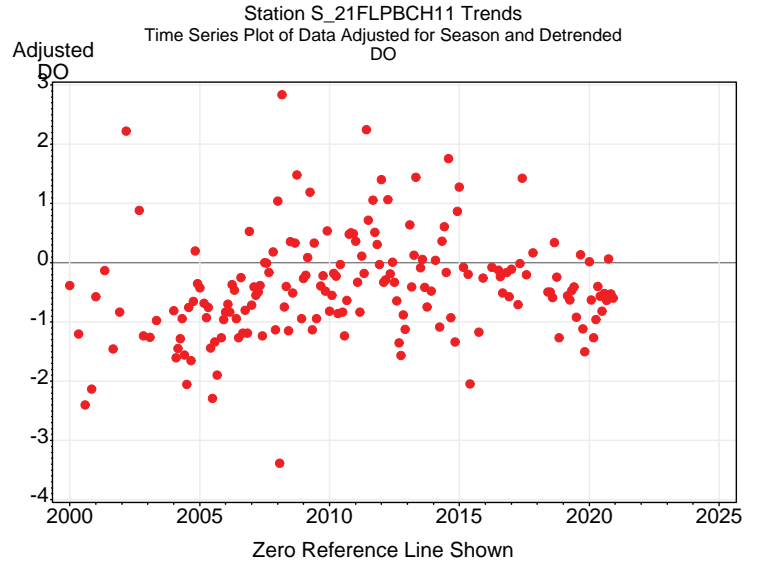
Station S_21FLPBCH11 Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.14	.004	0.067	0.014

Station S_21FLPBCH11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO

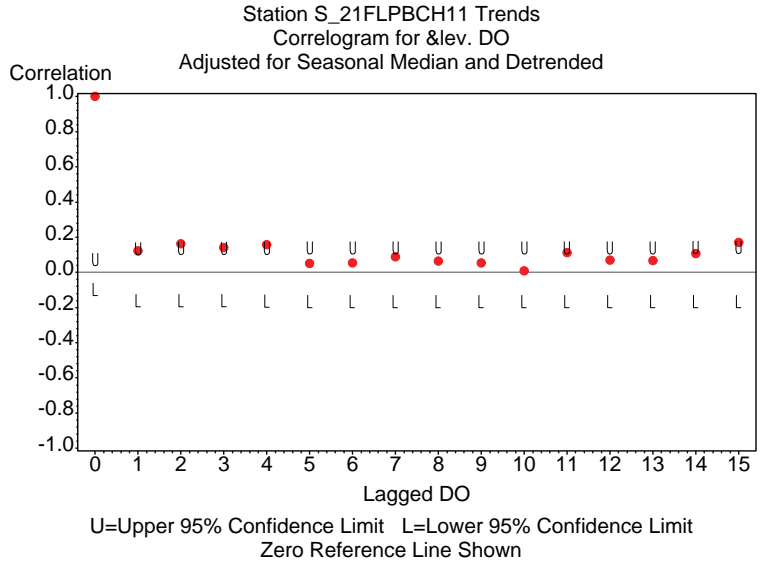
Adjusted for Seasonal Medians

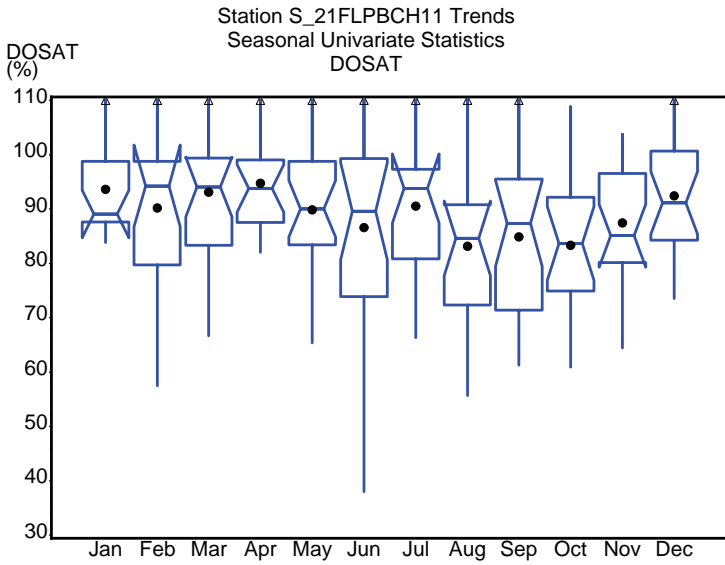
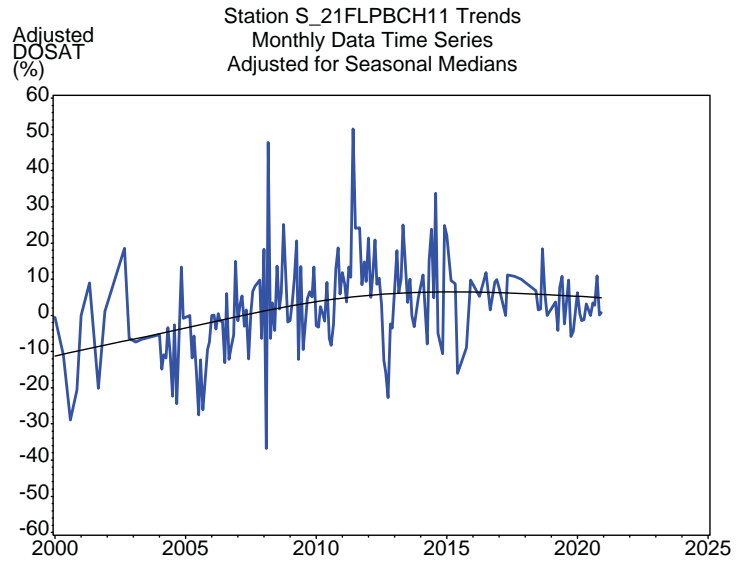
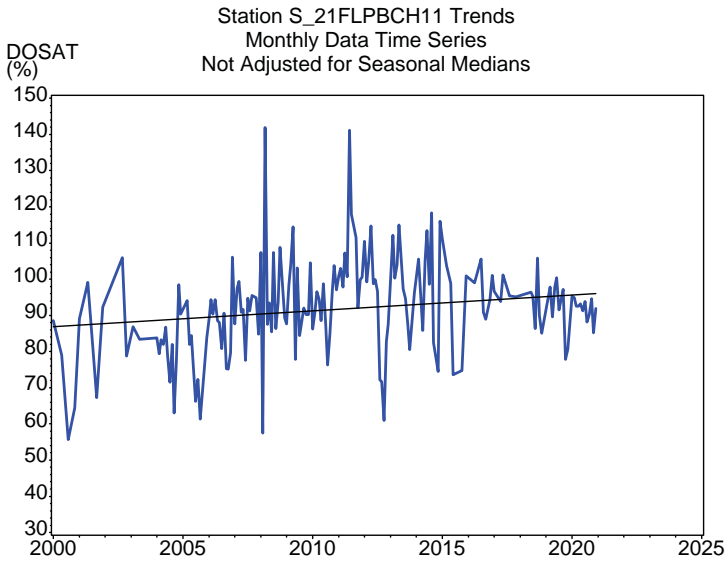
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.14	.004	0.067	0.014



Station S_21FLPBCH11 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

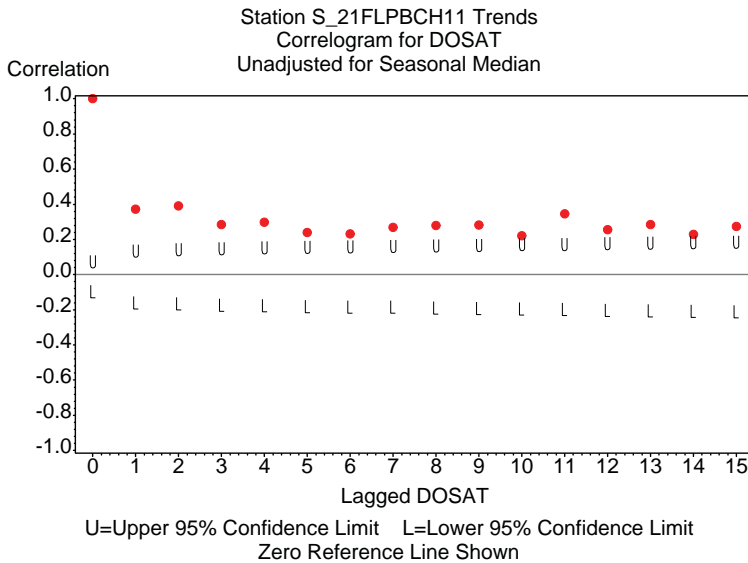
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.124	0.074	0.147	-0.147
2	0.162	0.074	0.148	-0.148
3	0.141	0.075	0.149	-0.149
4	0.156	0.075	0.150	-0.150
5	0.051	0.076	0.152	-0.152
6	0.054	0.076	0.152	-0.152
7	0.087	0.076	0.152	-0.152
8	0.064	0.076	0.152	-0.152
9	0.055	0.076	0.152	-0.152
10	0.008	0.076	0.153	-0.153
11	0.111	0.076	0.153	-0.153
12	0.070	0.077	0.153	-0.153
13	0.067	0.077	0.153	-0.153
14	0.107	0.077	0.154	-0.154
15	0.170	0.077	0.154	-0.154





Station S_21FLPBCH11 Trends Autocorrelation Statistics for DOSAT

Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.373	0.074	0.147	-0.147
2	0.390	0.077	0.154	-0.154
3	0.285	0.081	0.161	-0.161
4	0.298	0.082	0.165	-0.165
5	0.239	0.084	0.169	-0.169
6	0.231	0.086	0.171	-0.171
7	0.268	0.087	0.173	-0.173
8	0.279	0.088	0.176	-0.176
9	0.282	0.090	0.179	-0.179
10	0.221	0.091	0.183	-0.183
11	0.346	0.092	0.185	-0.185
12	0.255	0.095	0.189	-0.189
13	0.284	0.096	0.192	-0.192
14	0.229	0.097	0.195	-0.195
15	0.273	0.098	0.197	-0.197

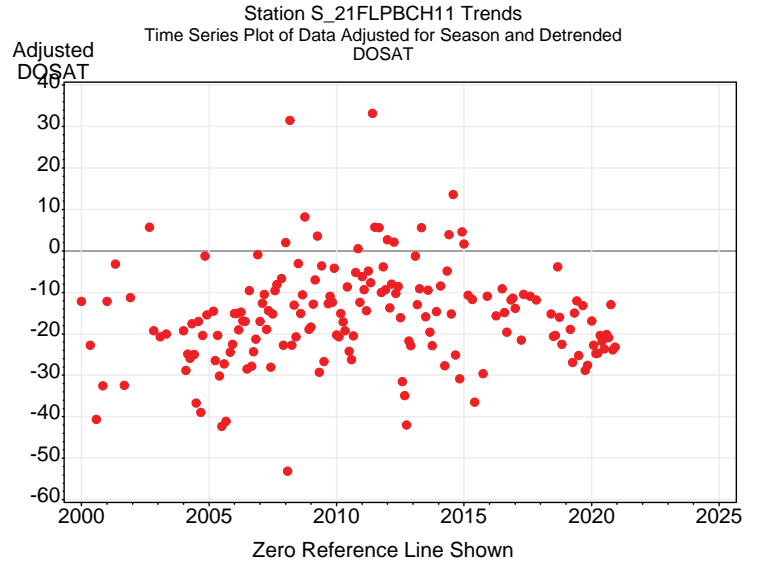


Station S_21FLPBCH11 Trends Appendix Seasonal Kendall Tau Trend Test Statistics DOSAT Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.344	0	0	0.58

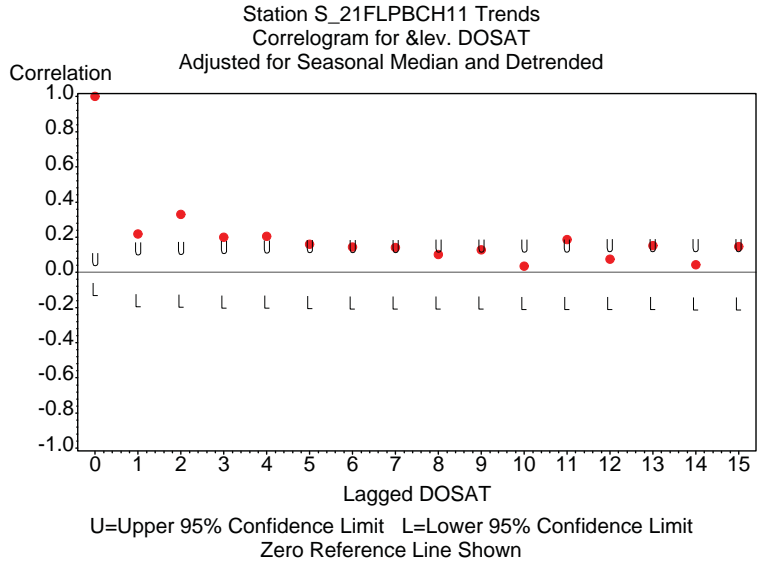
Station S_21FLPBCH11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DOSAT
 Adjusted for Seasonal Medians

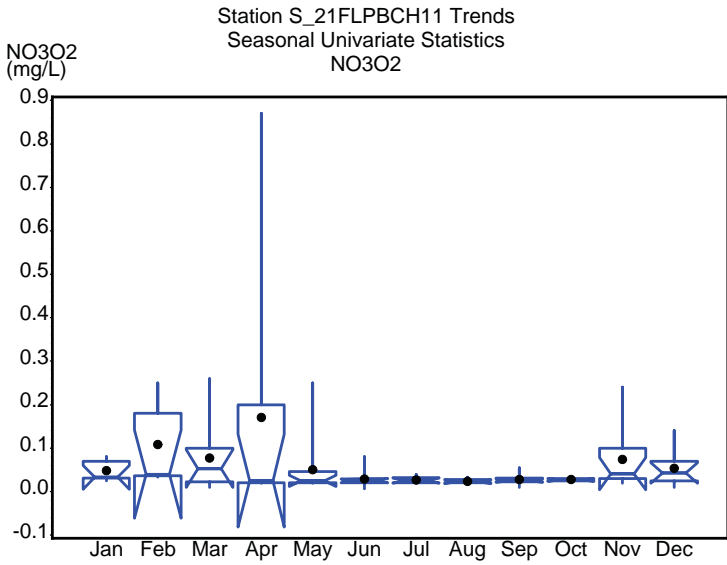
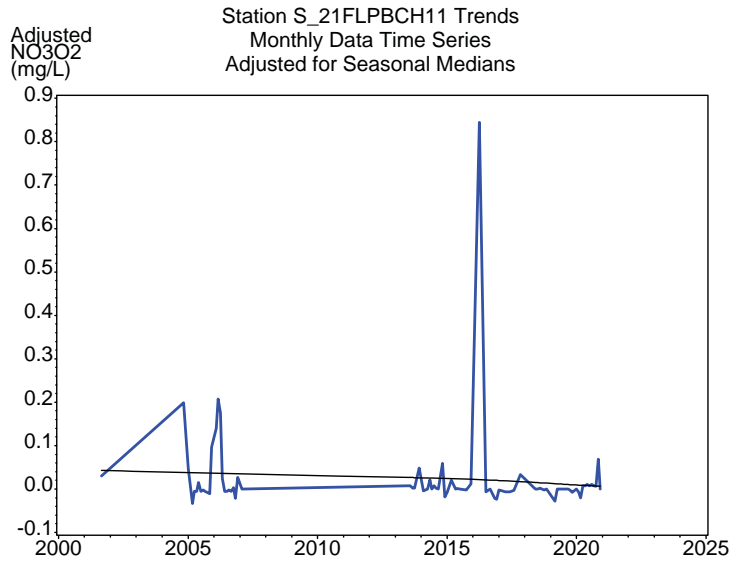
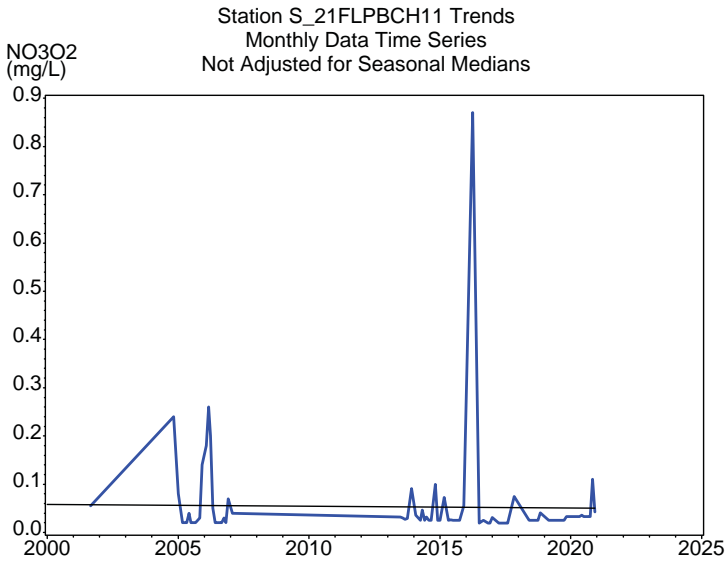
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.344	0	0	0.58



Station S_21FLPBCH11 Trends
 Autocorrelation Statistics for DOSAT
 Adjusted for Seasonal Median and Detrended

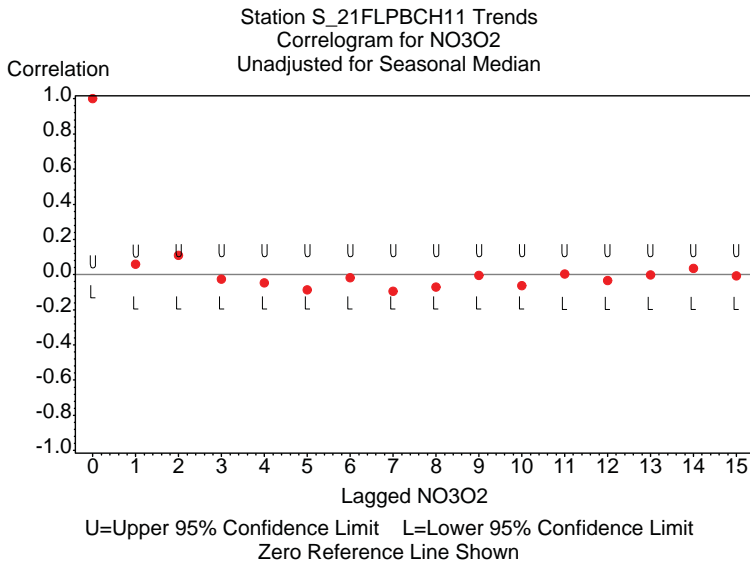
Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.217	0.074	0.147	-0.147
2	0.329	0.075	0.150	-0.150
3	0.200	0.077	0.155	-0.155
4	0.205	0.078	0.157	-0.157
5	0.159	0.079	0.159	-0.159
6	0.145	0.080	0.160	-0.160
7	0.141	0.080	0.161	-0.161
8	0.101	0.081	0.162	-0.162
9	0.129	0.081	0.162	-0.162
10	0.034	0.081	0.163	-0.163
11	0.186	0.081	0.163	-0.163
12	0.074	0.082	0.164	-0.164
13	0.152	0.082	0.165	-0.165
14	0.042	0.083	0.166	-0.166
15	0.146	0.083	0.166	-0.166





Station S_21FLPBCH11 Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.059	0.074	0.147	-0.147
2	0.110	0.074	0.148	-0.148
3	-0.025	0.074	0.148	-0.148
4	-0.048	0.074	0.148	-0.148
5	-0.086	0.074	0.148	-0.148
6	-0.019	0.074	0.149	-0.149
7	-0.094	0.074	0.149	-0.149
8	-0.071	0.075	0.149	-0.149
9	-0.004	0.075	0.149	-0.149
10	-0.062	0.075	0.149	-0.149
11	0.004	0.075	0.150	-0.150
12	-0.033	0.075	0.150	-0.150
13	-0.002	0.075	0.150	-0.150
14	0.035	0.075	0.150	-0.150
15	-0.006	0.075	0.150	-0.150

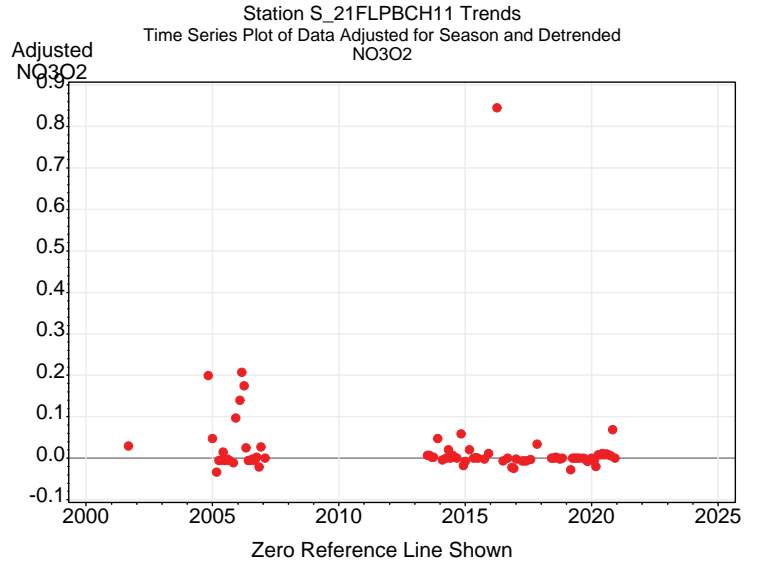


Station S_21FLPBCH11 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.012	0.905	0.924	0

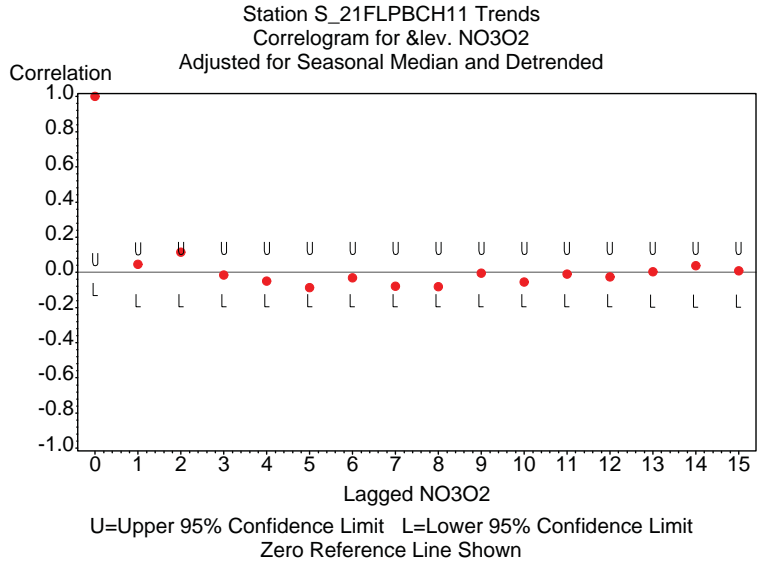
Station S_21FLPBCH11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

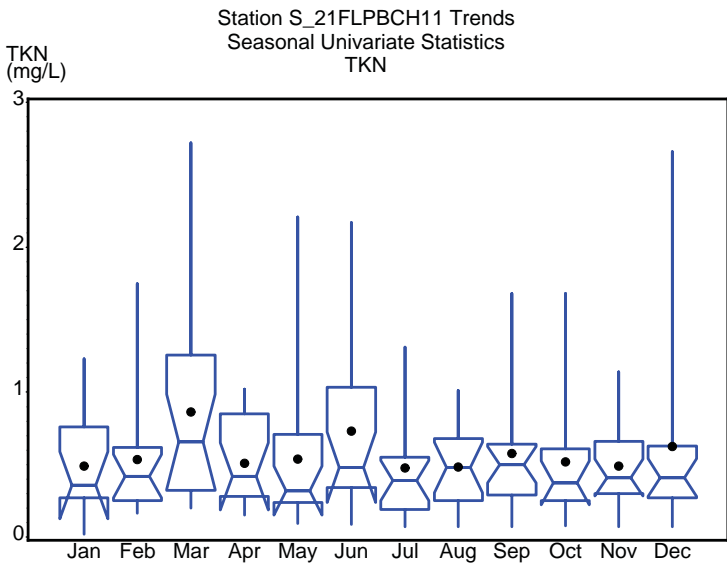
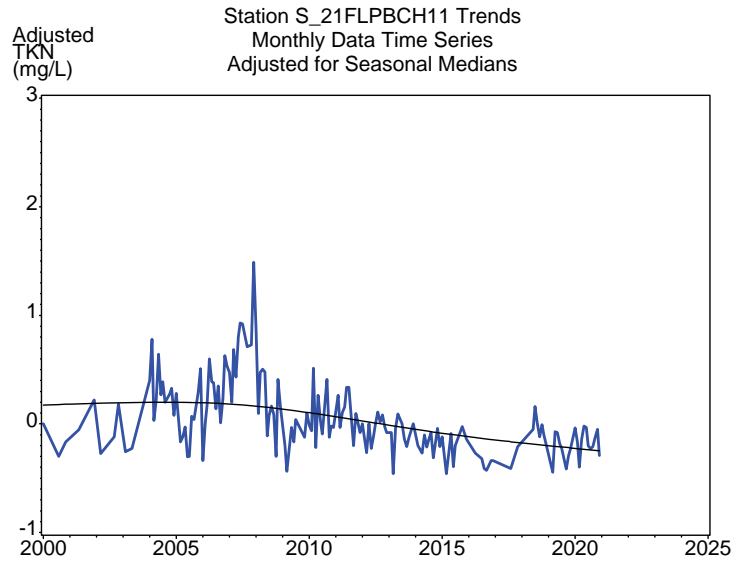
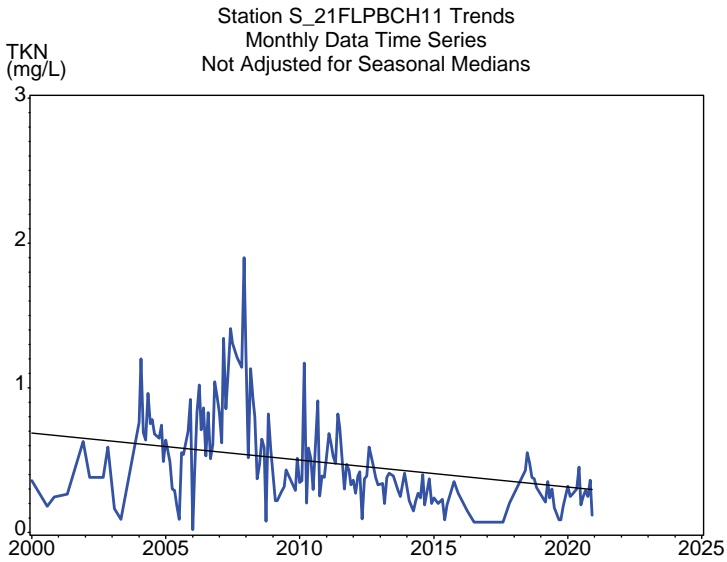
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.012	0.905	0.924	0



Station S_21FLPBCH11 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

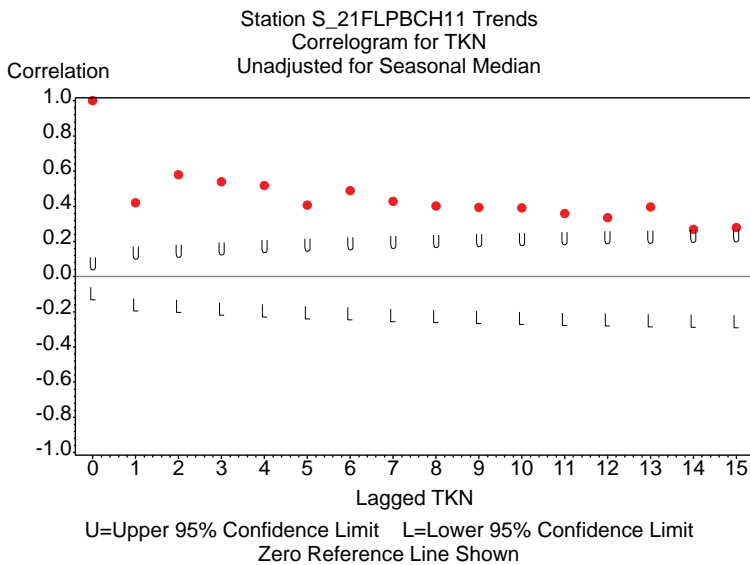
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.046	0.074	0.147	-0.147
2	0.114	0.074	0.148	-0.148
3	-0.014	0.074	0.148	-0.148
4	-0.051	0.074	0.148	-0.148
5	-0.086	0.074	0.148	-0.148
6	-0.032	0.074	0.149	-0.149
7	-0.078	0.074	0.149	-0.149
8	-0.081	0.075	0.149	-0.149
9	-0.004	0.075	0.149	-0.149
10	-0.055	0.075	0.149	-0.149
11	-0.009	0.075	0.149	-0.149
12	-0.027	0.075	0.149	-0.149
13	0.003	0.075	0.150	-0.150
14	0.039	0.075	0.150	-0.150
15	0.009	0.075	0.150	-0.150





Station S_21FLPBCH11 Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.419	0.074	0.147	-0.147
2	0.579	0.078	0.156	-0.156
3	0.539	0.085	0.171	-0.171
4	0.518	0.091	0.183	-0.183
5	0.406	0.096	0.193	-0.193
6	0.490	0.100	0.199	-0.199
7	0.429	0.104	0.208	-0.208
8	0.401	0.107	0.214	-0.214
9	0.394	0.110	0.219	-0.219
10	0.392	0.112	0.224	-0.224
11	0.359	0.115	0.229	-0.229
12	0.335	0.117	0.233	-0.233
13	0.395	0.118	0.237	-0.237
14	0.270	0.121	0.242	-0.242
15	0.279	0.122	0.244	-0.244



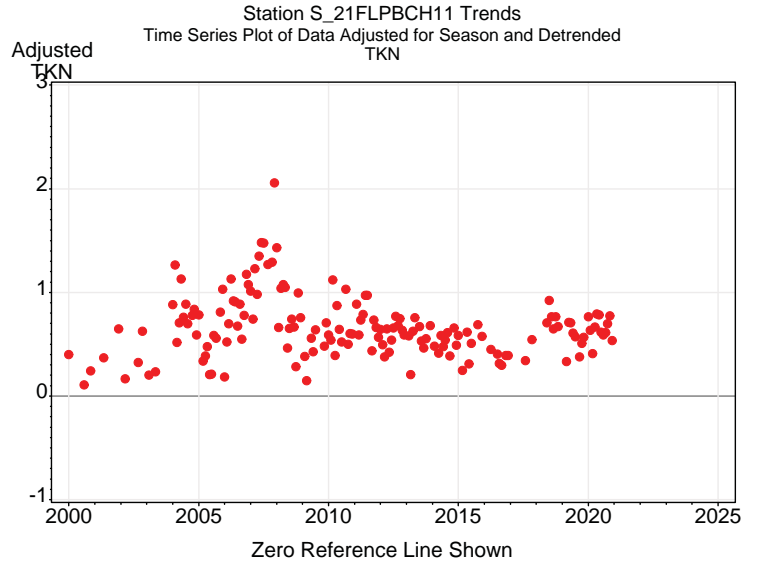
Station S_21FLPBCH11 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.404	0	0	-0.02

Station S_21FLPBCH11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN

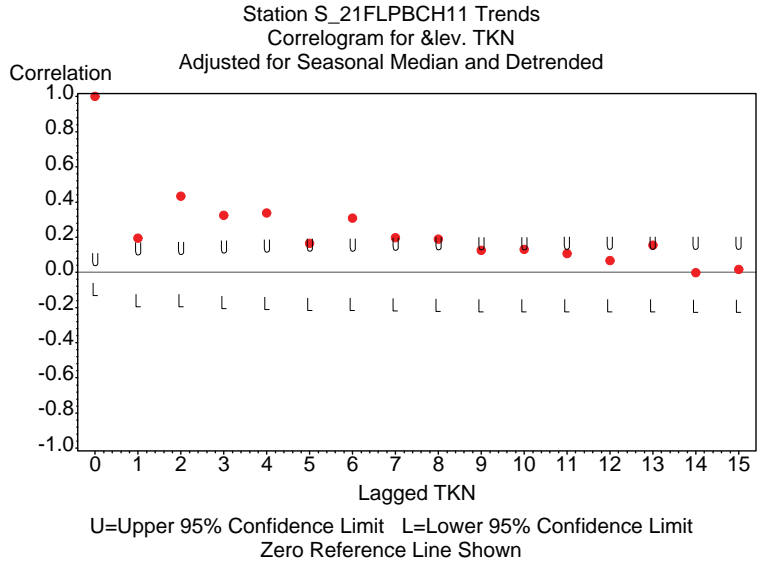
Adjusted for Seasonal Medians

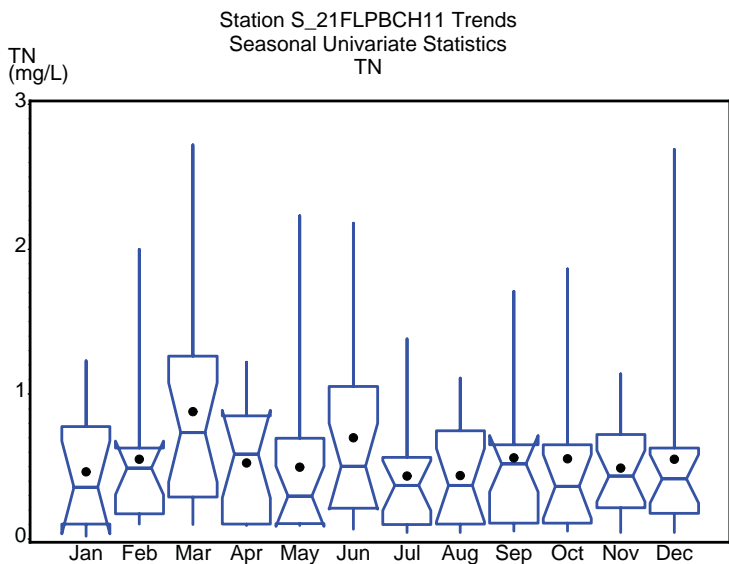
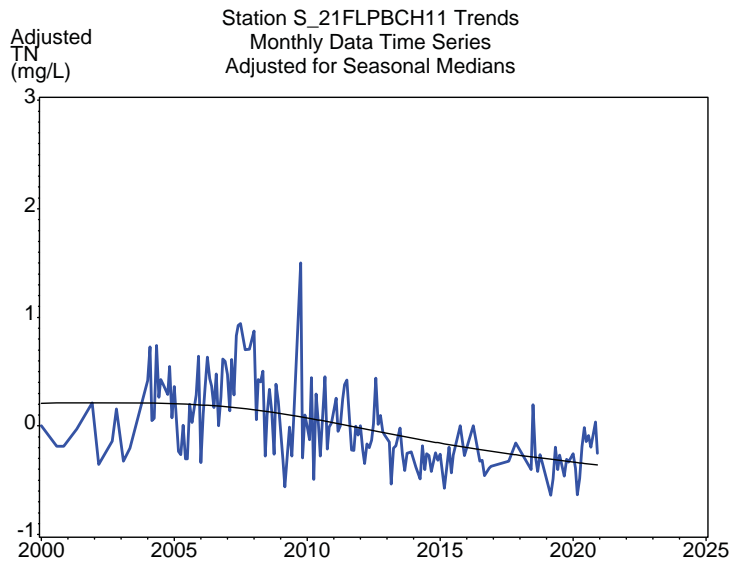
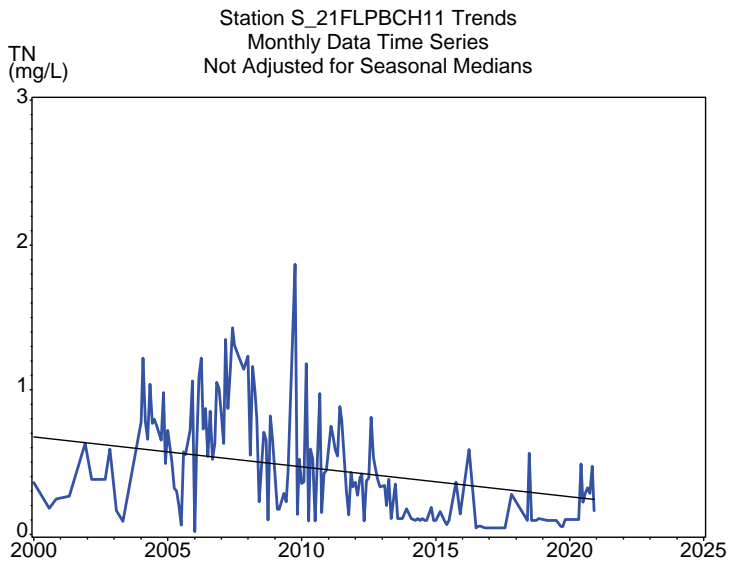
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.404	0	0	-0.02



Station S_21FLPBCH11 Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

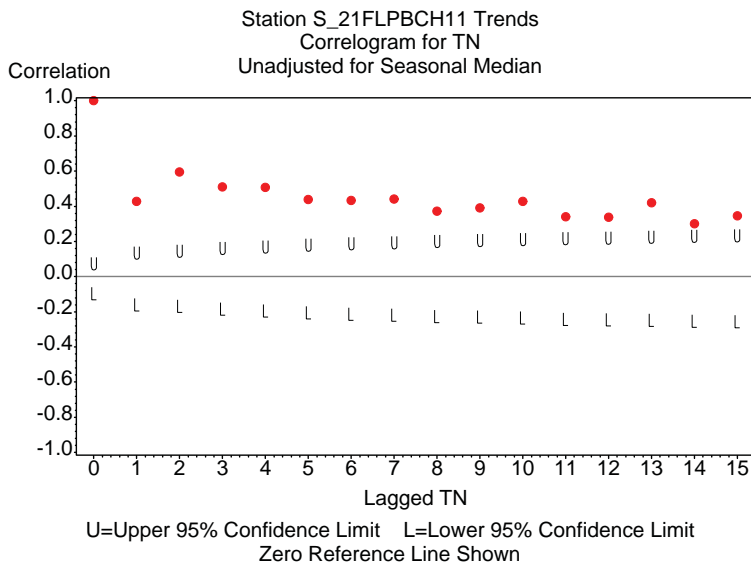
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.195	0.074	0.147	-0.147
2	0.433	0.075	0.149	-0.149
3	0.324	0.079	0.158	-0.158
4	0.338	0.081	0.163	-0.163
5	0.166	0.084	0.168	-0.168
6	0.308	0.085	0.169	-0.169
7	0.196	0.087	0.173	-0.173
8	0.188	0.087	0.175	-0.175
9	0.126	0.088	0.176	-0.176
10	0.132	0.088	0.177	-0.177
11	0.108	0.089	0.178	-0.178
12	0.067	0.089	0.178	-0.178
13	0.154	0.089	0.178	-0.178
14	-0.002	0.090	0.179	-0.179
15	0.017	0.090	0.179	-0.179





Station S_21FLPBCH11 Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.428	0.074	0.147	-0.147
2	0.596	0.078	0.156	-0.156
3	0.510	0.086	0.172	-0.172
4	0.508	0.091	0.182	-0.182
5	0.439	0.096	0.192	-0.192
6	0.434	0.100	0.200	-0.200
7	0.442	0.103	0.206	-0.206
8	0.373	0.107	0.213	-0.213
9	0.390	0.109	0.218	-0.218
10	0.427	0.111	0.223	-0.223
11	0.340	0.114	0.229	-0.229
12	0.338	0.116	0.232	-0.232
13	0.421	0.118	0.236	-0.236
14	0.300	0.121	0.241	-0.241
15	0.345	0.122	0.244	-0.244



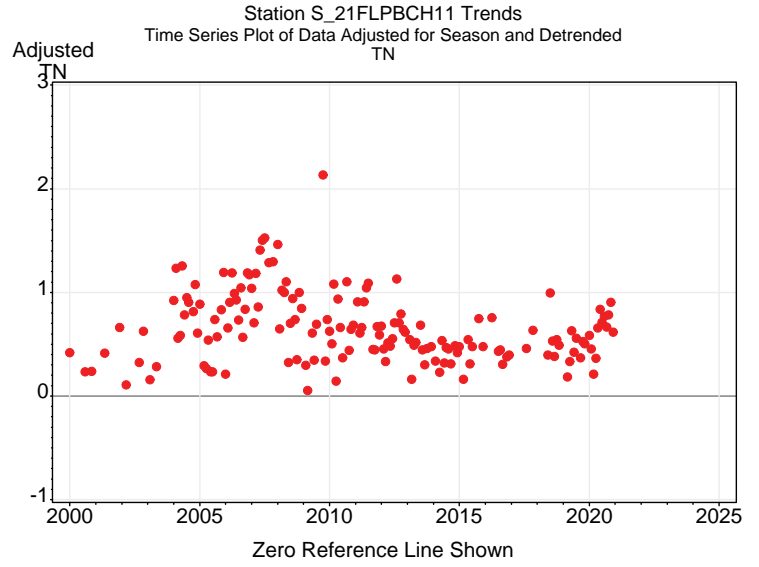
Station S_21FLPBCH11 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.414	0	0	-0.021

Station S_21FLPBCH11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

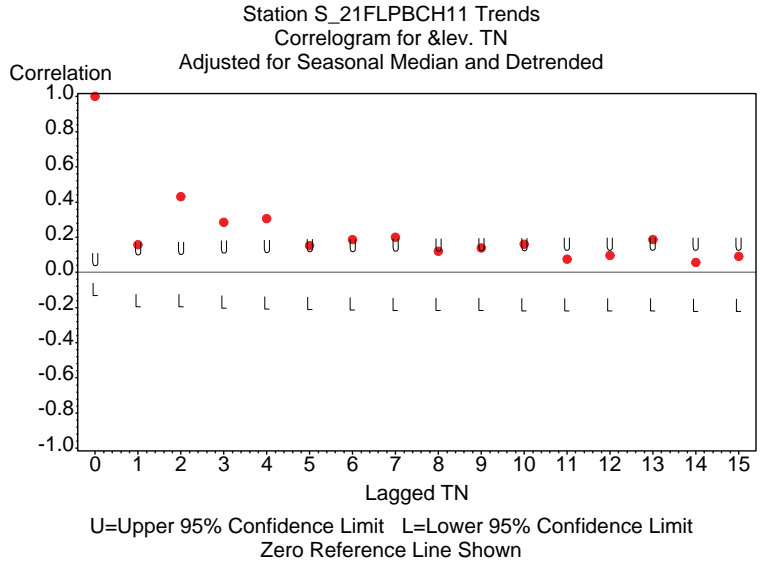
Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.414	0	0	-0.021

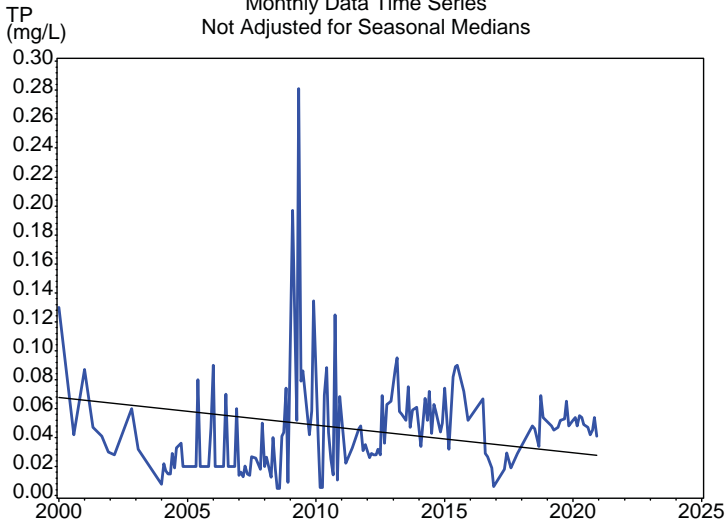


Station S_21FLPBCH11 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

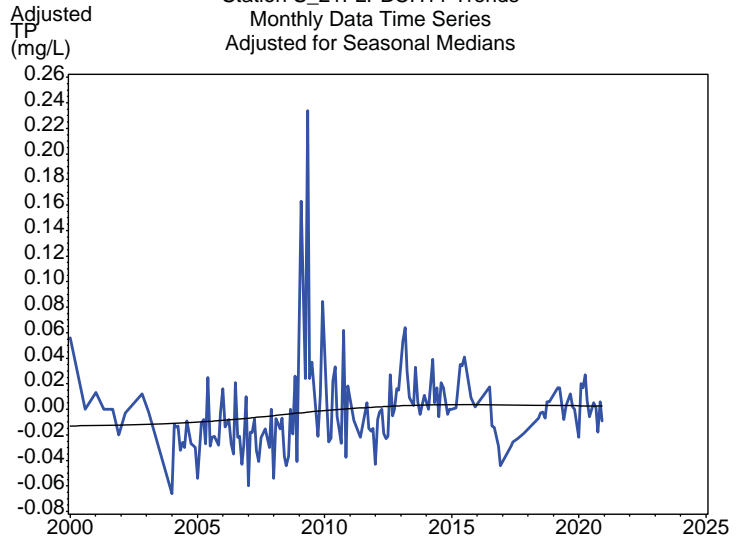
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.157	0.074	0.147	-0.147
2	0.430	0.074	0.149	-0.149
3	0.284	0.079	0.157	-0.157
4	0.307	0.081	0.161	-0.161
5	0.151	0.083	0.165	-0.165
6	0.186	0.083	0.166	-0.166
7	0.201	0.084	0.168	-0.168
8	0.119	0.085	0.169	-0.169
9	0.139	0.085	0.170	-0.170
10	0.160	0.085	0.171	-0.171
11	0.075	0.086	0.172	-0.172
12	0.095	0.086	0.172	-0.172
13	0.186	0.086	0.173	-0.173
14	0.057	0.087	0.174	-0.174
15	0.092	0.087	0.174	-0.174



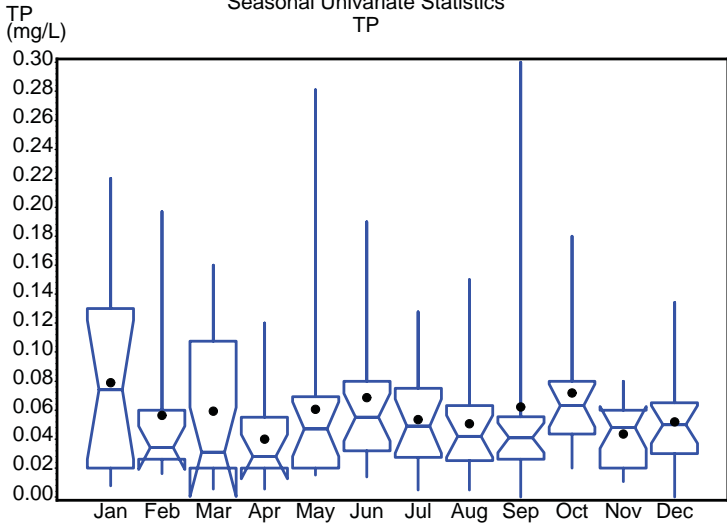
Station S_21FLPBCH11 Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_21FLPBCH11 Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



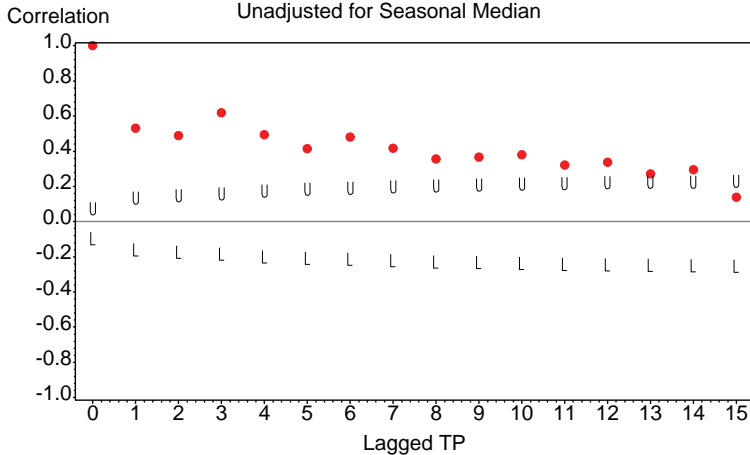
Station S_21FLPBCH11 Trends
Seasonal Univariate Statistics
TP



Station S_21FLPBCH11 Trends
Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.532	0.074	0.147	-0.147
2	0.489	0.080	0.161	-0.161
3	0.618	0.086	0.171	-0.171
4	0.493	0.093	0.187	-0.187
5	0.414	0.098	0.196	-0.196
6	0.481	0.101	0.202	-0.202
7	0.418	0.105	0.210	-0.210
8	0.356	0.108	0.216	-0.216
9	0.367	0.110	0.220	-0.220
10	0.379	0.112	0.225	-0.225
11	0.321	0.115	0.229	-0.229
12	0.337	0.116	0.233	-0.233
13	0.272	0.118	0.236	-0.236
14	0.296	0.119	0.238	-0.238
15	0.138	0.120	0.241	-0.241

Station S_21FLPBCH11 Trends
Correlogram for TP
Unadjusted for Seasonal Median



Station S_21FLPBCH11 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TP
Unadjusted for Seasonal Medians

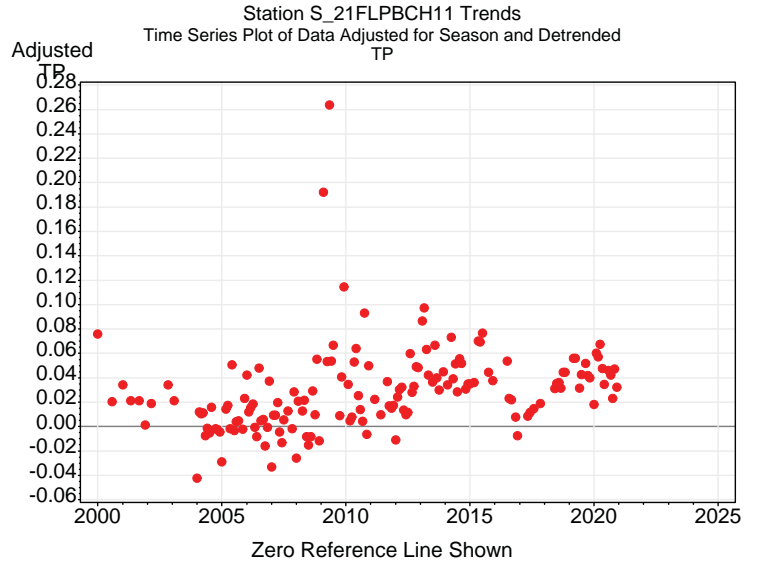
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.117	0.025	0.272	-.001

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_21FLPBCH11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

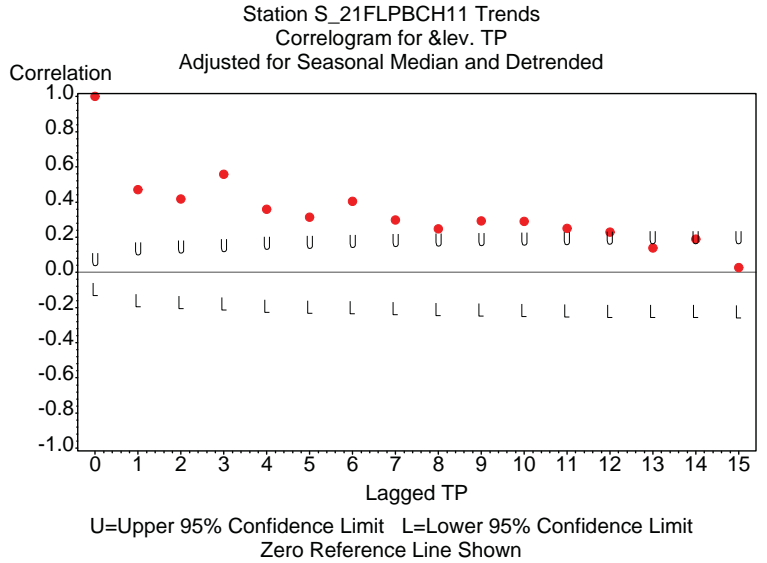
Adjusted for Seasonal Medians

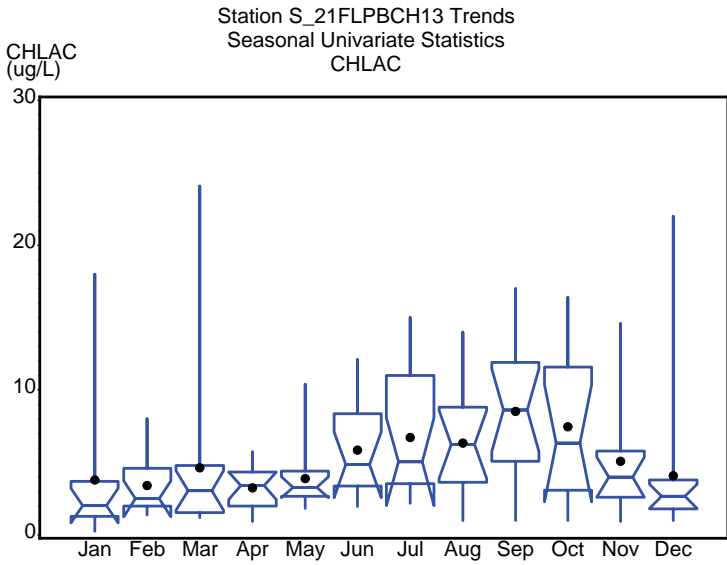
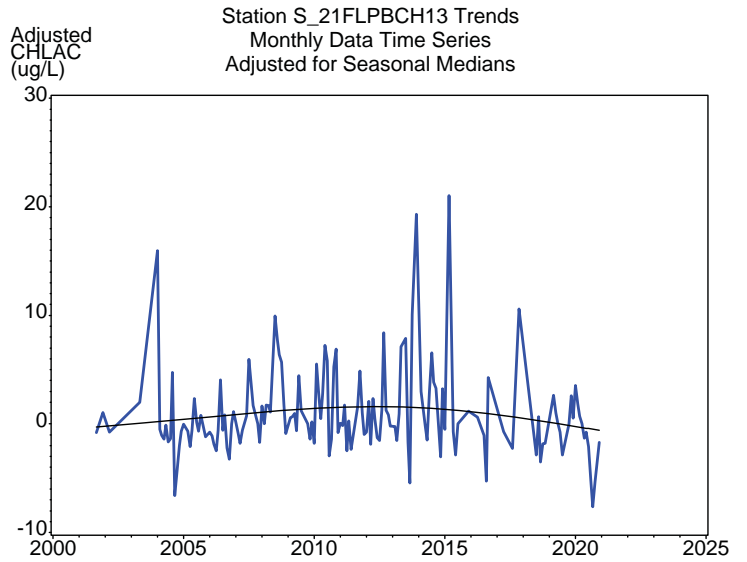
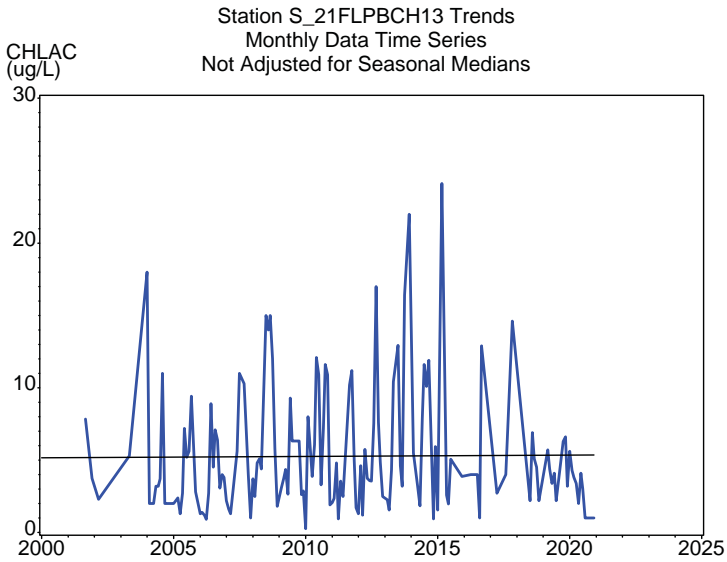
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.117	0.025	0.272	-.001



Station S_21FLPBCH11 Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

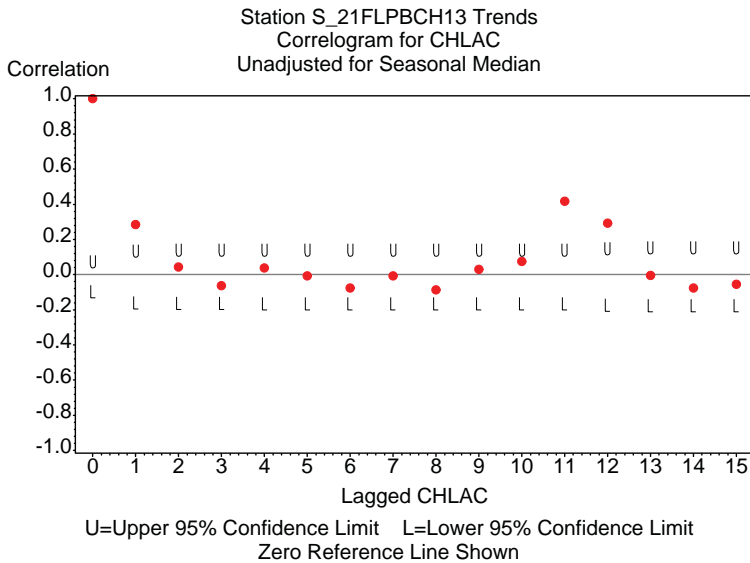
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.469	0.074	0.147	-0.147
2	0.417	0.079	0.158	-0.158
3	0.558	0.083	0.166	-0.166
4	0.359	0.089	0.179	-0.179
5	0.314	0.092	0.184	-0.184
6	0.404	0.094	0.188	-0.188
7	0.298	0.097	0.194	-0.194
8	0.248	0.099	0.197	-0.197
9	0.292	0.100	0.200	-0.200
10	0.289	0.101	0.203	-0.203
11	0.250	0.103	0.206	-0.206
12	0.228	0.104	0.208	-0.208
13	0.140	0.105	0.210	-0.210
14	0.188	0.105	0.210	-0.210
15	0.027	0.106	0.211	-0.211





Station S_21FLPBCH13 Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.285	0.074	0.147	-0.147
2	0.043	0.076	0.151	-0.151
3	-0.064	0.076	0.151	-0.151
4	0.037	0.076	0.152	-0.152
5	-0.006	0.076	0.152	-0.152
6	-0.076	0.076	0.152	-0.152
7	-0.008	0.076	0.152	-0.152
8	-0.087	0.076	0.152	-0.152
9	0.029	0.076	0.152	-0.152
10	0.075	0.076	0.152	-0.152
11	0.418	0.076	0.153	-0.153
12	0.292	0.080	0.161	-0.161
13	-0.005	0.082	0.165	-0.165
14	-0.075	0.082	0.165	-0.165
15	-0.055	0.082	0.165	-0.165

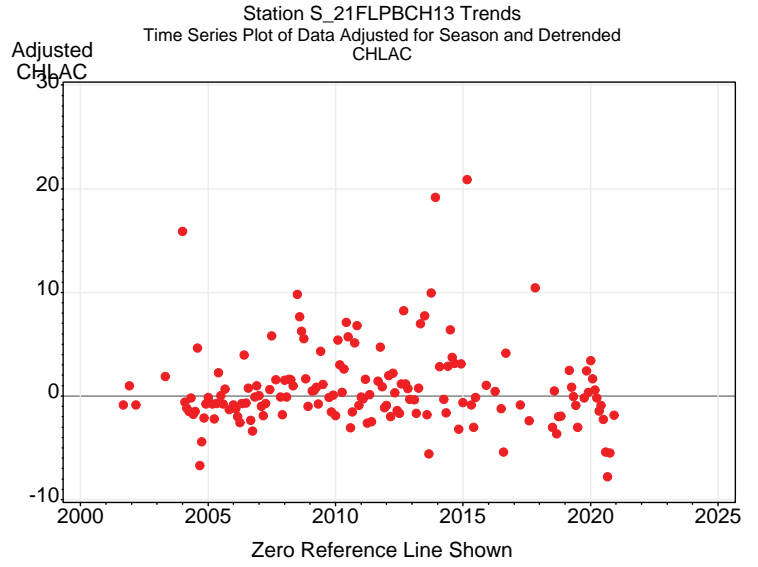


Station S_21FLPBCH13 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.012	0.862	0.878	.004

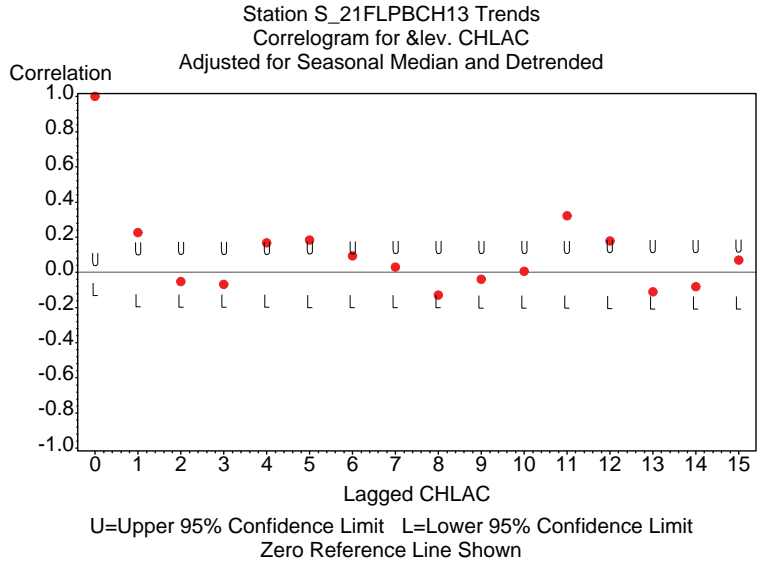
Station S_21FLPBCH13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

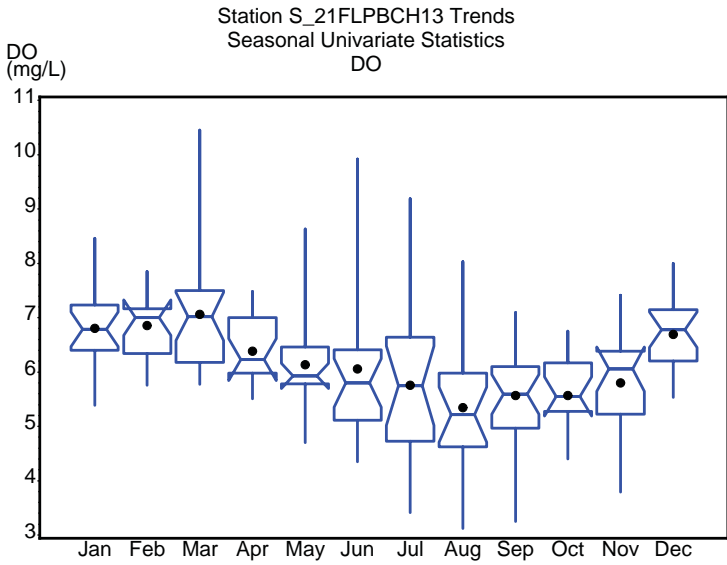
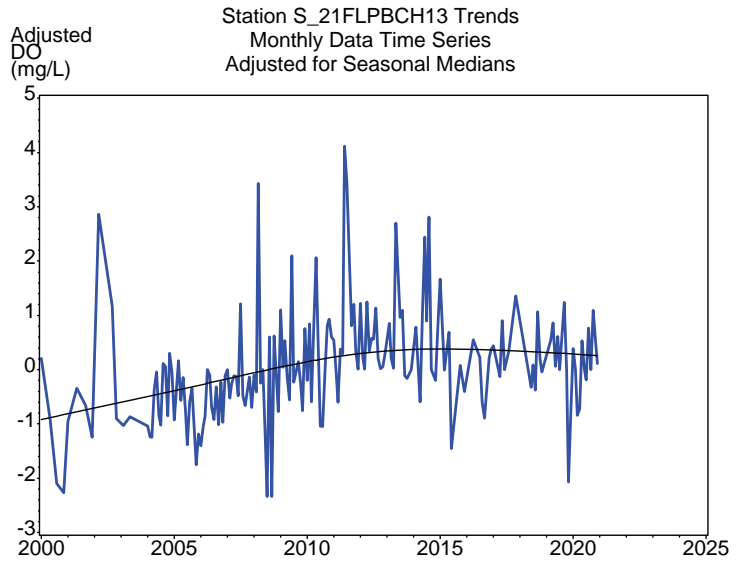
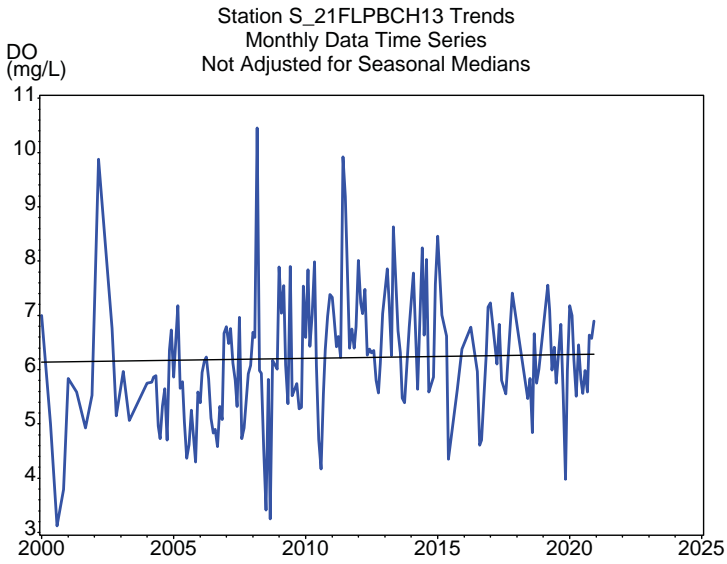
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.012	0.862	0.878	.004



Station S_21FLPBCH13 Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

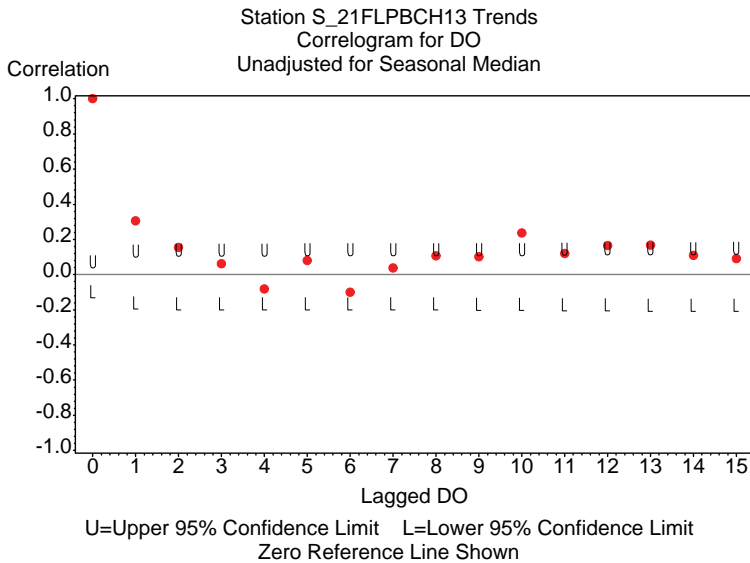
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.227	0.074	0.147	-0.147
2	-0.052	0.075	0.150	-0.150
3	-0.069	0.075	0.150	-0.150
4	0.167	0.075	0.150	-0.150
5	0.185	0.076	0.152	-0.152
6	0.094	0.077	0.153	-0.153
7	0.030	0.077	0.154	-0.154
8	-0.128	0.077	0.154	-0.154
9	-0.040	0.077	0.155	-0.155
10	0.007	0.077	0.155	-0.155
11	0.321	0.077	0.155	-0.155
12	0.179	0.080	0.159	-0.159
13	-0.112	0.080	0.161	-0.161
14	-0.082	0.081	0.161	-0.161
15	0.070	0.081	0.162	-0.162





Station S_21FLPBCH13 Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.305	0.074	0.147	-0.147
2	0.155	0.076	0.152	-0.152
3	0.061	0.077	0.153	-0.153
4	-0.082	0.077	0.153	-0.153
5	0.079	0.077	0.154	-0.154
6	-0.099	0.077	0.154	-0.154
7	0.037	0.077	0.154	-0.154
8	0.106	0.077	0.154	-0.154
9	0.102	0.077	0.155	-0.155
10	0.238	0.078	0.155	-0.155
11	0.119	0.079	0.158	-0.158
12	0.164	0.079	0.159	-0.159
13	0.167	0.080	0.160	-0.160
14	0.109	0.081	0.161	-0.161
15	0.092	0.081	0.162	-0.162

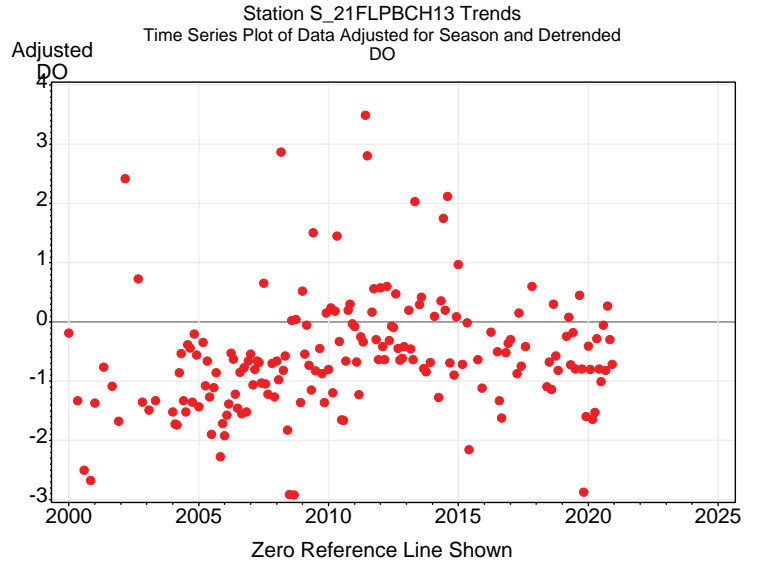


Station S_21FLPBCH13 Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.174	0	0.033	0.02

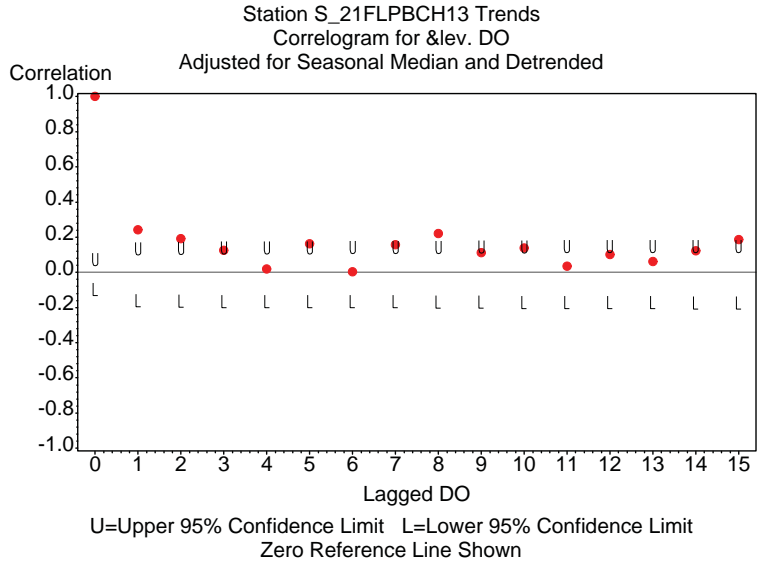
Station S_21FLPBCH13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

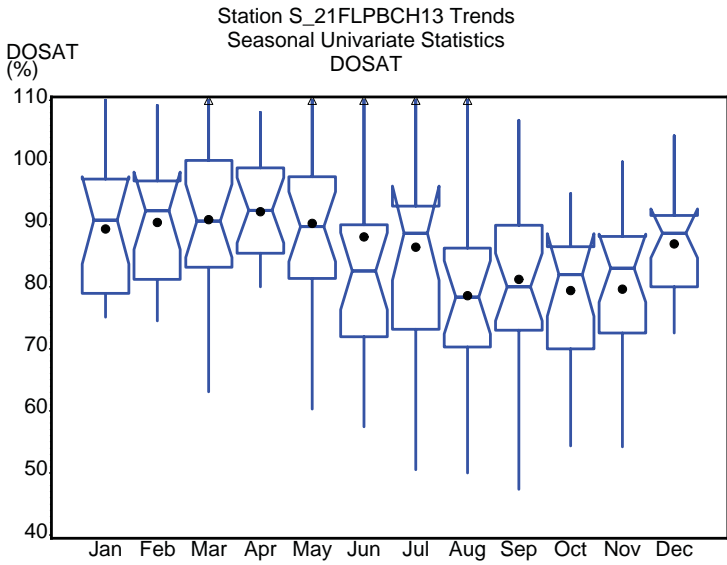
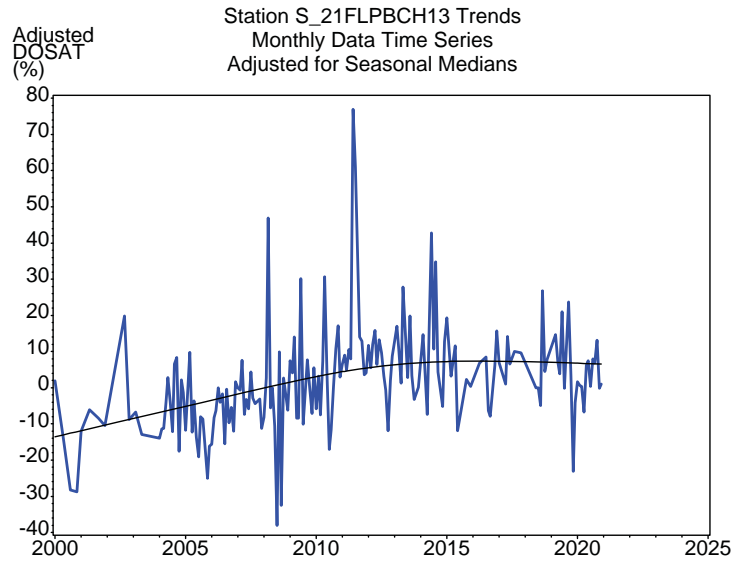
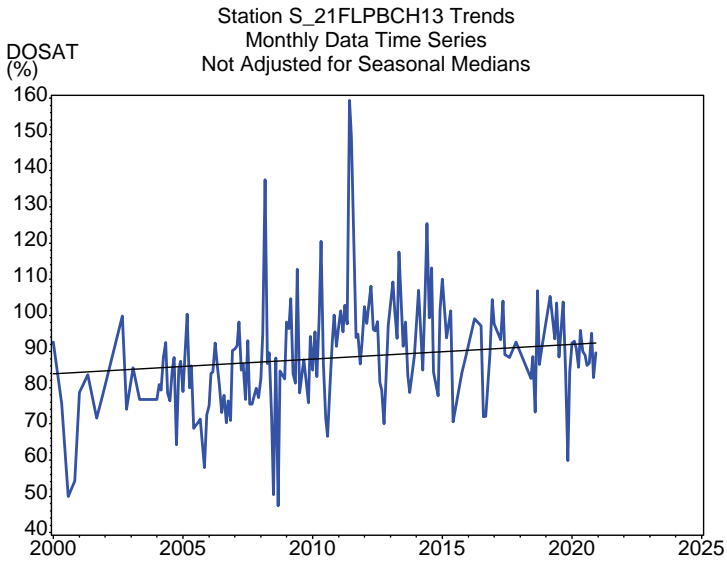
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.174	0	0.033	0.02



Station S_21FLPBCH13 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

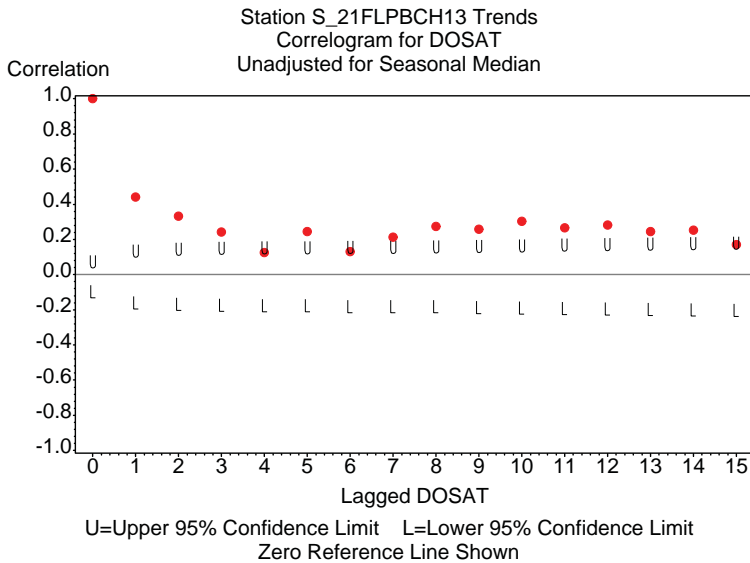
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.241	0.074	0.147	-0.147
2	0.192	0.075	0.150	-0.150
3	0.125	0.076	0.152	-0.152
4	0.019	0.076	0.153	-0.153
5	0.163	0.076	0.153	-0.153
6	0.004	0.077	0.154	-0.154
7	0.158	0.077	0.154	-0.154
8	0.220	0.078	0.155	-0.155
9	0.111	0.079	0.157	-0.157
10	0.140	0.079	0.158	-0.158
11	0.035	0.079	0.159	-0.159
12	0.102	0.079	0.159	-0.159
13	0.063	0.080	0.159	-0.159
14	0.124	0.080	0.160	-0.160
15	0.187	0.080	0.160	-0.160





Station S_21FLPBCH13 Trends Autocorrelation Statistics for DOSAT

Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.442	0.074	0.147	-0.147
2	0.333	0.078	0.157	-0.157
3	0.243	0.081	0.162	-0.162
4	0.125	0.082	0.164	-0.164
5	0.246	0.083	0.165	-0.165
6	0.132	0.084	0.168	-0.168
7	0.214	0.084	0.169	-0.169
8	0.274	0.085	0.170	-0.170
9	0.258	0.087	0.174	-0.174
10	0.302	0.088	0.176	-0.176
11	0.266	0.090	0.180	-0.180
12	0.281	0.091	0.183	-0.183
13	0.244	0.093	0.186	-0.186
14	0.254	0.094	0.188	-0.188
15	0.170	0.095	0.191	-0.191

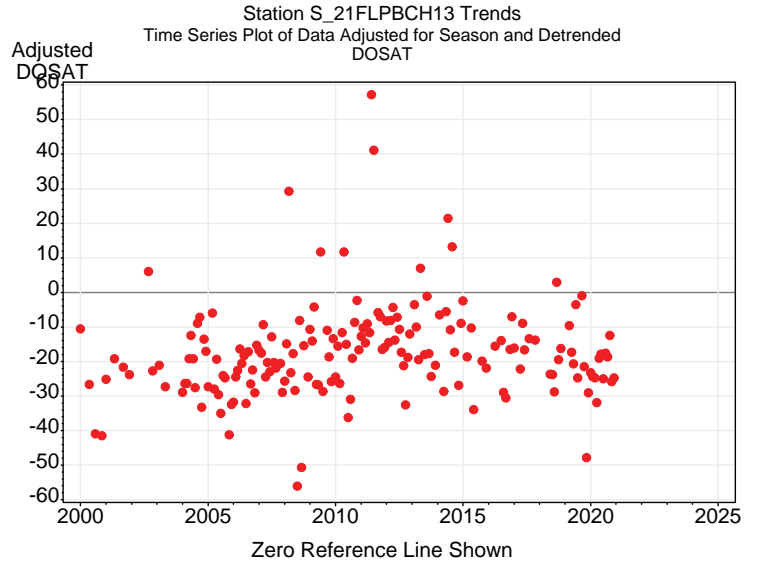


Station S_21FLPBCH13 Trends Appendix Seasonal Kendall Tau Trend Test Statistics DOSAT Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.357	0	0	0.623

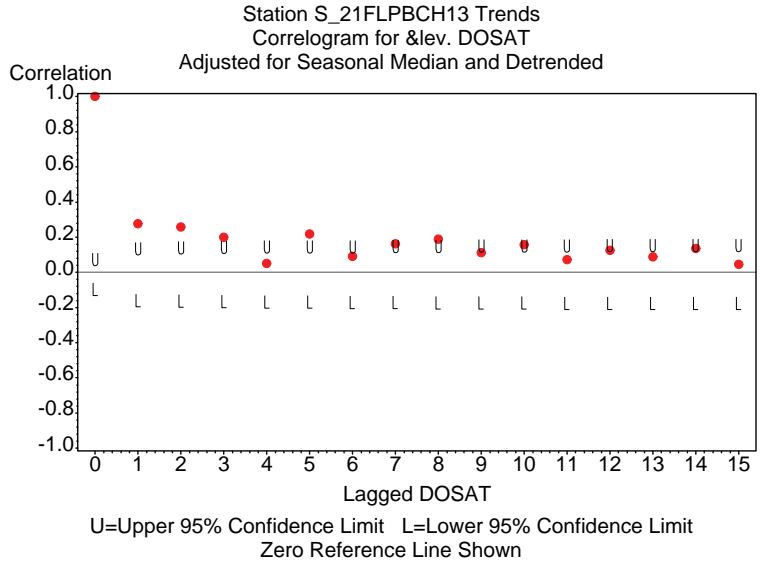
Station S_21FLPBCH13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DOSAT
 Adjusted for Seasonal Medians

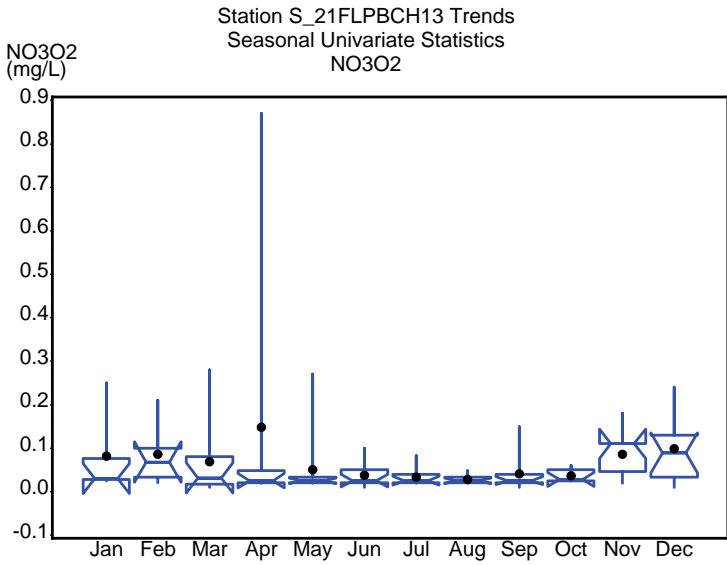
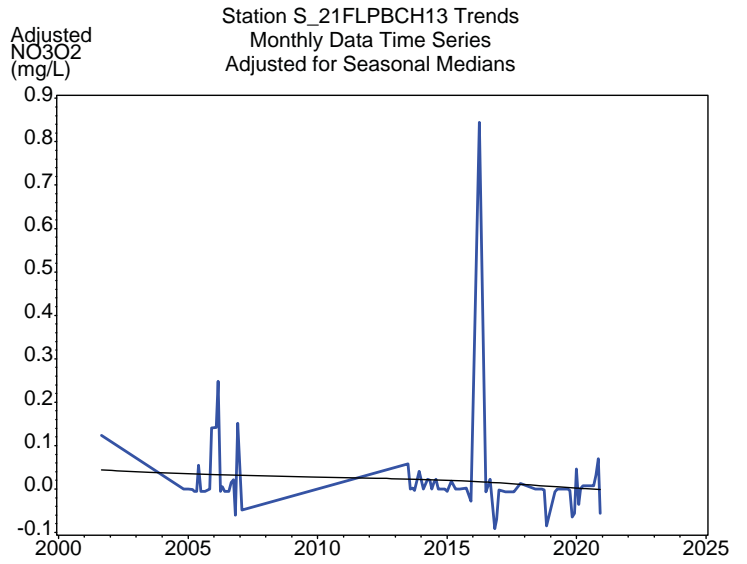
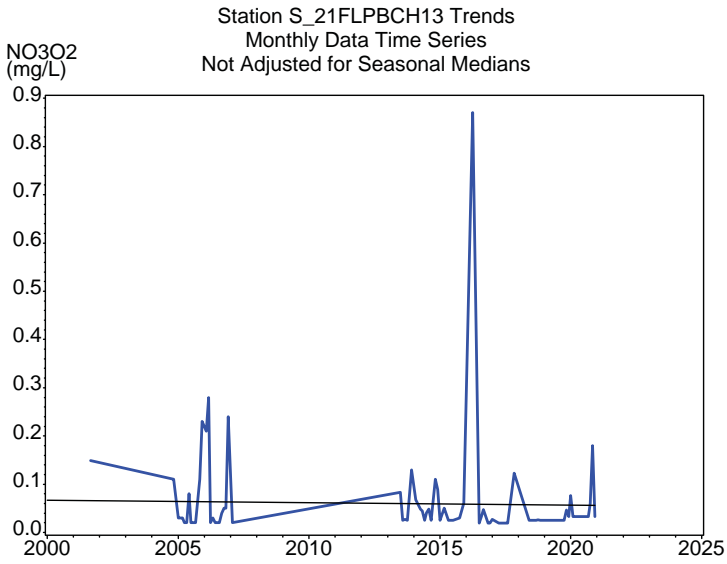
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.357	0	0	0.623



Station S_21FLPBCH13 Trends
 Autocorrelation Statistics for DOSAT
 Adjusted for Seasonal Median and Detrended

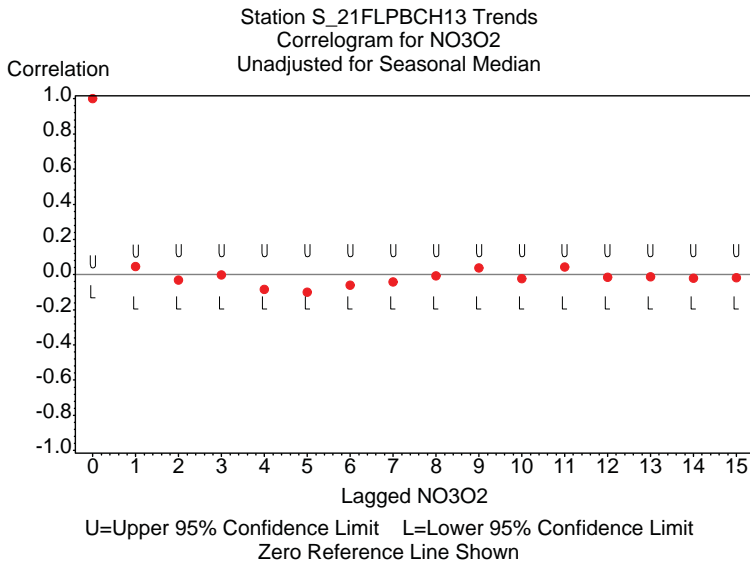
Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.276	0.074	0.147	-0.147
2	0.257	0.076	0.151	-0.151
3	0.199	0.077	0.154	-0.154
4	0.050	0.078	0.156	-0.156
5	0.218	0.078	0.156	-0.156
6	0.091	0.079	0.158	-0.158
7	0.163	0.079	0.159	-0.159
8	0.188	0.080	0.160	-0.160
9	0.113	0.081	0.162	-0.162
10	0.157	0.081	0.162	-0.162
11	0.073	0.082	0.163	-0.163
12	0.125	0.082	0.164	-0.164
13	0.088	0.082	0.164	-0.164
14	0.135	0.082	0.165	-0.165
15	0.047	0.083	0.165	-0.165





Station S_21FLPBCH13 Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.046	0.074	0.147	-0.147
2	-0.030	0.074	0.148	-0.148
3	-0.001	0.074	0.148	-0.148
4	-0.083	0.074	0.148	-0.148
5	-0.100	0.074	0.148	-0.148
6	-0.061	0.074	0.148	-0.148
7	-0.043	0.074	0.149	-0.149
8	-0.007	0.074	0.149	-0.149
9	0.039	0.074	0.149	-0.149
10	-0.023	0.074	0.149	-0.149
11	0.044	0.074	0.149	-0.149
12	-0.014	0.074	0.149	-0.149
13	-0.013	0.074	0.149	-0.149
14	-0.021	0.074	0.149	-0.149
15	-0.019	0.074	0.149	-0.149



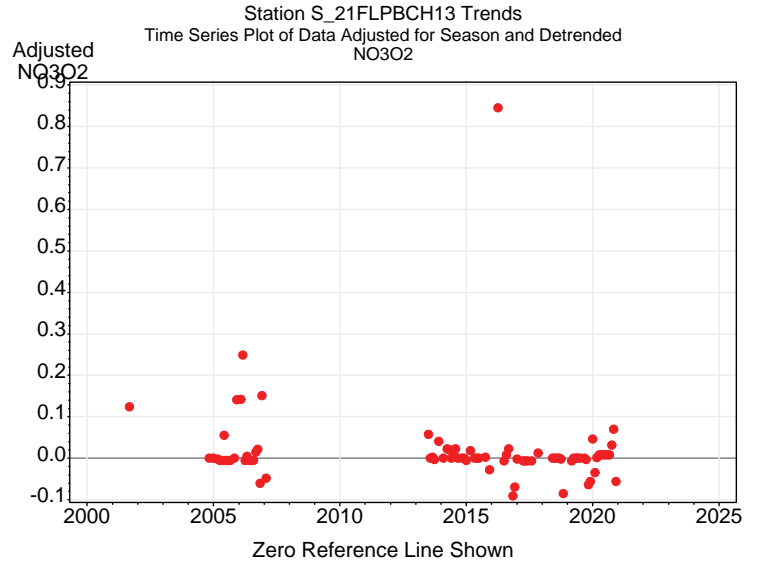
Station S_21FLPBCH13 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.016	0.862	0.893	0

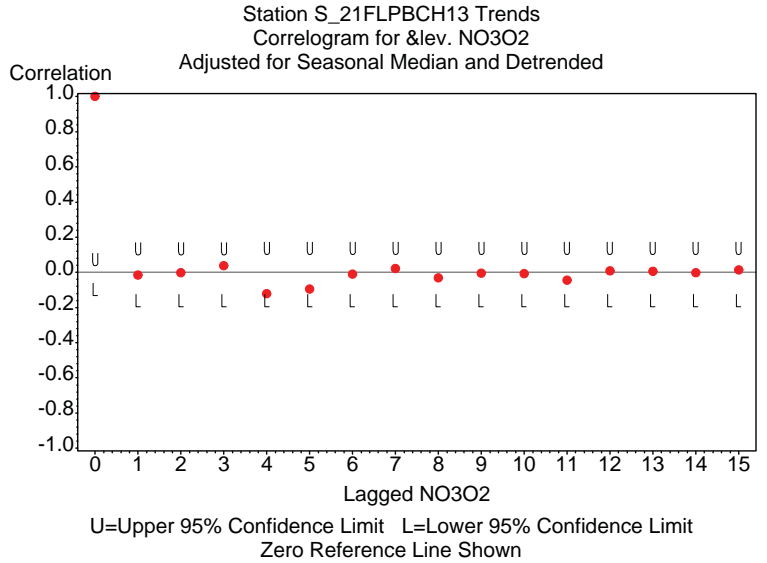
Station S_21FLPBCH13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.016	0.862	0.893	0

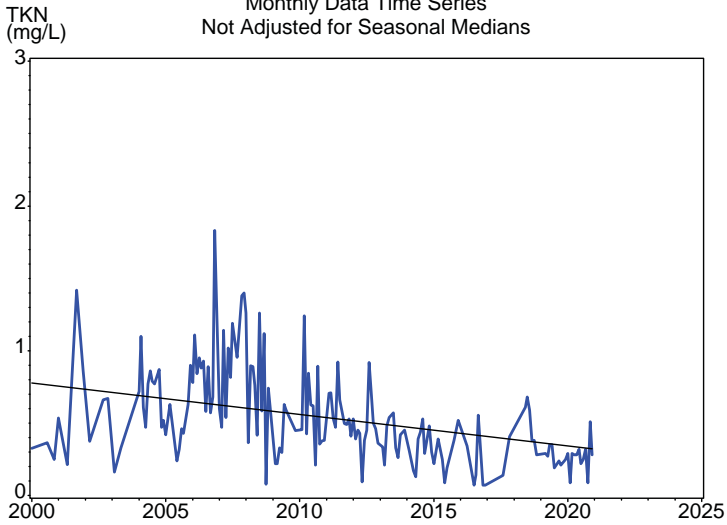


Station S_21FLPBCH13 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

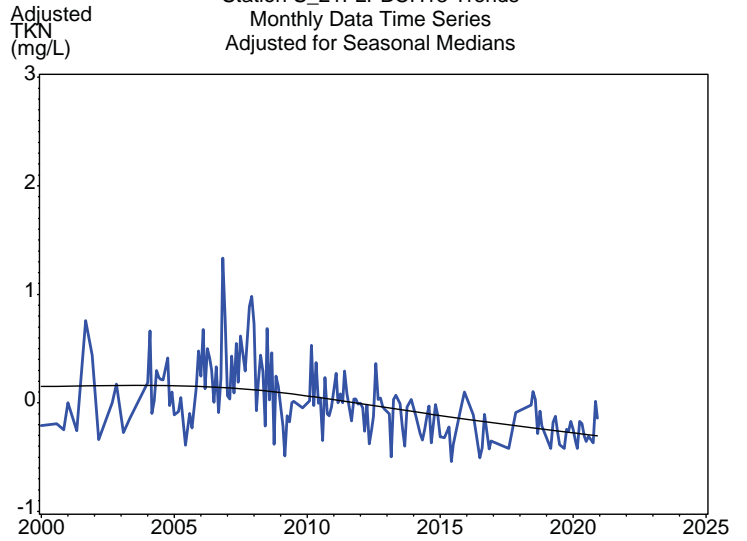
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	-0.014	0.074	0.147	-0.147
2	-0.003	0.074	0.147	-0.147
3	0.037	0.074	0.147	-0.147
4	-0.121	0.074	0.148	-0.148
5	-0.096	0.074	0.148	-0.148
6	-0.009	0.074	0.149	-0.149
7	0.021	0.074	0.149	-0.149
8	-0.032	0.074	0.149	-0.149
9	-0.004	0.074	0.149	-0.149
10	-0.006	0.074	0.149	-0.149
11	-0.045	0.074	0.149	-0.149
12	0.009	0.074	0.149	-0.149
13	0.006	0.074	0.149	-0.149
14	-0.002	0.074	0.149	-0.149
15	0.014	0.074	0.149	-0.149



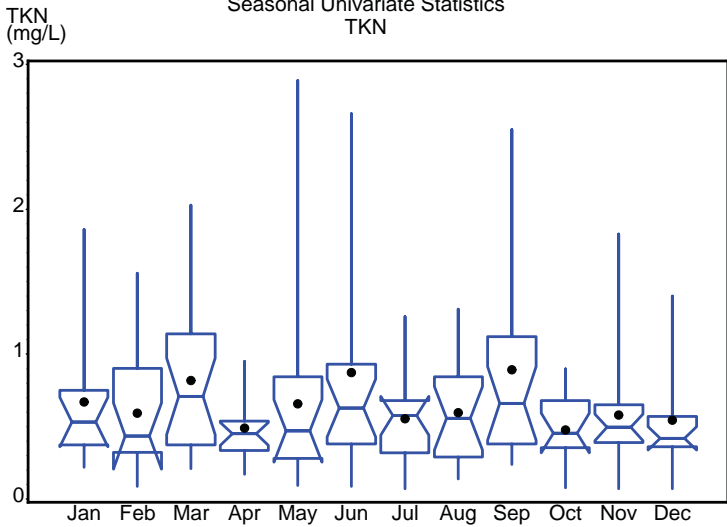
Station S_21FLPBCH13 Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_21FLPBCH13 Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



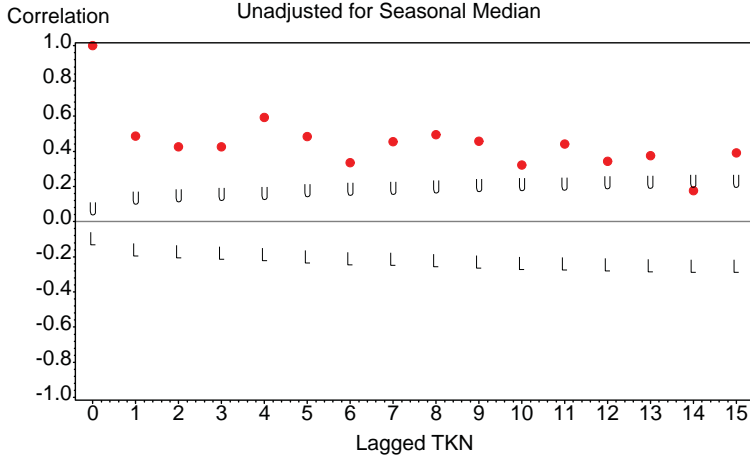
Station S_21FLPBCH13 Trends
Seasonal Univariate Statistics
TKN



Station S_21FLPBCH13 Trends
Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.486	0.074	0.147	-0.147
2	0.424	0.079	0.159	-0.159
3	0.425	0.083	0.167	-0.167
4	0.593	0.087	0.174	-0.174
5	0.484	0.094	0.188	-0.188
6	0.336	0.099	0.197	-0.197
7	0.455	0.101	0.201	-0.201
8	0.494	0.104	0.209	-0.209
9	0.457	0.108	0.217	-0.217
10	0.322	0.112	0.224	-0.224
11	0.441	0.114	0.227	-0.227
12	0.343	0.117	0.233	-0.233
13	0.376	0.118	0.237	-0.237
14	0.177	0.121	0.241	-0.241
15	0.391	0.121	0.242	-0.242

Station S_21FLPBCH13 Trends
Correlogram for TKN
Unadjusted for Seasonal Median



Station S_21FLPBCH13 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TKN
Unadjusted for Seasonal Medians

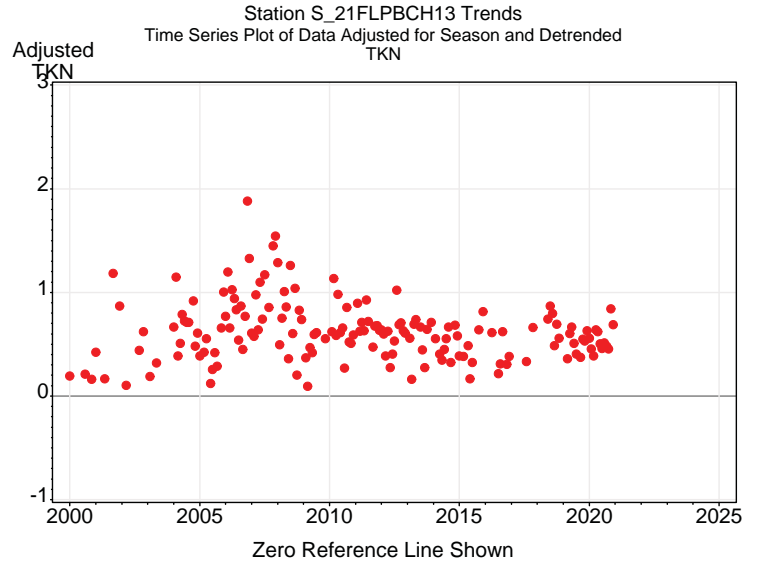
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.427	0	0	-0.02

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_21FLPBCH13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN

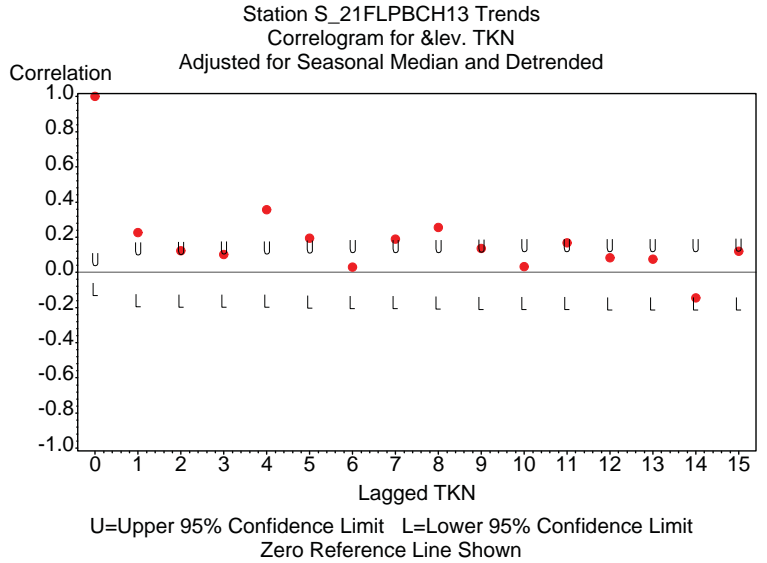
Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.427	0	0	-0.02

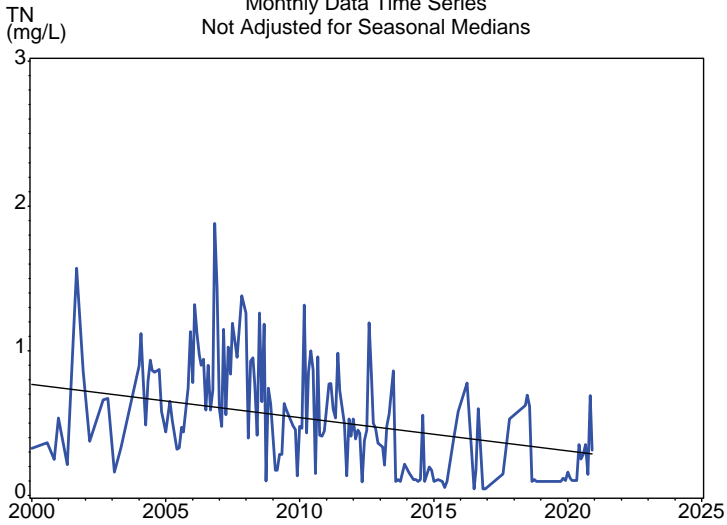


Station S_21FLPBCH13 Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

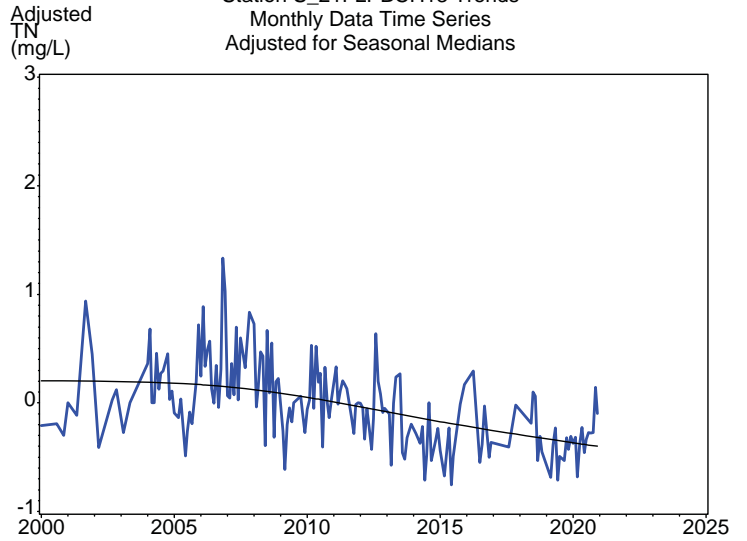
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.225	0.074	0.147	-0.147
2	0.124	0.075	0.150	-0.150
3	0.101	0.075	0.151	-0.151
4	0.357	0.076	0.151	-0.151
5	0.194	0.079	0.157	-0.157
6	0.030	0.079	0.159	-0.159
7	0.190	0.079	0.159	-0.159
8	0.255	0.080	0.161	-0.161
9	0.135	0.082	0.163	-0.163
10	0.033	0.082	0.164	-0.164
11	0.169	0.082	0.164	-0.164
12	0.082	0.083	0.166	-0.166
13	0.076	0.083	0.166	-0.166
14	-0.146	0.083	0.166	-0.166
15	0.121	0.084	0.167	-0.167



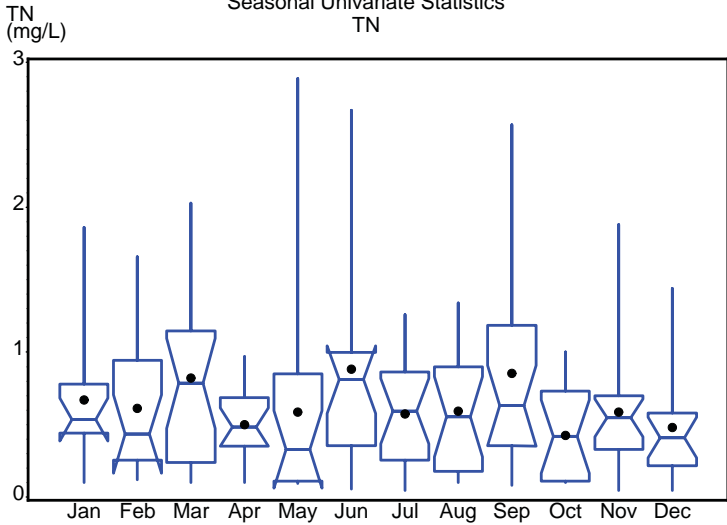
Station S_21FLPBCH13 Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_21FLPBCH13 Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



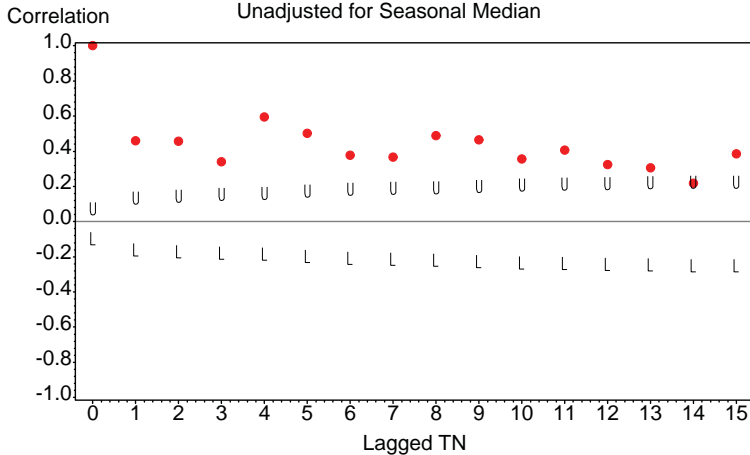
Station S_21FLPBCH13 Trends
Seasonal Univariate Statistics
TN



Station S_21FLPBCH13 Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.461	0.074	0.147	-0.147
2	0.456	0.079	0.158	-0.158
3	0.340	0.083	0.167	-0.167
4	0.594	0.086	0.172	-0.172
5	0.503	0.093	0.186	-0.186
6	0.378	0.098	0.196	-0.196
7	0.366	0.100	0.201	-0.201
8	0.488	0.103	0.206	-0.206
9	0.464	0.107	0.214	-0.214
10	0.355	0.111	0.221	-0.221
11	0.407	0.113	0.225	-0.225
12	0.324	0.115	0.230	-0.230
13	0.307	0.117	0.234	-0.234
14	0.217	0.118	0.237	-0.237
15	0.386	0.119	0.238	-0.238

Station S_21FLPBCH13 Trends
Correlogram for TN
Unadjusted for Seasonal Median



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

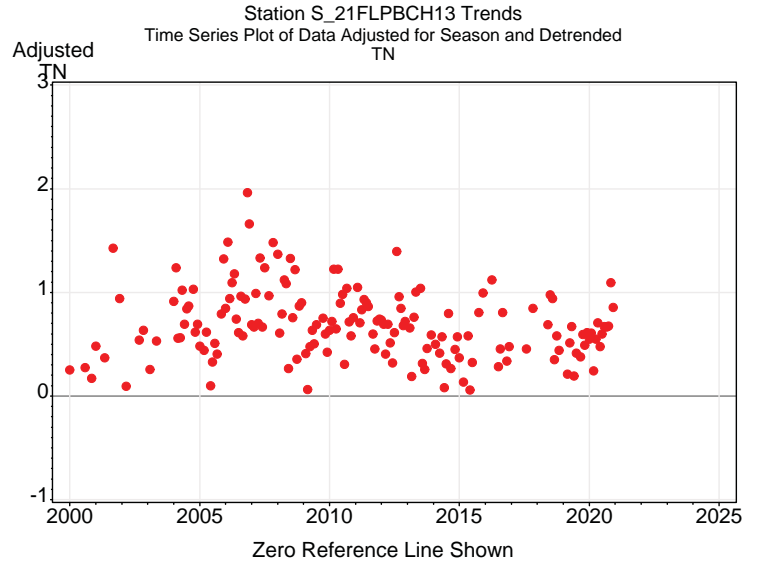
Station S_21FLPBCH13 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.412	0	0	-0.023

Station S_21FLPBCH13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

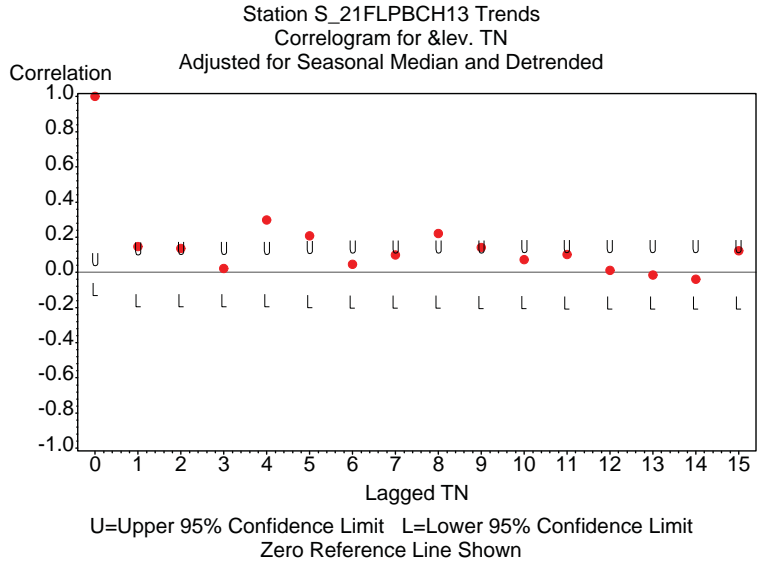
Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.412	0	0	-0.023

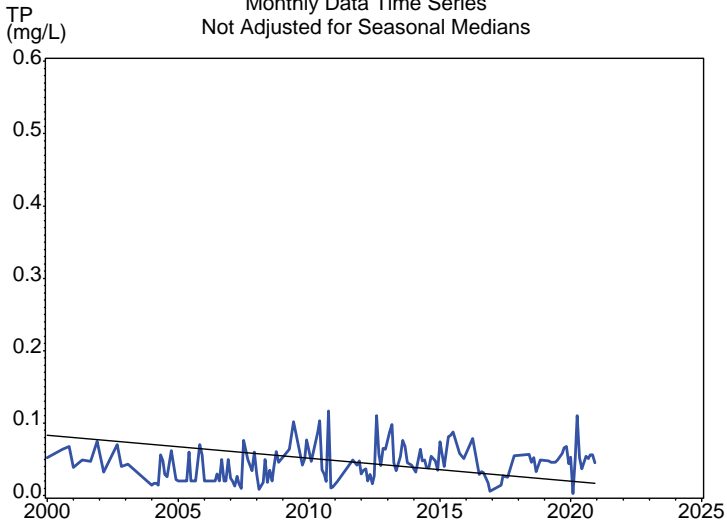


Station S_21FLPBCH13 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

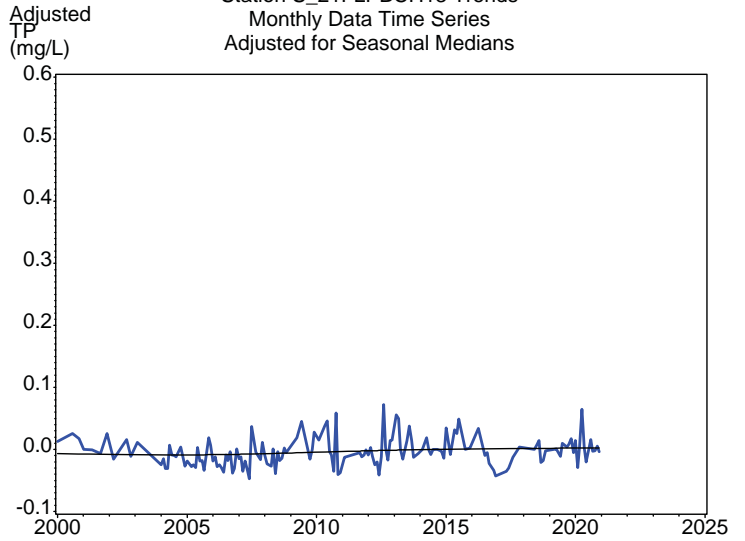
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.146	0.074	0.147	-0.147
2	0.136	0.074	0.148	-0.148
3	0.022	0.075	0.149	-0.149
4	0.298	0.075	0.149	-0.149
5	0.208	0.077	0.154	-0.154
6	0.045	0.078	0.156	-0.156
7	0.100	0.078	0.156	-0.156
8	0.222	0.078	0.156	-0.156
9	0.141	0.079	0.158	-0.158
10	0.072	0.080	0.159	-0.159
11	0.101	0.080	0.160	-0.160
12	0.011	0.080	0.160	-0.160
13	-0.014	0.080	0.160	-0.160
14	-0.039	0.080	0.160	-0.160
15	0.123	0.080	0.160	-0.160



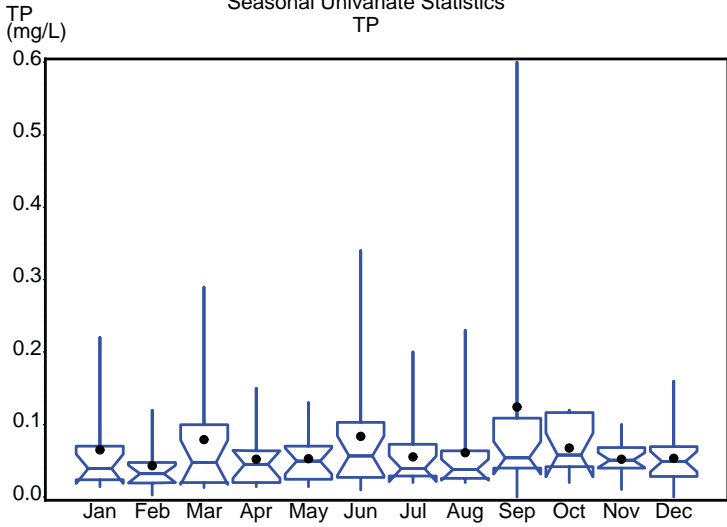
Station S_21FLPBCH13 Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_21FLPBCH13 Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



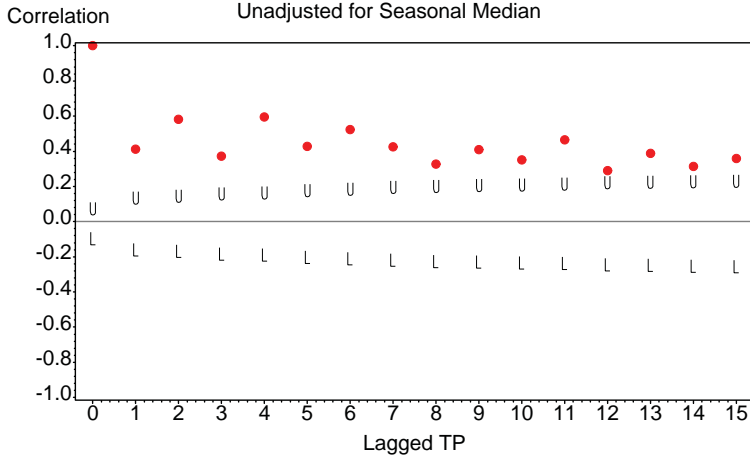
Station S_21FLPBCH13 Trends
Seasonal Univariate Statistics
TP



Station S_21FLPBCH13 Trends
Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.412	0.074	0.147	-0.147
2	0.582	0.078	0.156	-0.156
3	0.373	0.085	0.171	-0.171
4	0.595	0.088	0.176	-0.176
5	0.428	0.095	0.190	-0.190
6	0.523	0.099	0.197	-0.197
7	0.426	0.104	0.207	-0.207
8	0.326	0.107	0.213	-0.213
9	0.409	0.108	0.217	-0.217
10	0.350	0.111	0.222	-0.222
11	0.465	0.113	0.226	-0.226
12	0.290	0.117	0.233	-0.233
13	0.387	0.118	0.236	-0.236
14	0.314	0.120	0.240	-0.240
15	0.359	0.122	0.243	-0.243

Station S_21FLPBCH13 Trends
Correlogram for TP
Unadjusted for Seasonal Median



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

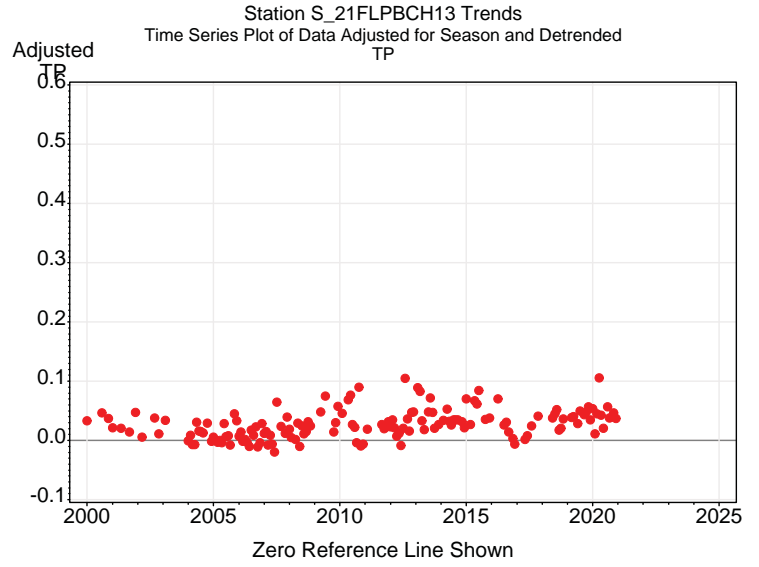
Station S_21FLPBCH13 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TP
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.208	0	0.023	-0.001

Station S_21FLPBCH13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

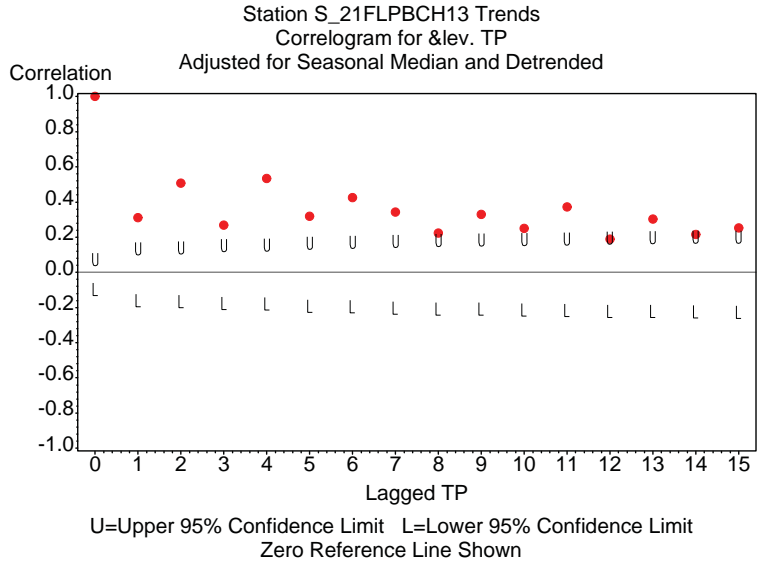
Adjusted for Seasonal Medians

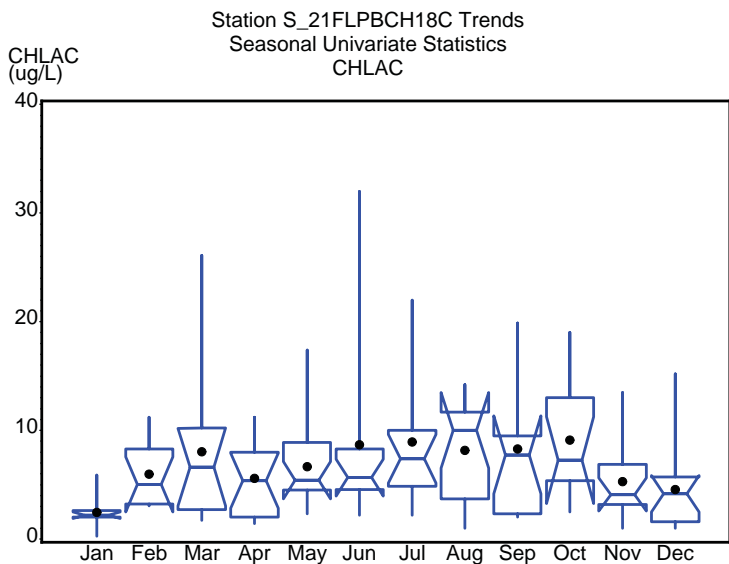
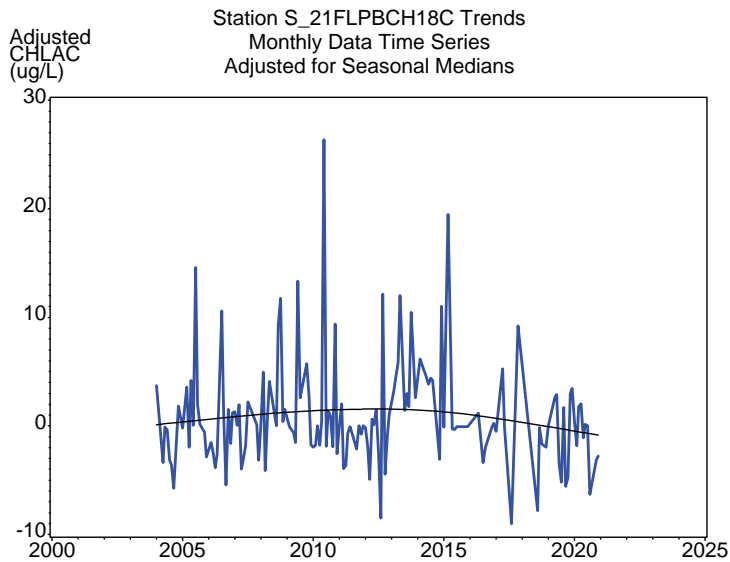
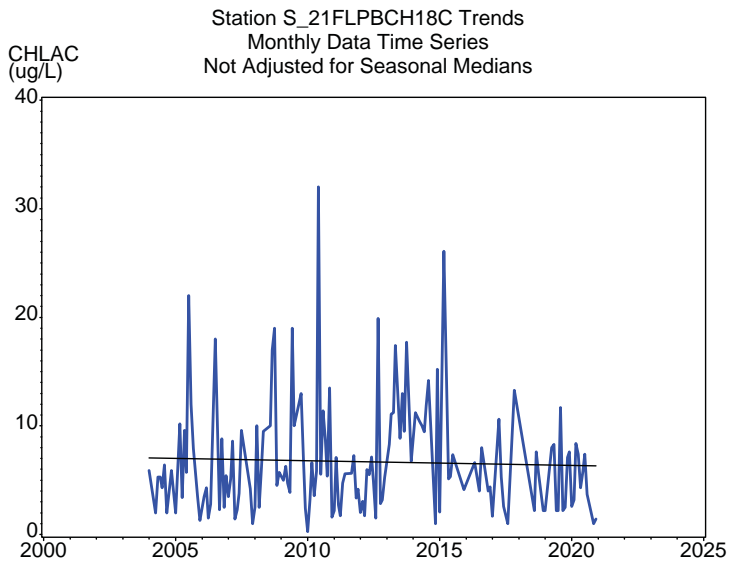
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.208	0	0.023	-.001



Station S_21FLPBCH13 Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

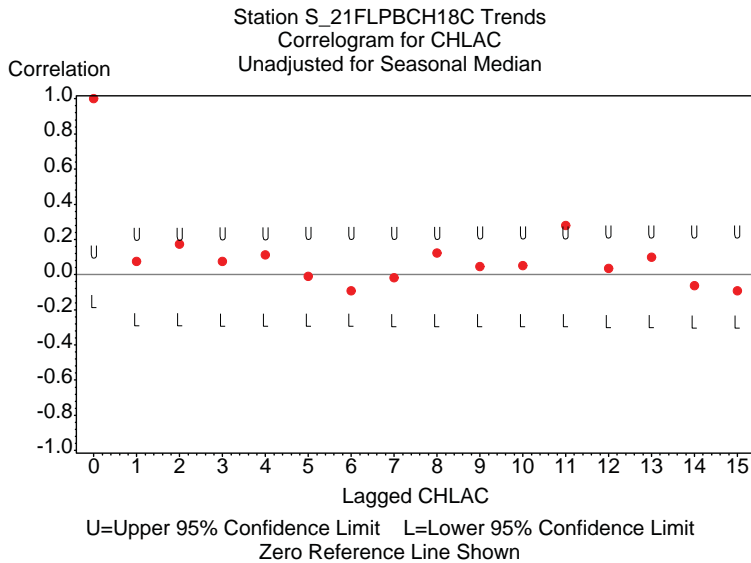
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.043	0.085	-0.085
1	0.310	0.074	0.147	-0.147
2	0.507	0.076	0.152	-0.152
3	0.270	0.082	0.164	-0.164
4	0.534	0.084	0.167	-0.167
5	0.320	0.090	0.179	-0.179
6	0.426	0.092	0.183	-0.183
7	0.344	0.095	0.190	-0.190
8	0.224	0.097	0.195	-0.195
9	0.329	0.098	0.196	-0.196
10	0.251	0.100	0.200	-0.200
11	0.371	0.101	0.203	-0.203
12	0.190	0.104	0.208	-0.208
13	0.303	0.104	0.209	-0.209
14	0.216	0.106	0.212	-0.212
15	0.252	0.107	0.214	-0.214





Station S_21FLPBCH18C Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.075	0.121	0.243	-0.243
2	0.174	0.121	0.243	-0.243
3	0.074	0.123	0.245	-0.245
4	0.113	0.123	0.246	-0.246
5	-0.009	0.123	0.247	-0.247
6	-0.093	0.123	0.247	-0.247
7	-0.018	0.124	0.248	-0.248
8	0.124	0.124	0.248	-0.248
9	0.046	0.124	0.249	-0.249
10	0.050	0.124	0.249	-0.249
11	0.278	0.125	0.249	-0.249
12	0.034	0.128	0.255	-0.255
13	0.098	0.128	0.255	-0.255
14	-0.062	0.128	0.256	-0.256
15	-0.091	0.128	0.256	-0.256

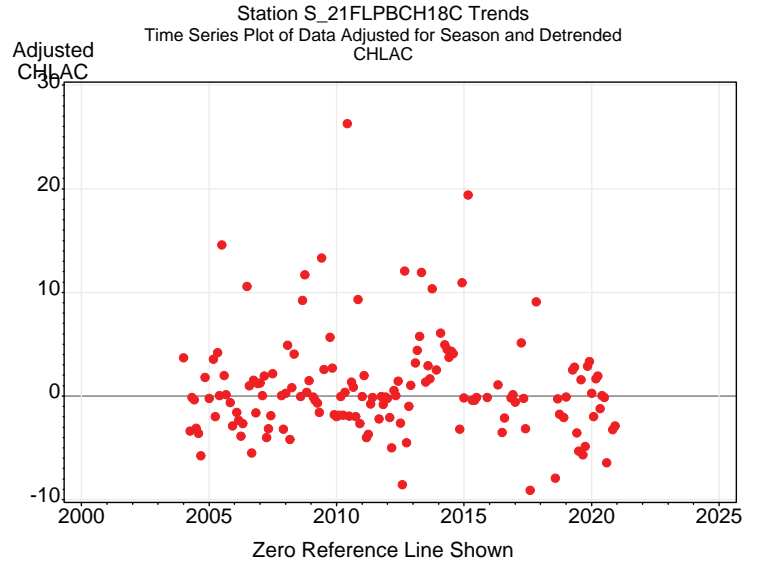


Station S_21FLPBCH18C Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.012	0.869	0.901	.007

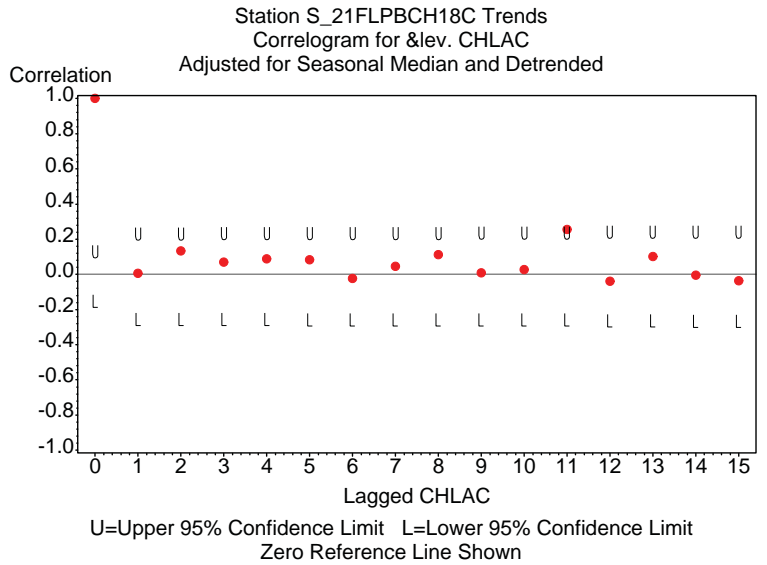
Station S_21FLPBCH18C Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

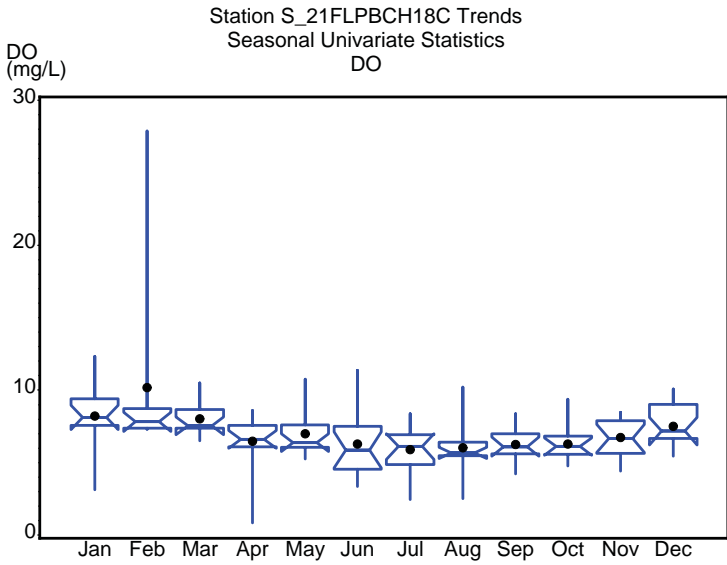
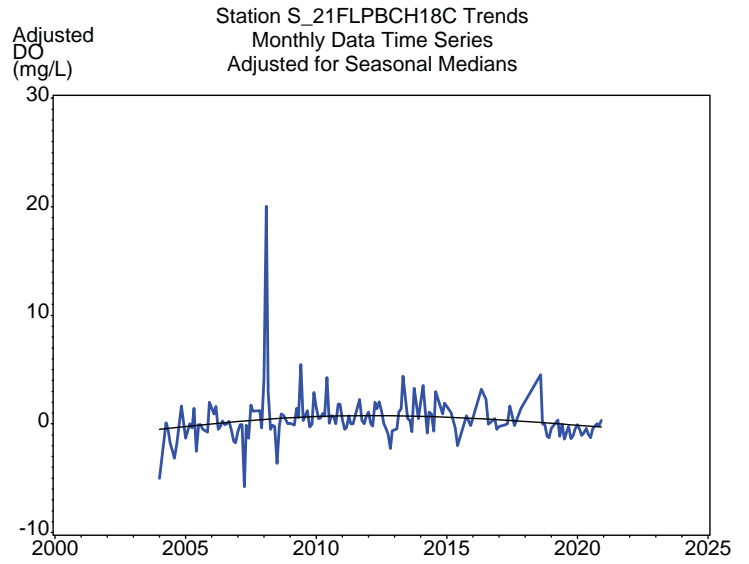
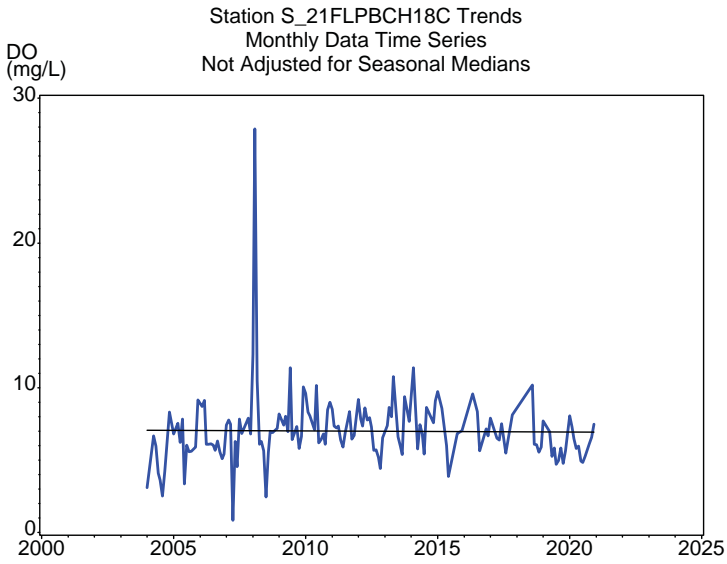
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.012	0.869	0.901	.007



Station S_21FLPBCH18C Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

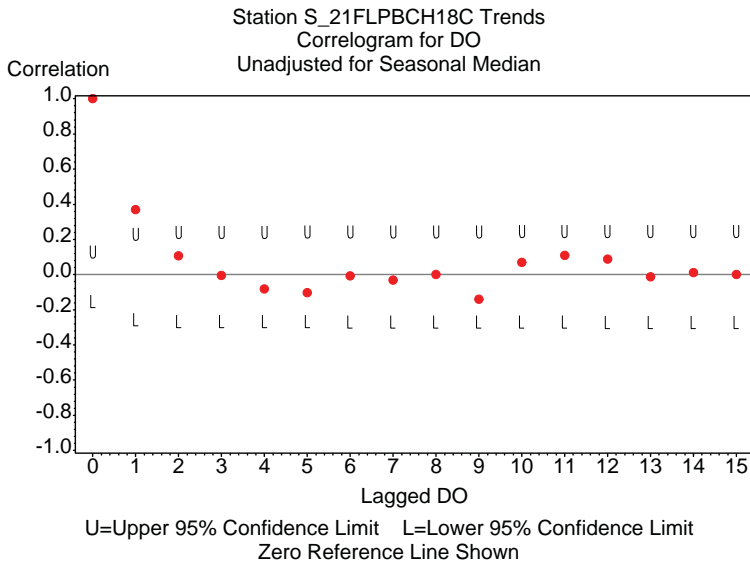
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.007	0.121	0.243	-0.243
2	0.134	0.121	0.243	-0.243
3	0.070	0.122	0.244	-0.244
4	0.089	0.122	0.244	-0.244
5	0.083	0.122	0.245	-0.245
6	-0.023	0.123	0.246	-0.246
7	0.045	0.123	0.246	-0.246
8	0.112	0.123	0.246	-0.246
9	0.010	0.123	0.247	-0.247
10	0.026	0.123	0.247	-0.247
11	0.255	0.123	0.247	-0.247
12	-0.039	0.126	0.252	-0.252
13	0.102	0.126	0.252	-0.252
14	-0.004	0.126	0.253	-0.253
15	-0.037	0.126	0.253	-0.253





Station S_21FLPBCH18C Trends
Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.369	0.121	0.243	-0.243
2	0.107	0.127	0.253	-0.253
3	-0.004	0.127	0.254	-0.254
4	-0.082	0.127	0.254	-0.254
5	-0.103	0.127	0.255	-0.255
6	-0.007	0.128	0.256	-0.256
7	-0.030	0.128	0.256	-0.256
8	0.002	0.128	0.256	-0.256
9	-0.140	0.128	0.256	-0.256
10	0.070	0.129	0.257	-0.257
11	0.109	0.129	0.257	-0.257
12	0.088	0.129	0.258	-0.258
13	-0.012	0.129	0.259	-0.259
14	0.012	0.130	0.259	-0.259
15	0.000	0.130	0.259	-0.259

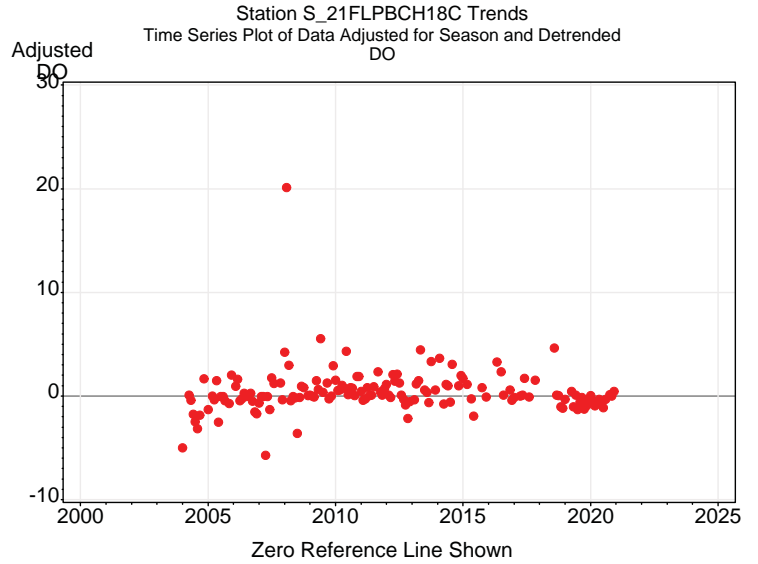


Station S_21FLPBCH18C Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DO
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.016	0.81	0.89	-.006

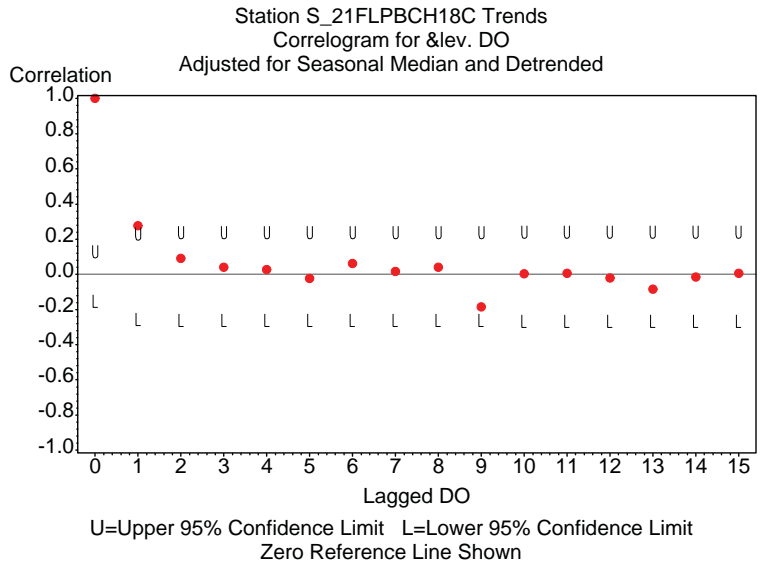
Station S_21FLPBCH18C Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

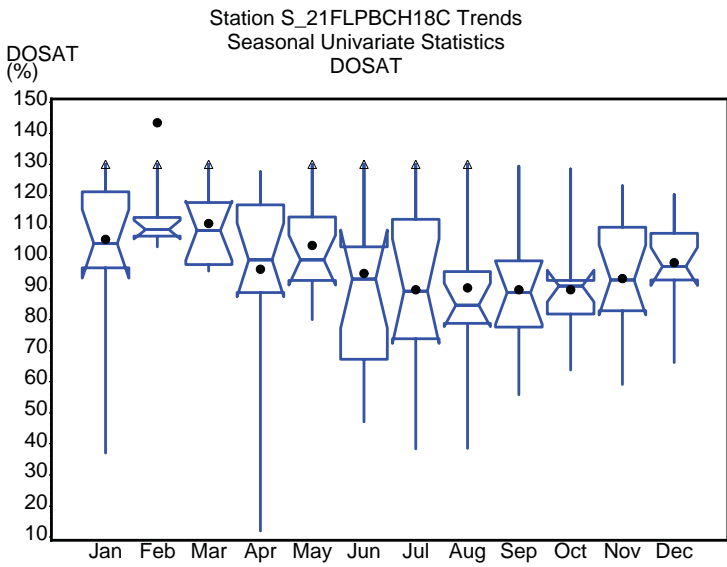
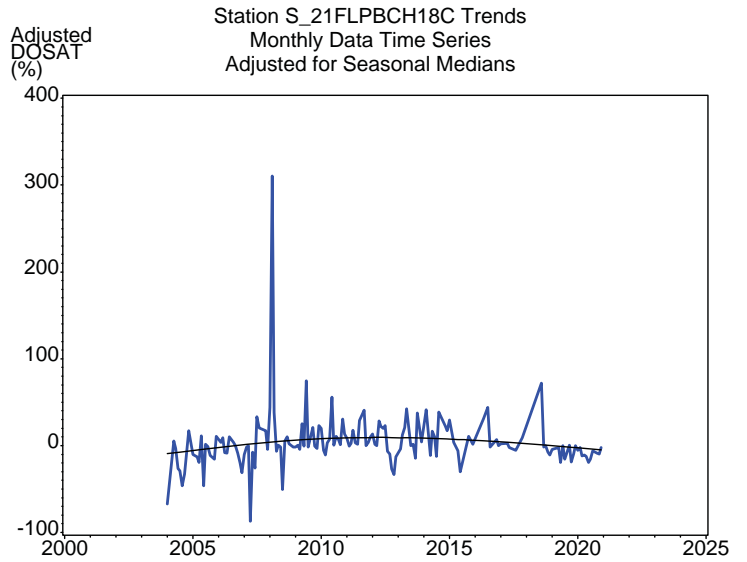
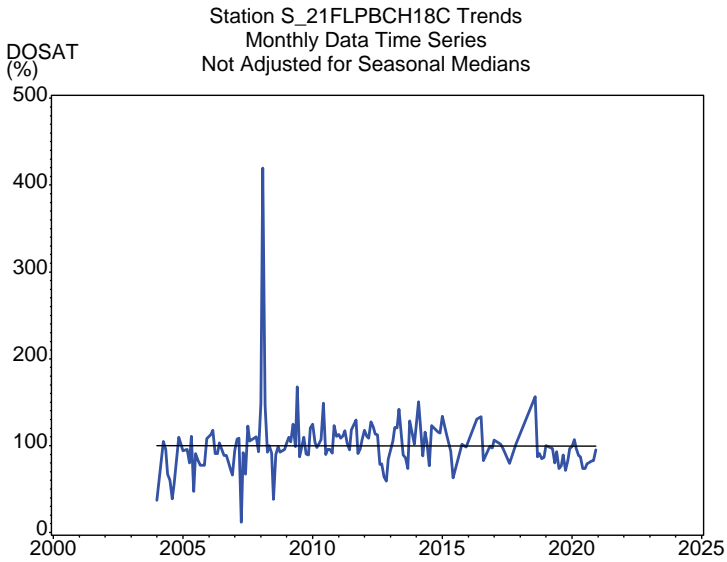
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.016	0.81	0.89	-.006



Station S_21FLPBCH18C Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

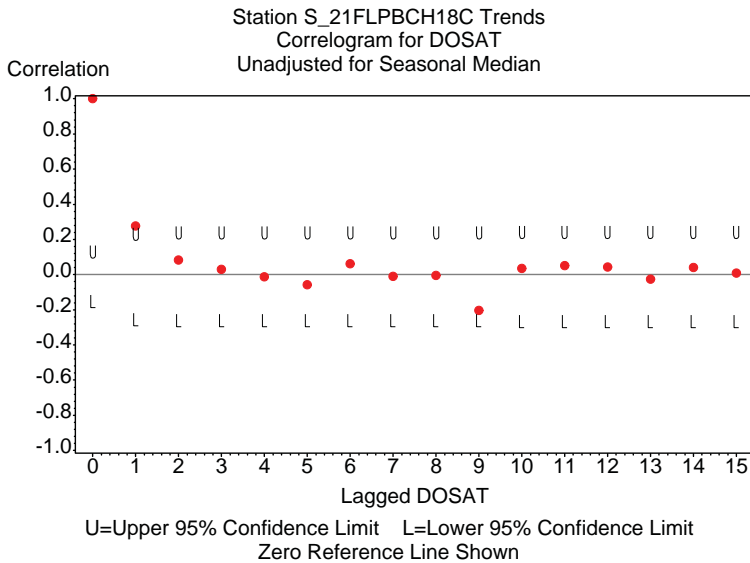
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.276	0.121	0.243	-0.243
2	0.090	0.124	0.249	-0.249
3	0.041	0.125	0.249	-0.249
4	0.027	0.125	0.249	-0.249
5	-0.022	0.125	0.249	-0.249
6	0.062	0.125	0.249	-0.249
7	0.017	0.125	0.250	-0.250
8	0.040	0.125	0.250	-0.250
9	-0.186	0.125	0.250	-0.250
10	0.004	0.126	0.253	-0.253
11	0.006	0.126	0.253	-0.253
12	-0.020	0.126	0.253	-0.253
13	-0.085	0.126	0.253	-0.253
14	-0.014	0.127	0.253	-0.253
15	0.005	0.127	0.253	-0.253





Station S_21FLPBCH18C Trends Autocorrelation Statistics for DOSAT

Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.277	0.121	0.243	-0.243
2	0.084	0.124	0.249	-0.249
3	0.030	0.125	0.249	-0.249
4	-0.012	0.125	0.249	-0.249
5	-0.057	0.125	0.249	-0.249
6	0.061	0.125	0.250	-0.250
7	-0.011	0.125	0.250	-0.250
8	-0.004	0.125	0.250	-0.250
9	-0.204	0.125	0.250	-0.250
10	0.036	0.127	0.253	-0.253
11	0.050	0.127	0.253	-0.253
12	0.043	0.127	0.253	-0.253
13	-0.027	0.127	0.254	-0.254
14	0.041	0.127	0.254	-0.254
15	0.009	0.127	0.254	-0.254

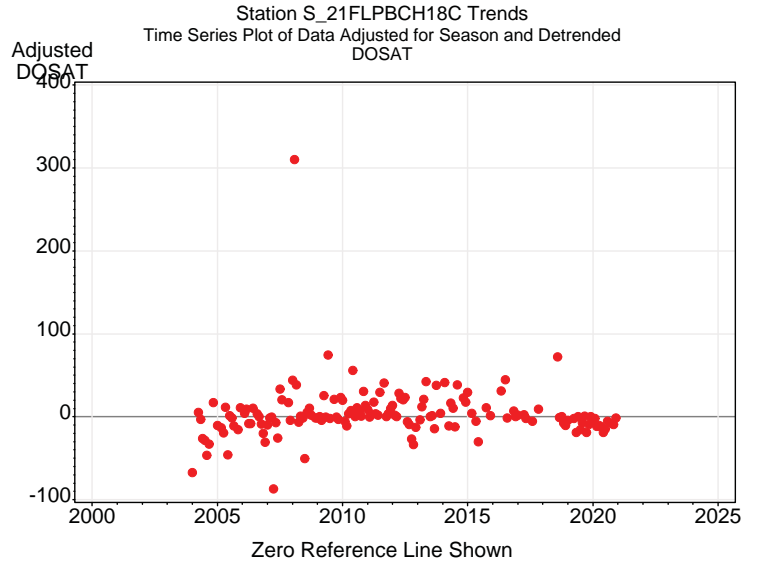


Station S_21FLPBCH18C Trends Appendix Seasonal Kendall Tau Trend Test Statistics DOSAT Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.002	0.986	0.992	-0.015

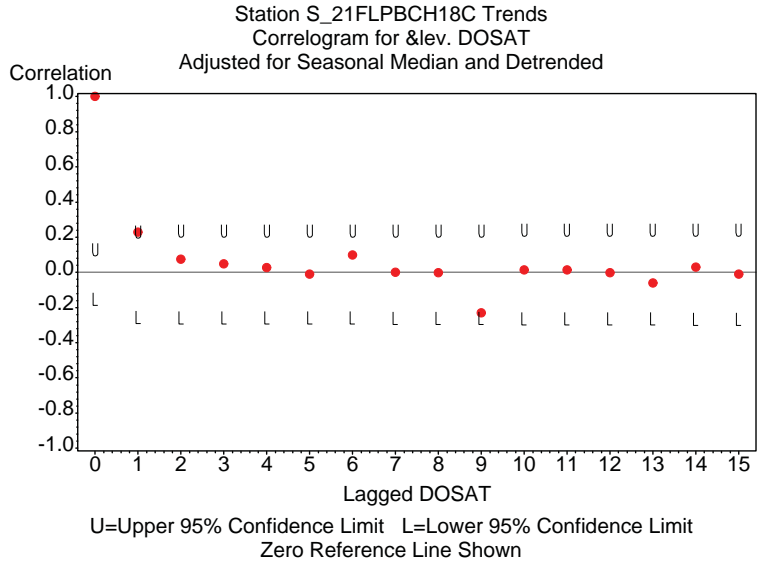
Station S_21FLPBCH18C Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DOSAT
 Adjusted for Seasonal Medians

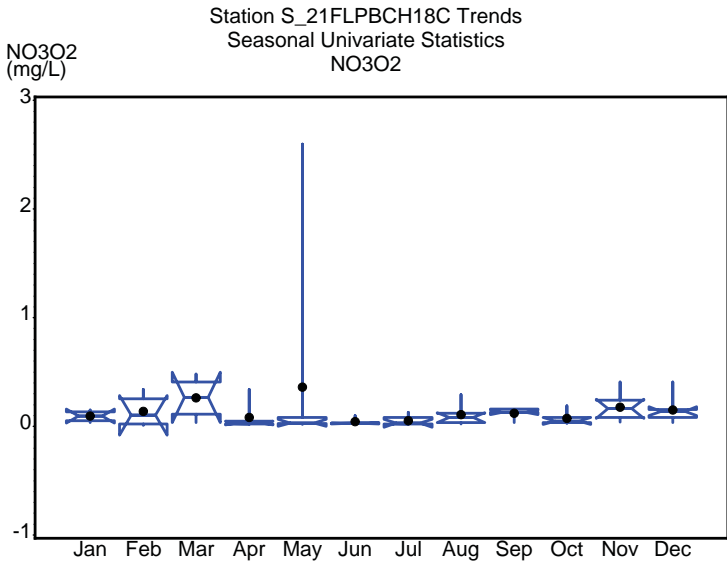
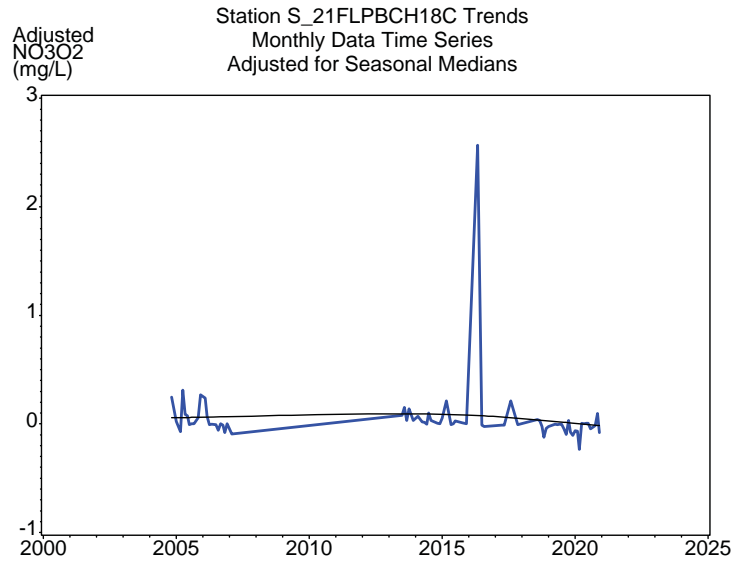
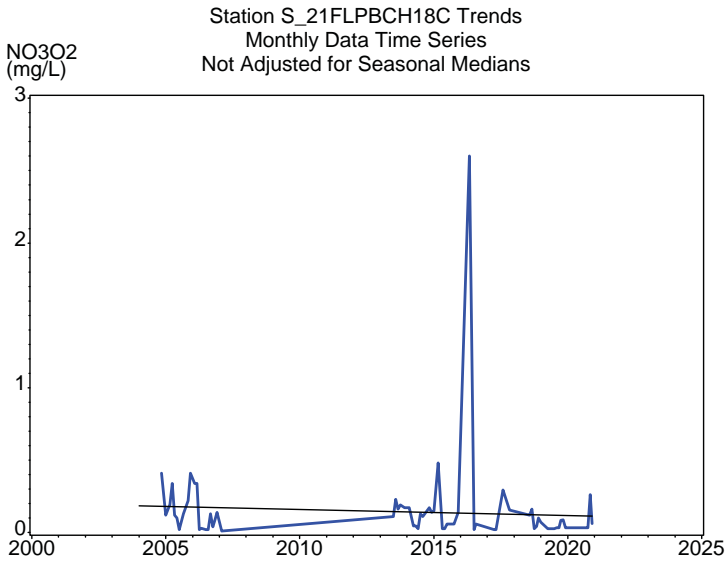
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.002	0.986	0.992	-0.015



Station S_21FLPBCH18C Trends
 Autocorrelation Statistics for DOSAT
 Adjusted for Seasonal Median and Detrended

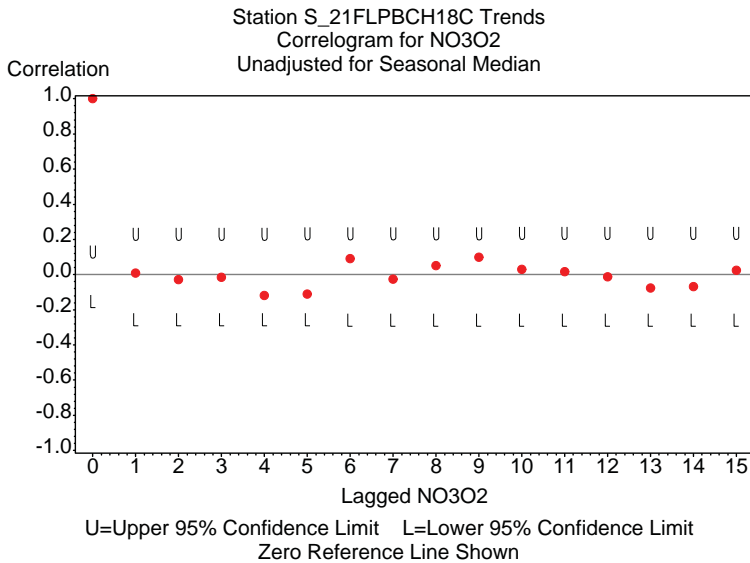
Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.230	0.121	0.243	-0.243
2	0.076	0.123	0.247	-0.247
3	0.049	0.124	0.247	-0.247
4	0.028	0.124	0.247	-0.247
5	-0.009	0.124	0.247	-0.247
6	0.098	0.124	0.247	-0.247
7	0.002	0.124	0.248	-0.248
8	-0.002	0.124	0.248	-0.248
9	-0.229	0.124	0.248	-0.248
10	0.014	0.126	0.252	-0.252
11	0.014	0.126	0.252	-0.252
12	-0.001	0.126	0.252	-0.252
13	-0.059	0.126	0.252	-0.252
14	0.030	0.126	0.253	-0.253
15	-0.009	0.126	0.253	-0.253





Station S_21FLPBCH18C Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.009	0.121	0.243	-0.243
2	-0.028	0.121	0.243	-0.243
3	-0.014	0.121	0.243	-0.243
4	-0.119	0.121	0.243	-0.243
5	-0.112	0.122	0.244	-0.244
6	0.092	0.122	0.245	-0.245
7	-0.026	0.123	0.245	-0.245
8	0.052	0.123	0.246	-0.246
9	0.100	0.123	0.246	-0.246
10	0.029	0.123	0.247	-0.247
11	0.016	0.123	0.247	-0.247
12	-0.013	0.123	0.247	-0.247
13	-0.075	0.123	0.247	-0.247
14	-0.069	0.124	0.247	-0.247
15	0.024	0.124	0.247	-0.247

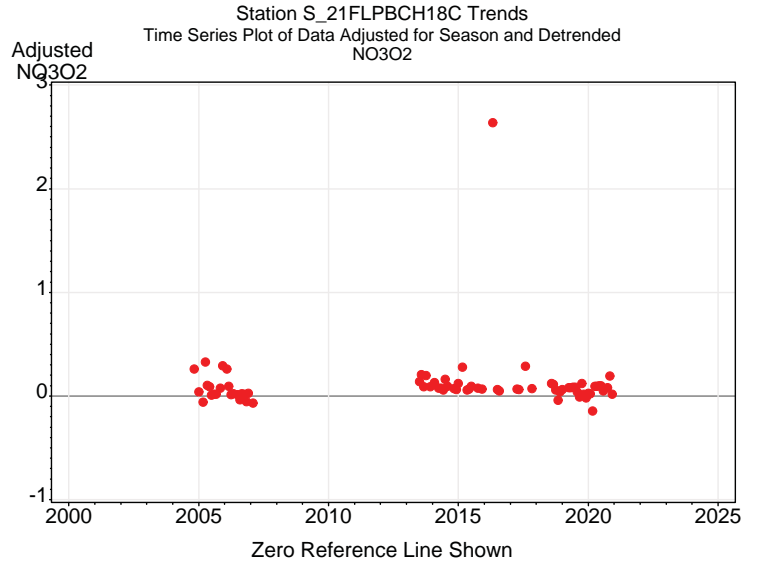


Station S_21FLPBCH18C Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.236	0.02	0.105	-0.005

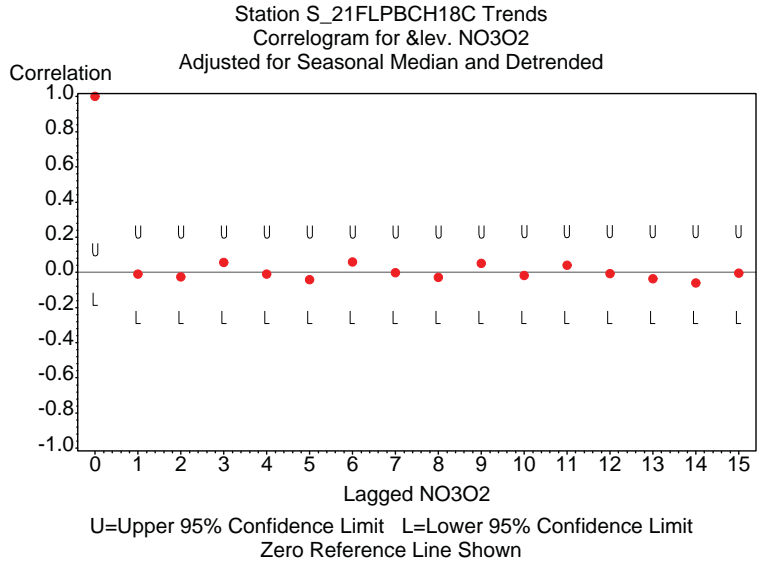
Station S_21FLPBCH18C Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

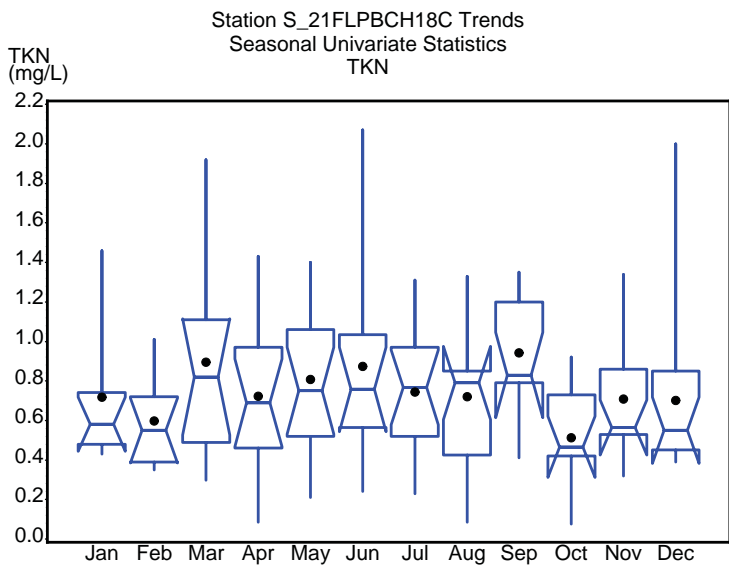
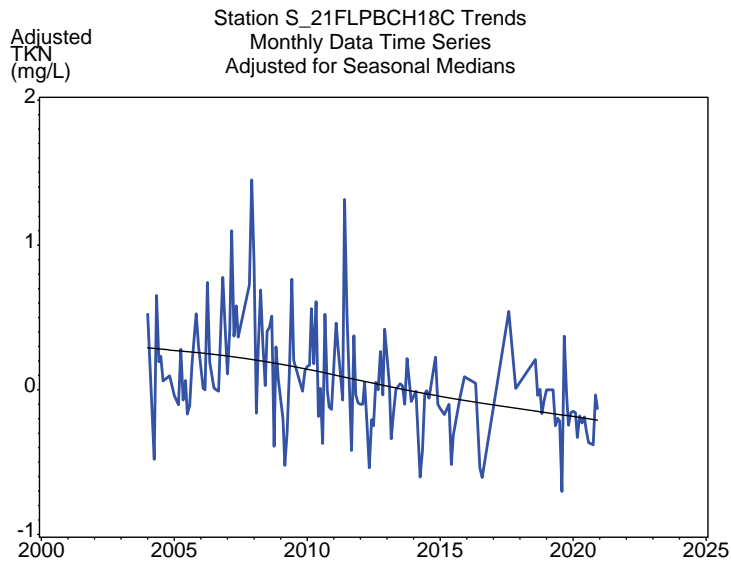
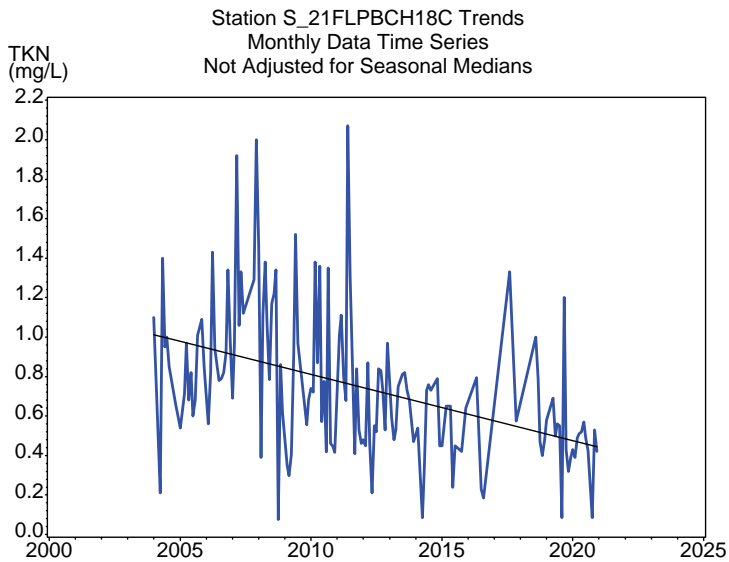
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.236	0.02	0.105	-.005



Station S_21FLPBCH18C Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

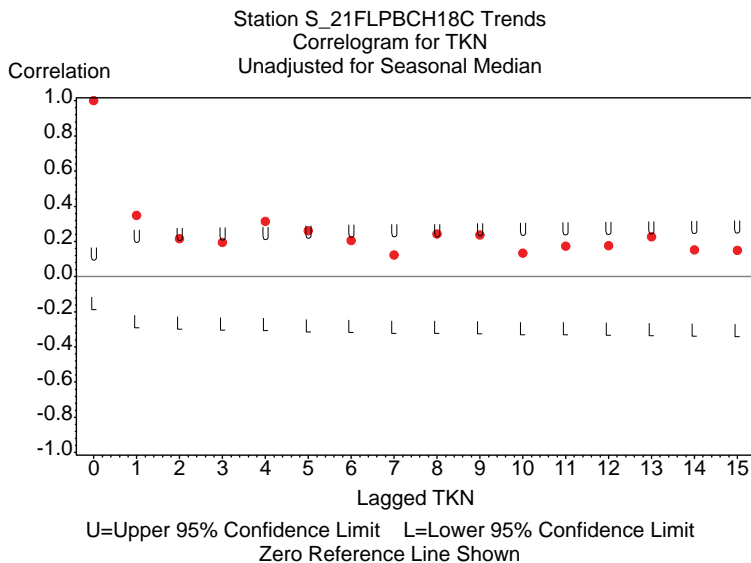
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	-0.011	0.121	0.243	-0.243
2	-0.025	0.121	0.243	-0.243
3	0.056	0.121	0.243	-0.243
4	-0.011	0.121	0.243	-0.243
5	-0.042	0.121	0.243	-0.243
6	0.060	0.122	0.243	-0.243
7	-0.003	0.122	0.243	-0.243
8	-0.028	0.122	0.243	-0.243
9	0.052	0.122	0.243	-0.243
10	-0.018	0.122	0.244	-0.244
11	0.040	0.122	0.244	-0.244
12	-0.007	0.122	0.244	-0.244
13	-0.036	0.122	0.244	-0.244
14	-0.060	0.122	0.244	-0.244
15	-0.004	0.122	0.244	-0.244





Station S_21FLPBCH18C Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.348	0.121	0.243	-0.243
2	0.216	0.126	0.252	-0.252
3	0.195	0.128	0.256	-0.256
4	0.314	0.129	0.259	-0.259
5	0.261	0.133	0.266	-0.266
6	0.206	0.135	0.271	-0.271
7	0.123	0.137	0.274	-0.274
8	0.242	0.138	0.275	-0.275
9	0.236	0.140	0.279	-0.279
10	0.133	0.142	0.283	-0.283
11	0.174	0.142	0.284	-0.284
12	0.175	0.143	0.286	-0.286
13	0.227	0.144	0.289	-0.289
14	0.152	0.146	0.292	-0.292
15	0.148	0.147	0.294	-0.294

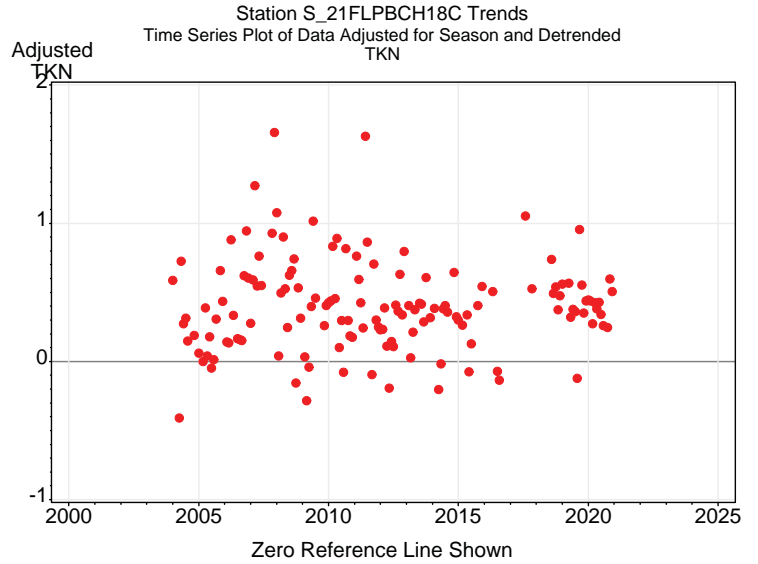


Station S_21FLPBCH18C Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.376	0	.003	-0.033

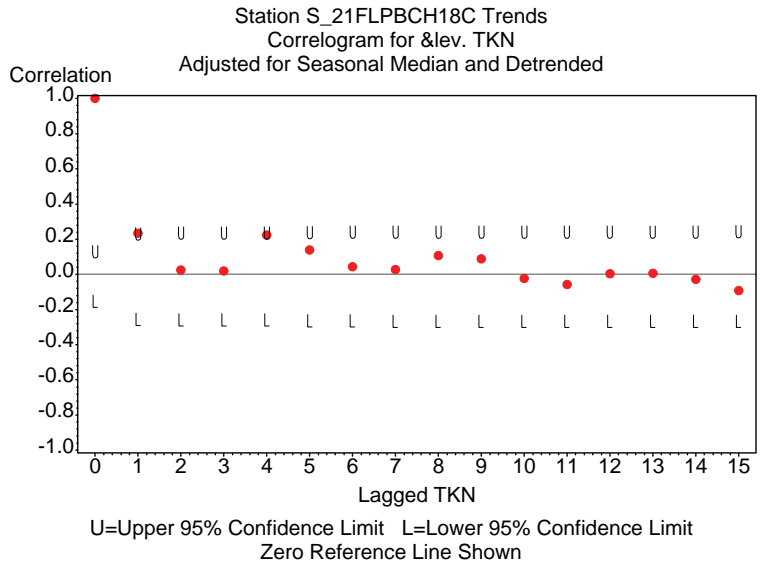
Station S_21FLPBCH18C Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN
 Adjusted for Seasonal Medians

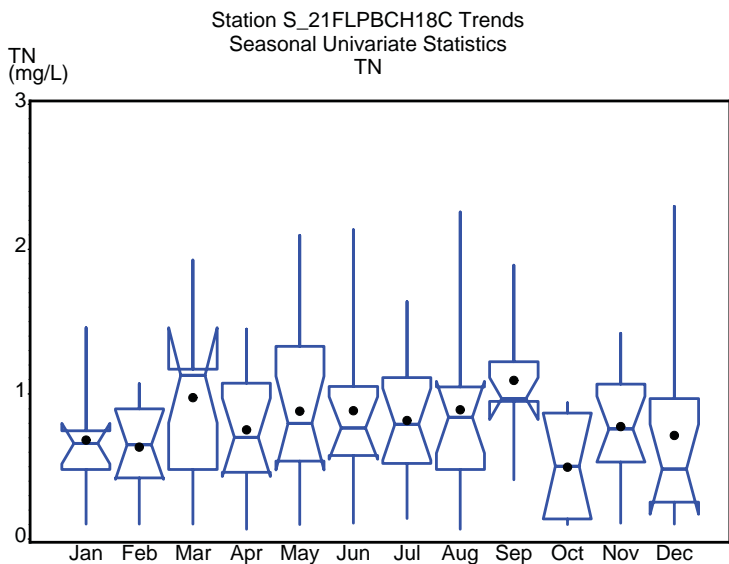
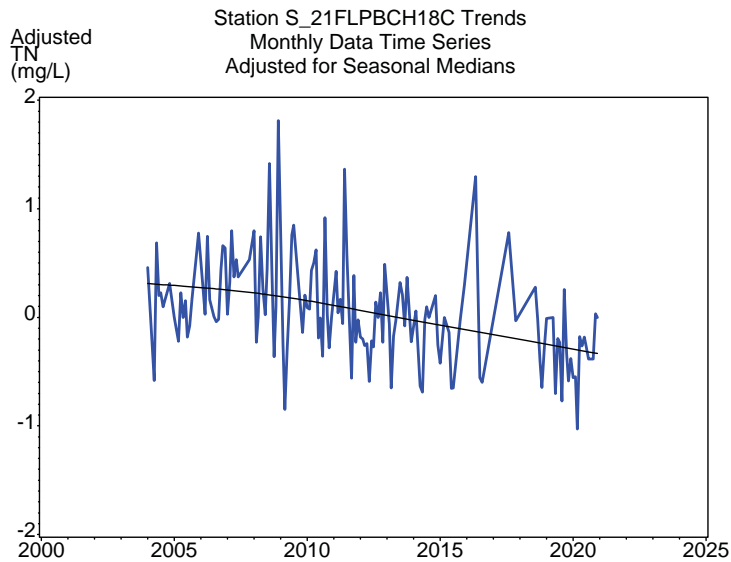
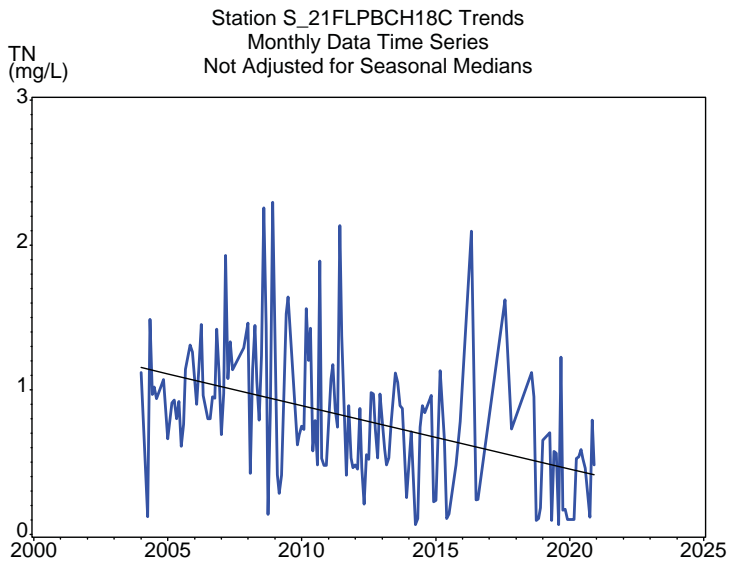
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.376	0	.003	-0.033



Station S_21FLPBCH18C Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

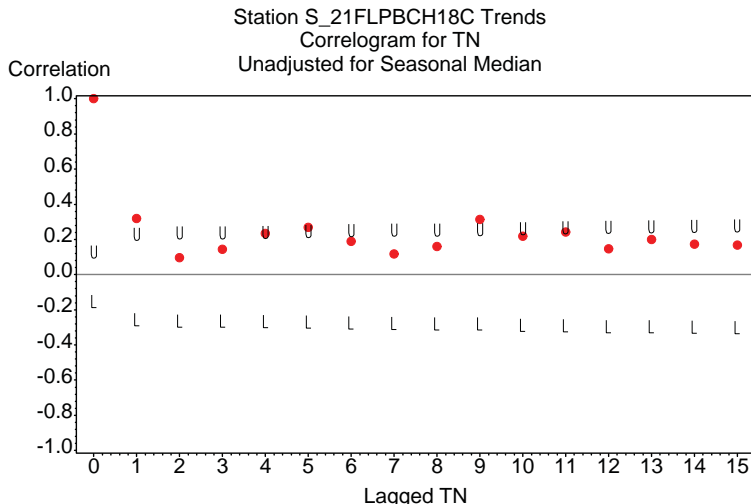
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.234	0.121	0.243	-0.243
2	0.025	0.123	0.247	-0.247
3	0.019	0.123	0.247	-0.247
4	0.224	0.123	0.247	-0.247
5	0.140	0.125	0.251	-0.251
6	0.043	0.126	0.252	-0.252
7	0.028	0.126	0.253	-0.253
8	0.108	0.126	0.253	-0.253
9	0.088	0.127	0.254	-0.254
10	-0.023	0.127	0.254	-0.254
11	-0.058	0.127	0.254	-0.254
12	0.004	0.127	0.254	-0.254
13	0.005	0.127	0.254	-0.254
14	-0.029	0.127	0.254	-0.254
15	-0.092	0.127	0.255	-0.255





Station S_21FLPBCH18C Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.320	0.121	0.243	-0.243
2	0.095	0.125	0.251	-0.251
3	0.144	0.126	0.251	-0.251
4	0.235	0.126	0.253	-0.253
5	0.270	0.129	0.257	-0.257
6	0.190	0.131	0.263	-0.263
7	0.118	0.133	0.265	-0.265
8	0.160	0.133	0.266	-0.266
9	0.313	0.134	0.268	-0.268
10	0.218	0.138	0.275	-0.275
11	0.243	0.139	0.279	-0.279
12	0.146	0.141	0.283	-0.283
13	0.199	0.142	0.284	-0.284
14	0.172	0.144	0.287	-0.287
15	0.167	0.145	0.289	-0.289



Station S_21FLPBCH18C Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

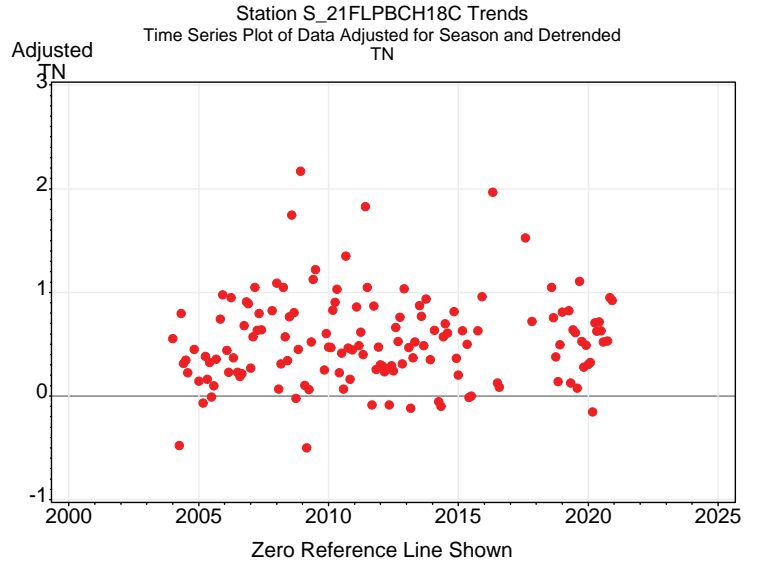
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.366	0	.003	-0.048

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_21FLPBCH18C Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

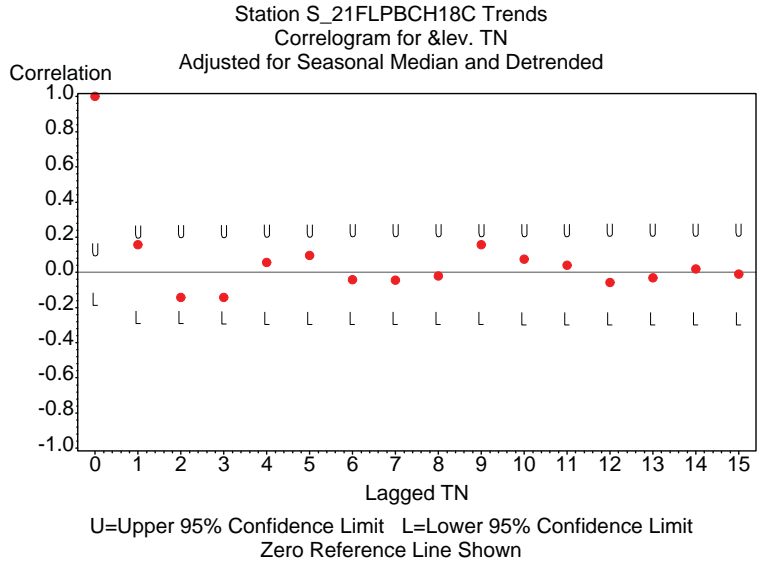
Adjusted for Seasonal Medians

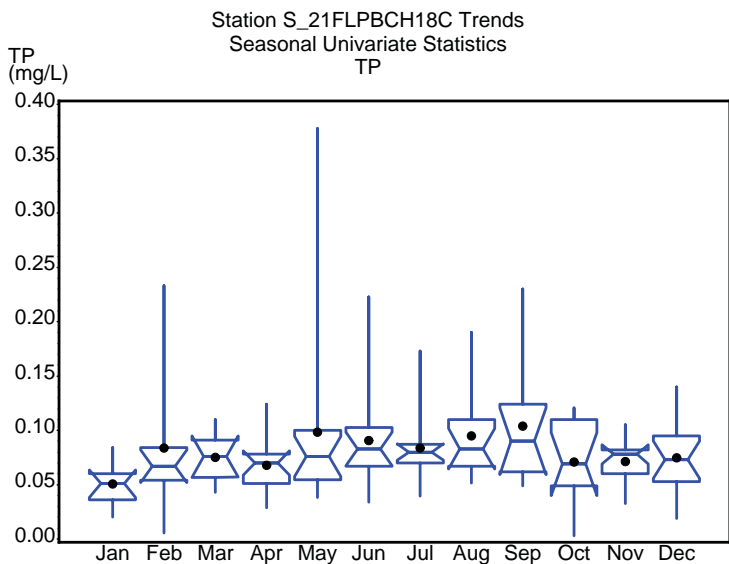
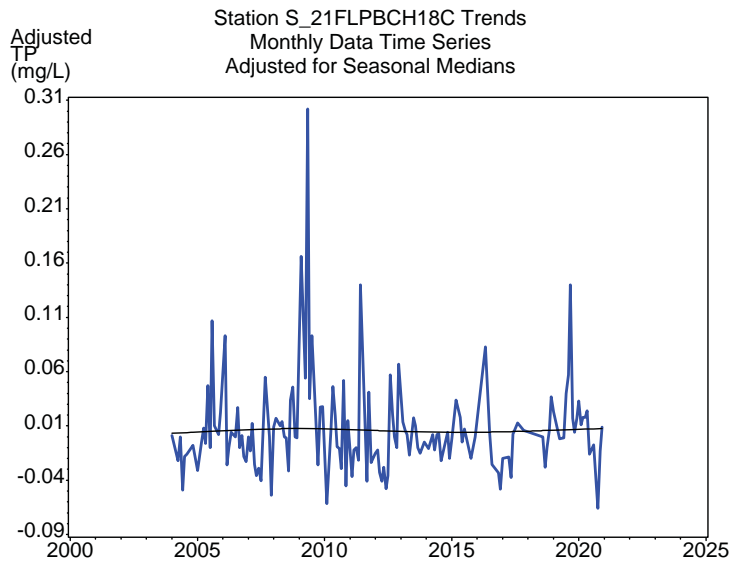
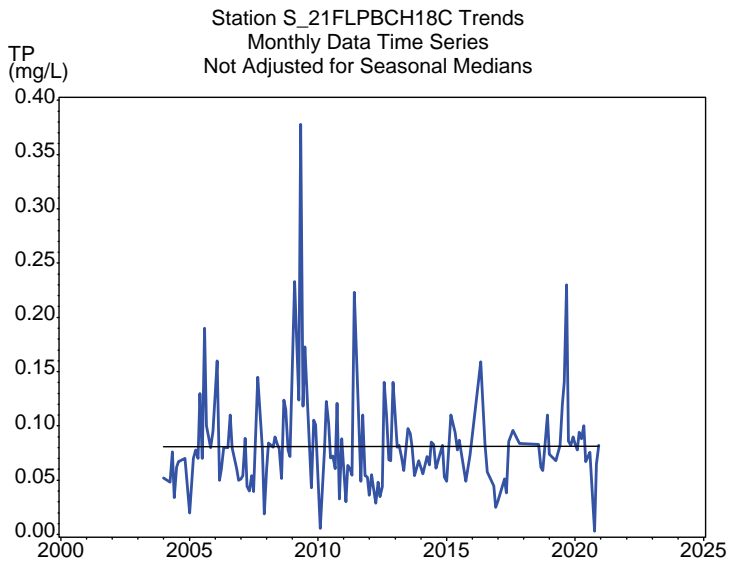
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.366	0	.003	-0.048



Station S_21FLPBCH18C Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

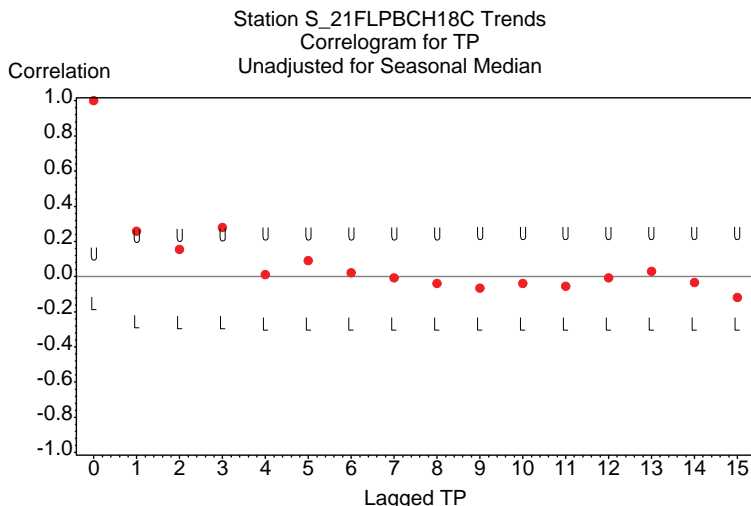
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.156	0.121	0.243	-0.243
2	-0.143	0.122	0.244	-0.244
3	-0.142	0.123	0.246	-0.246
4	0.056	0.124	0.248	-0.248
5	0.096	0.124	0.248	-0.248
6	-0.043	0.124	0.249	-0.249
7	-0.044	0.124	0.249	-0.249
8	-0.020	0.125	0.249	-0.249
9	0.157	0.125	0.249	-0.249
10	0.075	0.125	0.251	-0.251
11	0.041	0.126	0.251	-0.251
12	-0.057	0.126	0.252	-0.252
13	-0.030	0.126	0.252	-0.252
14	0.019	0.126	0.252	-0.252
15	-0.009	0.126	0.252	-0.252





Station S_21FLPBCH18C Trends Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.257	0.121	0.243	-0.243
2	0.154	0.124	0.248	-0.248
3	0.278	0.125	0.250	-0.250
4	0.011	0.128	0.256	-0.256
5	0.092	0.128	0.256	-0.256
6	0.022	0.128	0.256	-0.256
7	-0.006	0.128	0.256	-0.256
8	-0.040	0.128	0.256	-0.256
9	-0.065	0.128	0.257	-0.257
10	-0.040	0.128	0.257	-0.257
11	-0.054	0.128	0.257	-0.257
12	-0.007	0.129	0.257	-0.257
13	0.031	0.129	0.257	-0.257
14	-0.034	0.129	0.257	-0.257
15	-0.118	0.129	0.257	-0.257



Station S_21FLPBCH18C Trends Appendix Seasonal Kendall Tau Trend Test Statistics TP Unadjusted for Seasonal Medians

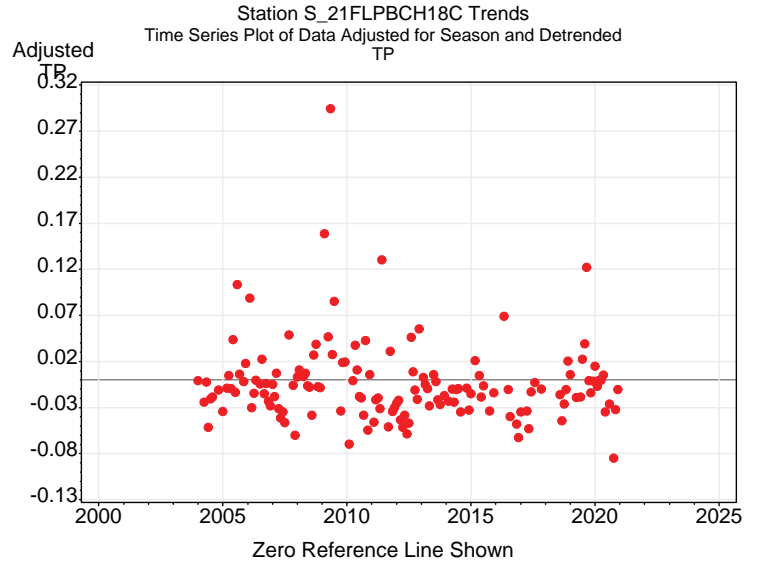
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.071	0.276	0.479	.001

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_21FLPBCH18C Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

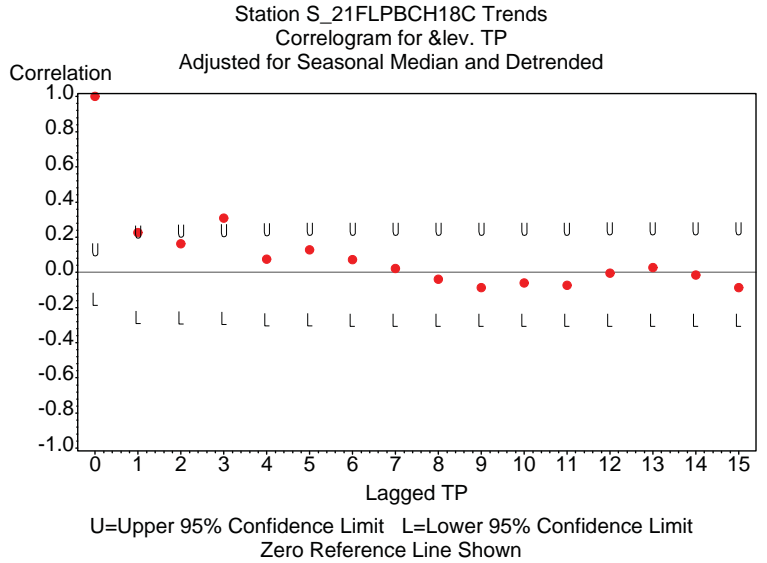
Adjusted for Seasonal Medians

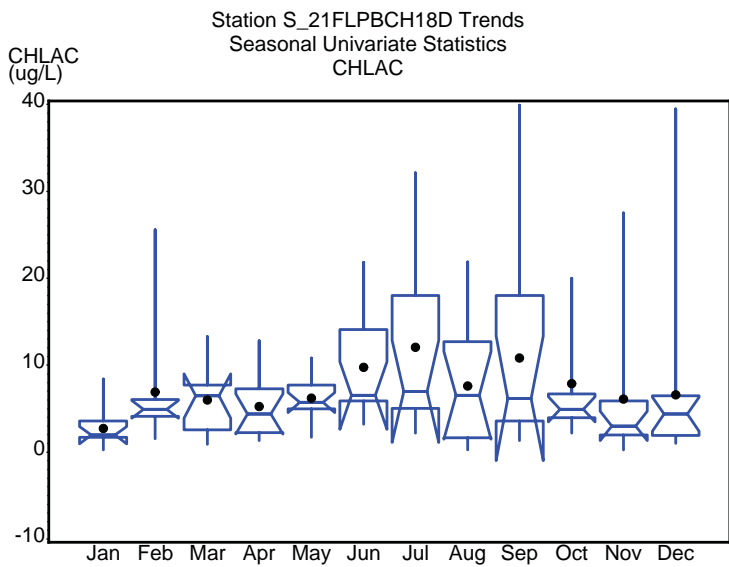
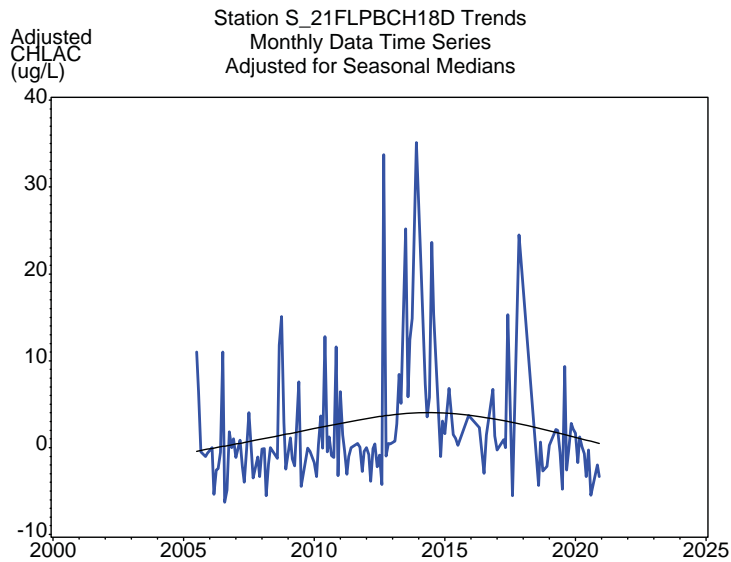
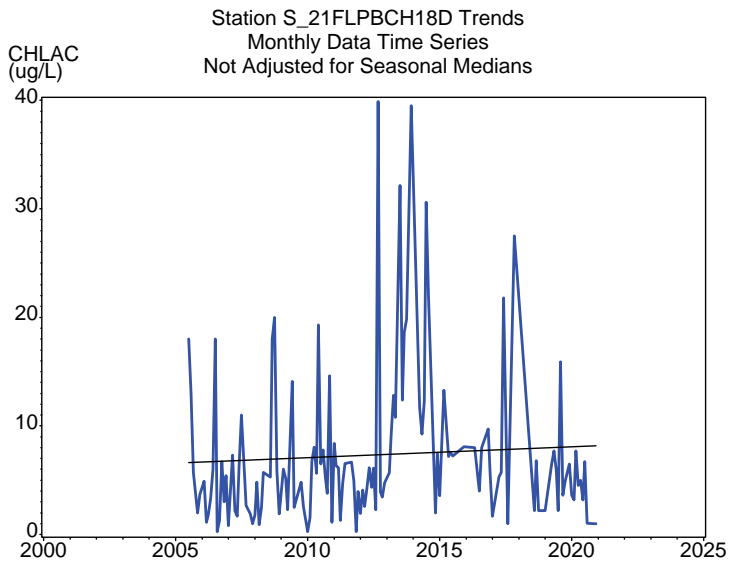
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.071	0.276	0.479	.001



Station S_21FLPBCH18C Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

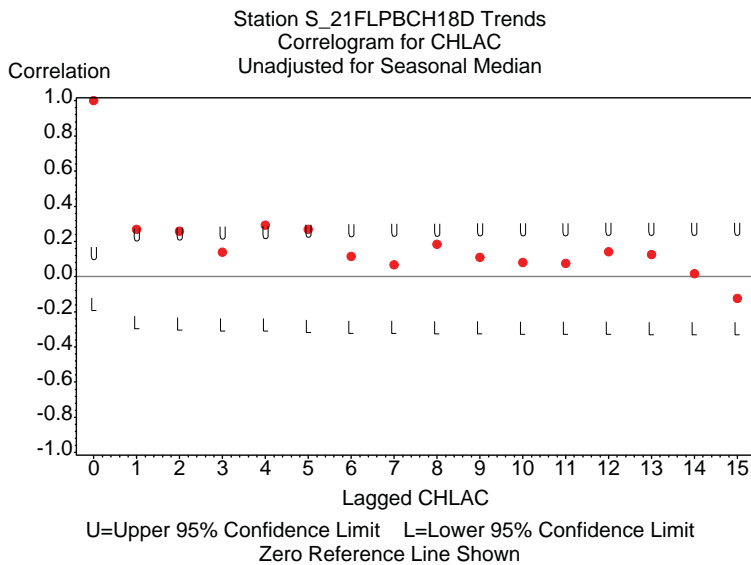
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.070	0.140	-0.140
1	0.226	0.121	0.243	-0.243
2	0.163	0.123	0.247	-0.247
3	0.309	0.124	0.249	-0.249
4	0.075	0.128	0.256	-0.256
5	0.129	0.128	0.257	-0.257
6	0.072	0.129	0.258	-0.258
7	0.021	0.129	0.258	-0.258
8	-0.040	0.129	0.258	-0.258
9	-0.086	0.129	0.258	-0.258
10	-0.060	0.129	0.259	-0.259
11	-0.073	0.130	0.259	-0.259
12	-0.005	0.130	0.260	-0.260
13	0.026	0.130	0.260	-0.260
14	-0.015	0.130	0.260	-0.260
15	-0.088	0.130	0.260	-0.260





Station S_21FLPBCH18D Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.270	0.125	0.250	-0.250
2	0.257	0.128	0.256	-0.256
3	0.140	0.131	0.261	-0.261
4	0.293	0.131	0.263	-0.263
5	0.270	0.135	0.270	-0.270
6	0.116	0.138	0.275	-0.275
7	0.068	0.138	0.276	-0.276
8	0.184	0.138	0.277	-0.277
9	0.110	0.140	0.279	-0.279
10	0.079	0.140	0.280	-0.280
11	0.076	0.140	0.280	-0.280
12	0.141	0.140	0.281	-0.281
13	0.126	0.141	0.282	-0.282
14	0.017	0.142	0.283	-0.283
15	-0.124	0.142	0.283	-0.283

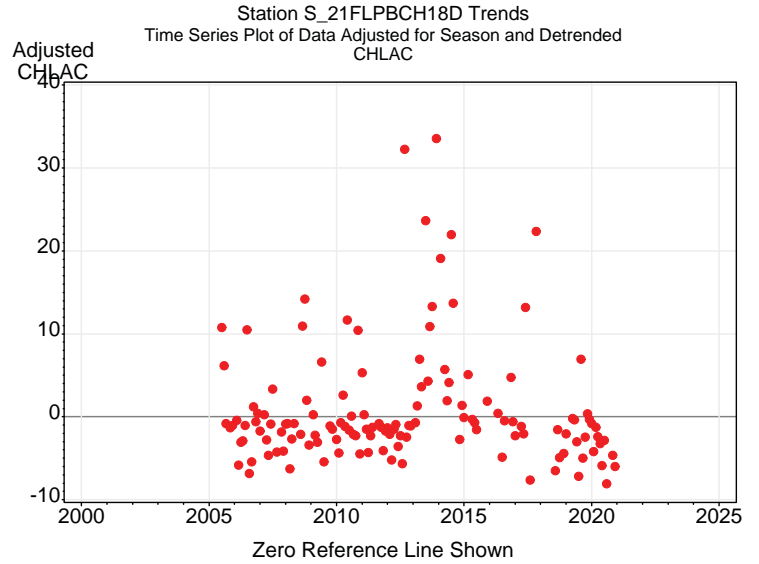


Station S_21FLPBCH18D Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.133	0.05	0.207	0.145

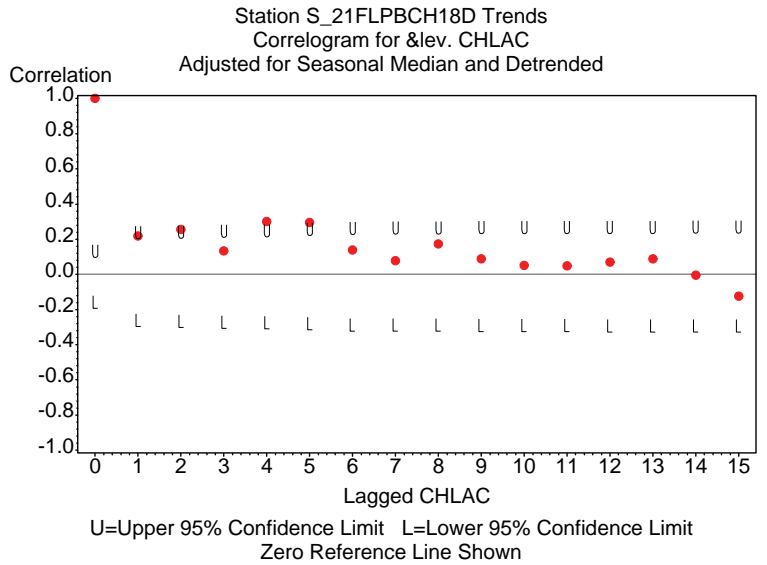
Station S_21FLPBCH18D Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

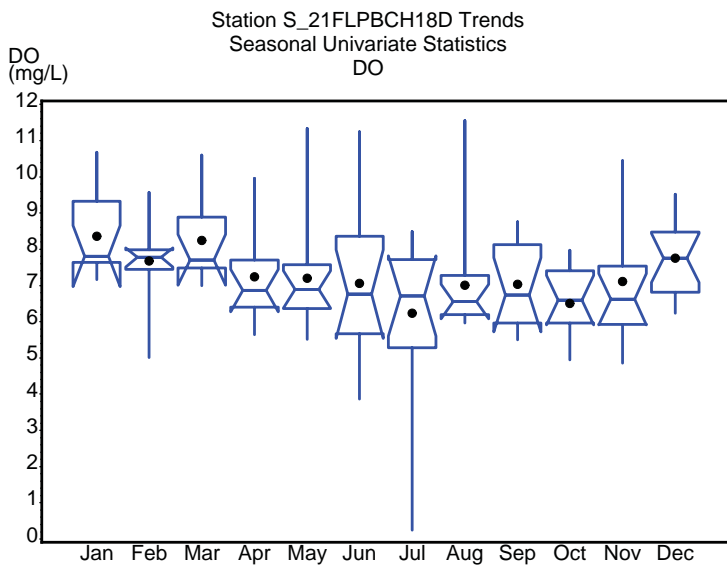
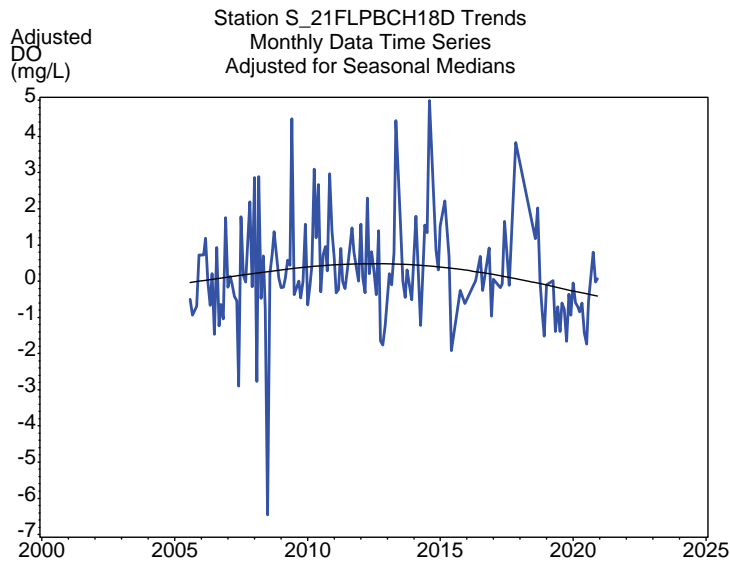
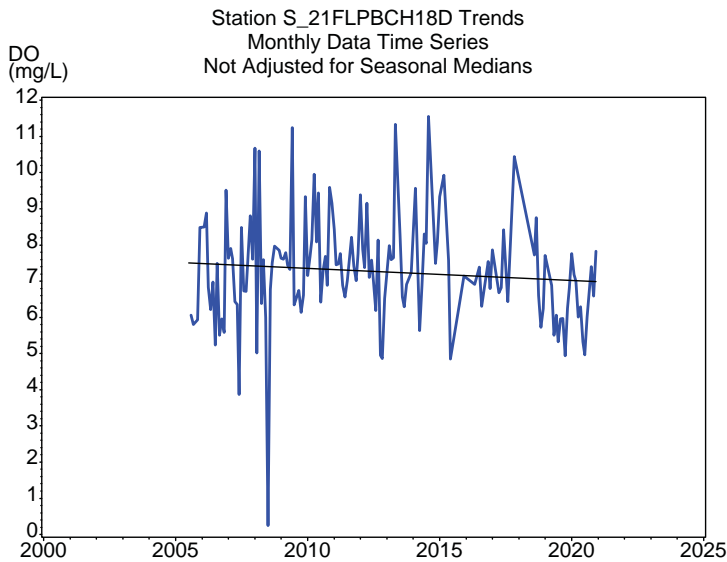
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.133	0.05	0.207	0.145



Station S_21FLPBCH18D Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

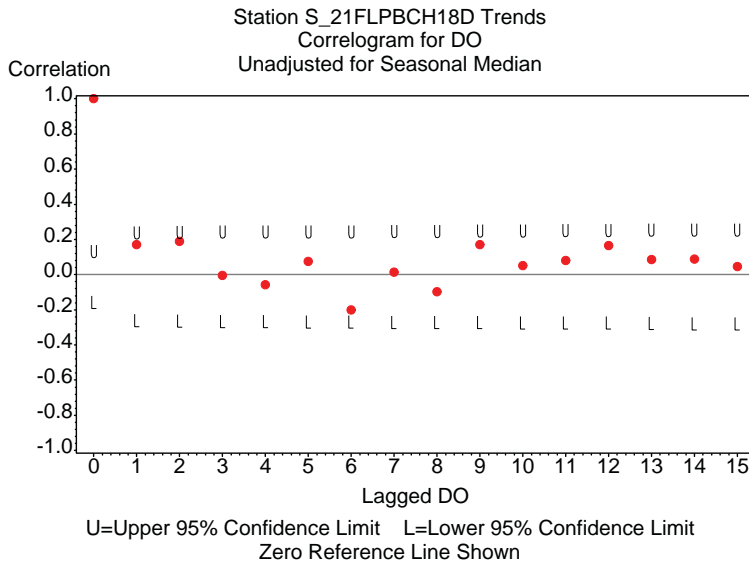
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.219	0.125	0.250	-0.250
2	0.256	0.127	0.254	-0.254
3	0.133	0.130	0.259	-0.259
4	0.301	0.130	0.261	-0.261
5	0.294	0.134	0.268	-0.268
6	0.139	0.137	0.274	-0.274
7	0.078	0.138	0.276	-0.276
8	0.174	0.138	0.276	-0.276
9	0.087	0.139	0.279	-0.279
10	0.050	0.140	0.279	-0.279
11	0.048	0.140	0.279	-0.279
12	0.071	0.140	0.280	-0.280
13	0.088	0.140	0.280	-0.280
14	-0.005	0.140	0.281	-0.281
15	-0.124	0.140	0.281	-0.281





Station S_21FLPBCH18D Trends
Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.171	0.125	0.250	-0.250
2	0.189	0.126	0.252	-0.252
3	-0.004	0.128	0.255	-0.255
4	-0.058	0.128	0.255	-0.255
5	0.076	0.128	0.256	-0.256
6	-0.200	0.128	0.256	-0.256
7	0.014	0.130	0.259	-0.259
8	-0.098	0.130	0.259	-0.259
9	0.170	0.130	0.260	-0.260
10	0.052	0.131	0.262	-0.262
11	0.080	0.131	0.263	-0.263
12	0.165	0.132	0.263	-0.263
13	0.086	0.133	0.265	-0.265
14	0.088	0.133	0.266	-0.266
15	0.046	0.133	0.266	-0.266

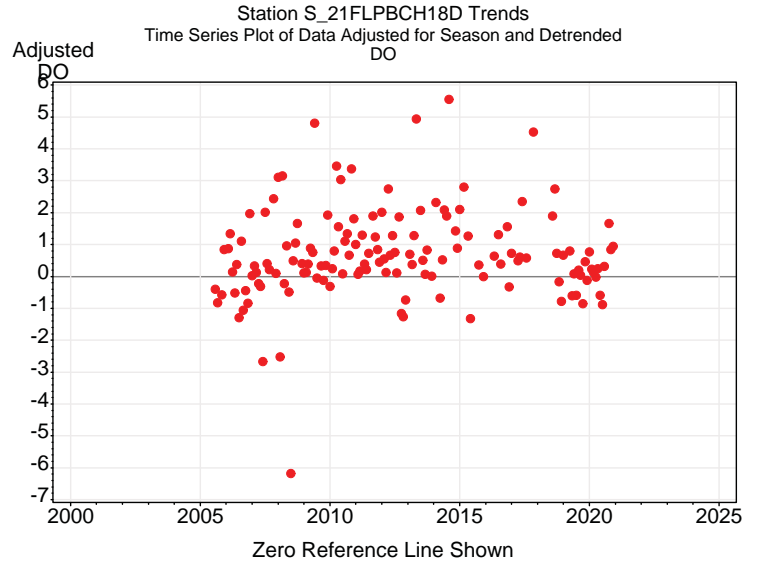


Station S_21FLPBCH18D Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DO
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.102	0.118	0.31	-0.048

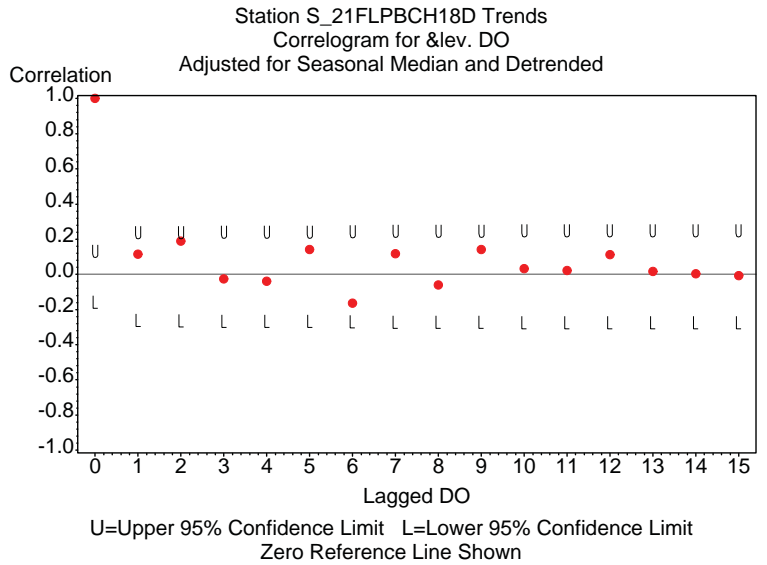
Station S_21FLPBCH18D Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

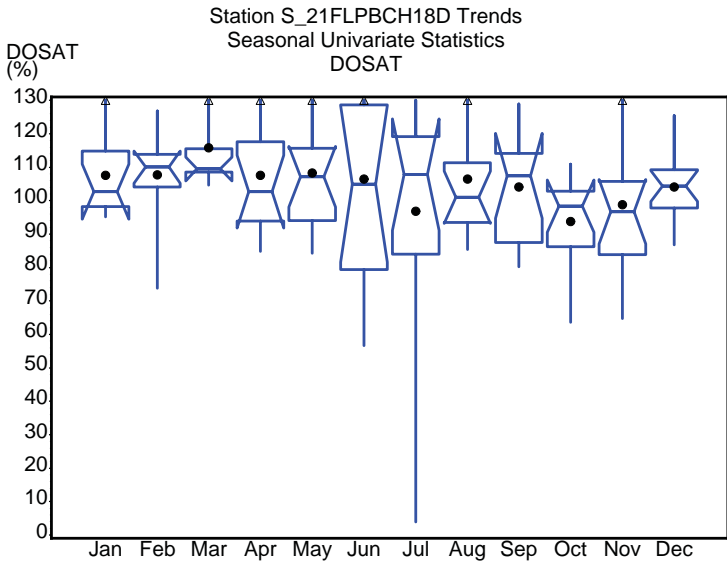
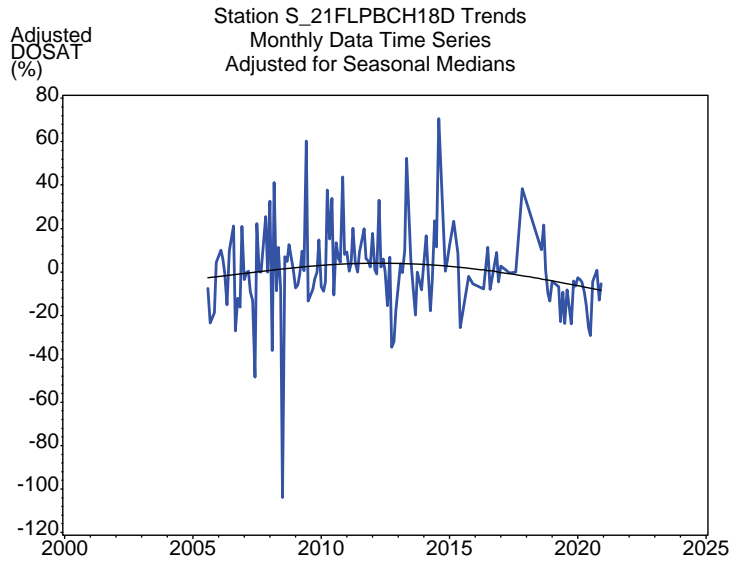
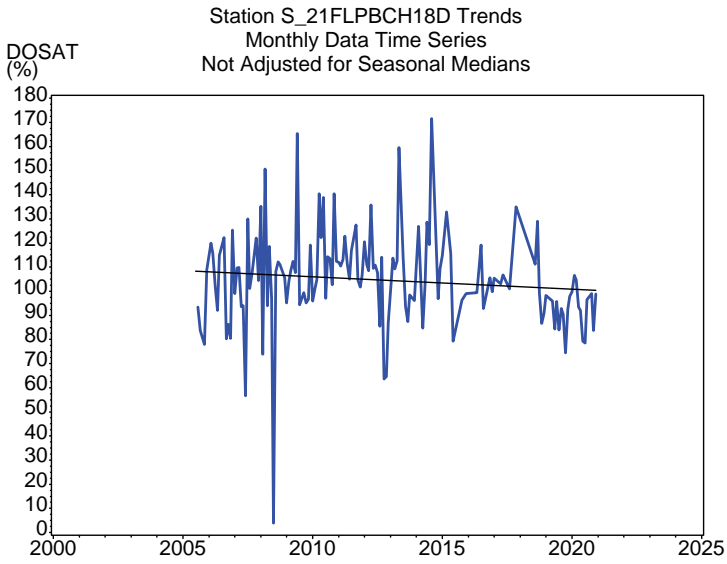
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.102	0.118	0.31	-0.048



Station S_21FLPBCH18D Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

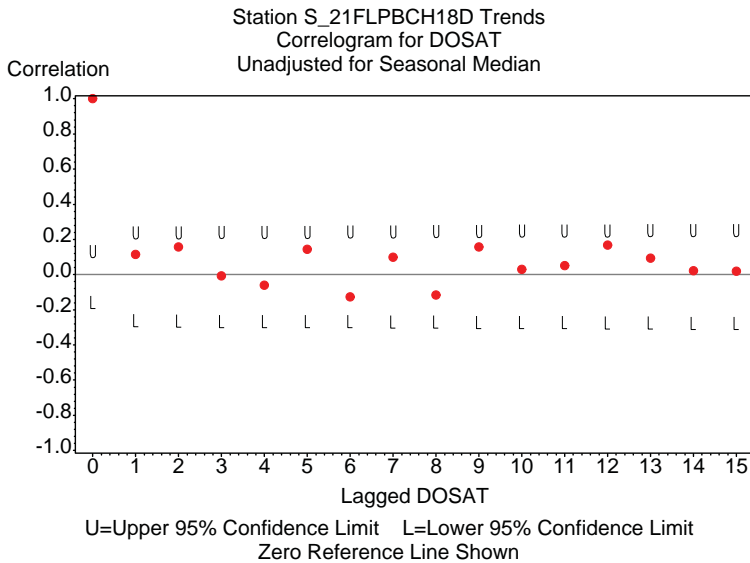
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.116	0.125	0.250	-0.250
2	0.188	0.126	0.251	-0.251
3	-0.025	0.127	0.254	-0.254
4	-0.040	0.127	0.254	-0.254
5	0.141	0.127	0.254	-0.254
6	-0.163	0.128	0.256	-0.256
7	0.118	0.129	0.258	-0.258
8	-0.061	0.130	0.259	-0.259
9	0.141	0.130	0.259	-0.259
10	0.032	0.130	0.261	-0.261
11	0.023	0.131	0.261	-0.261
12	0.111	0.131	0.261	-0.261
13	0.017	0.131	0.262	-0.262
14	0.004	0.131	0.262	-0.262
15	-0.006	0.131	0.262	-0.262





Station S_21FLPBCH18D Trends Autocorrelation Statistics for DOSAT

Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.115	0.125	0.250	-0.250
2	0.158	0.126	0.251	-0.251
3	-0.006	0.127	0.253	-0.253
4	-0.059	0.127	0.253	-0.253
5	0.143	0.127	0.253	-0.253
6	-0.127	0.128	0.255	-0.255
7	0.098	0.128	0.256	-0.256
8	-0.117	0.129	0.257	-0.257
9	0.157	0.129	0.258	-0.258
10	0.029	0.130	0.260	-0.260
11	0.051	0.130	0.260	-0.260
12	0.169	0.130	0.261	-0.261
13	0.094	0.131	0.263	-0.263
14	0.023	0.132	0.264	-0.264
15	0.019	0.132	0.264	-0.264

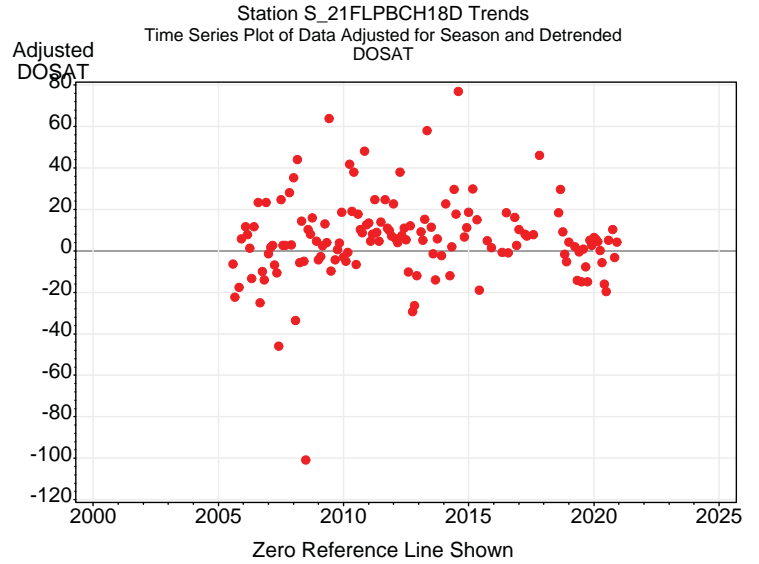


Station S_21FLPBCH18D Trends Appendix Seasonal Kendall Tau Trend Test Statistics DOSAT Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.098	0.136	0.318	-0.54

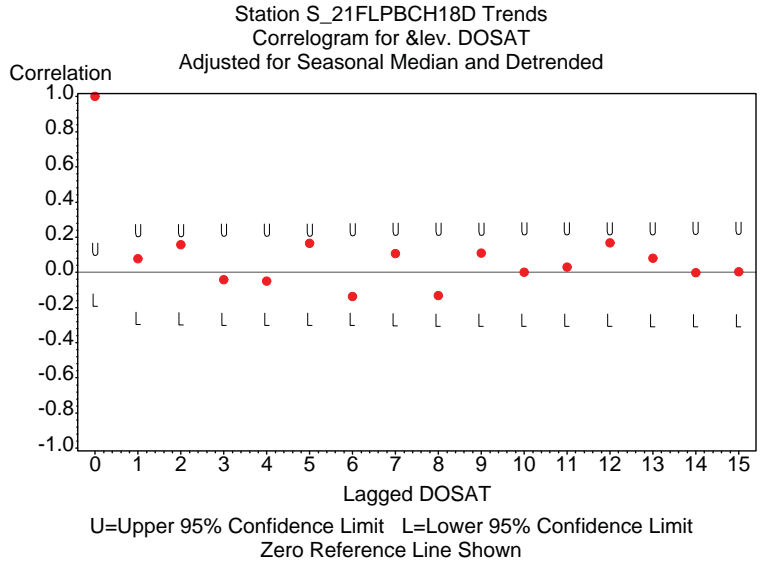
Station S_21FLPBCH18D Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DOSAT
 Adjusted for Seasonal Medians

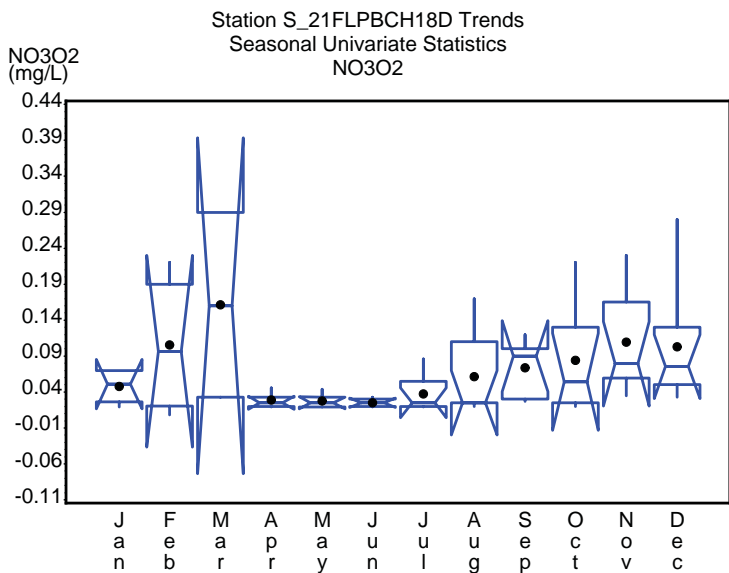
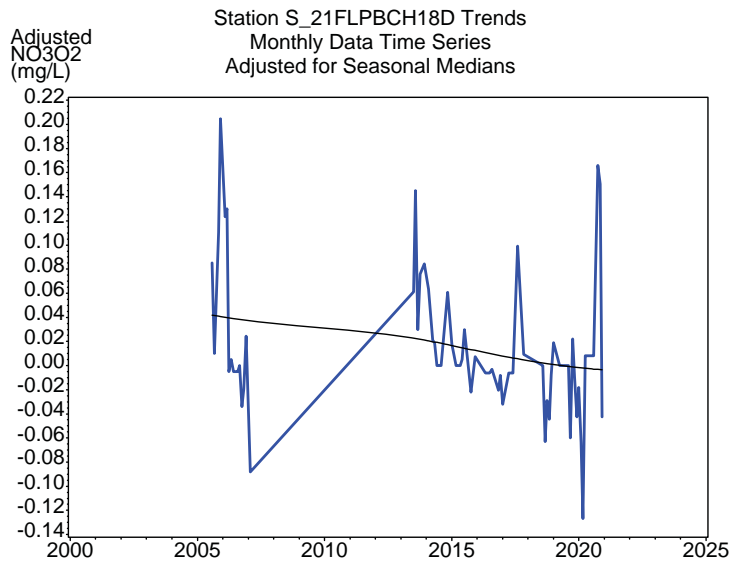
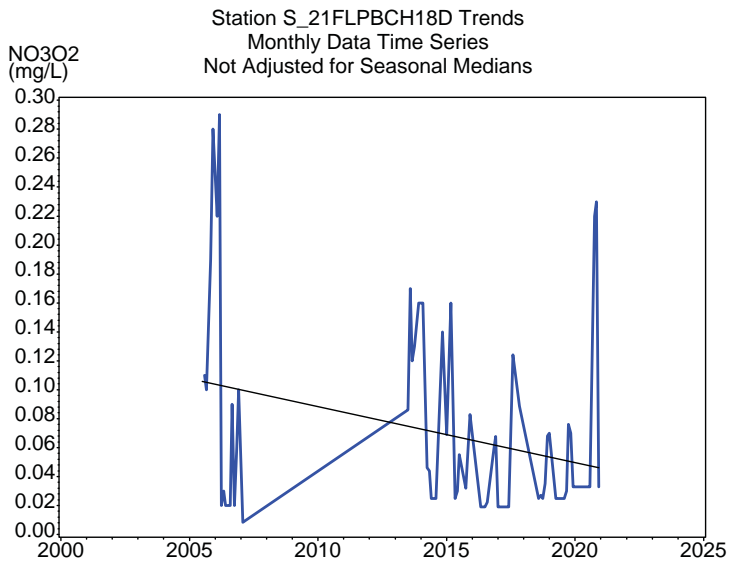
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.098	0.136	0.318	-0.54



Station S_21FLPBCH18D Trends
 Autocorrelation Statistics for DOSAT
 Adjusted for Seasonal Median and Detrended

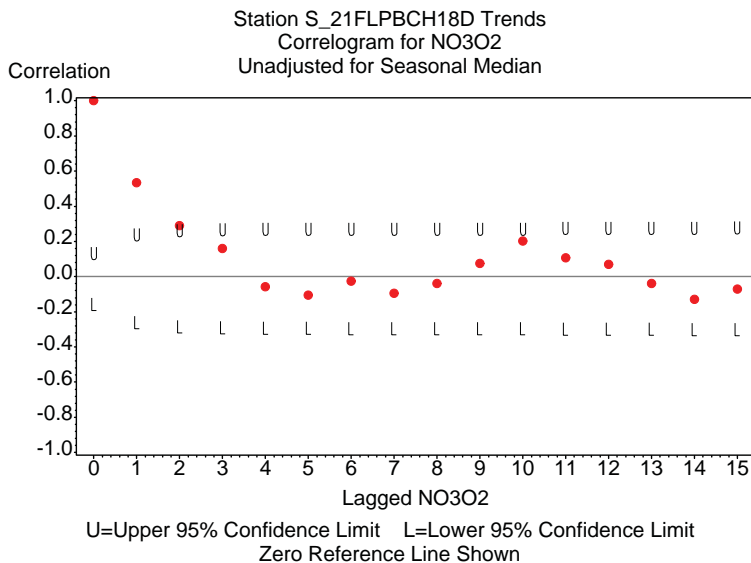
Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.078	0.125	0.250	-0.250
2	0.156	0.125	0.251	-0.251
3	-0.041	0.126	0.253	-0.253
4	-0.049	0.126	0.253	-0.253
5	0.165	0.126	0.253	-0.253
6	-0.138	0.128	0.255	-0.255
7	0.108	0.128	0.257	-0.257
8	-0.133	0.129	0.258	-0.258
9	0.110	0.130	0.259	-0.259
10	0.000	0.130	0.260	-0.260
11	0.031	0.130	0.260	-0.260
12	0.168	0.130	0.260	-0.260
13	0.079	0.131	0.262	-0.262
14	-0.002	0.131	0.263	-0.263
15	0.003	0.131	0.263	-0.263





Station S_21FLPBCH18D Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.533	0.125	0.250	-0.250
2	0.290	0.136	0.273	-0.273
3	0.160	0.139	0.279	-0.279
4	-0.058	0.140	0.281	-0.281
5	-0.106	0.141	0.281	-0.281
6	-0.027	0.141	0.282	-0.282
7	-0.096	0.141	0.282	-0.282
8	-0.038	0.141	0.283	-0.283
9	0.075	0.141	0.283	-0.283
10	0.202	0.142	0.283	-0.283
11	0.107	0.143	0.286	-0.286
12	0.070	0.144	0.287	-0.287
13	-0.038	0.144	0.287	-0.287
14	-0.128	0.144	0.288	-0.288
15	-0.071	0.144	0.289	-0.289

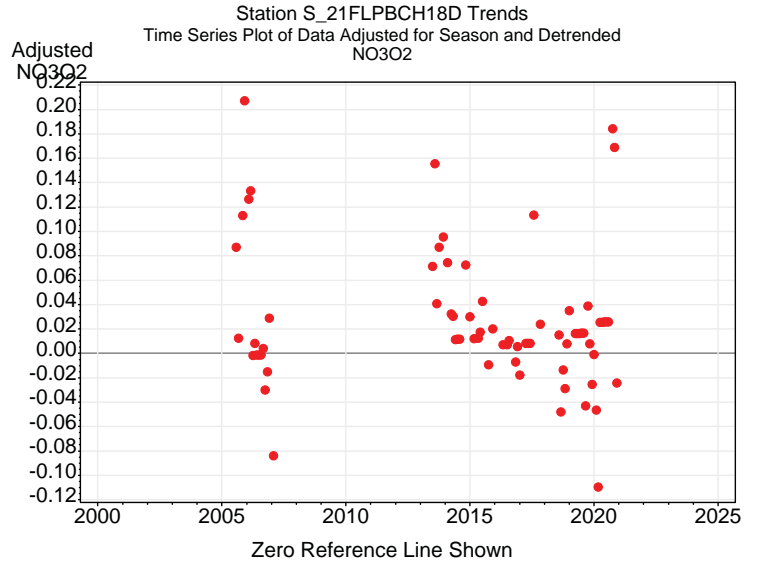


Station S_21FLPBCH18D Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.111	0.301	0.412	-.001

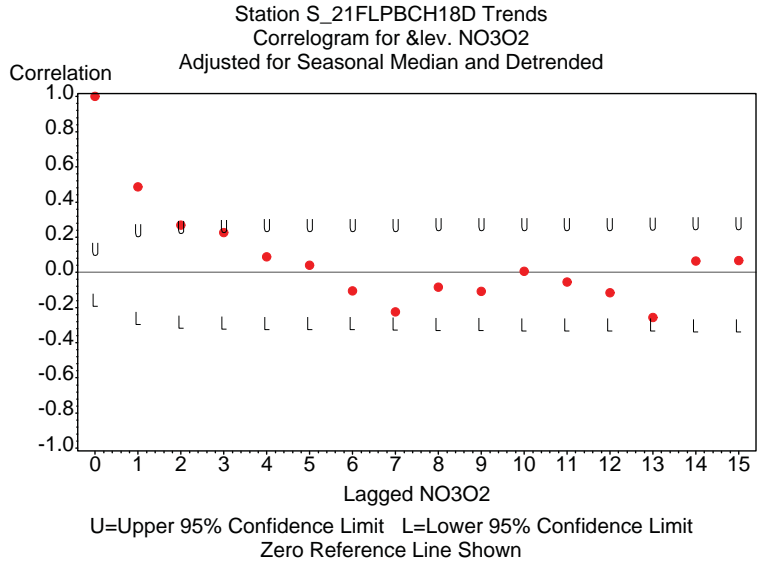
Station S_21FLPBCH18D Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

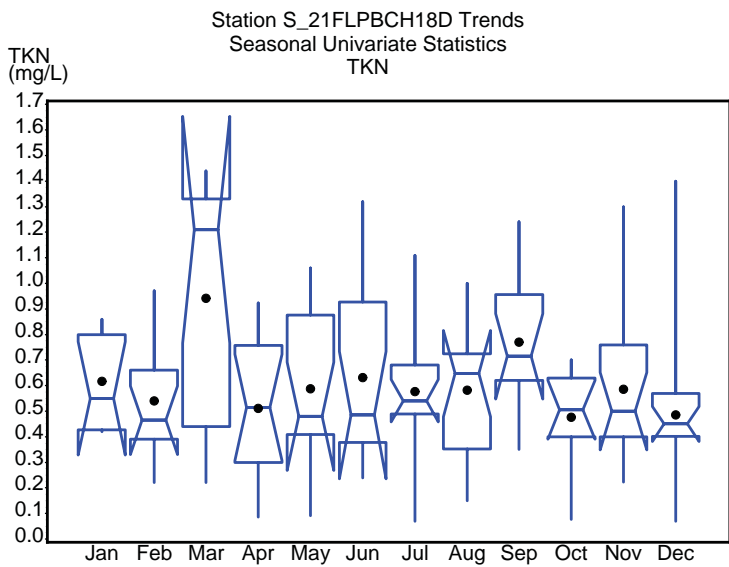
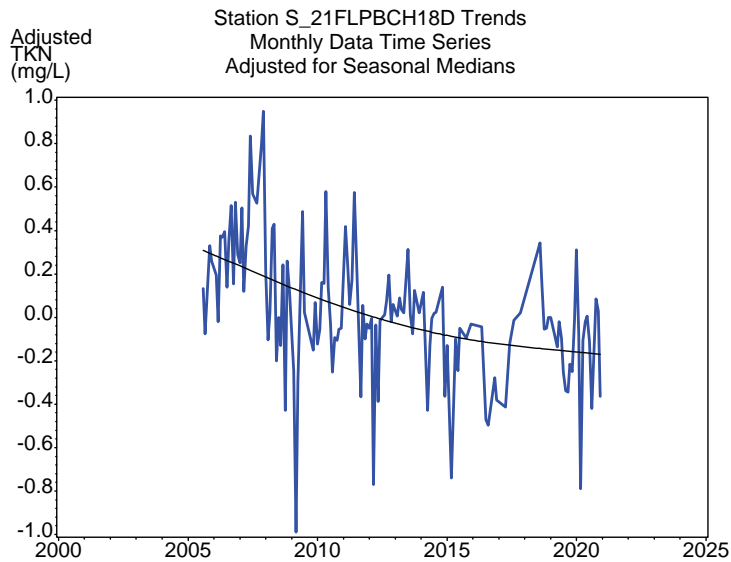
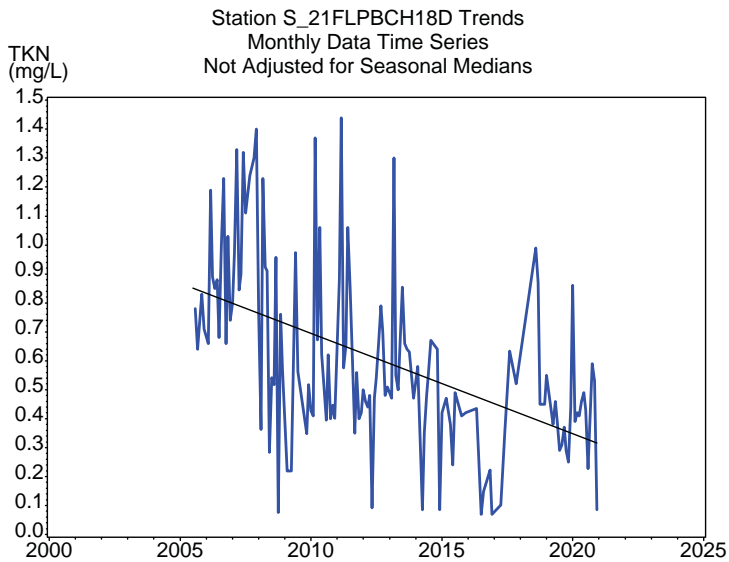
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.111	0.301	0.412	-0.001



Station S_21FLPBCH18D Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

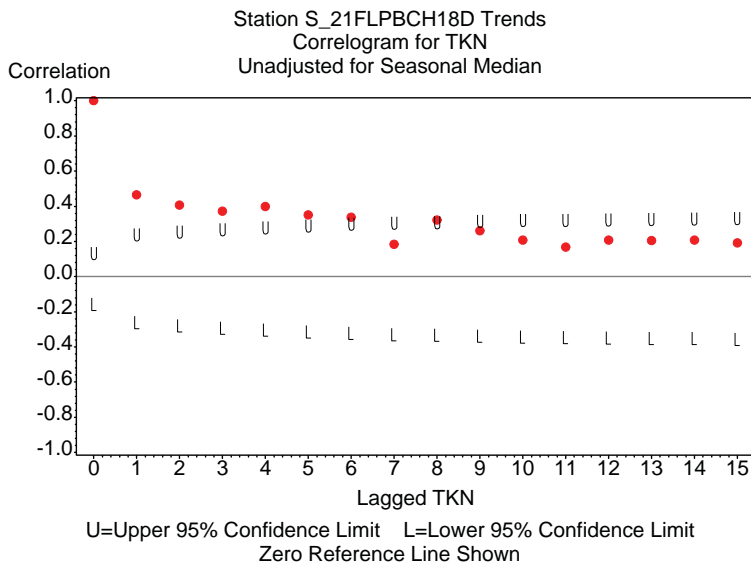
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.485	0.125	0.250	-0.250
2	0.270	0.134	0.269	-0.269
3	0.226	0.137	0.274	-0.274
4	0.088	0.139	0.278	-0.278
5	0.041	0.139	0.279	-0.279
6	-0.105	0.139	0.279	-0.279
7	-0.224	0.140	0.280	-0.280
8	-0.085	0.142	0.284	-0.284
9	-0.108	0.142	0.284	-0.284
10	0.006	0.142	0.285	-0.285
11	-0.054	0.142	0.285	-0.285
12	-0.117	0.143	0.285	-0.285
13	-0.256	0.143	0.286	-0.286
14	0.065	0.145	0.291	-0.291
15	0.066	0.146	0.291	-0.291





Station S_21FLPBCH18D Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.464	0.125	0.250	-0.250
2	0.406	0.134	0.267	-0.267
3	0.372	0.140	0.280	-0.280
4	0.400	0.145	0.290	-0.290
5	0.351	0.151	0.301	-0.301
6	0.338	0.155	0.310	-0.310
7	0.185	0.159	0.317	-0.317
8	0.323	0.160	0.320	-0.320
9	0.262	0.163	0.326	-0.326
10	0.208	0.165	0.331	-0.331
11	0.168	0.167	0.333	-0.333
12	0.208	0.168	0.335	-0.335
13	0.206	0.169	0.338	-0.338
14	0.207	0.170	0.340	-0.340
15	0.193	0.171	0.343	-0.343



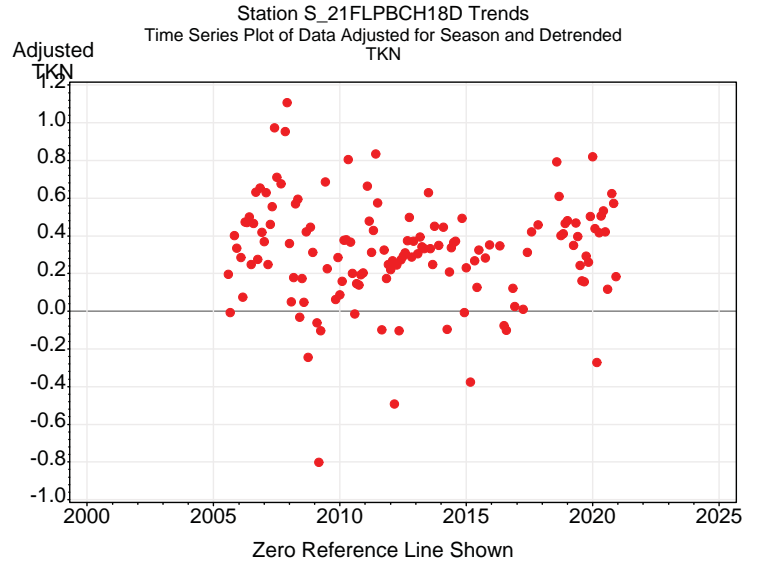
Station S_21FLPBCH18D Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.352	0	.007	-0.03

Station S_21FLPBCH18D Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN

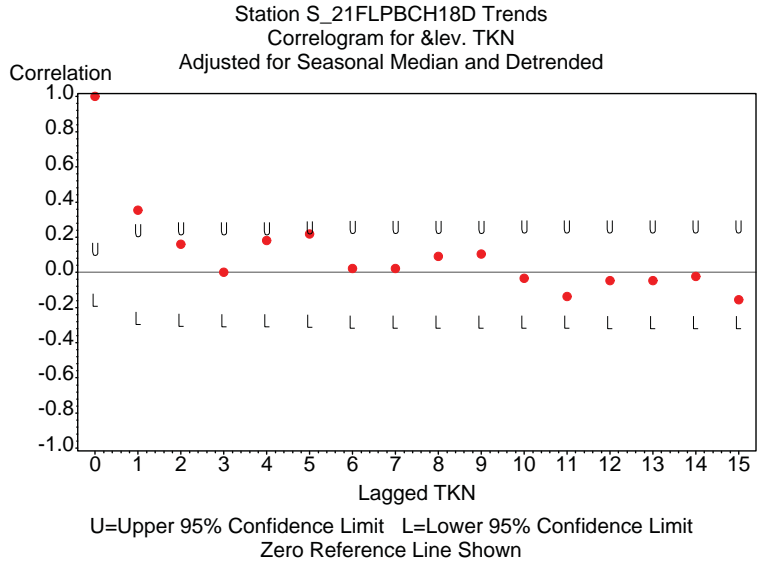
Adjusted for Seasonal Medians

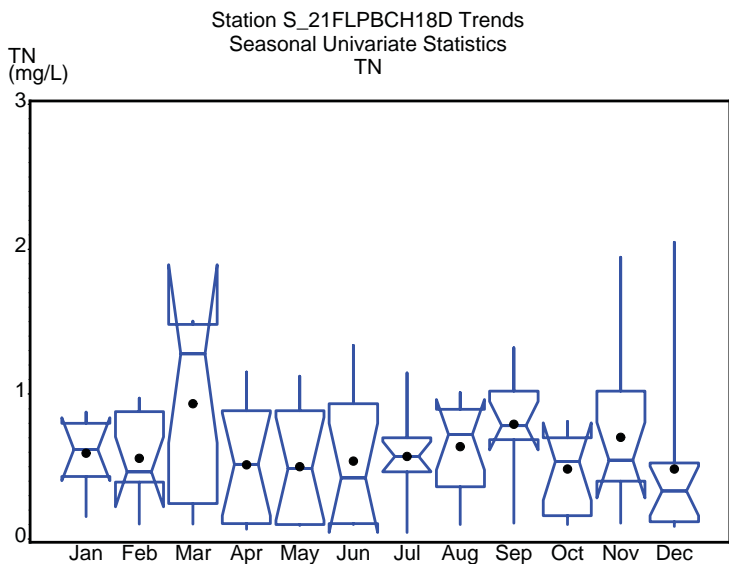
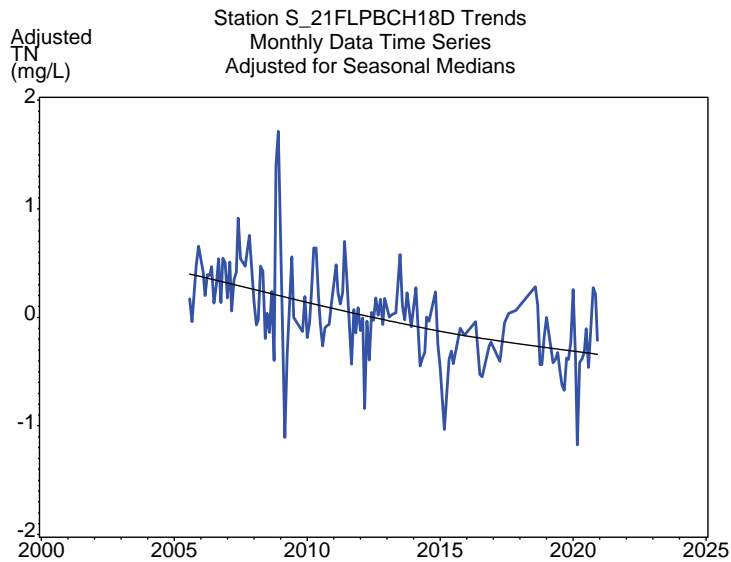
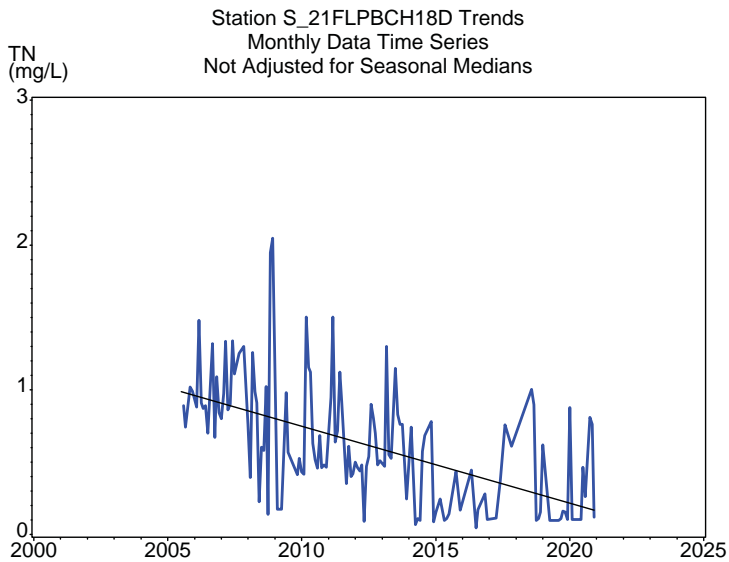
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.352	0	.007	-0.03



Station S_21FLPBCH18D Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

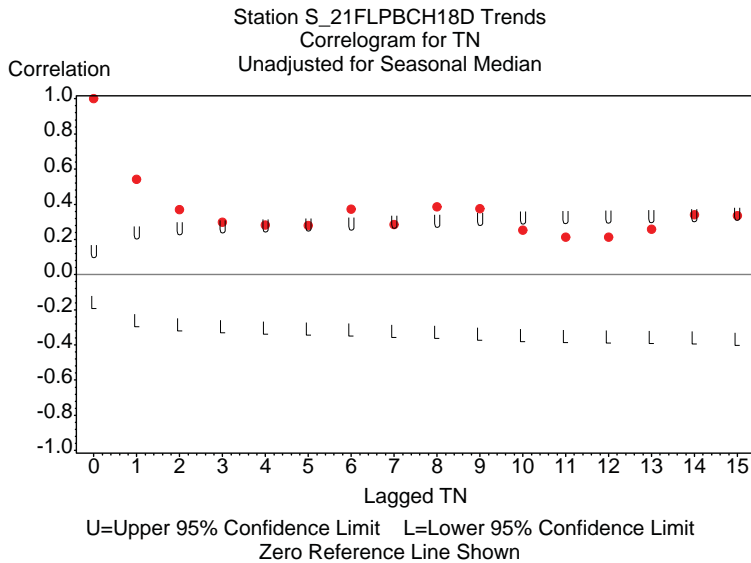
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.353	0.125	0.250	-0.250
2	0.161	0.130	0.260	-0.260
3	0.000	0.131	0.262	-0.262
4	0.181	0.131	0.262	-0.262
5	0.219	0.132	0.265	-0.265
6	0.023	0.134	0.269	-0.269
7	0.021	0.134	0.269	-0.269
8	0.090	0.134	0.269	-0.269
9	0.104	0.135	0.269	-0.269
10	-0.035	0.135	0.270	-0.270
11	-0.138	0.135	0.270	-0.270
12	-0.047	0.136	0.272	-0.272
13	-0.048	0.136	0.272	-0.272
14	-0.022	0.136	0.272	-0.272
15	-0.156	0.136	0.272	-0.272





Station S_21FLPBCH18D Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.541	0.125	0.250	-0.250
2	0.370	0.137	0.273	-0.273
3	0.299	0.142	0.284	-0.284
4	0.281	0.145	0.290	-0.290
5	0.278	0.148	0.296	-0.296
6	0.371	0.151	0.301	-0.301
7	0.285	0.155	0.310	-0.310
8	0.386	0.158	0.316	-0.316
9	0.376	0.163	0.326	-0.326
10	0.254	0.167	0.334	-0.334
11	0.214	0.169	0.338	-0.338
12	0.214	0.171	0.341	-0.341
13	0.257	0.172	0.344	-0.344
14	0.339	0.174	0.348	-0.348
15	0.335	0.177	0.355	-0.355



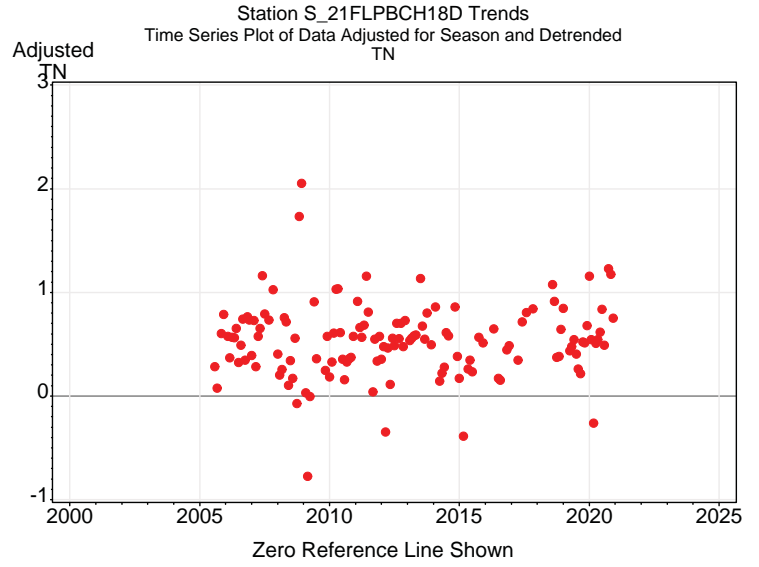
Station S_21FLPBCH18D Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.422	0	.003	-0.053

Station S_21FLPBCH18D Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

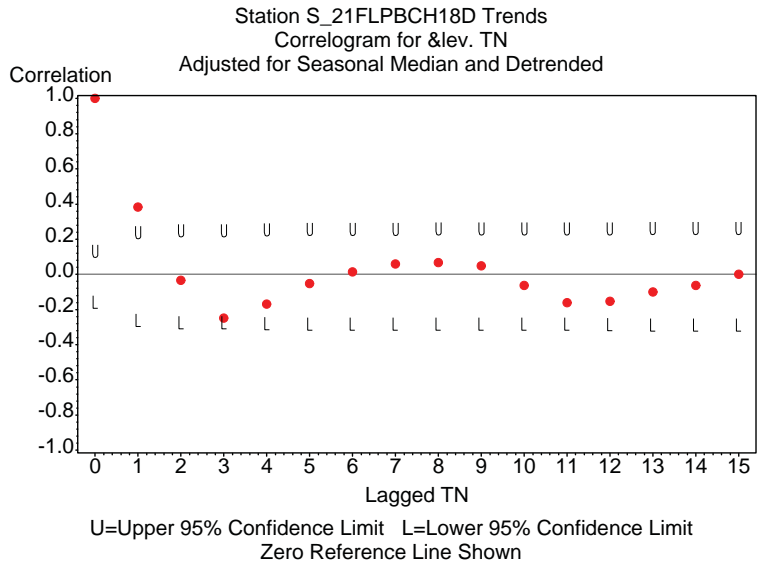
Adjusted for Seasonal Medians

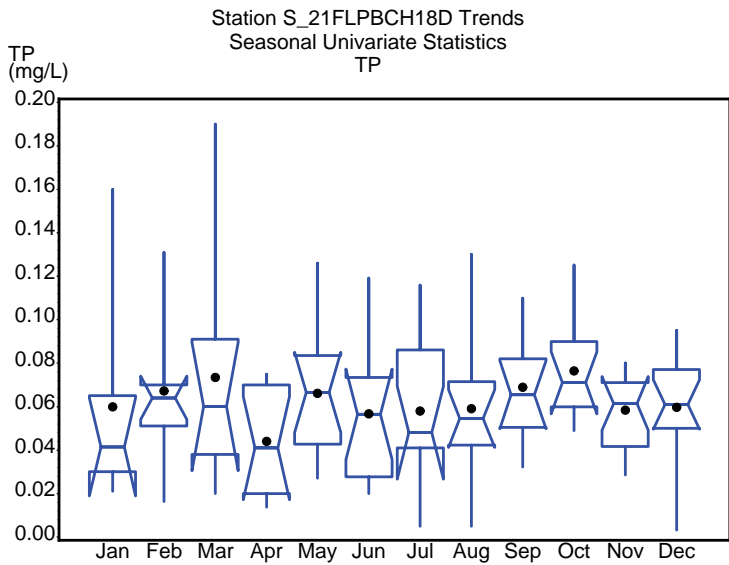
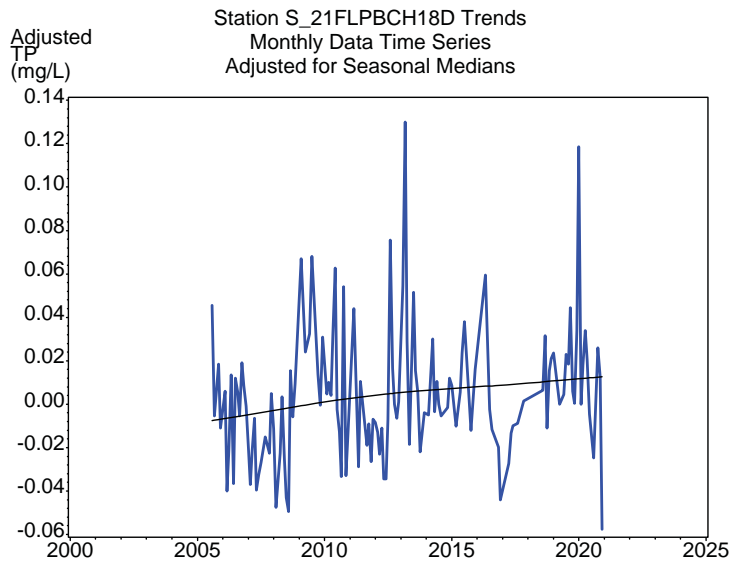
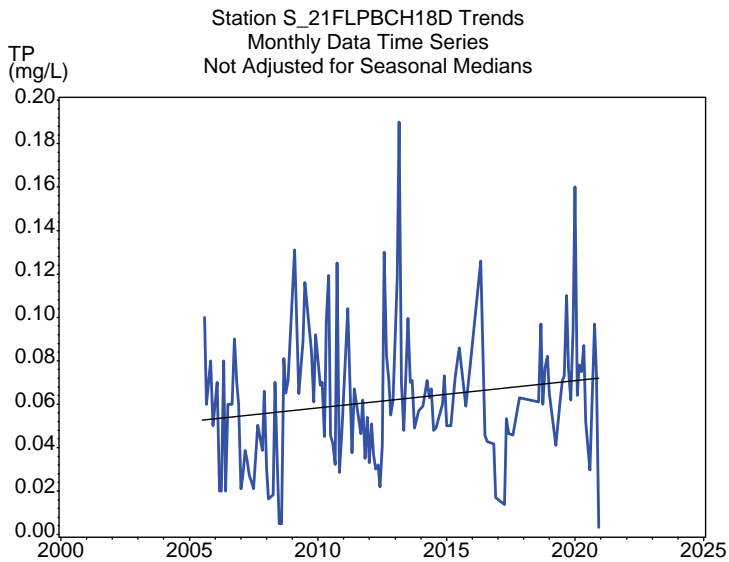
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.422	0	.003	-0.053



Station S_21FLPBCH18D Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

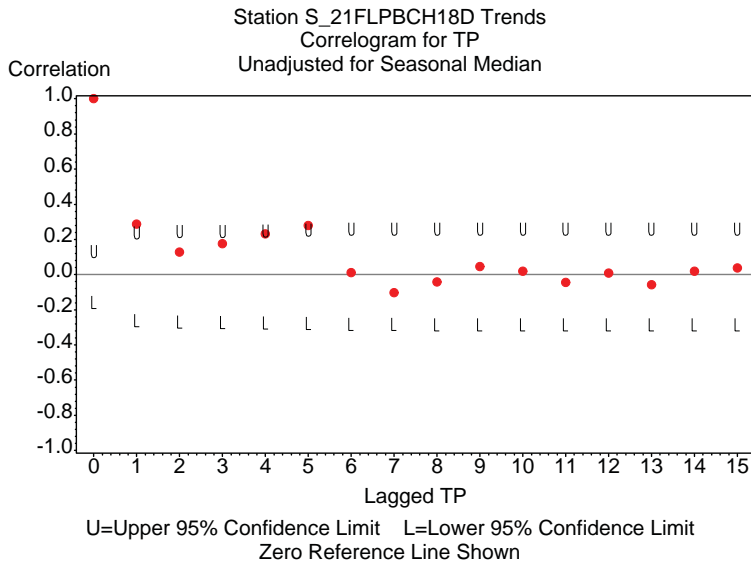
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.383	0.125	0.250	-0.250
2	-0.034	0.131	0.262	-0.262
3	-0.248	0.131	0.262	-0.262
4	-0.169	0.133	0.267	-0.267
5	-0.053	0.135	0.269	-0.269
6	0.015	0.135	0.269	-0.269
7	0.059	0.135	0.269	-0.269
8	0.068	0.135	0.270	-0.270
9	0.048	0.135	0.270	-0.270
10	-0.064	0.135	0.270	-0.270
11	-0.160	0.135	0.270	-0.270
12	-0.154	0.136	0.272	-0.272
13	-0.101	0.137	0.274	-0.274
14	-0.063	0.137	0.275	-0.275
15	0.002	0.138	0.275	-0.275





Station S_21FLPBCH18D Trends
Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.287	0.125	0.250	-0.250
2	0.128	0.128	0.257	-0.257
3	0.177	0.129	0.258	-0.258
4	0.231	0.130	0.261	-0.261
5	0.278	0.132	0.265	-0.265
6	0.012	0.135	0.271	-0.271
7	-0.102	0.135	0.271	-0.271
8	-0.043	0.136	0.272	-0.272
9	0.046	0.136	0.272	-0.272
10	0.018	0.136	0.272	-0.272
11	-0.045	0.136	0.272	-0.272
12	0.008	0.136	0.272	-0.272
13	-0.058	0.136	0.272	-0.272
14	0.018	0.136	0.272	-0.272
15	0.039	0.136	0.272	-0.272



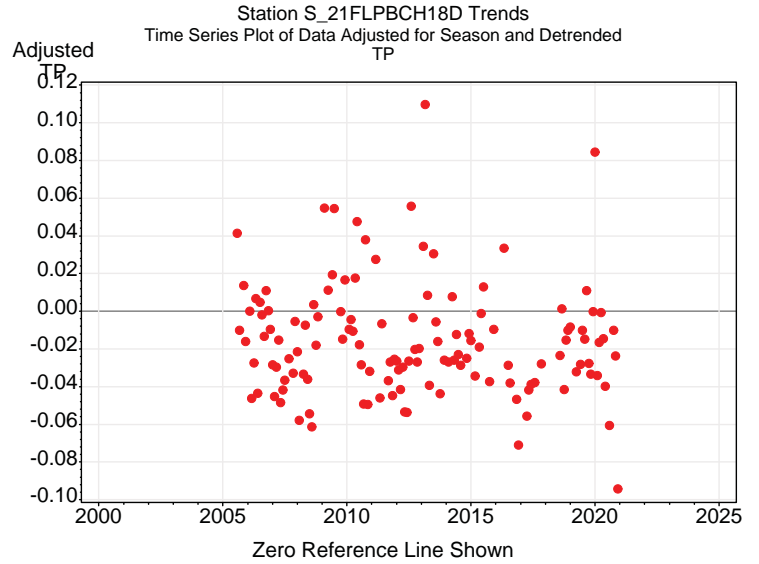
Station S_21FLPBCH18D Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TP
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.167	0.016	0.098	.002

Station S_21FLPBCH18D Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

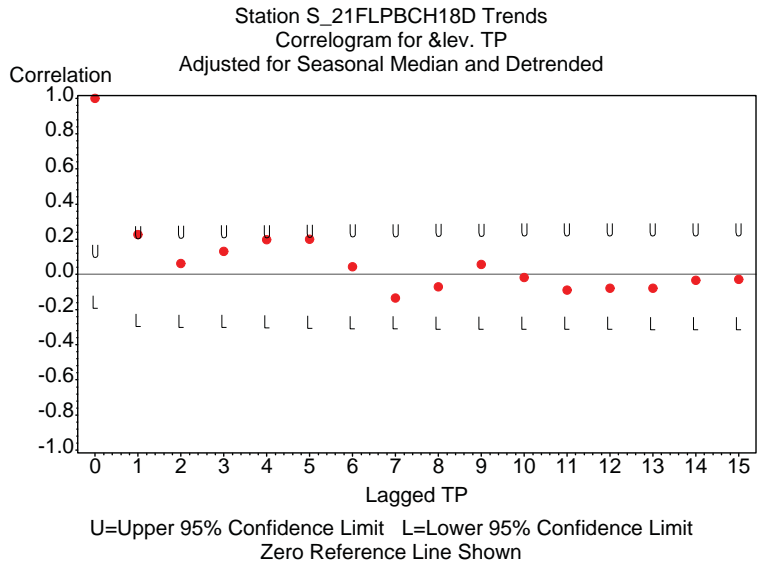
Adjusted for Seasonal Medians

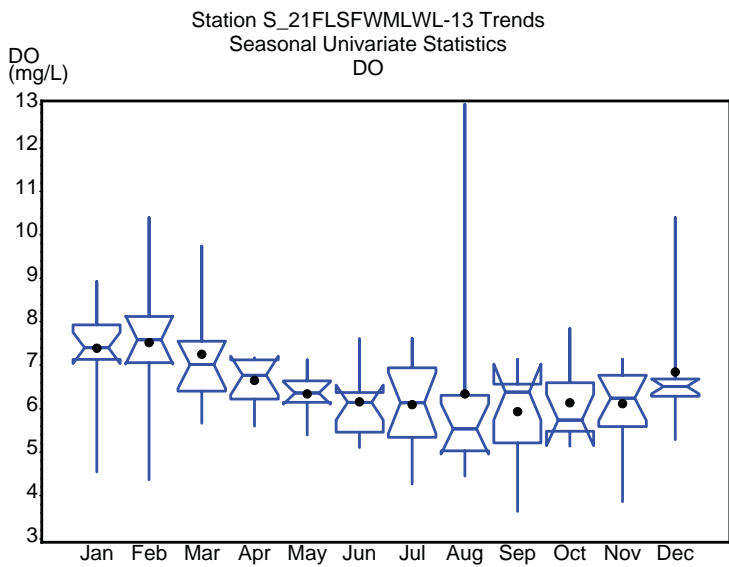
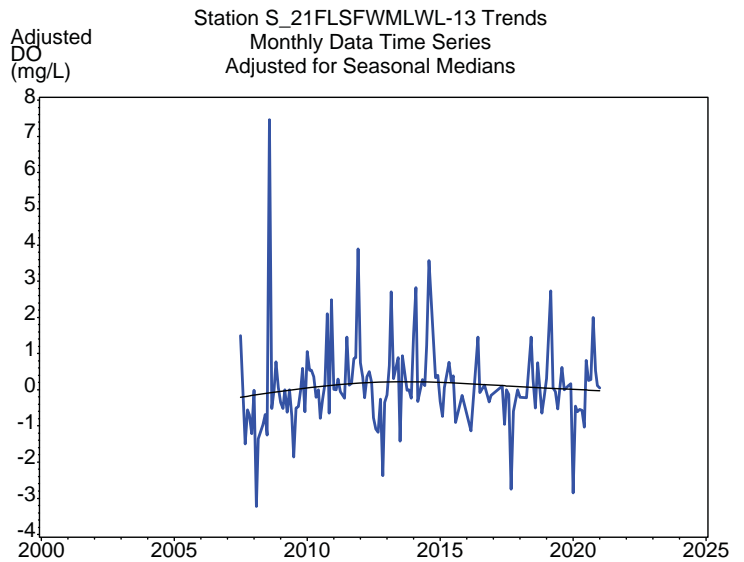
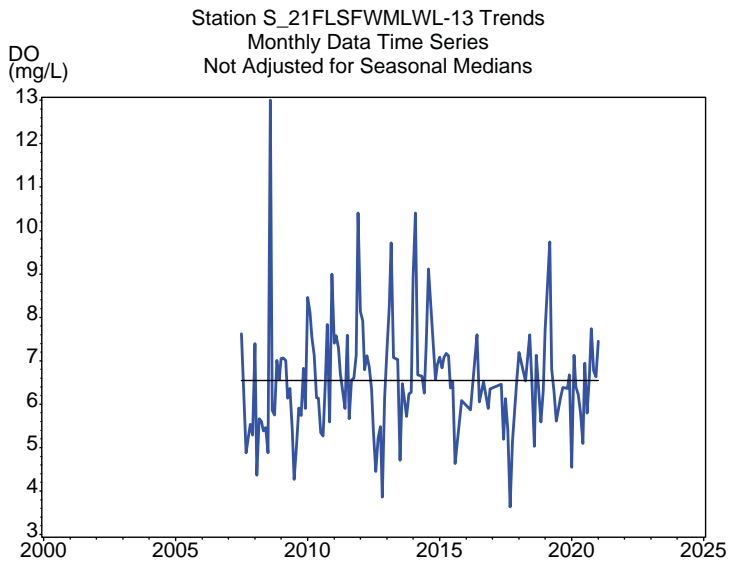
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.167	0.016	0.098	.002



Station S_21FLPBCH18D Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

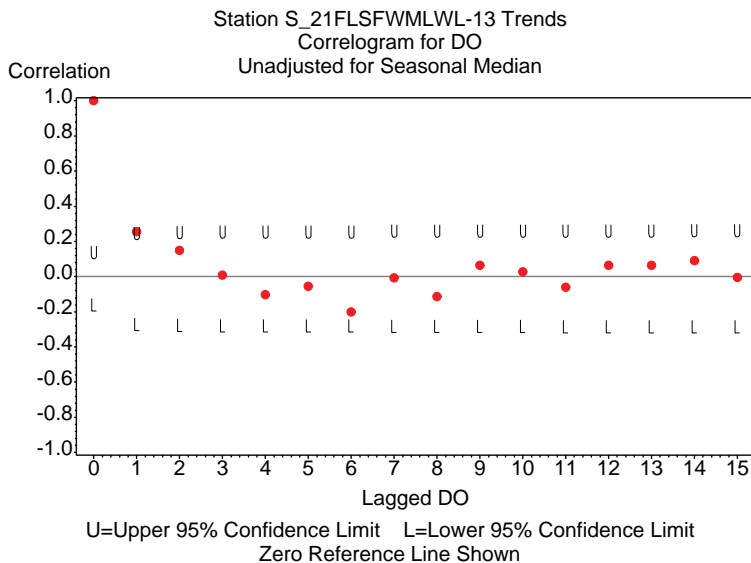
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.072	0.144	-0.144
1	0.226	0.125	0.250	-0.250
2	0.062	0.127	0.254	-0.254
3	0.132	0.127	0.255	-0.255
4	0.196	0.128	0.256	-0.256
5	0.201	0.130	0.259	-0.259
6	0.043	0.131	0.262	-0.262
7	-0.134	0.131	0.262	-0.262
8	-0.070	0.132	0.264	-0.264
9	0.056	0.132	0.264	-0.264
10	-0.018	0.132	0.265	-0.265
11	-0.090	0.132	0.265	-0.265
12	-0.079	0.133	0.265	-0.265
13	-0.078	0.133	0.266	-0.266
14	-0.034	0.133	0.266	-0.266
15	-0.028	0.133	0.266	-0.266





Station S_21FLSFWMLWL-13 Trends
Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.255	0.129	0.258	-0.258
2	0.150	0.132	0.264	-0.264
3	0.009	0.133	0.266	-0.266
4	-0.104	0.133	0.266	-0.266
5	-0.054	0.133	0.267	-0.267
6	-0.201	0.133	0.267	-0.267
7	-0.008	0.135	0.270	-0.270
8	-0.113	0.135	0.270	-0.270
9	0.064	0.136	0.271	-0.271
10	0.027	0.136	0.271	-0.271
11	-0.060	0.136	0.272	-0.272
12	0.065	0.136	0.272	-0.272
13	0.065	0.136	0.272	-0.272
14	0.091	0.136	0.273	-0.273
15	-0.005	0.137	0.273	-0.273

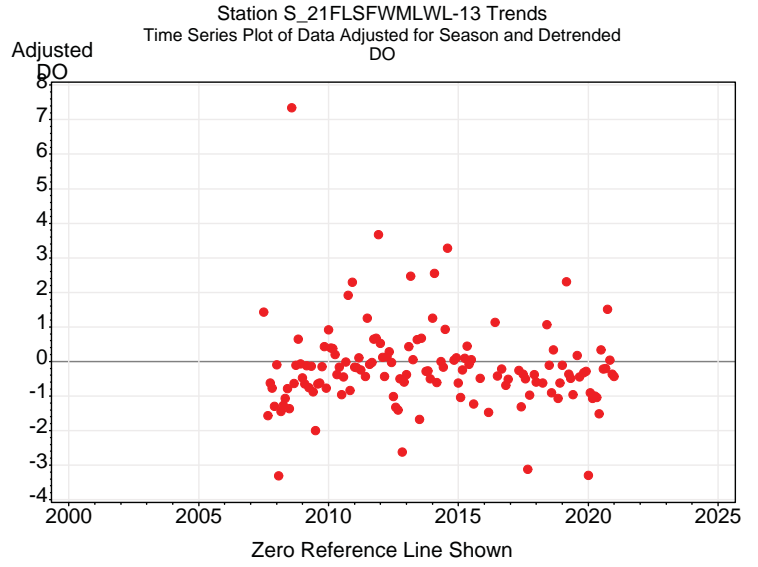


Station S_21FLSFWMLWL-13 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DO
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.102	0.133	0.258	0.03

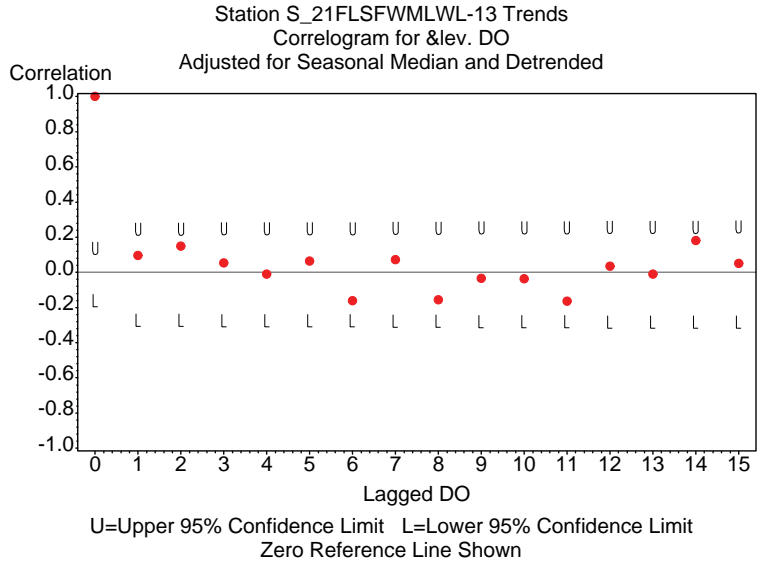
Station S_21FLSFWMLWL-13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

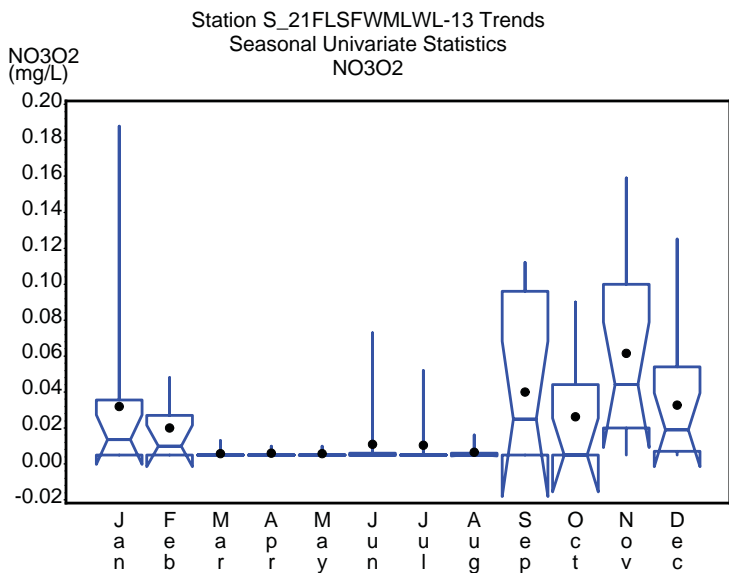
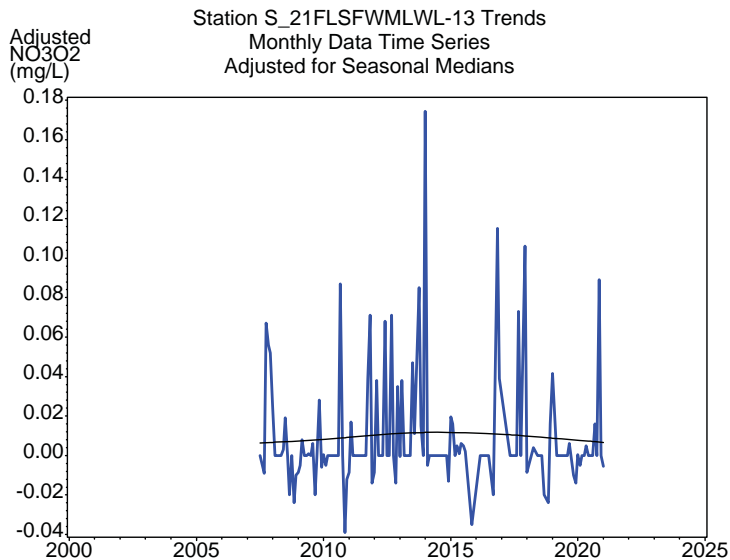
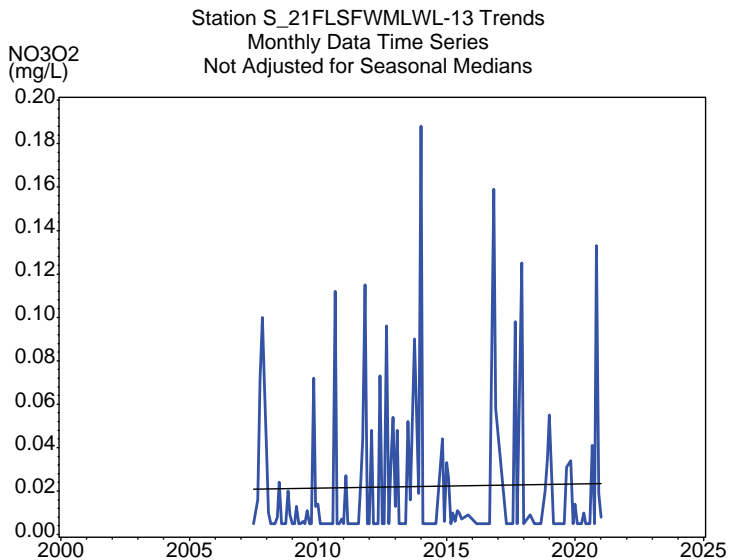
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.102	0.133	0.258	0.03



Station S_21FLSFWMLWL-13 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

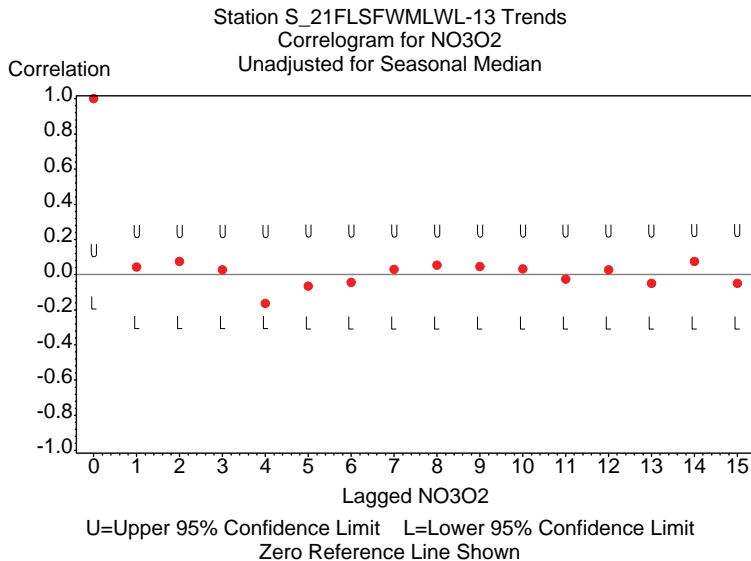
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.095	0.129	0.258	-0.258
2	0.150	0.129	0.259	-0.259
3	0.053	0.130	0.261	-0.261
4	-0.010	0.131	0.261	-0.261
5	0.064	0.131	0.261	-0.261
6	-0.160	0.131	0.261	-0.261
7	0.072	0.132	0.264	-0.264
8	-0.157	0.132	0.264	-0.264
9	-0.035	0.133	0.266	-0.266
10	-0.037	0.133	0.266	-0.266
11	-0.163	0.133	0.266	-0.266
12	0.034	0.134	0.269	-0.269
13	-0.011	0.134	0.269	-0.269
14	0.182	0.134	0.269	-0.269
15	0.050	0.136	0.271	-0.271





Station S_21FLSFWMLWL-13 Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.042	0.129	0.258	-0.258
2	0.074	0.129	0.258	-0.258
3	0.027	0.129	0.259	-0.259
4	-0.165	0.129	0.259	-0.259
5	-0.065	0.131	0.261	-0.261
6	-0.044	0.131	0.262	-0.262
7	0.029	0.131	0.262	-0.262
8	0.053	0.131	0.262	-0.262
9	0.046	0.131	0.262	-0.262
10	0.033	0.131	0.262	-0.262
11	-0.025	0.131	0.262	-0.262
12	0.026	0.131	0.262	-0.262
13	-0.049	0.131	0.262	-0.262
14	0.075	0.131	0.263	-0.263
15	-0.049	0.132	0.263	-0.263

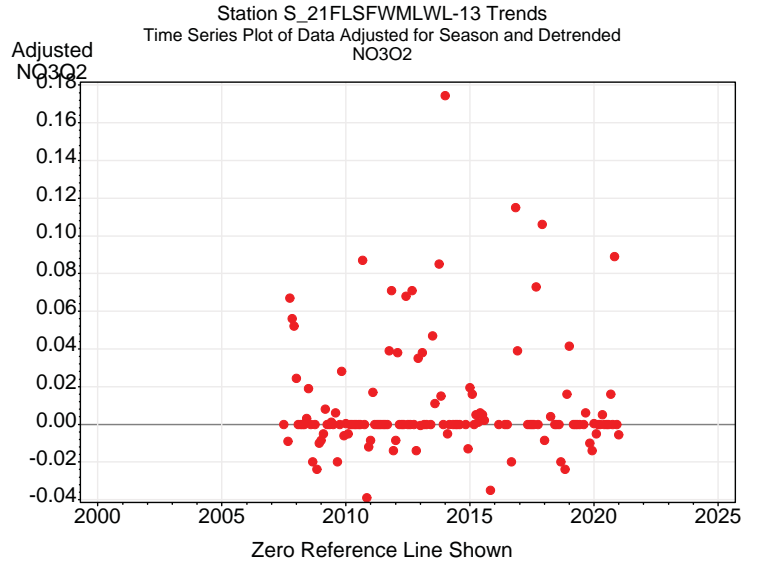


Station S_21FLSFWMLWL-13 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.011	0.863	0.883	0

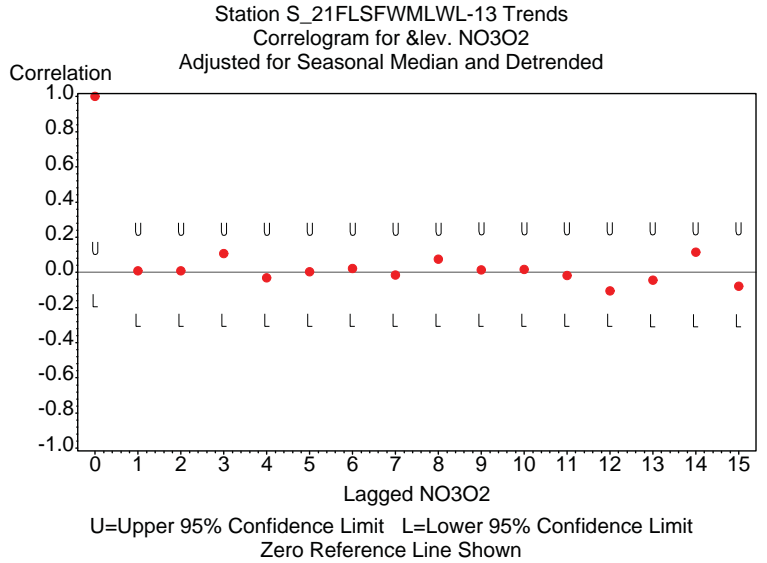
Station S_21FLSFWMLWL-13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

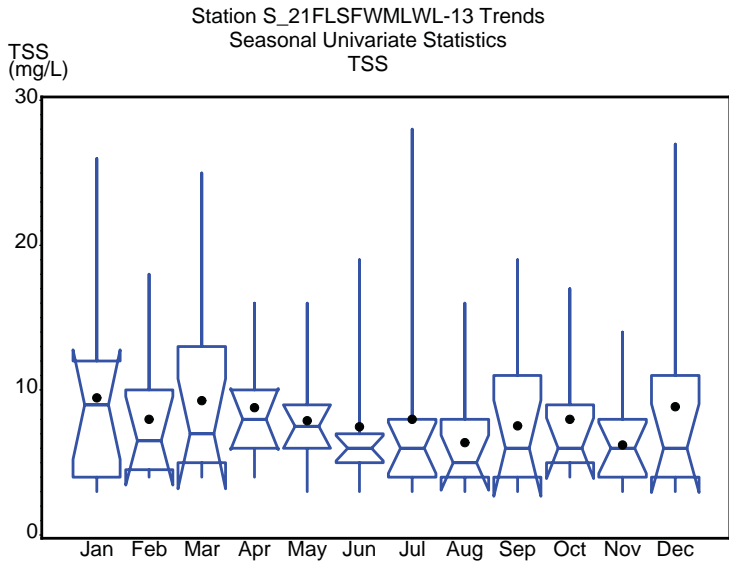
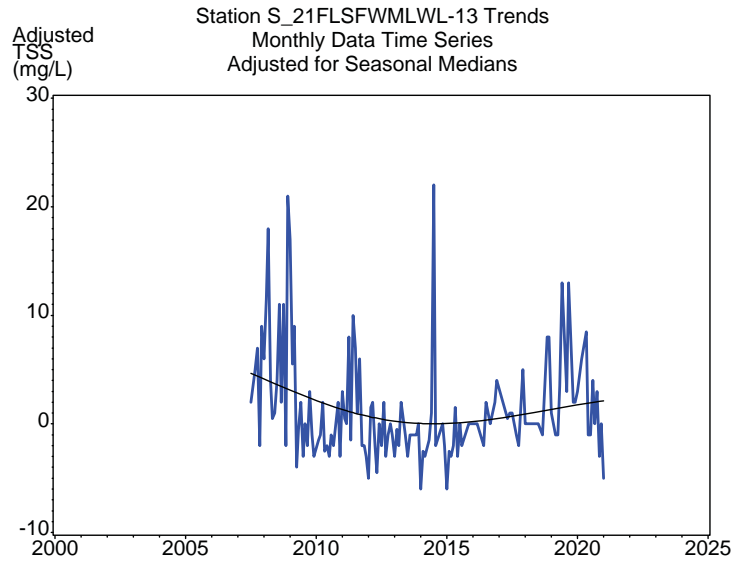
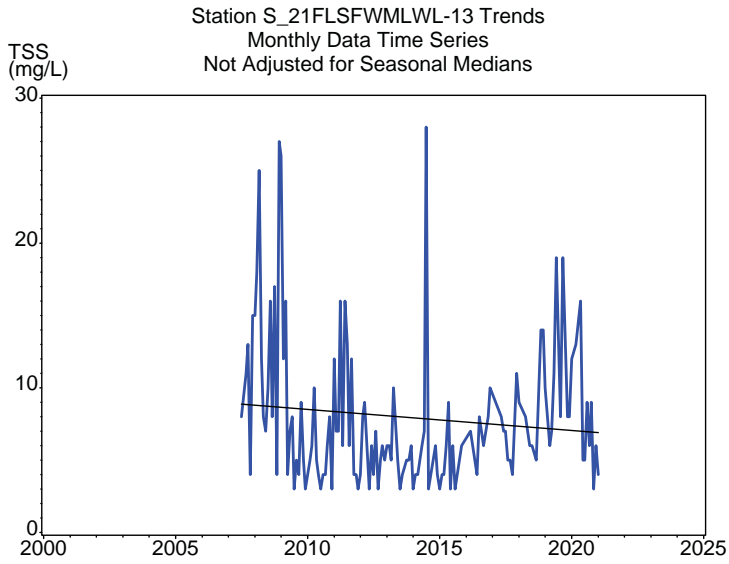
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.011	0.863	0.883	0



Station S_21FLSFWMLWL-13 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

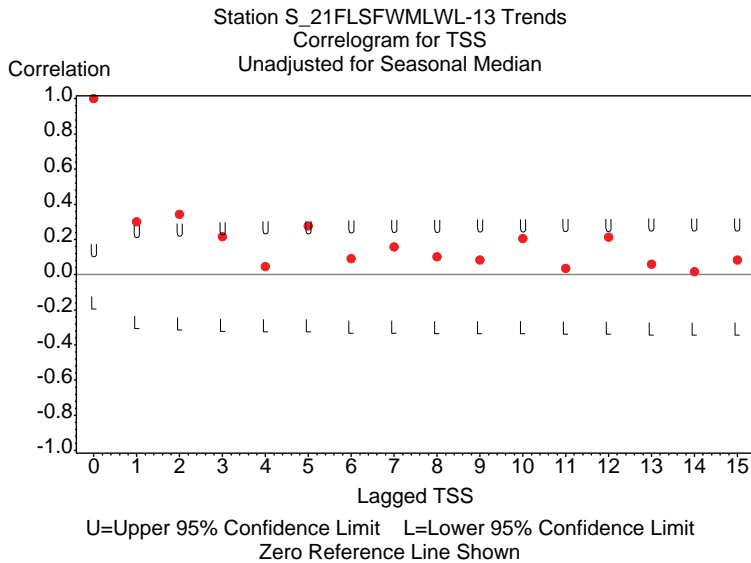
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.008	0.129	0.258	-0.258
2	0.008	0.129	0.258	-0.258
3	0.108	0.129	0.258	-0.258
4	-0.032	0.130	0.259	-0.259
5	0.003	0.130	0.259	-0.259
6	0.023	0.130	0.259	-0.259
7	-0.014	0.130	0.259	-0.259
8	0.075	0.130	0.259	-0.259
9	0.014	0.130	0.260	-0.260
10	0.016	0.130	0.260	-0.260
11	-0.018	0.130	0.260	-0.260
12	-0.105	0.130	0.260	-0.260
13	-0.045	0.130	0.261	-0.261
14	0.114	0.131	0.261	-0.261
15	-0.079	0.131	0.262	-0.262





Station S_21FLSFWMLWL-13 Trends
Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.301	0.129	0.258	-0.258
2	0.342	0.133	0.266	-0.266
3	0.215	0.138	0.275	-0.275
4	0.045	0.140	0.279	-0.279
5	0.276	0.140	0.279	-0.279
6	0.090	0.143	0.285	-0.285
7	0.157	0.143	0.286	-0.286
8	0.101	0.144	0.288	-0.288
9	0.083	0.144	0.289	-0.289
10	0.205	0.145	0.289	-0.289
11	0.036	0.146	0.292	-0.292
12	0.214	0.146	0.292	-0.292
13	0.060	0.148	0.296	-0.296
14	0.017	0.148	0.296	-0.296
15	0.082	0.148	0.296	-0.296



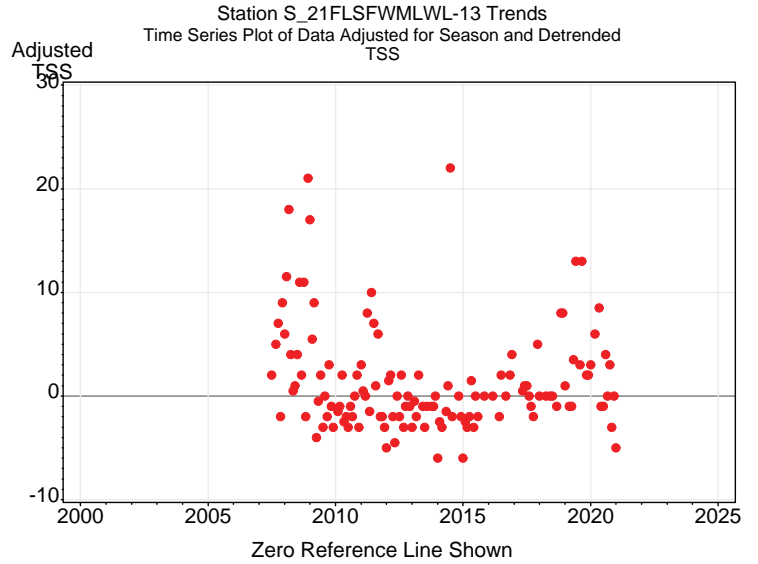
Station S_21FLSFWMLWL-13 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics

TSS
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.027	0.708	0.841	0

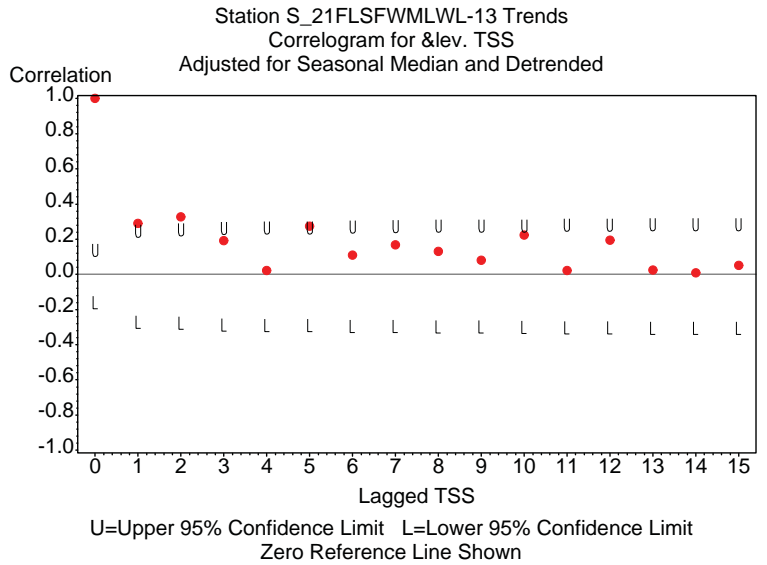
Station S_21FLSFWMLWL-13 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.027	0.708	0.841	0

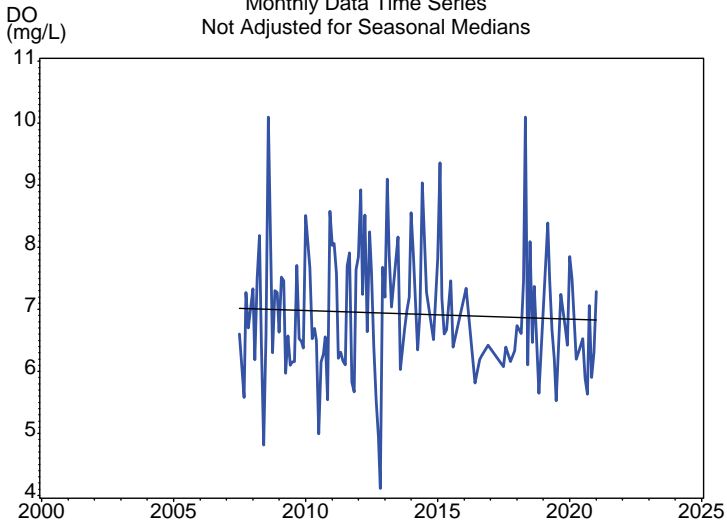


Station S_21FLSFWMLWL-13 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

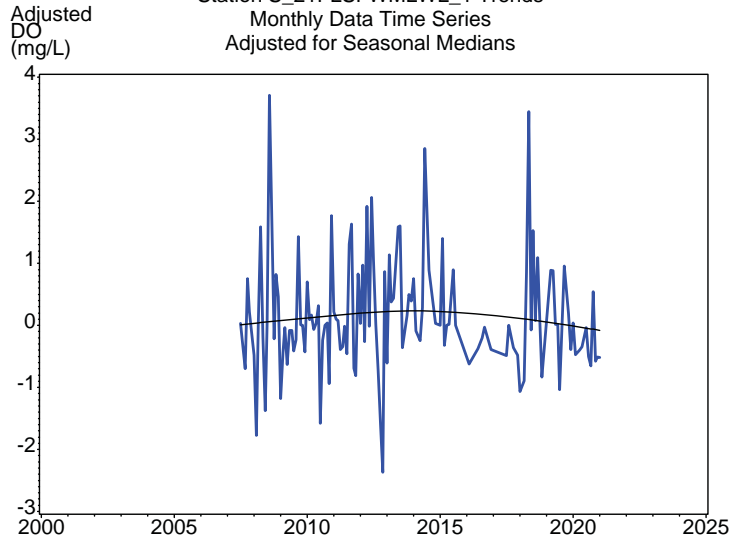
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.290	0.129	0.258	-0.258
2	0.327	0.133	0.265	-0.265
3	0.191	0.137	0.274	-0.274
4	0.023	0.139	0.277	-0.277
5	0.274	0.139	0.277	-0.277
6	0.109	0.142	0.283	-0.283
7	0.167	0.142	0.284	-0.284
8	0.130	0.143	0.286	-0.286
9	0.080	0.144	0.287	-0.287
10	0.223	0.144	0.288	-0.288
11	0.021	0.146	0.292	-0.292
12	0.195	0.146	0.292	-0.292
13	0.024	0.147	0.295	-0.295
14	0.009	0.147	0.295	-0.295
15	0.050	0.147	0.295	-0.295



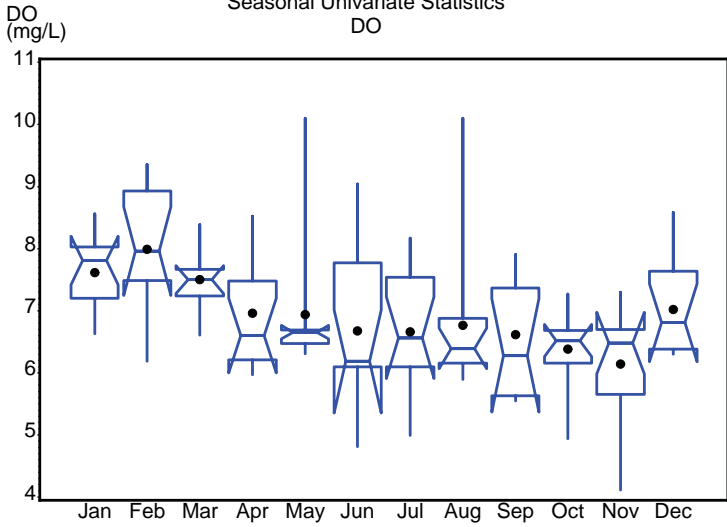
Station S_21FLSFWMLWL_1 Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_21FLSFWMLWL_1 Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



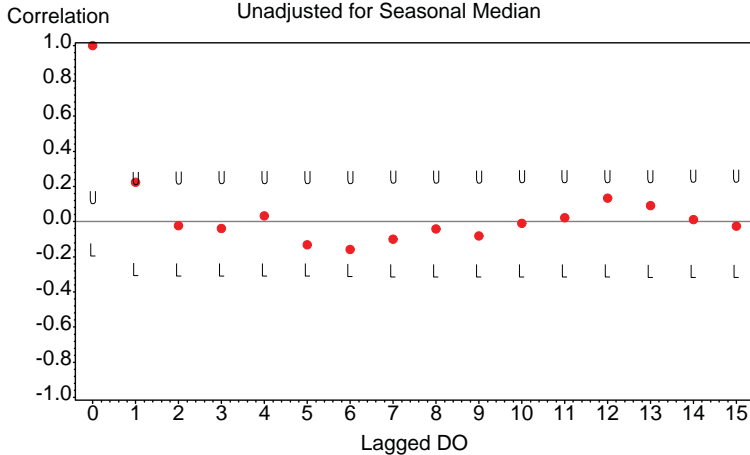
Station S_21FLSFWMLWL_1 Trends
Seasonal Univariate Statistics
DO



Station S_21FLSFWMLWL_1 Trends
Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.223	0.129	0.258	-0.258
2	-0.024	0.131	0.262	-0.262
3	-0.039	0.131	0.263	-0.263
4	0.033	0.131	0.263	-0.263
5	-0.131	0.131	0.263	-0.263
6	-0.159	0.132	0.264	-0.264
7	-0.100	0.133	0.266	-0.266
8	-0.043	0.134	0.267	-0.267
9	-0.081	0.134	0.267	-0.267
10	-0.009	0.134	0.268	-0.268
11	0.021	0.134	0.268	-0.268
12	0.134	0.134	0.268	-0.268
13	0.092	0.135	0.269	-0.269
14	0.012	0.135	0.270	-0.270
15	-0.027	0.135	0.270	-0.270

Station S_21FLSFWMLWL_1 Trends
Correlogram for DO
Unadjusted for Seasonal Median



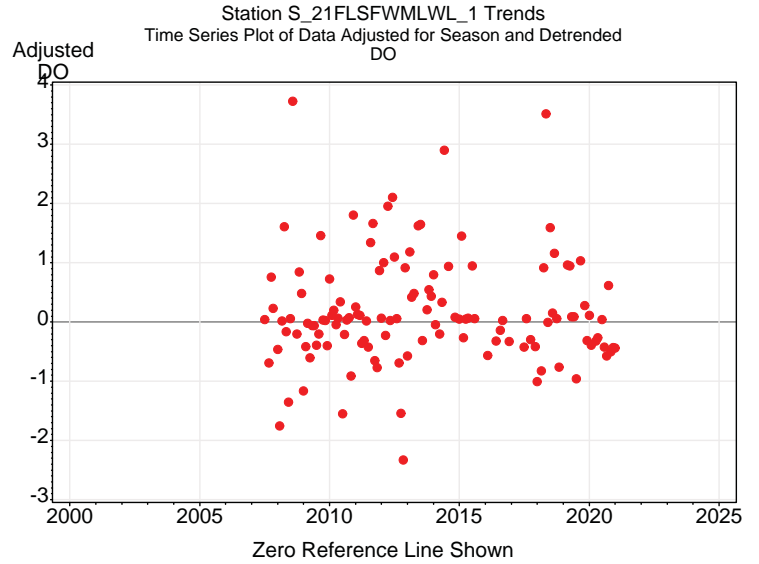
Station S_21FLSFWMLWL_1 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DO
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.039	0.596	0.593	-.005

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

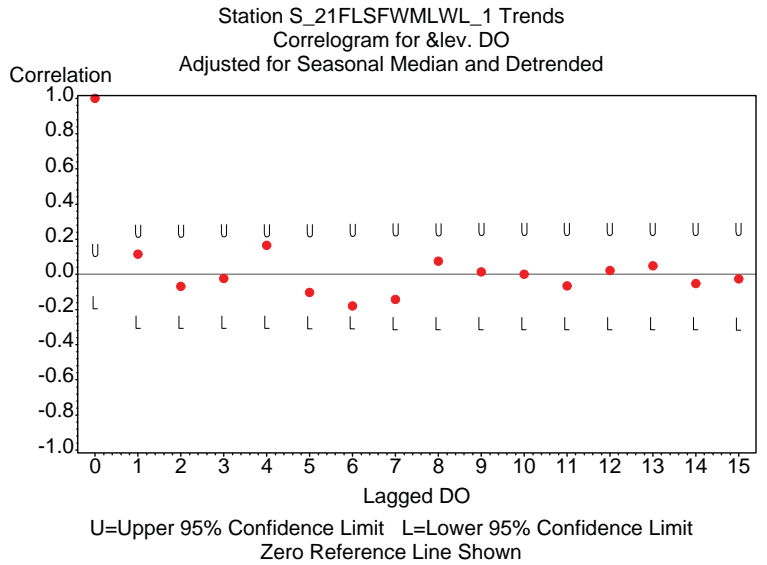
Station S_21FLSFWMLWL_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

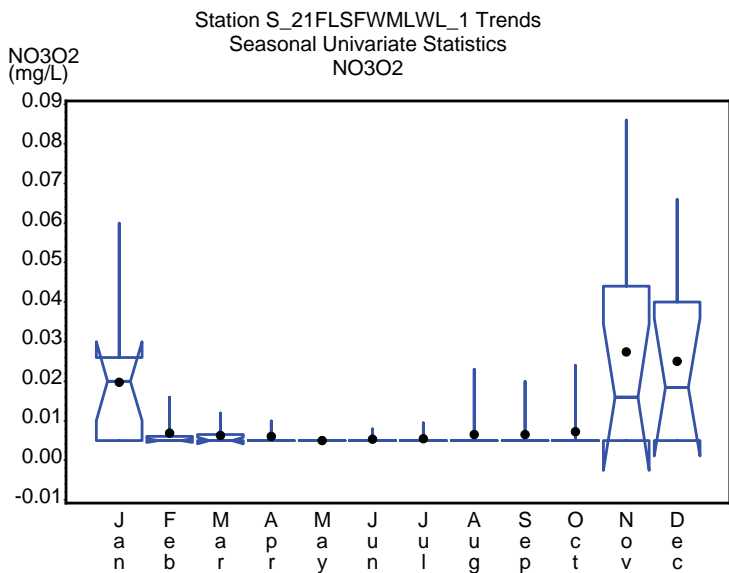
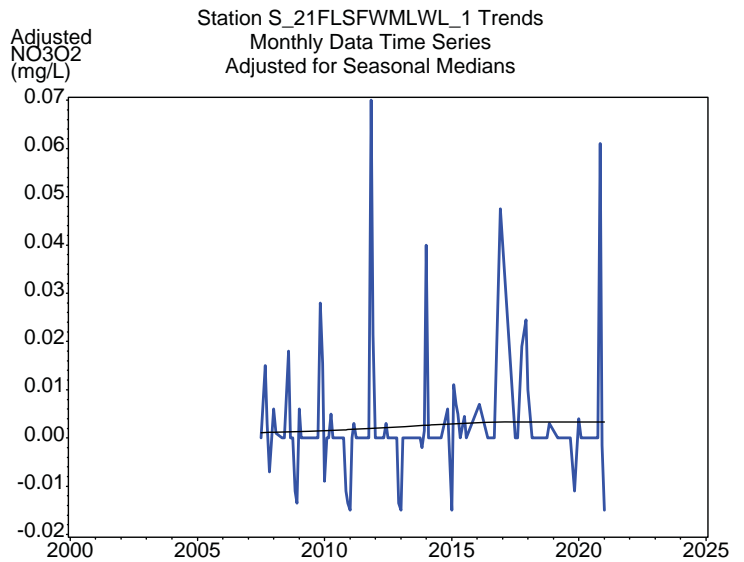
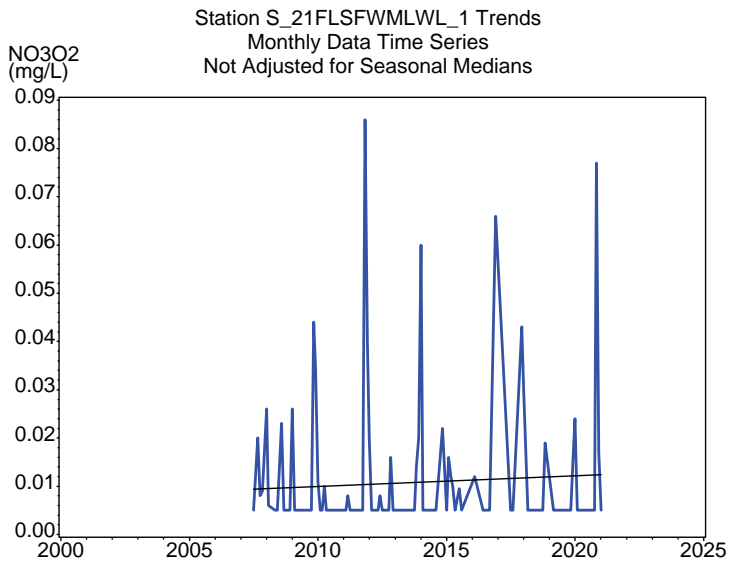
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.039	0.596	0.593	-.005



Station S_21FLSFWMLWL_1 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

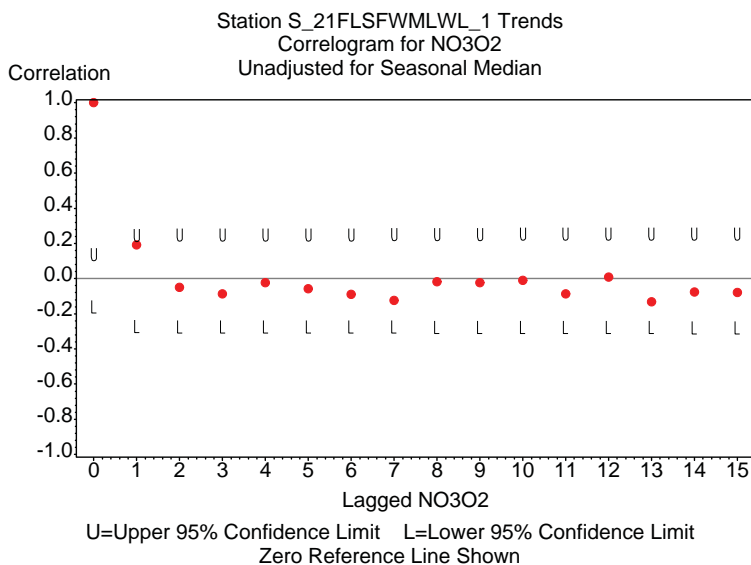
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.114	0.129	0.258	-0.258
2	-0.069	0.130	0.259	-0.259
3	-0.024	0.130	0.260	-0.260
4	0.166	0.130	0.260	-0.260
5	-0.103	0.131	0.262	-0.262
6	-0.180	0.131	0.263	-0.263
7	-0.142	0.133	0.266	-0.266
8	0.075	0.134	0.267	-0.267
9	0.013	0.134	0.268	-0.268
10	0.001	0.134	0.268	-0.268
11	-0.066	0.134	0.268	-0.268
12	0.021	0.134	0.268	-0.268
13	0.048	0.134	0.268	-0.268
14	-0.052	0.134	0.268	-0.268
15	-0.027	0.134	0.269	-0.269





Station S_21FLSFWMLWL_1 Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.191	0.129	0.258	-0.258
2	-0.049	0.131	0.261	-0.261
3	-0.088	0.131	0.262	-0.262
4	-0.023	0.131	0.262	-0.262
5	-0.057	0.131	0.262	-0.262
6	-0.089	0.131	0.262	-0.262
7	-0.124	0.132	0.263	-0.263
8	-0.017	0.132	0.264	-0.264
9	-0.022	0.132	0.264	-0.264
10	-0.011	0.132	0.265	-0.265
11	-0.086	0.132	0.265	-0.265
12	0.010	0.133	0.265	-0.265
13	-0.132	0.133	0.265	-0.265
14	-0.077	0.133	0.267	-0.267
15	-0.079	0.134	0.267	-0.267

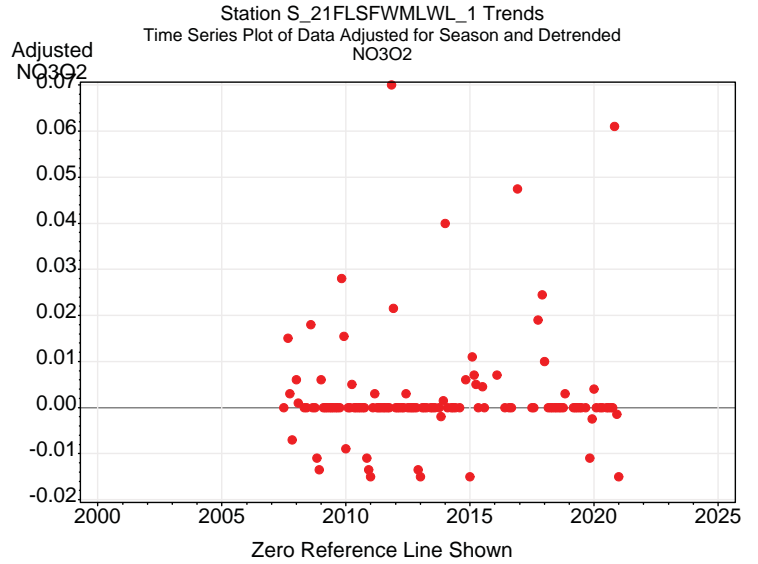


Station S_21FLSFWMLWL_1 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.016	0.781	0.839	0

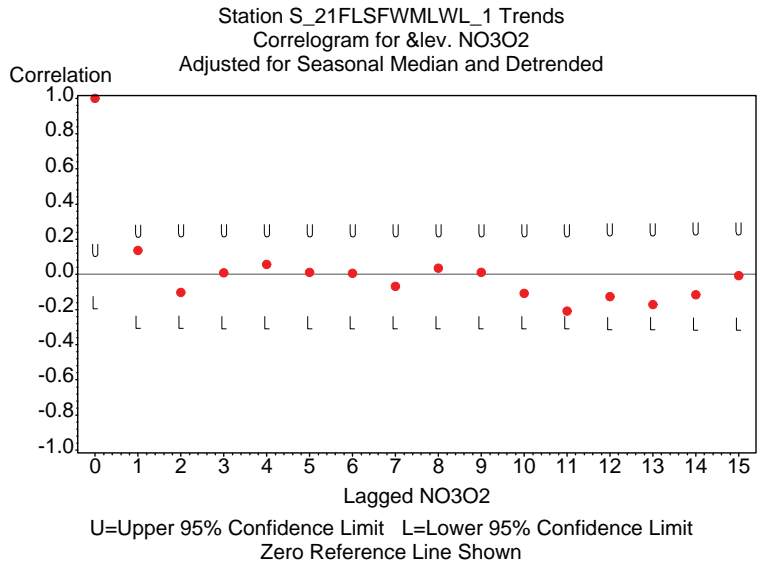
Station S_21FLSFWMLWL_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

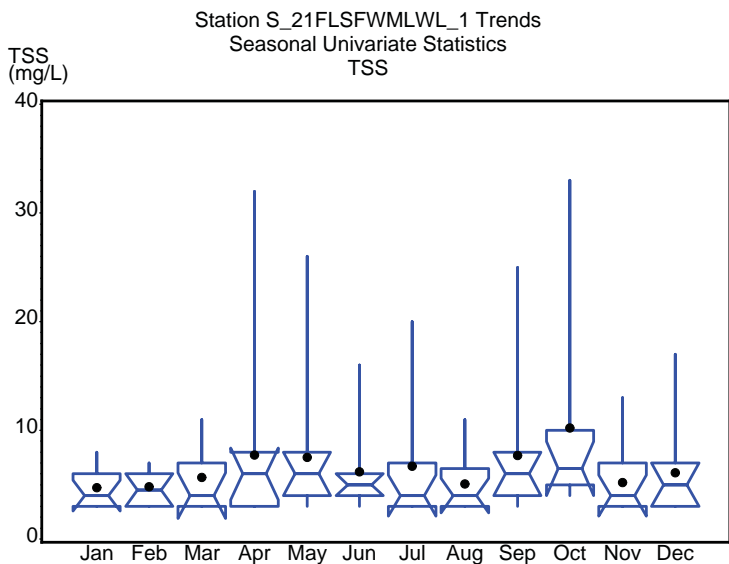
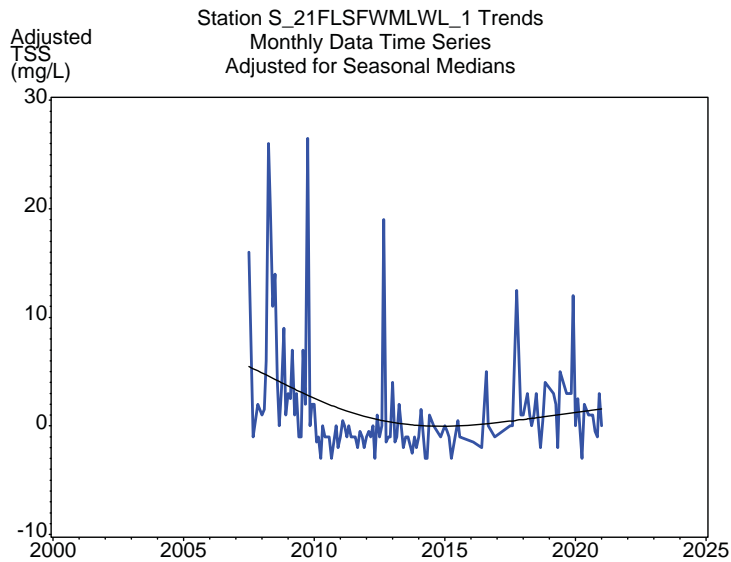
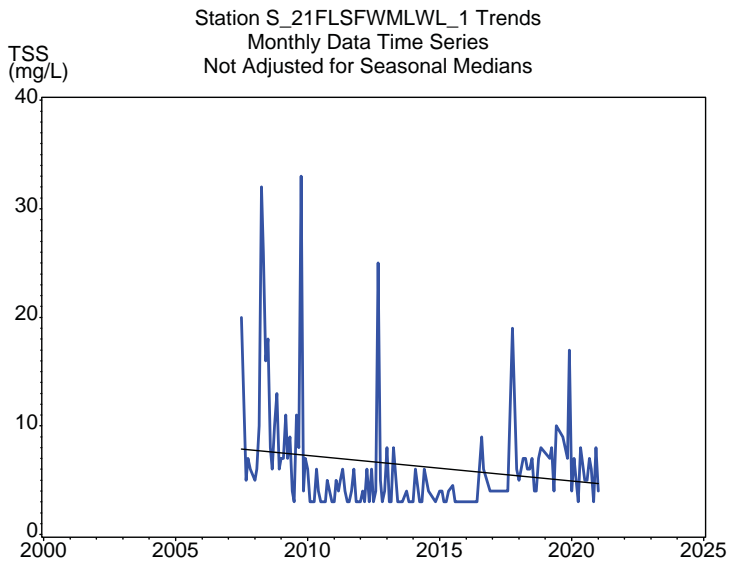
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.016	0.781	0.839	0



Station S_21FLSFWMLWL_1 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

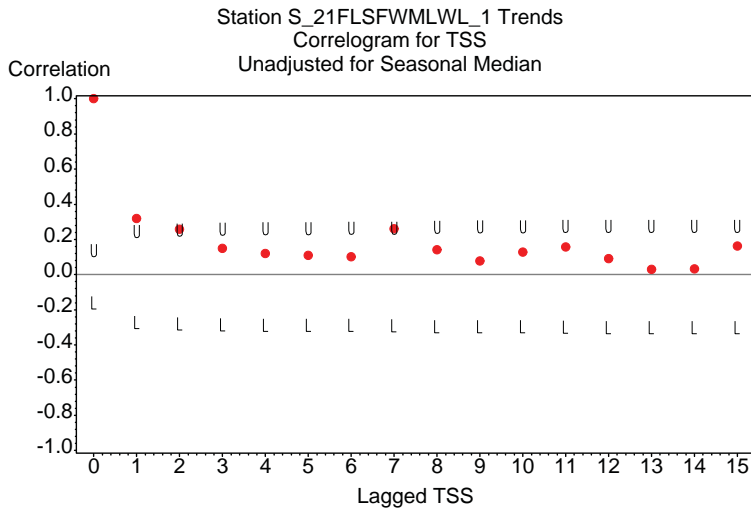
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.135	0.129	0.258	-0.258
2	-0.104	0.130	0.260	-0.260
3	0.009	0.130	0.261	-0.261
4	0.057	0.130	0.261	-0.261
5	0.012	0.130	0.261	-0.261
6	0.005	0.130	0.261	-0.261
7	-0.067	0.130	0.261	-0.261
8	0.034	0.131	0.261	-0.261
9	0.011	0.131	0.261	-0.261
10	-0.108	0.131	0.261	-0.261
11	-0.210	0.131	0.262	-0.262
12	-0.126	0.133	0.266	-0.266
13	-0.172	0.134	0.267	-0.267
14	-0.115	0.135	0.270	-0.270
15	-0.006	0.136	0.271	-0.271





Station S_21FLSFWMLWL_1 Trends
Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.320	0.129	0.258	-0.258
2	0.257	0.133	0.267	-0.267
3	0.150	0.136	0.272	-0.272
4	0.119	0.137	0.274	-0.274
5	0.109	0.138	0.275	-0.275
6	0.101	0.138	0.276	-0.276
7	0.260	0.139	0.277	-0.277
8	0.141	0.141	0.282	-0.282
9	0.077	0.142	0.284	-0.284
10	0.128	0.142	0.284	-0.284
11	0.158	0.143	0.286	-0.286
12	0.090	0.144	0.288	-0.288
13	0.030	0.144	0.288	-0.288
14	0.032	0.144	0.288	-0.288
15	0.162	0.144	0.288	-0.288



Station S_21FLSFWMLWL_1 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TSS

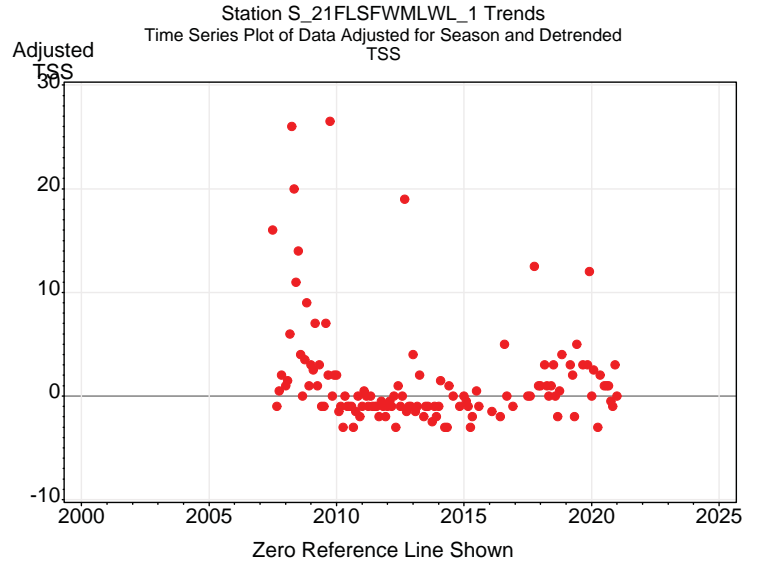
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.049	0.484	0.717	0

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

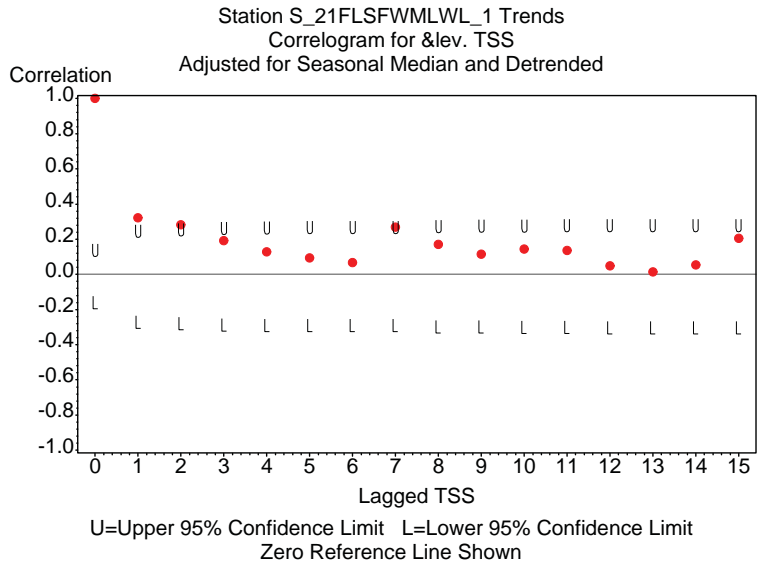
Station S_21FLSFWMLWL_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.049	0.484	0.717	0

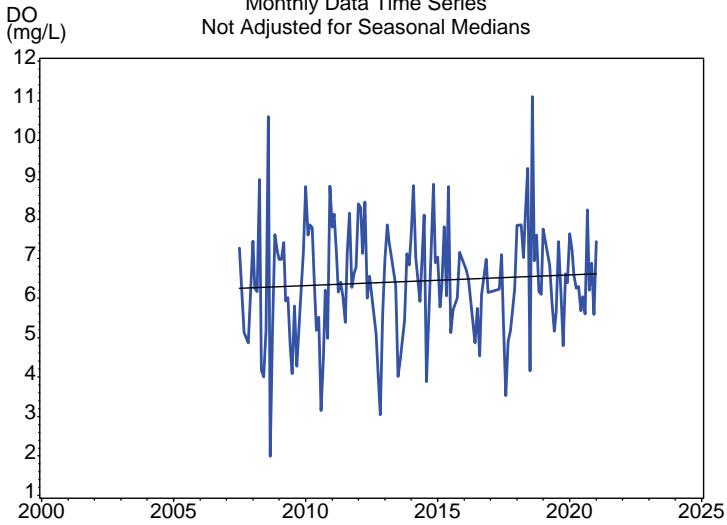


Station S_21FLSFWMLWL_1 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

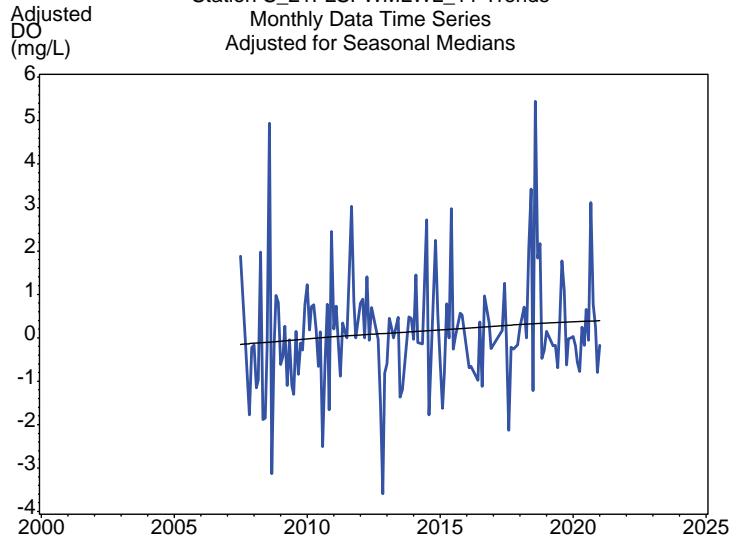
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.322	0.129	0.258	-0.258
2	0.283	0.133	0.267	-0.267
3	0.191	0.137	0.274	-0.274
4	0.129	0.138	0.277	-0.277
5	0.093	0.139	0.278	-0.278
6	0.066	0.139	0.279	-0.279
7	0.270	0.139	0.279	-0.279
8	0.170	0.142	0.285	-0.285
9	0.114	0.143	0.287	-0.287
10	0.143	0.144	0.288	-0.288
11	0.137	0.145	0.289	-0.289
12	0.048	0.145	0.291	-0.291
13	0.014	0.146	0.291	-0.291
14	0.054	0.146	0.291	-0.291
15	0.205	0.146	0.291	-0.291



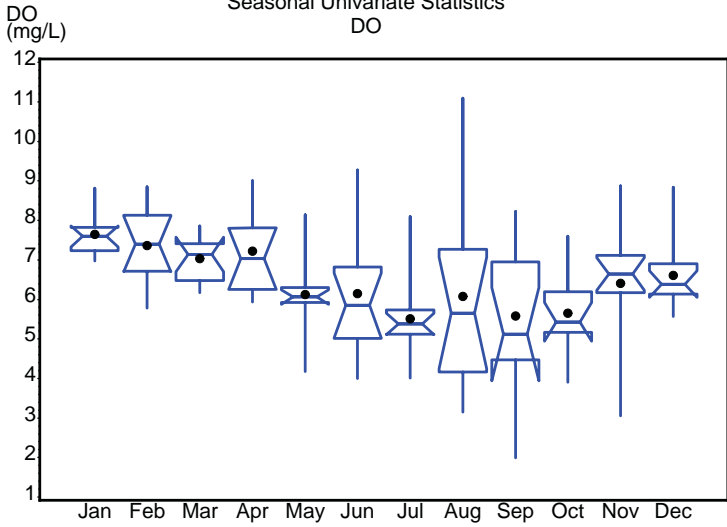
Station S_21FLSFWMLWL_11 Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_21FLSFWMLWL_11 Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



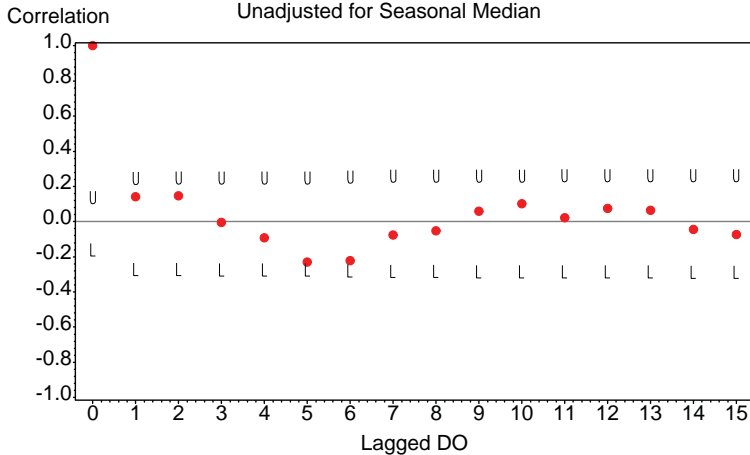
Station S_21FLSFWMLWL_11 Trends
Seasonal Univariate Statistics
DO



Station S_21FLSFWMLWL_11 Trends
Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.142	0.129	0.258	-0.258
2	0.146	0.130	0.260	-0.260
3	-0.005	0.131	0.262	-0.262
4	-0.093	0.131	0.262	-0.262
5	-0.231	0.131	0.262	-0.262
6	-0.221	0.133	0.267	-0.267
7	-0.075	0.136	0.271	-0.271
8	-0.052	0.136	0.271	-0.271
9	0.060	0.136	0.272	-0.272
10	0.102	0.136	0.272	-0.272
11	0.021	0.136	0.273	-0.273
12	0.075	0.136	0.273	-0.273
13	0.065	0.137	0.273	-0.273
14	-0.044	0.137	0.274	-0.274
15	-0.074	0.137	0.274	-0.274

Station S_21FLSFWMLWL_11 Trends
Correlogram for DO
Unadjusted for Seasonal Median



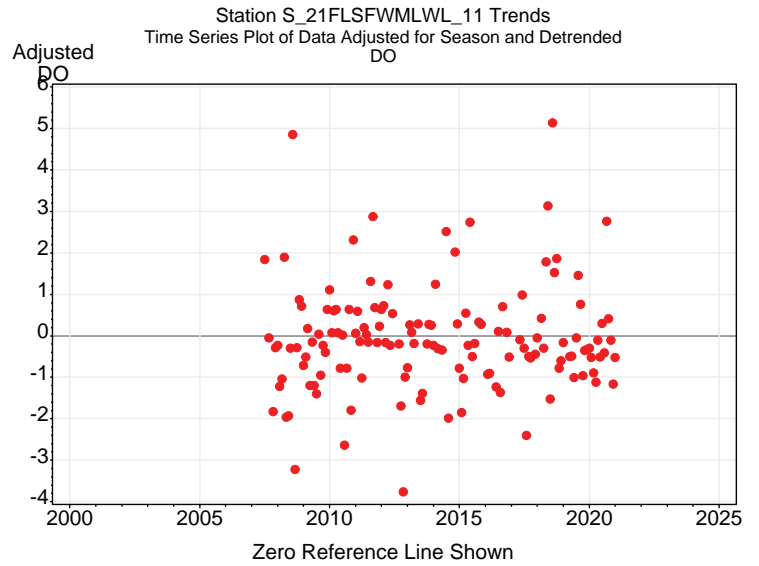
Station S_21FLSFWMLWL_11 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DO
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.062	0.353	0.46	0.022

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

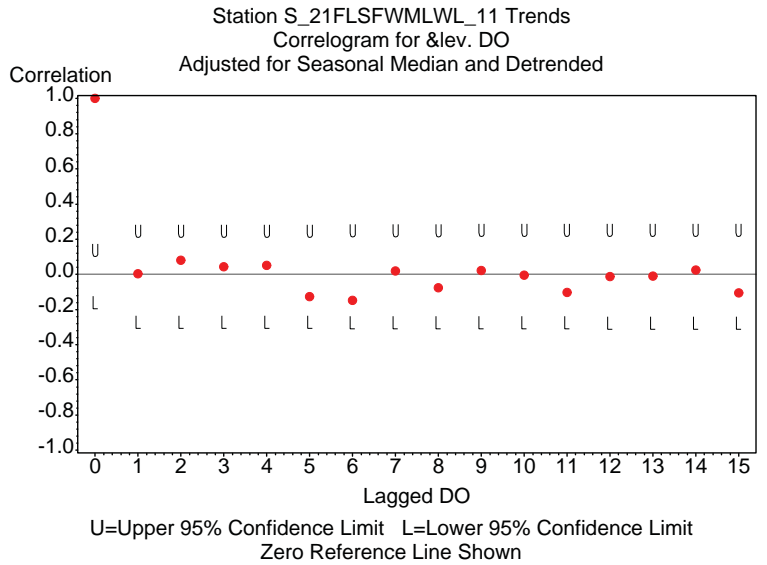
Station S_21FLSFWMLWL_11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

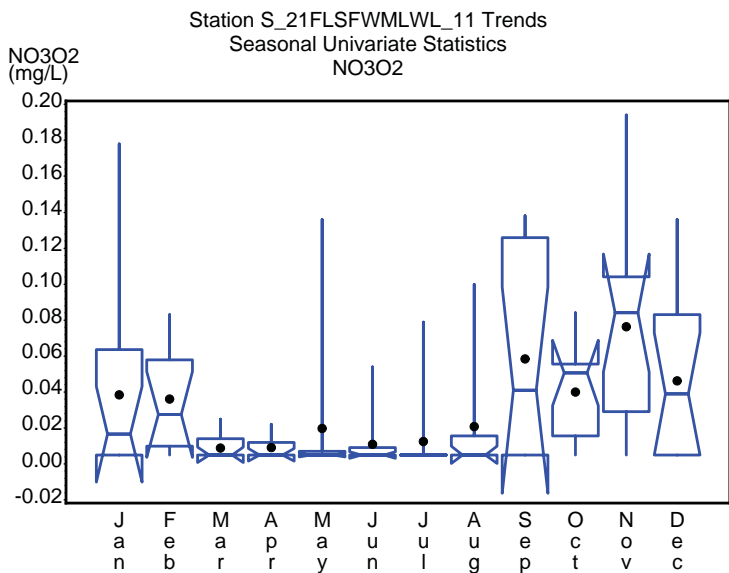
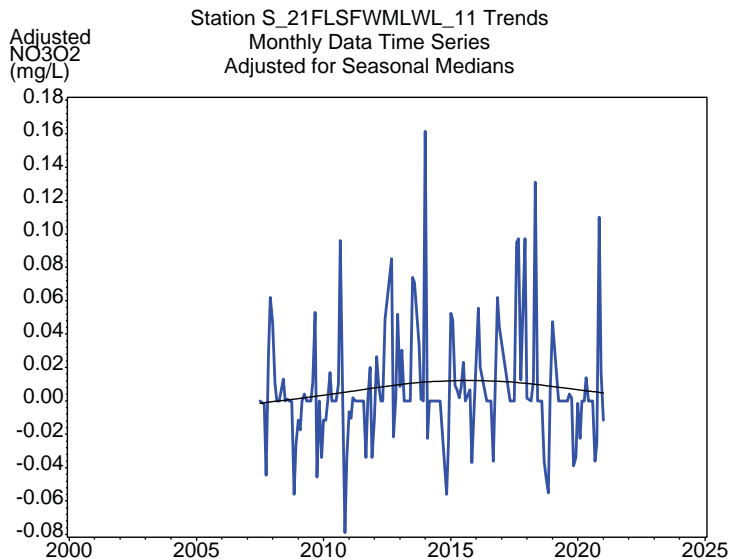
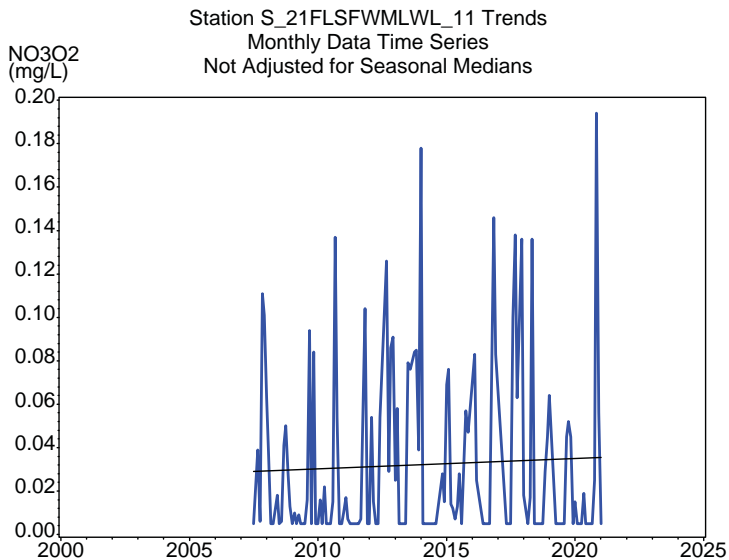
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.062	0.353	0.46	0.022



Station S_21FLSFWMLWL_11 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

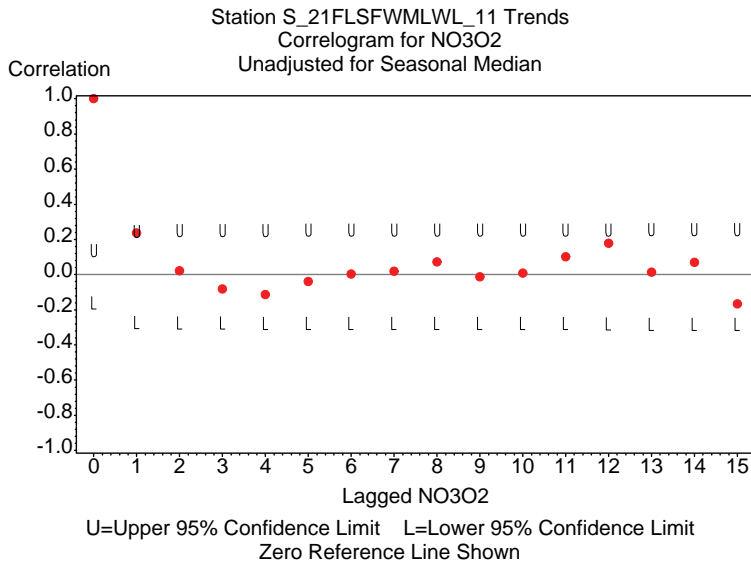
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.004	0.129	0.258	-0.258
2	0.080	0.129	0.258	-0.258
3	0.044	0.129	0.259	-0.259
4	0.051	0.129	0.259	-0.259
5	-0.127	0.130	0.259	-0.259
6	-0.147	0.130	0.261	-0.261
7	0.019	0.131	0.262	-0.262
8	-0.077	0.131	0.262	-0.262
9	0.023	0.131	0.263	-0.263
10	-0.004	0.131	0.263	-0.263
11	-0.103	0.131	0.263	-0.263
12	-0.013	0.132	0.264	-0.264
13	-0.010	0.132	0.264	-0.264
14	0.024	0.132	0.264	-0.264
15	-0.105	0.132	0.264	-0.264





Station S_21FLSFWMLWL_11 Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.237	0.129	0.258	-0.258
2	0.023	0.131	0.263	-0.263
3	-0.082	0.132	0.263	-0.263
4	-0.113	0.132	0.264	-0.264
5	-0.040	0.132	0.265	-0.265
6	0.003	0.132	0.265	-0.265
7	0.020	0.132	0.265	-0.265
8	0.072	0.132	0.265	-0.265
9	-0.013	0.133	0.265	-0.265
10	0.010	0.133	0.265	-0.265
11	0.102	0.133	0.265	-0.265
12	0.178	0.133	0.266	-0.266
13	0.013	0.134	0.269	-0.269
14	0.070	0.134	0.269	-0.269
15	-0.167	0.135	0.269	-0.269

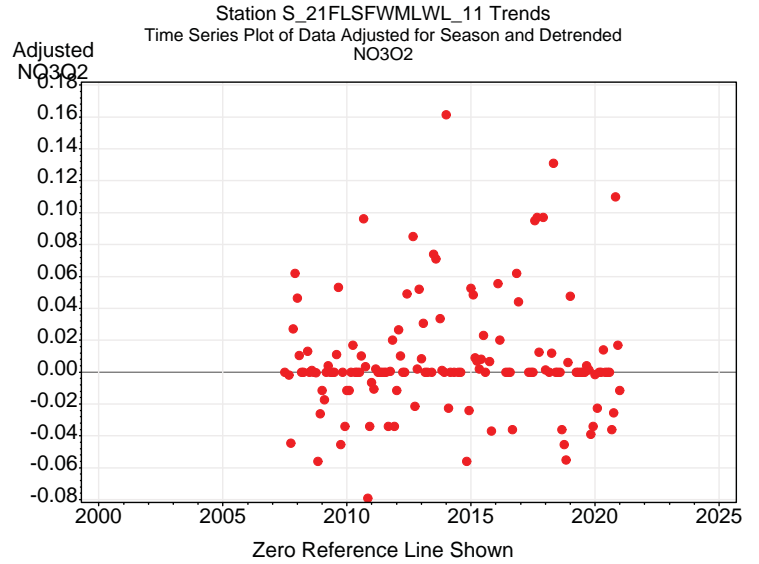


Station S_21FLSFWMLWL_11 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.032	0.6	0.666	0

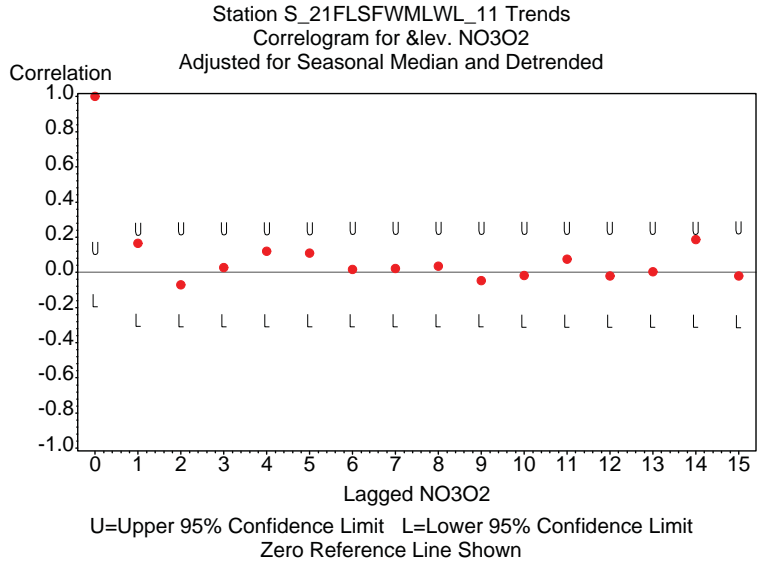
Station S_21FLSFWMLWL_11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.032	0.6	0.666	0

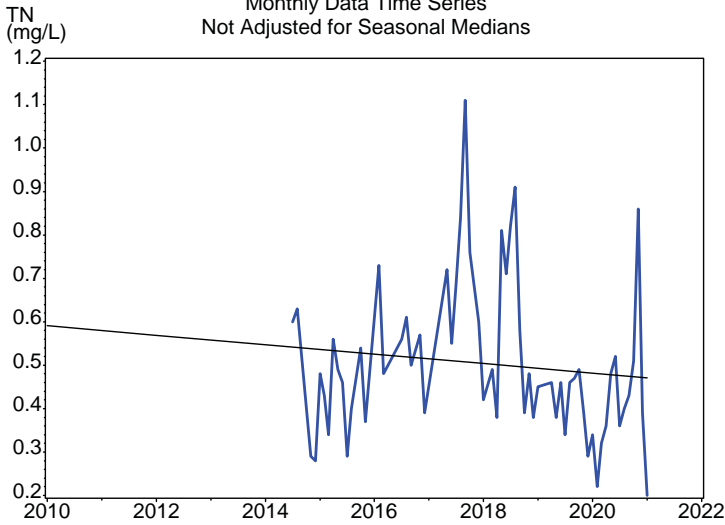


Station S_21FLSFWMLWL_11 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

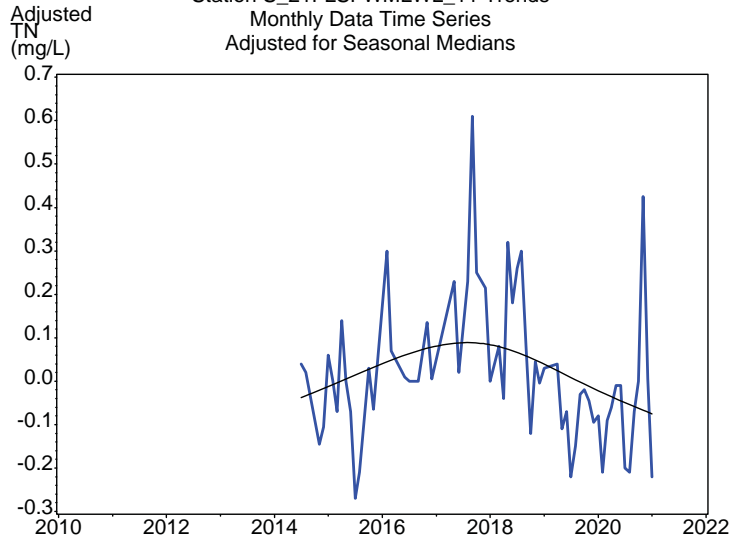
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.165	0.129	0.258	-0.258
2	-0.070	0.130	0.261	-0.261
3	0.028	0.130	0.261	-0.261
4	0.119	0.131	0.261	-0.261
5	0.109	0.131	0.262	-0.262
6	0.017	0.132	0.263	-0.263
7	0.022	0.132	0.263	-0.263
8	0.035	0.132	0.263	-0.263
9	-0.047	0.132	0.263	-0.263
10	-0.017	0.132	0.264	-0.264
11	0.075	0.132	0.264	-0.264
12	-0.021	0.132	0.264	-0.264
13	0.004	0.132	0.264	-0.264
14	0.187	0.132	0.264	-0.264
15	-0.021	0.134	0.267	-0.267



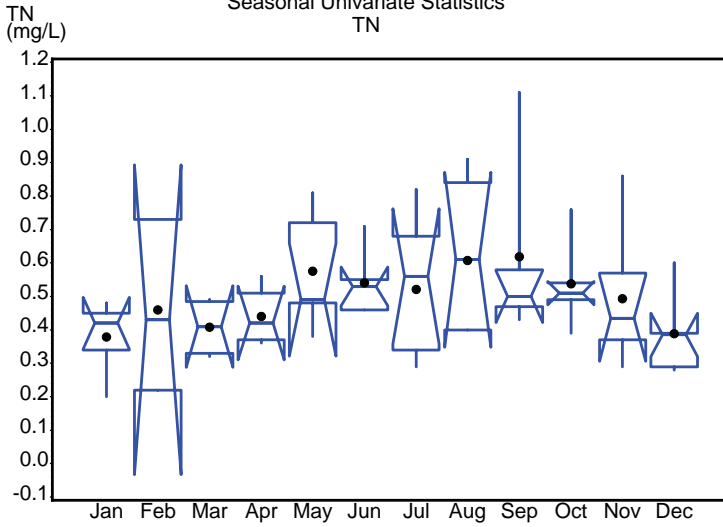
Station S_21FLSFWMLWL_11 Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_21FLSFWMLWL_11 Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



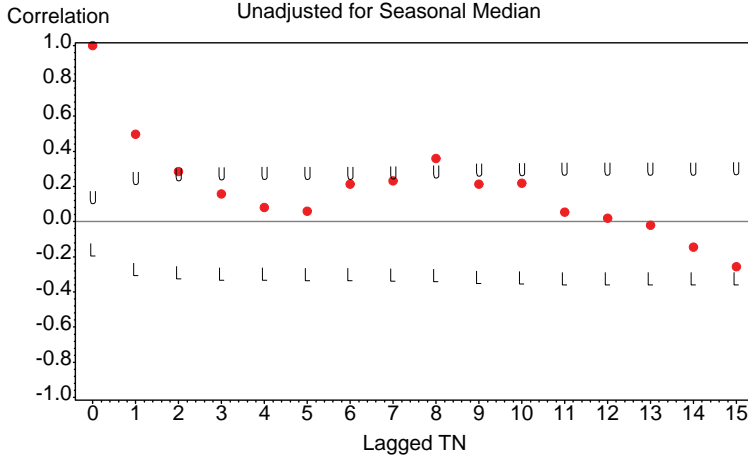
Station S_21FLSFWMLWL_11 Trends
Seasonal Univariate Statistics
TN



Station S_21FLSFWMLWL_11 Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.498	0.129	0.258	-0.258
2	0.285	0.139	0.279	-0.279
3	0.156	0.143	0.285	-0.285
4	0.081	0.144	0.287	-0.287
5	0.059	0.144	0.288	-0.288
6	0.213	0.144	0.288	-0.288
7	0.232	0.146	0.291	-0.291
8	0.358	0.148	0.295	-0.295
9	0.214	0.152	0.305	-0.305
10	0.217	0.154	0.308	-0.308
11	0.053	0.156	0.312	-0.312
12	0.018	0.156	0.312	-0.312
13	-0.020	0.156	0.312	-0.312
14	-0.146	0.156	0.312	-0.312
15	-0.257	0.157	0.313	-0.313

Station S_21FLSFWMLWL_11 Trends
Correlogram for TN
Unadjusted for Seasonal Median



Station S_21FLSFWMLWL_11 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.077	0.534	0.776	-.006

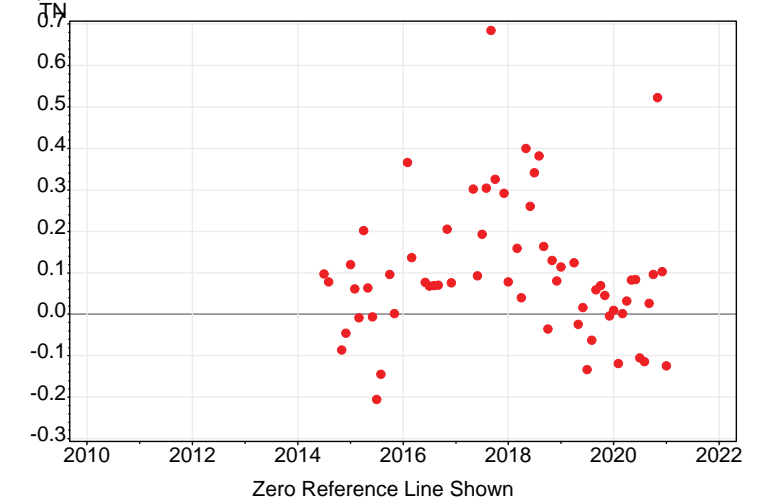
U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_21FLSFWMLWL_11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.077	0.534	0.776	-.006

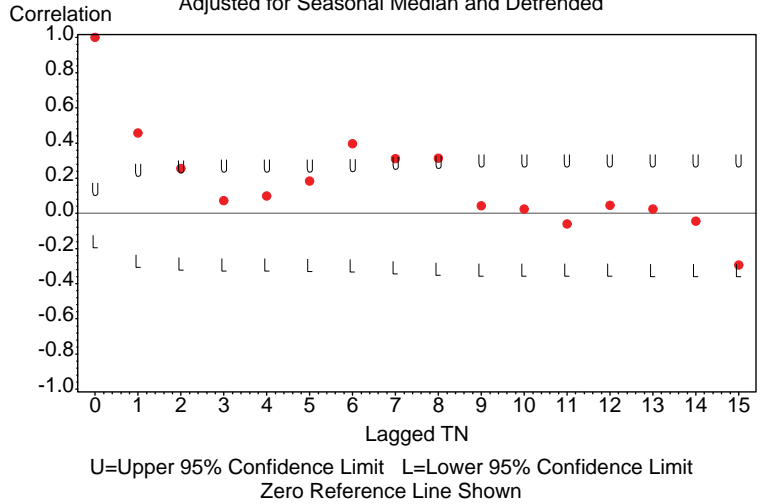
Station S_21FLSFWMLWL_11 Trends
 Time Series Plot of Data Adjusted for Season and Detrended
 TN

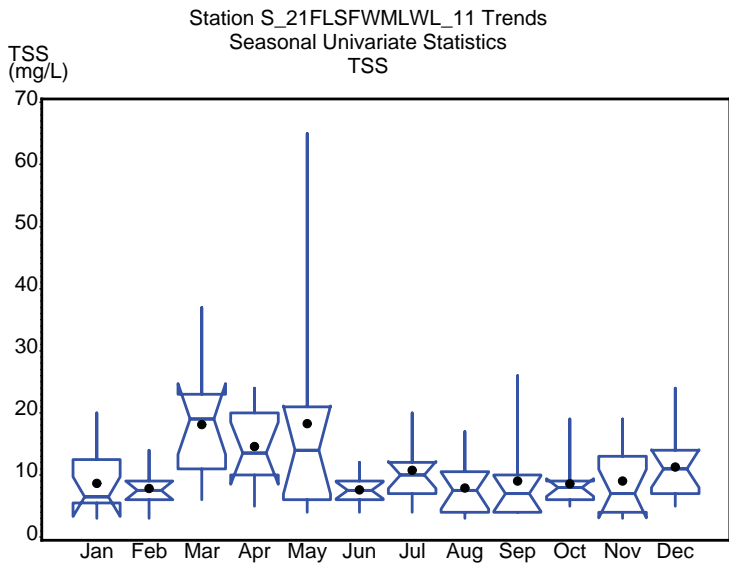
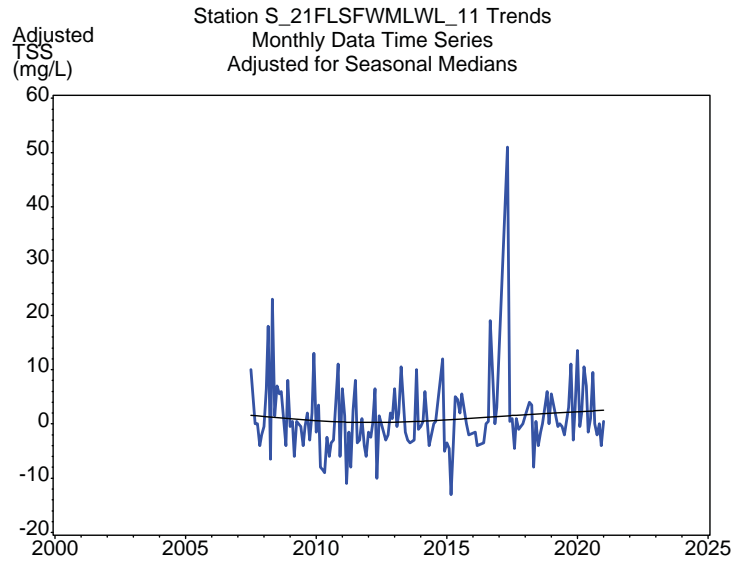
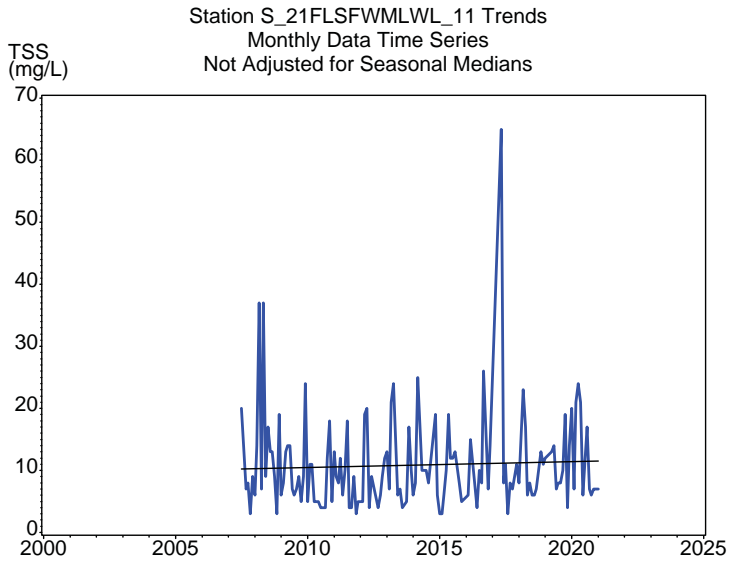


Station S_21FLSFWMLWL_11 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.458	0.129	0.258	-0.258
2	0.256	0.138	0.276	-0.276
3	0.073	0.140	0.281	-0.281
4	0.099	0.141	0.281	-0.281
5	0.183	0.141	0.282	-0.282
6	0.397	0.142	0.285	-0.285
7	0.310	0.148	0.297	-0.297
8	0.315	0.152	0.304	-0.304
9	0.042	0.156	0.311	-0.311
10	0.025	0.156	0.311	-0.311
11	-0.060	0.156	0.311	-0.311
12	0.046	0.156	0.311	-0.311
13	0.025	0.156	0.312	-0.312
14	-0.045	0.156	0.312	-0.312
15	-0.295	0.156	0.312	-0.312

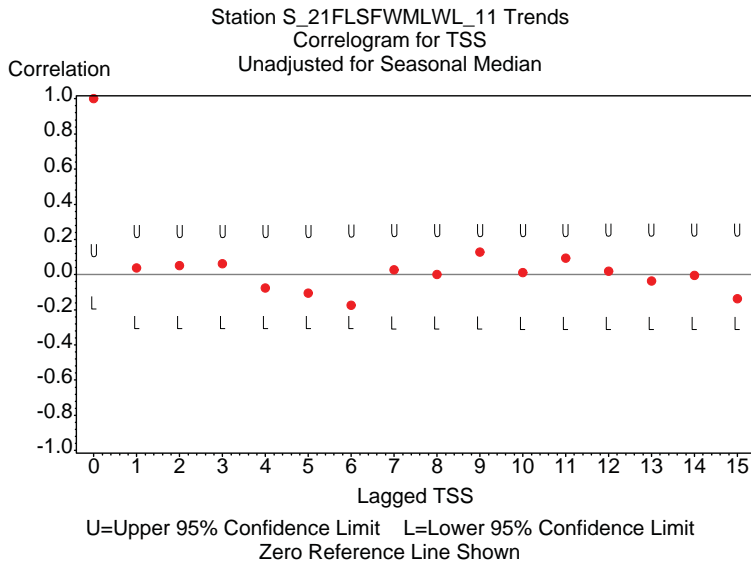
Station S_21FLSFWMLWL_11 Trends
 Correlogram for &lev. TN
 Adjusted for Seasonal Median and Detrended





Station S_21FLSFWMLWL_11 Trends
Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.038	0.129	0.258	-0.258
2	0.052	0.129	0.258	-0.258
3	0.063	0.129	0.259	-0.259
4	-0.075	0.129	0.259	-0.259
5	-0.106	0.130	0.259	-0.259
6	-0.175	0.130	0.260	-0.260
7	0.028	0.131	0.263	-0.263
8	0.002	0.132	0.263	-0.263
9	0.128	0.132	0.263	-0.263
10	0.012	0.132	0.264	-0.264
11	0.094	0.132	0.264	-0.264
12	0.018	0.133	0.265	-0.265
13	-0.037	0.133	0.265	-0.265
14	-0.004	0.133	0.265	-0.265
15	-0.136	0.133	0.265	-0.265



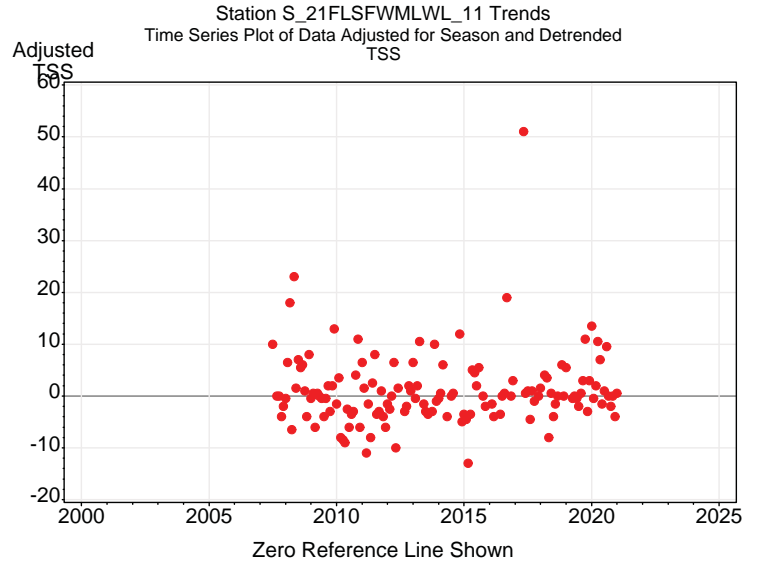
Station S_21FLSFWMLWL_11 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TSS

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.026	0.708	0.742	0

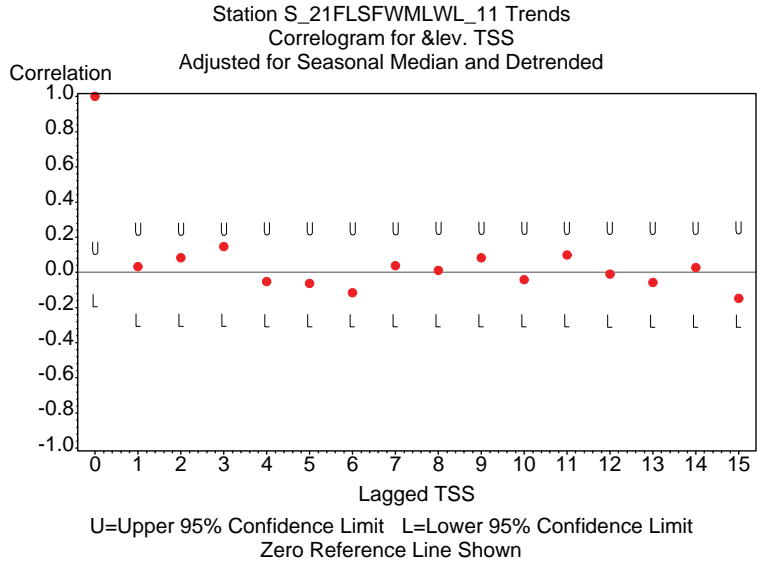
Station S_21FLSFWMLWL_11 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

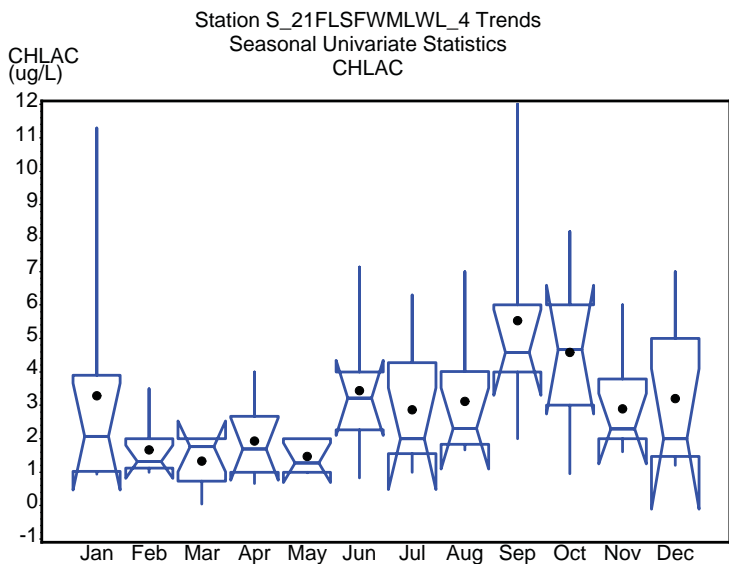
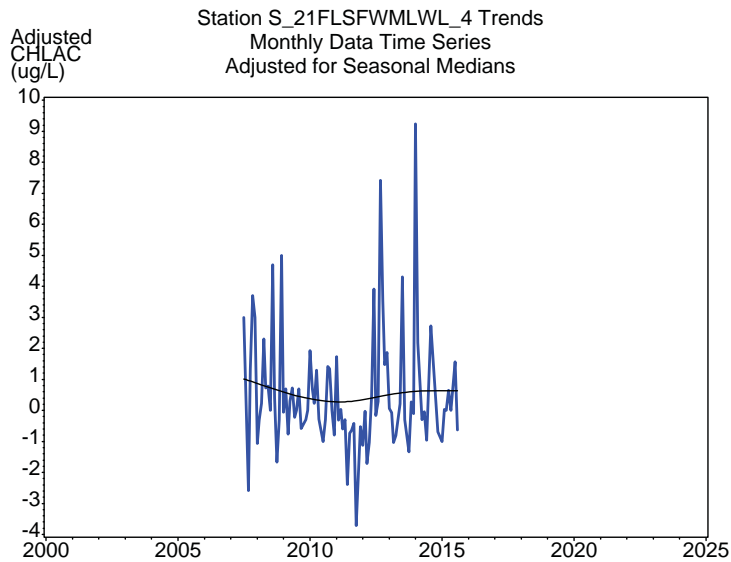
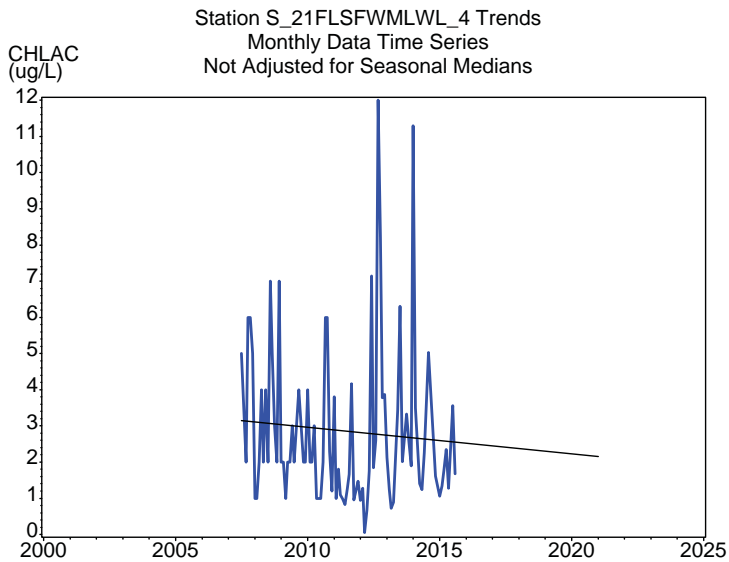
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.026	0.708	0.742	0



Station S_21FLSFWMLWL_11 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

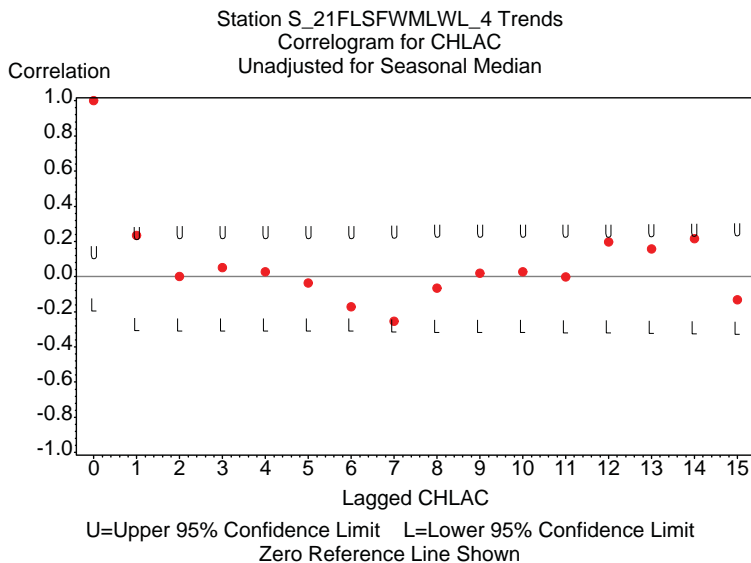
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.033	0.129	0.258	-0.258
2	0.083	0.129	0.258	-0.258
3	0.147	0.129	0.259	-0.259
4	-0.052	0.130	0.261	-0.261
5	-0.063	0.130	0.261	-0.261
6	-0.117	0.131	0.261	-0.261
7	0.038	0.131	0.262	-0.262
8	0.012	0.131	0.263	-0.263
9	0.084	0.131	0.263	-0.263
10	-0.041	0.132	0.263	-0.263
11	0.099	0.132	0.263	-0.263
12	-0.009	0.132	0.264	-0.264
13	-0.058	0.132	0.264	-0.264
14	0.026	0.132	0.264	-0.264
15	-0.149	0.132	0.265	-0.265





Station S_21FLSFWMLWL_4 Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.234	0.129	0.258	-0.258
2	0.002	0.131	0.263	-0.263
3	0.052	0.131	0.263	-0.263
4	0.028	0.132	0.263	-0.263
5	-0.037	0.132	0.263	-0.263
6	-0.173	0.132	0.263	-0.263
7	-0.253	0.133	0.266	-0.266
8	-0.066	0.136	0.271	-0.271
9	0.020	0.136	0.271	-0.271
10	0.027	0.136	0.271	-0.271
11	-0.002	0.136	0.272	-0.272
12	0.198	0.136	0.272	-0.272
13	0.156	0.137	0.275	-0.275
14	0.216	0.138	0.277	-0.277
15	-0.131	0.140	0.280	-0.280

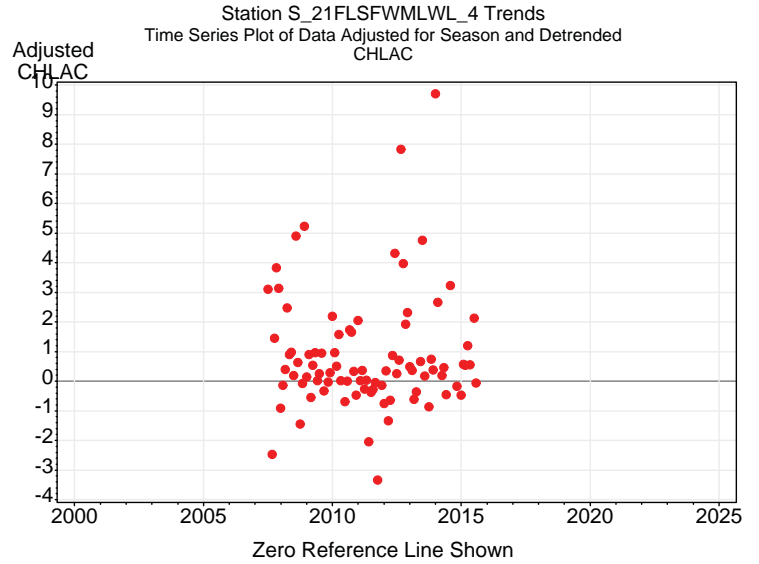


Station S_21FLSFWMLWL_4 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.089	0.34	0.464	-0.053

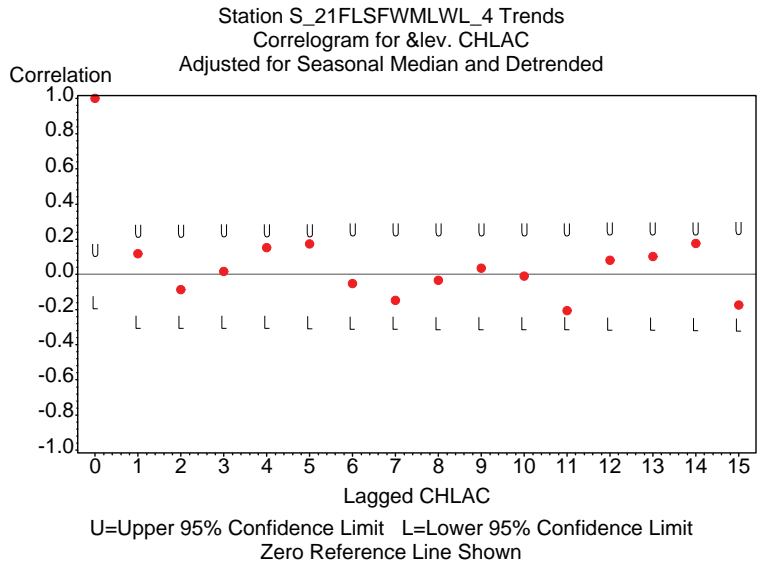
Station S_21FLSFWMLWL_4 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

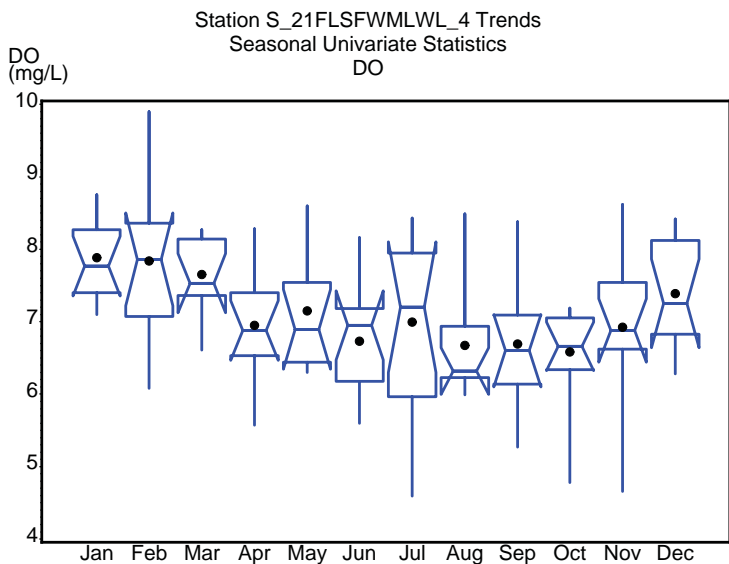
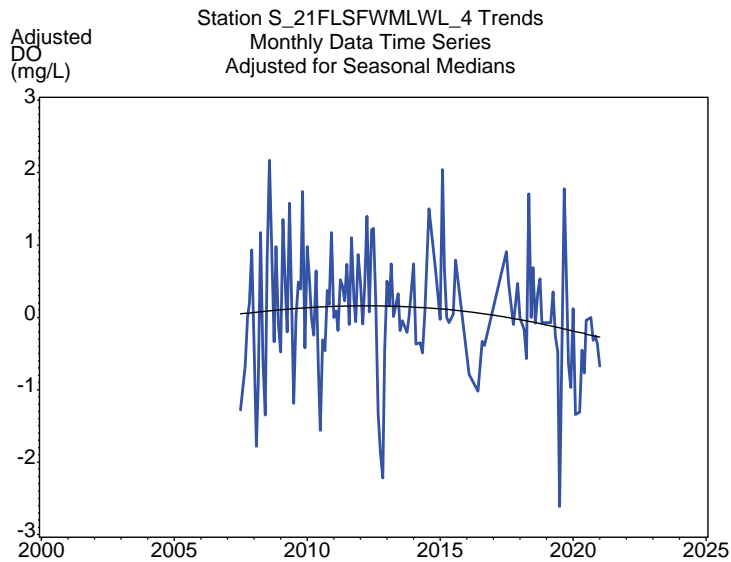
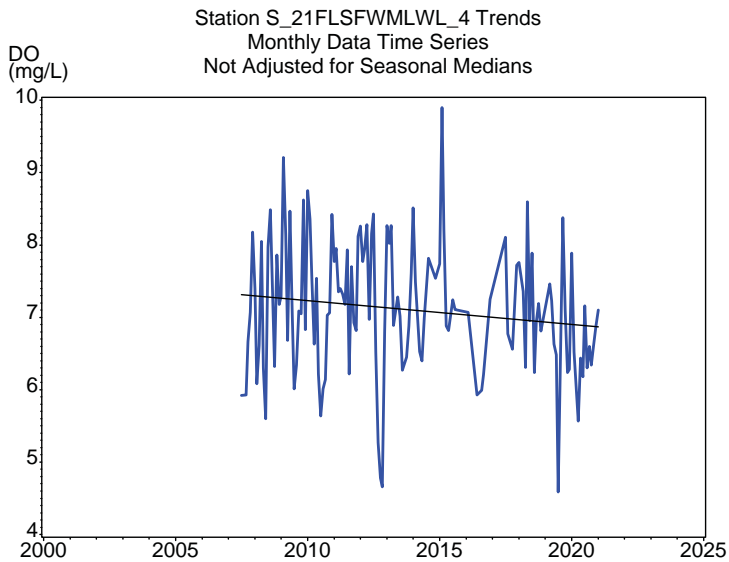
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.089	0.34	0.464	-0.053



Station S_21FLSFWMLWL_4 Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

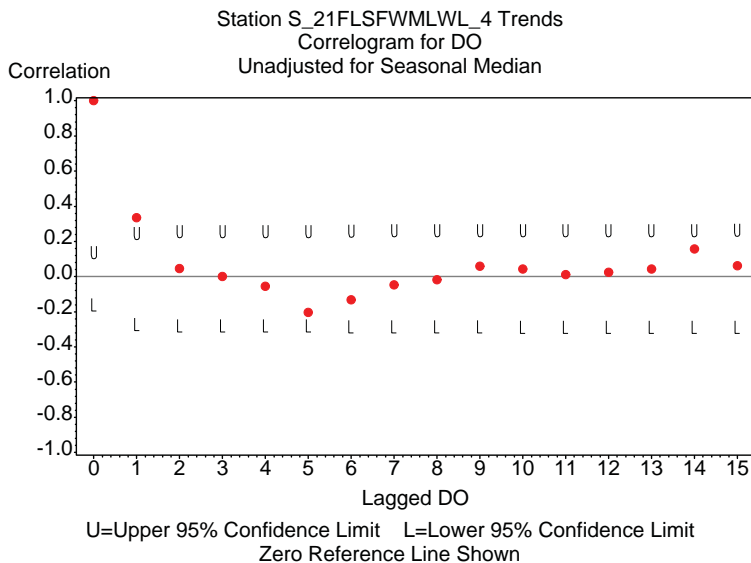
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.118	0.129	0.258	-0.258
2	-0.087	0.130	0.259	-0.259
3	0.016	0.130	0.260	-0.260
4	0.151	0.130	0.260	-0.260
5	0.174	0.131	0.262	-0.262
6	-0.053	0.132	0.265	-0.265
7	-0.147	0.132	0.265	-0.265
8	-0.034	0.133	0.267	-0.267
9	0.035	0.133	0.267	-0.267
10	-0.011	0.133	0.267	-0.267
11	-0.206	0.133	0.267	-0.267
12	0.081	0.135	0.270	-0.270
13	0.101	0.135	0.271	-0.271
14	0.177	0.136	0.272	-0.272
15	-0.175	0.137	0.274	-0.274





Station S_21FLSFWMLWL_4 Trends
Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.336	0.129	0.258	-0.258
2	0.045	0.134	0.268	-0.268
3	0.002	0.134	0.268	-0.268
4	-0.054	0.134	0.268	-0.268
5	-0.204	0.134	0.268	-0.268
6	-0.133	0.136	0.272	-0.272
7	-0.046	0.137	0.273	-0.273
8	-0.017	0.137	0.273	-0.273
9	0.060	0.137	0.273	-0.273
10	0.042	0.137	0.274	-0.274
11	0.011	0.137	0.274	-0.274
12	0.025	0.137	0.274	-0.274
13	0.042	0.137	0.274	-0.274
14	0.158	0.137	0.274	-0.274
15	0.061	0.138	0.276	-0.276

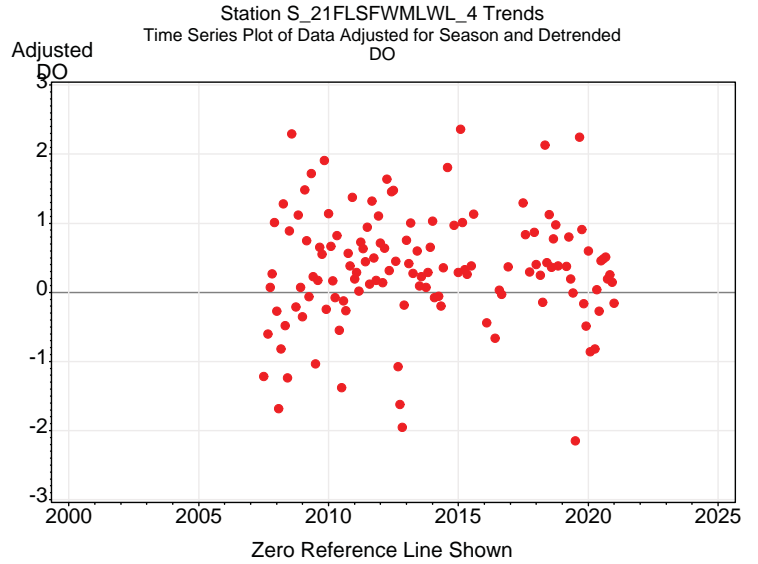


Station S_21FLSFWMLWL_4 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DO
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.128	0.066	0.101	-0.032

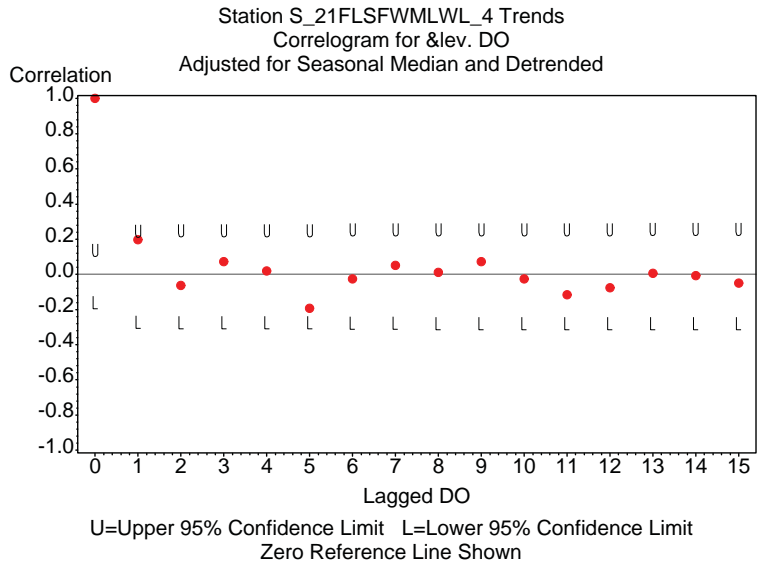
Station S_21FLSFWMLWL_4 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

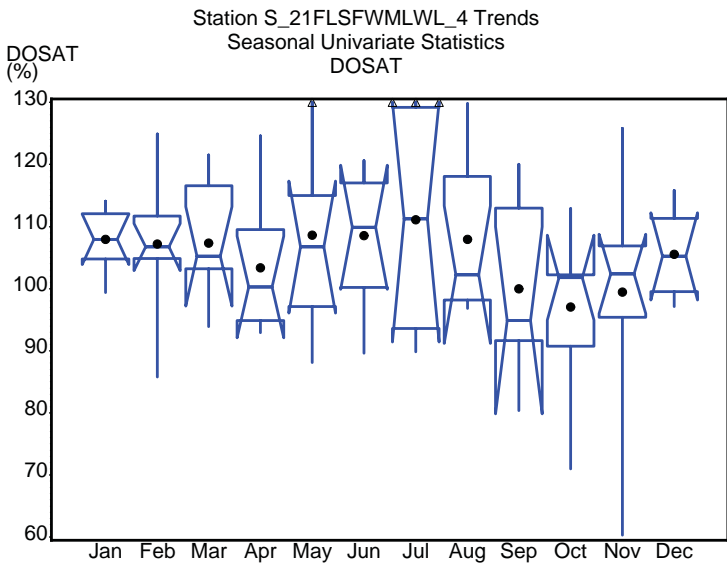
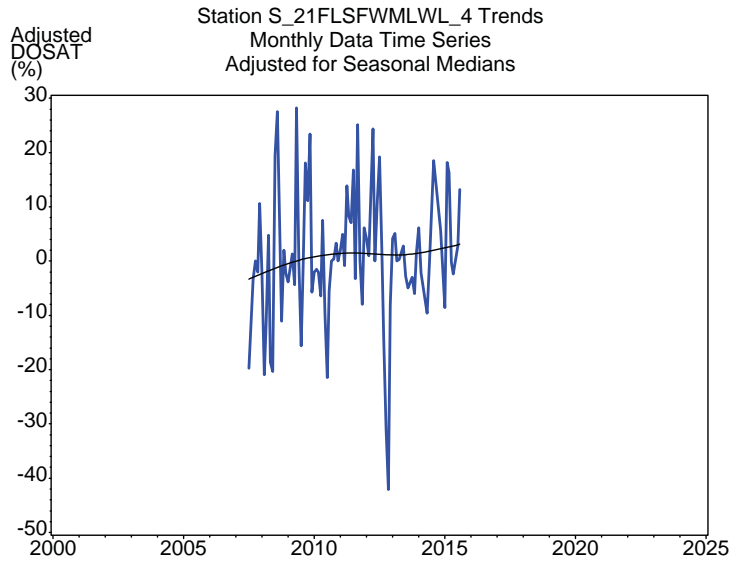
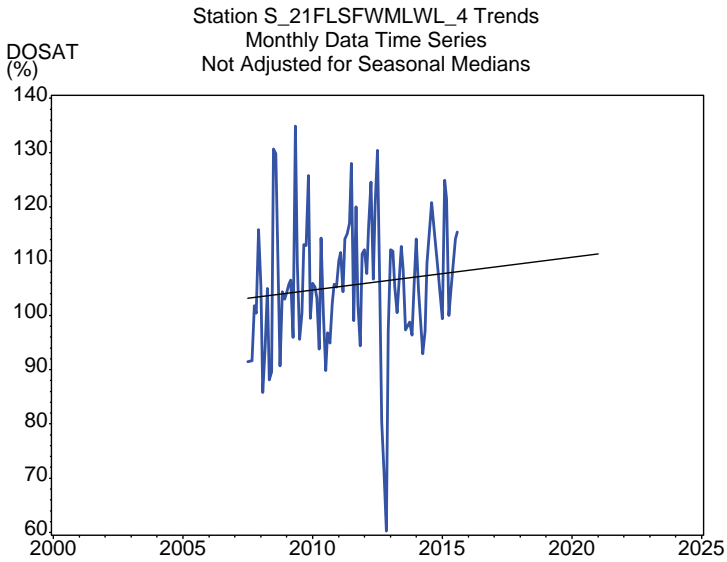
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.128	0.066	0.101	-0.032



Station S_21FLSFWMLWL_4 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

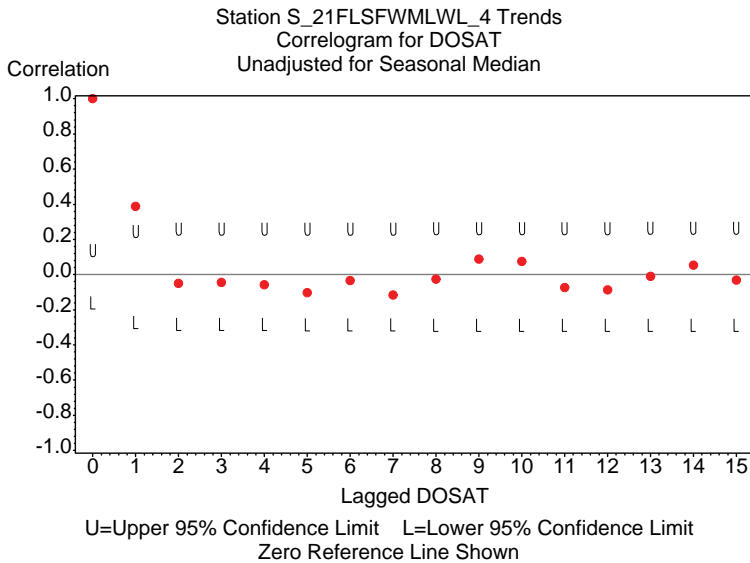
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.196	0.129	0.258	-0.258
2	-0.063	0.131	0.261	-0.261
3	0.072	0.131	0.262	-0.262
4	0.020	0.131	0.262	-0.262
5	-0.193	0.131	0.262	-0.262
6	-0.027	0.133	0.265	-0.265
7	0.051	0.133	0.265	-0.265
8	0.011	0.133	0.266	-0.266
9	0.072	0.133	0.266	-0.266
10	-0.025	0.133	0.266	-0.266
11	-0.116	0.133	0.266	-0.266
12	-0.077	0.134	0.267	-0.267
13	0.005	0.134	0.268	-0.268
14	-0.007	0.134	0.268	-0.268
15	-0.051	0.134	0.268	-0.268





Station S_21FLSFWMLWL_4 Trends
Autocorrelation Statistics for DOSAT

Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.389	0.129	0.258	-0.258
2	-0.049	0.135	0.271	-0.271
3	-0.044	0.136	0.271	-0.271
4	-0.057	0.136	0.271	-0.271
5	-0.104	0.136	0.272	-0.272
6	-0.034	0.136	0.272	-0.272
7	-0.115	0.136	0.272	-0.272
8	-0.025	0.137	0.274	-0.274
9	0.089	0.137	0.274	-0.274
10	0.074	0.137	0.274	-0.274
11	-0.073	0.137	0.275	-0.275
12	-0.087	0.138	0.275	-0.275
13	-0.011	0.138	0.276	-0.276
14	0.053	0.138	0.276	-0.276
15	-0.031	0.138	0.276	-0.276

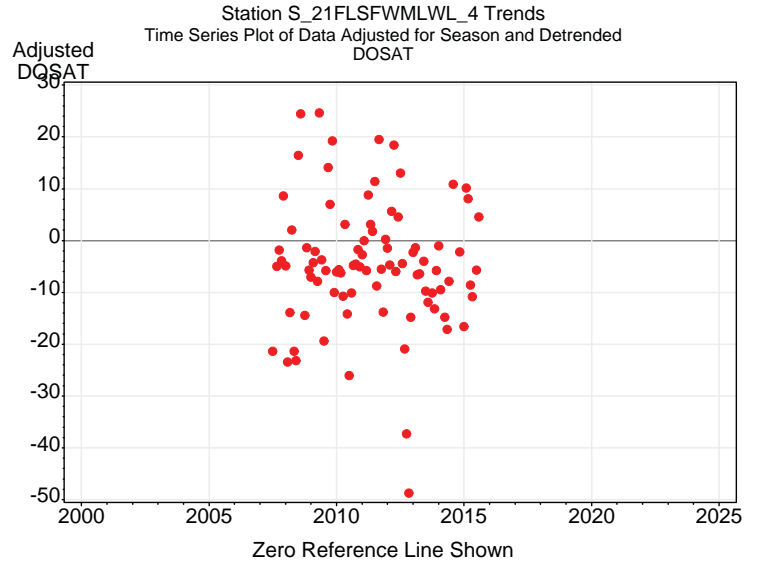


Station S_21FLSFWMLWL_4 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DOSAT
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.113	0.217	0.296	0.8

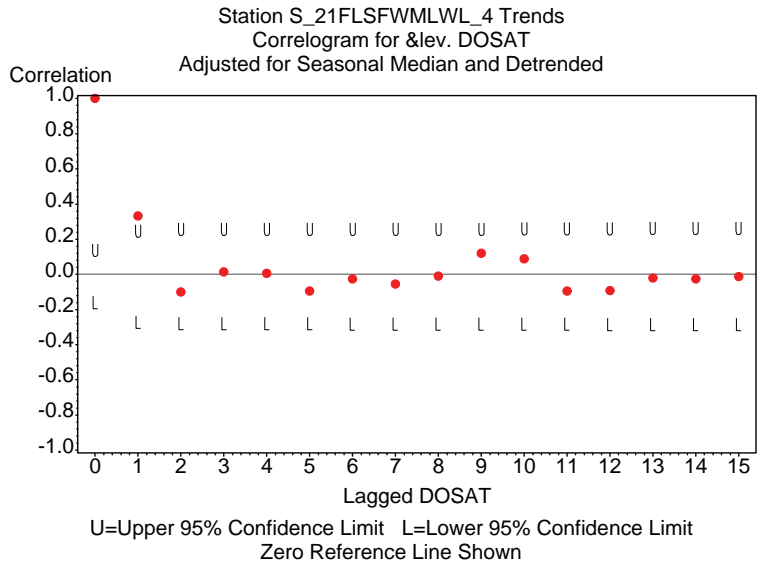
Station S_21FLSFWMLWL_4 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DOSAT
 Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.113	0.217	0.296	0.8

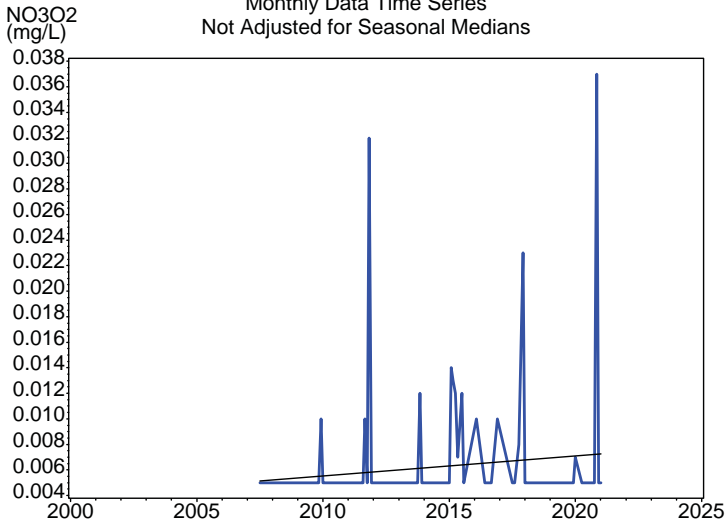


Station S_21FLSFWMLWL_4 Trends
 Autocorrelation Statistics for DOSAT
 Adjusted for Seasonal Median and Detrended

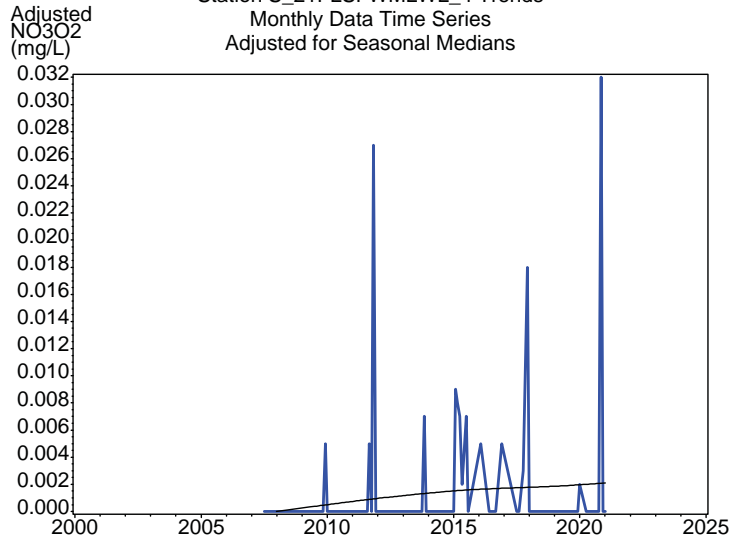
Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.332	0.129	0.258	-0.258
2	-0.100	0.134	0.268	-0.268
3	0.015	0.134	0.268	-0.268
4	0.005	0.134	0.268	-0.268
5	-0.094	0.134	0.268	-0.268
6	-0.026	0.135	0.269	-0.269
7	-0.056	0.135	0.269	-0.269
8	-0.009	0.135	0.269	-0.269
9	0.120	0.135	0.269	-0.269
10	0.089	0.135	0.271	-0.271
11	-0.094	0.136	0.271	-0.271
12	-0.092	0.136	0.272	-0.272
13	-0.021	0.136	0.273	-0.273
14	-0.025	0.136	0.273	-0.273
15	-0.012	0.136	0.273	-0.273



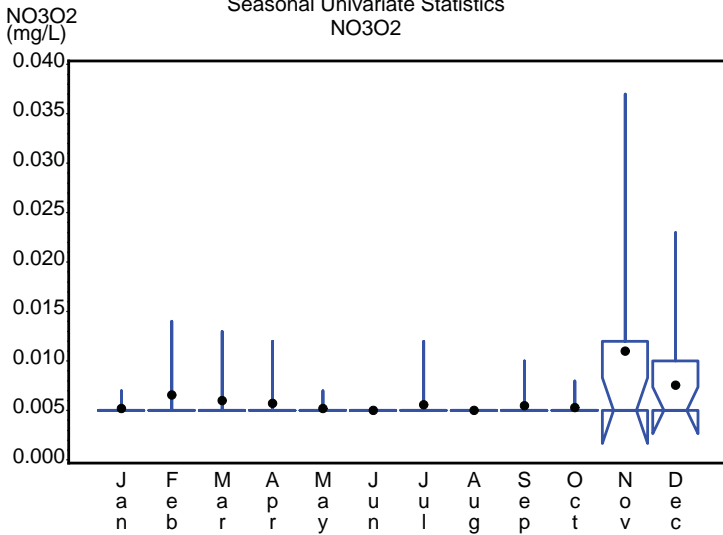
Station S_21FLSFWMWLWL_4 Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_21FLSFWMWLWL_4 Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



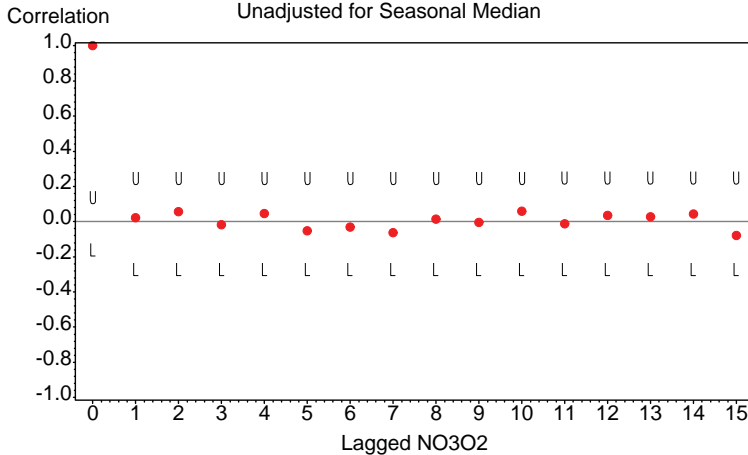
Station S_21FLSFWMWLWL_4 Trends
Seasonal Univariate Statistics
NO3O2



Station S_21FLSFWMWLWL_4 Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.021	0.129	0.258	-0.258
2	0.057	0.129	0.258	-0.258
3	-0.018	0.129	0.259	-0.259
4	0.046	0.129	0.259	-0.259
5	-0.052	0.129	0.259	-0.259
6	-0.030	0.129	0.259	-0.259
7	-0.062	0.130	0.259	-0.259
8	0.015	0.130	0.259	-0.259
9	-0.005	0.130	0.259	-0.259
10	0.059	0.130	0.259	-0.259
11	-0.013	0.130	0.260	-0.260
12	0.036	0.130	0.260	-0.260
13	0.028	0.130	0.260	-0.260
14	0.042	0.130	0.260	-0.260
15	-0.078	0.130	0.260	-0.260

Station S_21FLSFWMWLWL_4 Trends
Correlogram for NO3O2
Unadjusted for Seasonal Median



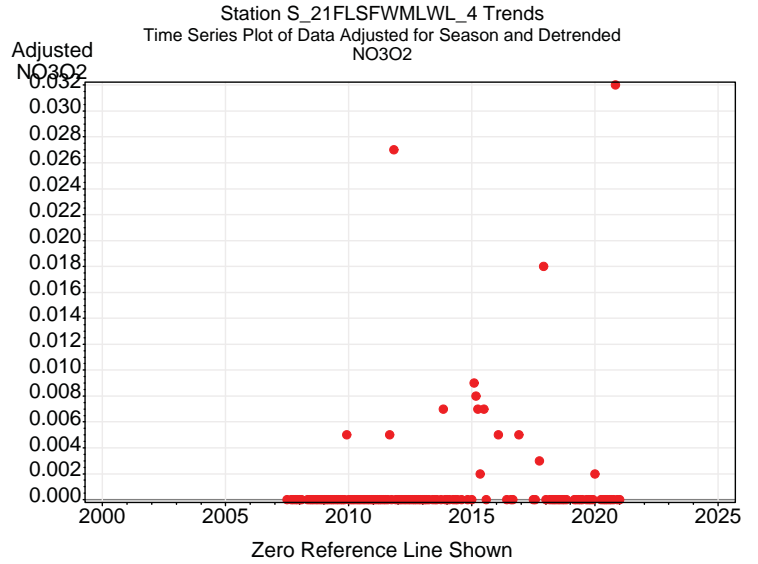
Station S_21FLSFWMWLWL_4 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.087	0.019	0.091	0

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

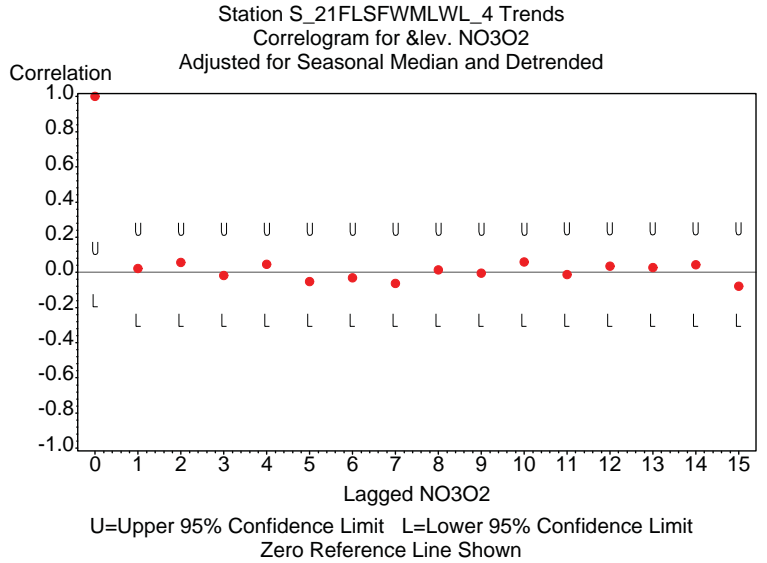
Station S_21FLSFWMLWL_4 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

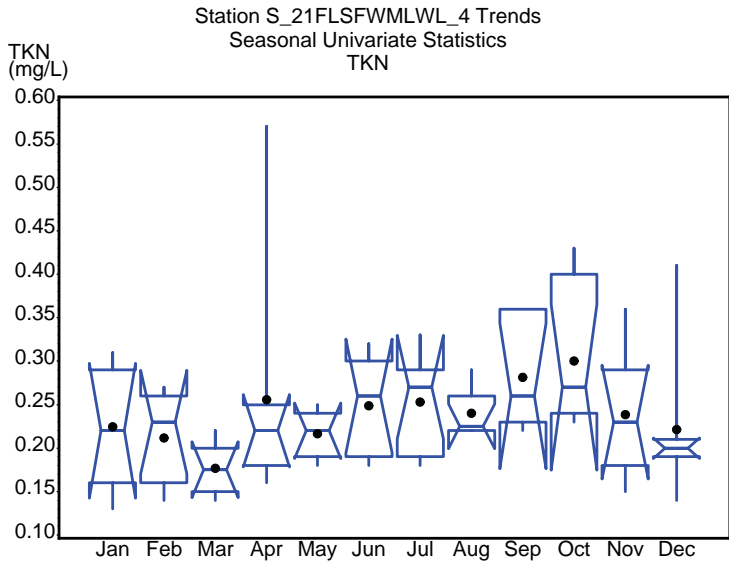
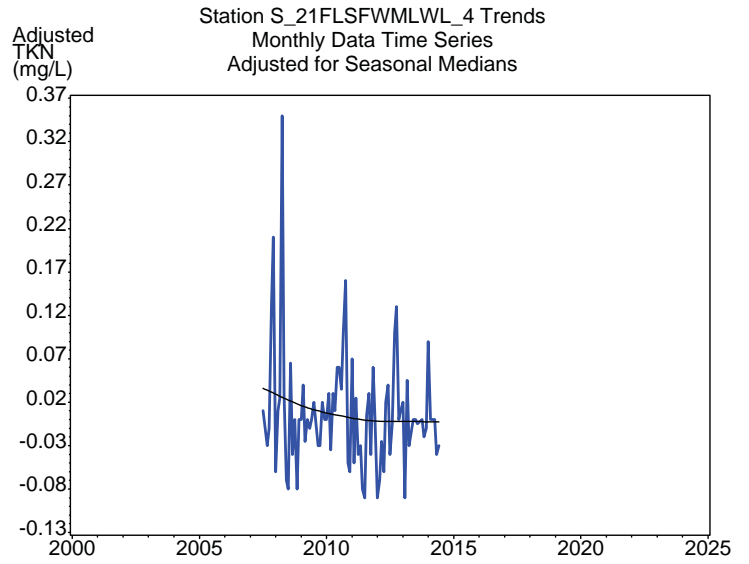
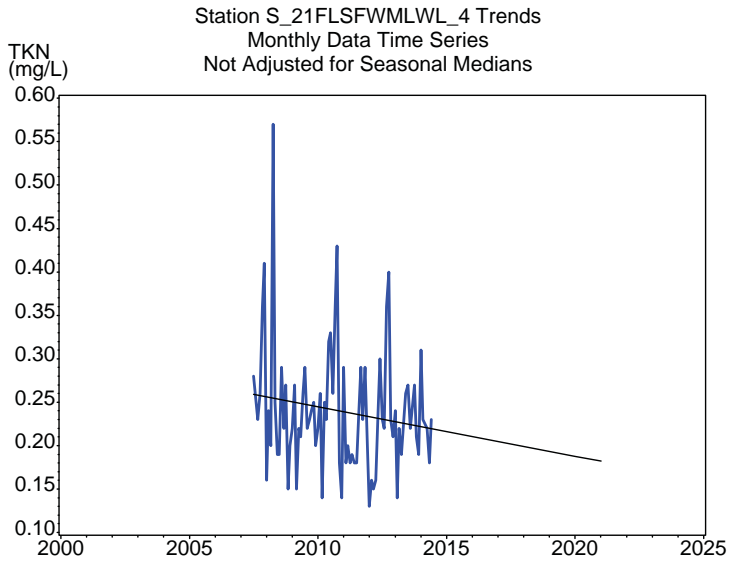
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.087	0.019	0.091	0



Station S_21FLSFWMLWL_4 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

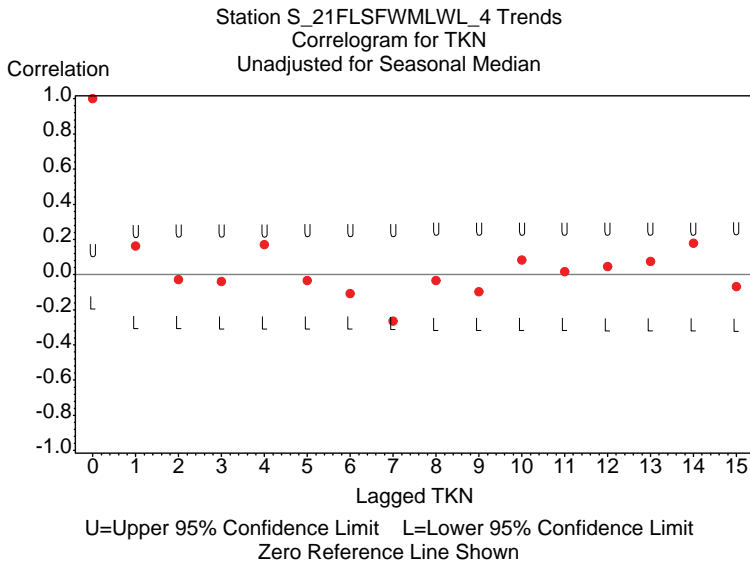
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.021	0.129	0.258	-0.258
2	0.057	0.129	0.258	-0.258
3	-0.018	0.129	0.259	-0.259
4	0.046	0.129	0.259	-0.259
5	-0.052	0.129	0.259	-0.259
6	-0.030	0.129	0.259	-0.259
7	-0.062	0.130	0.259	-0.259
8	0.015	0.130	0.259	-0.259
9	-0.005	0.130	0.259	-0.259
10	0.059	0.130	0.259	-0.259
11	-0.013	0.130	0.260	-0.260
12	0.036	0.130	0.260	-0.260
13	0.028	0.130	0.260	-0.260
14	0.042	0.130	0.260	-0.260
15	-0.078	0.130	0.260	-0.260





Station S_21FLSFWMLWL_4 Trends
Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.162	0.129	0.258	-0.258
2	-0.028	0.130	0.260	-0.260
3	-0.039	0.130	0.261	-0.261
4	0.171	0.130	0.261	-0.261
5	-0.033	0.132	0.263	-0.263
6	-0.108	0.132	0.263	-0.263
7	-0.265	0.132	0.264	-0.264
8	-0.035	0.135	0.270	-0.270
9	-0.098	0.135	0.270	-0.270
10	0.083	0.135	0.271	-0.271
11	0.016	0.136	0.271	-0.271
12	0.045	0.136	0.272	-0.272
13	0.075	0.136	0.272	-0.272
14	0.179	0.136	0.272	-0.272
15	-0.068	0.137	0.275	-0.275



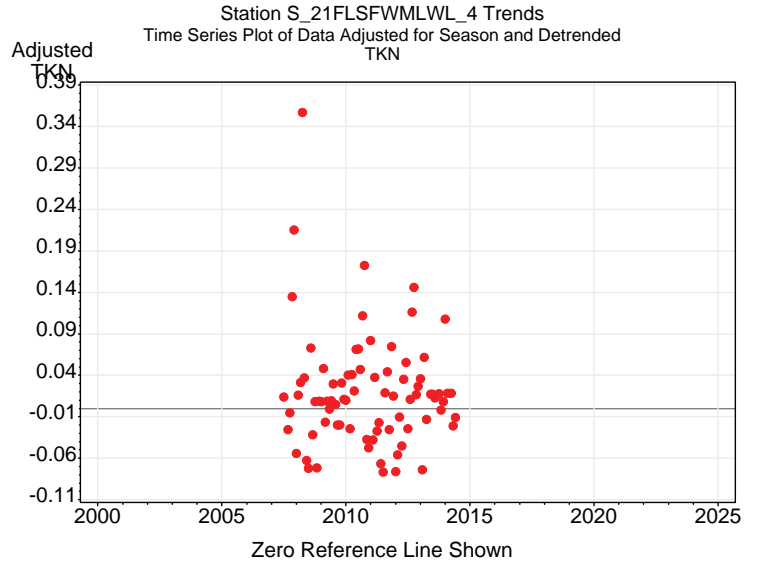
Station S_21FLSFWMLWL_4 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TKN

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.088	0.372	0.364	-.002

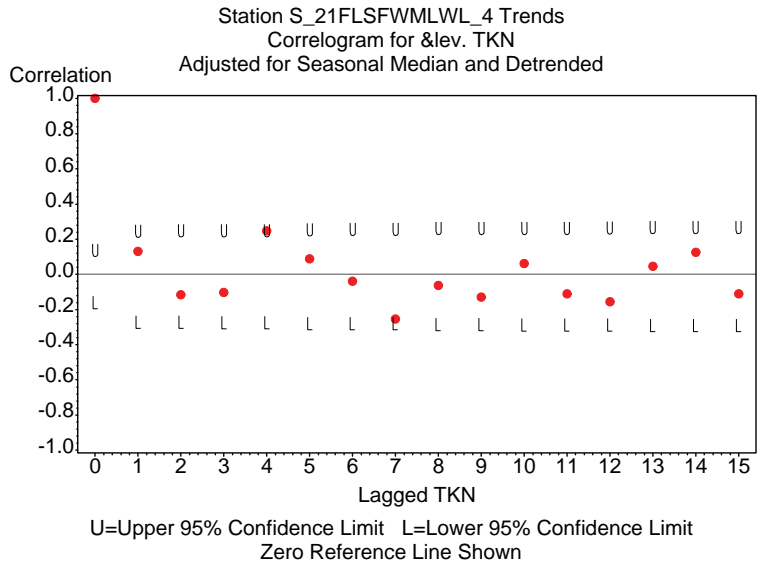
Station S_21FLSFWMLWL_4 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN
 Adjusted for Seasonal Medians

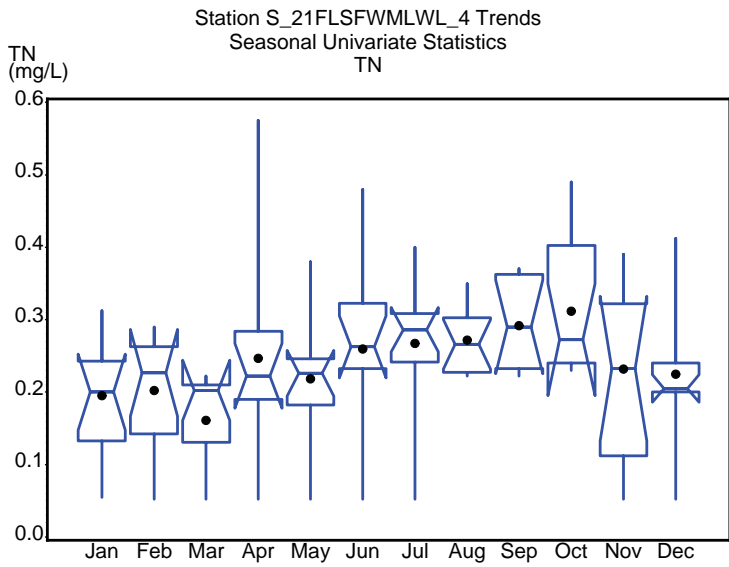
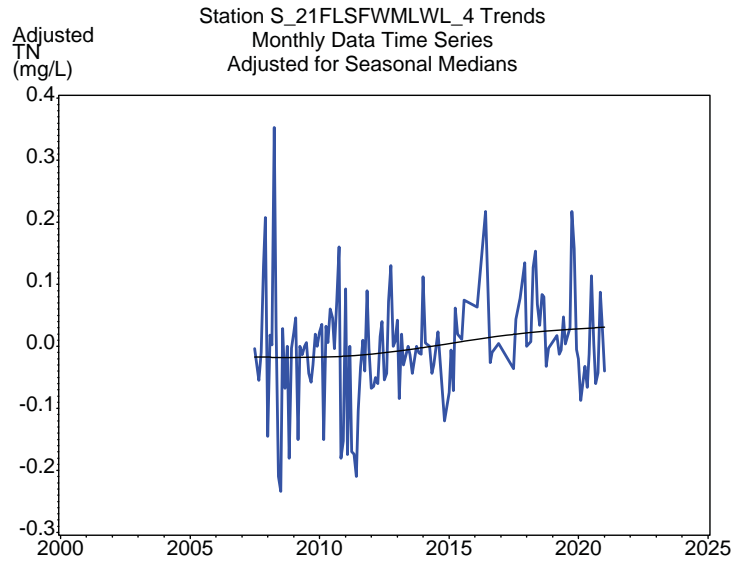
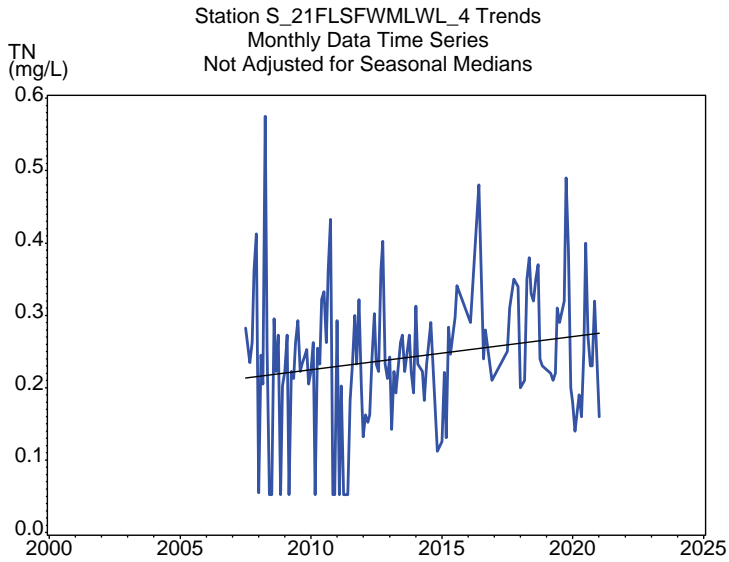
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.088	0.372	0.364	-.002



Station S_21FLSFWMLWL_4 Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

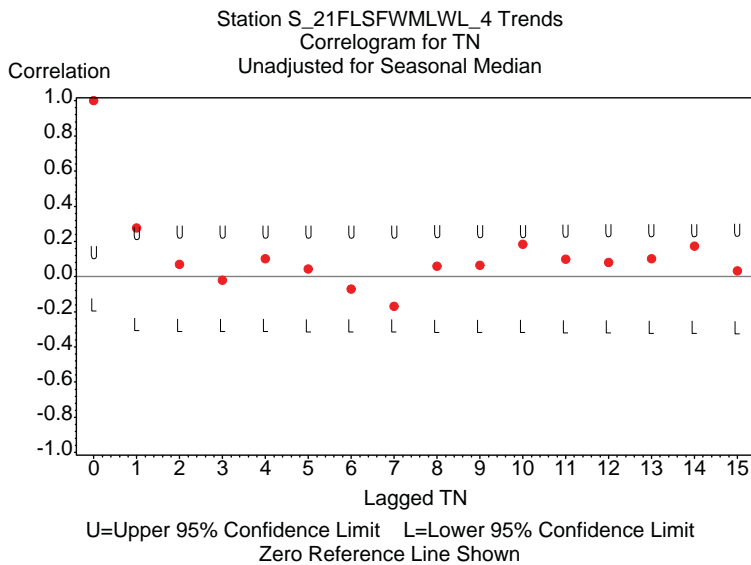
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.131	0.129	0.258	-0.258
2	-0.115	0.130	0.260	-0.260
3	-0.104	0.130	0.261	-0.261
4	0.248	0.131	0.262	-0.262
5	0.087	0.133	0.267	-0.267
6	-0.040	0.134	0.268	-0.268
7	-0.254	0.134	0.268	-0.268
8	-0.062	0.136	0.273	-0.273
9	-0.129	0.137	0.273	-0.273
10	0.062	0.137	0.275	-0.275
11	-0.112	0.137	0.275	-0.275
12	-0.157	0.138	0.276	-0.276
13	0.047	0.139	0.278	-0.278
14	0.126	0.139	0.278	-0.278
15	-0.112	0.140	0.279	-0.279





Station S_21FLSFWMLWL_4 Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.276	0.129	0.258	-0.258
2	0.069	0.132	0.265	-0.265
3	-0.021	0.133	0.265	-0.265
4	0.102	0.133	0.265	-0.265
5	0.042	0.133	0.266	-0.266
6	-0.070	0.133	0.266	-0.266
7	-0.168	0.133	0.267	-0.267
8	0.059	0.134	0.269	-0.269
9	0.064	0.135	0.269	-0.269
10	0.184	0.135	0.269	-0.269
11	0.100	0.136	0.272	-0.272
12	0.079	0.137	0.273	-0.273
13	0.102	0.137	0.274	-0.274
14	0.172	0.137	0.274	-0.274
15	0.033	0.138	0.277	-0.277



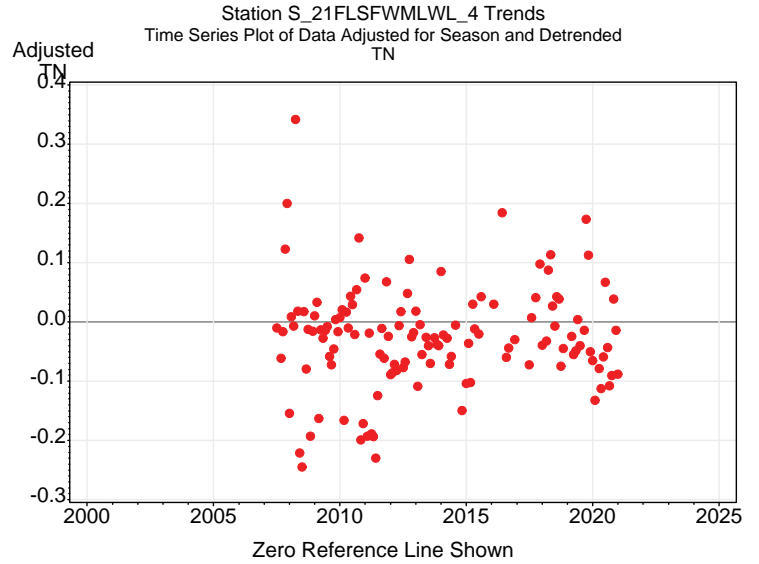
Station S_21FLSFWMLWL_4 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.115	0.096	0.229	.003

Station S_21FLSFWMLWL_4 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

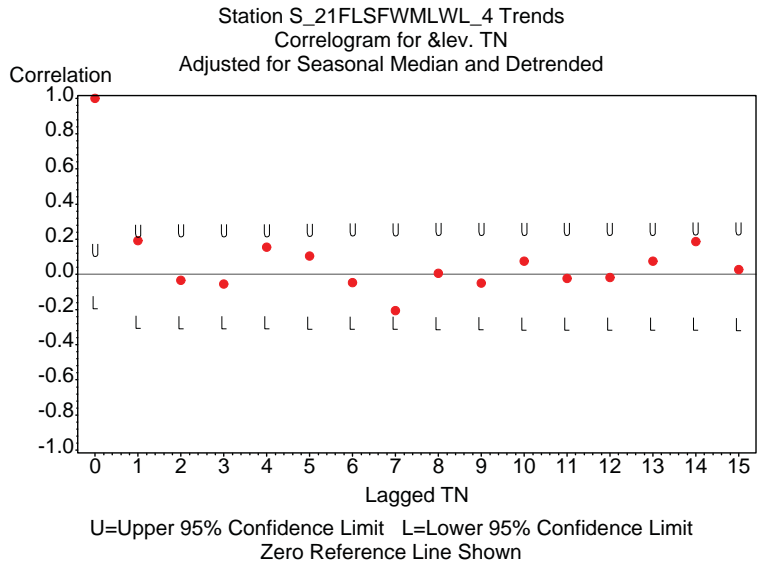
Adjusted for Seasonal Medians

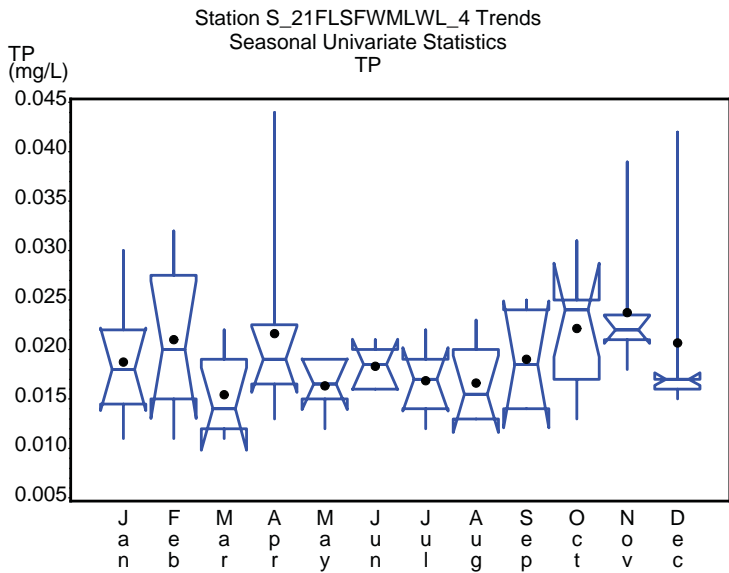
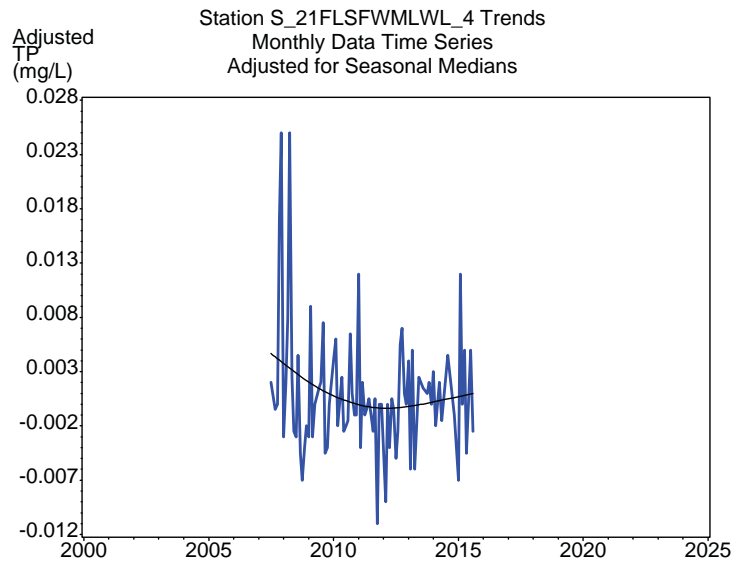
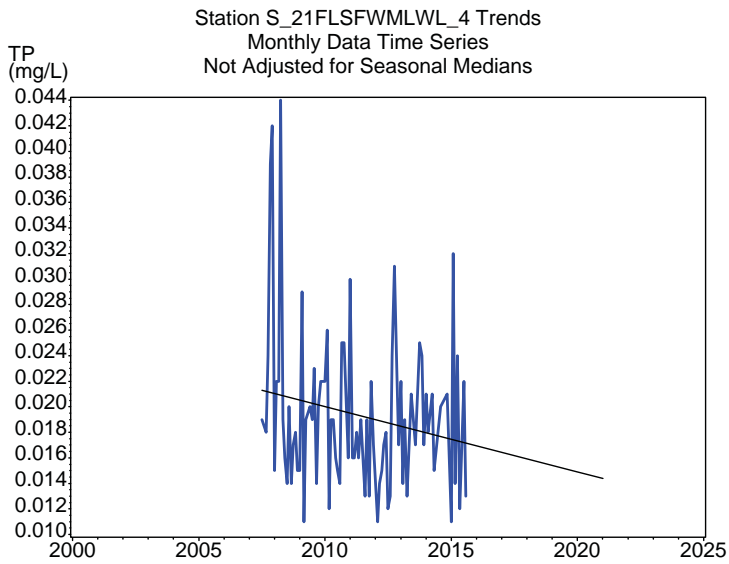
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.115	0.096	0.229	.003



Station S_21FLSFWMLWL_4 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

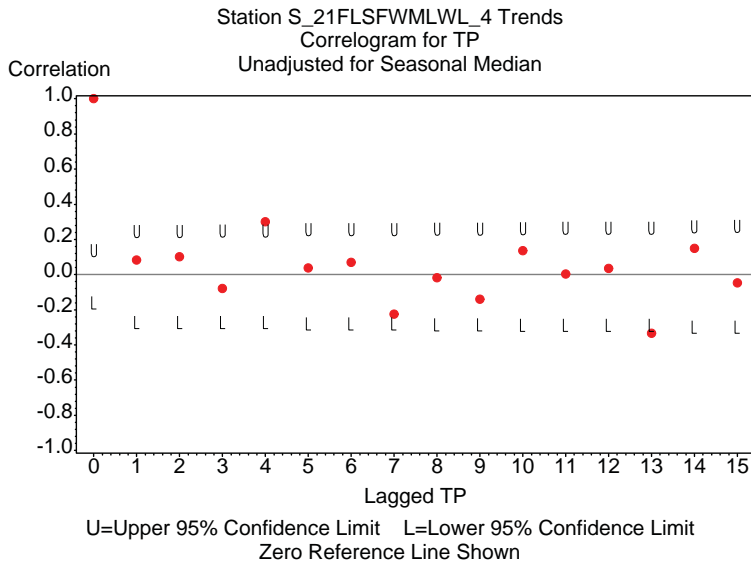
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.192	0.129	0.258	-0.258
2	-0.033	0.131	0.261	-0.261
3	-0.054	0.131	0.261	-0.261
4	0.154	0.131	0.262	-0.262
5	0.104	0.132	0.264	-0.264
6	-0.048	0.132	0.265	-0.265
7	-0.206	0.132	0.265	-0.265
8	0.006	0.134	0.268	-0.268
9	-0.050	0.134	0.268	-0.268
10	0.075	0.134	0.269	-0.269
11	-0.022	0.135	0.269	-0.269
12	-0.019	0.135	0.269	-0.269
13	0.076	0.135	0.269	-0.269
14	0.186	0.135	0.270	-0.270
15	0.028	0.136	0.272	-0.272





Station S_21FLSFWMLWL_4 Trends Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.083	0.129	0.258	-0.258
2	0.101	0.129	0.259	-0.259
3	-0.078	0.130	0.260	-0.260
4	0.300	0.130	0.260	-0.260
5	0.038	0.134	0.268	-0.268
6	0.070	0.134	0.268	-0.268
7	-0.224	0.134	0.268	-0.268
8	-0.018	0.136	0.272	-0.272
9	-0.141	0.136	0.272	-0.272
10	0.135	0.137	0.274	-0.274
11	0.004	0.138	0.276	-0.276
12	0.036	0.138	0.276	-0.276
13	-0.334	0.138	0.276	-0.276
14	0.150	0.142	0.285	-0.285
15	-0.047	0.143	0.286	-0.286



Station S_21FLSFWMLWL_4 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TP

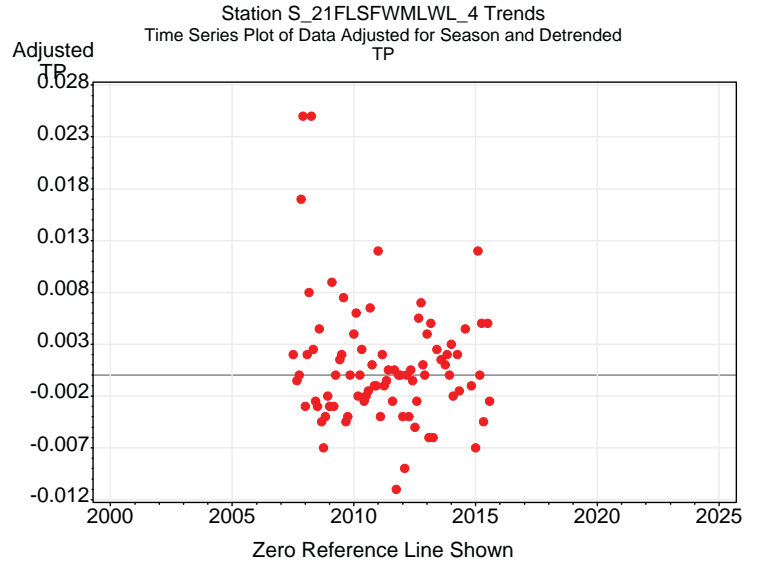
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.027	0.796	0.823	0

Station S_21FLSFWMLWL_4 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

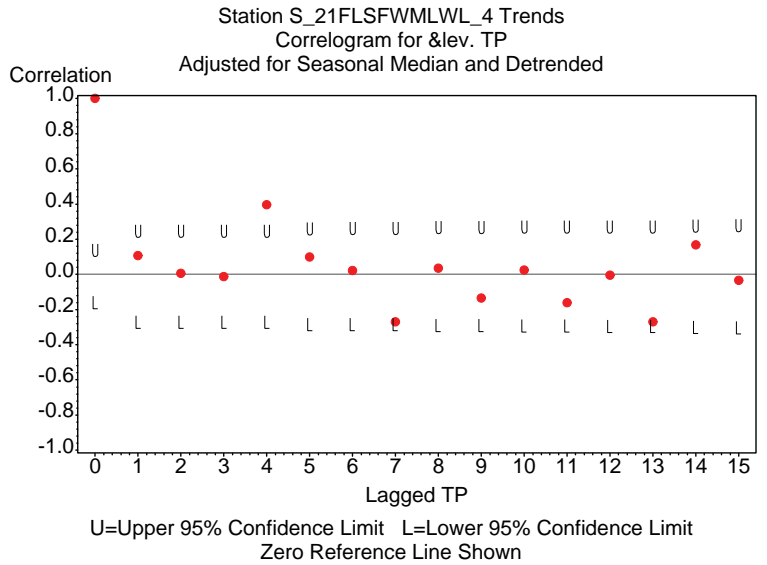
Adjusted for Seasonal Medians

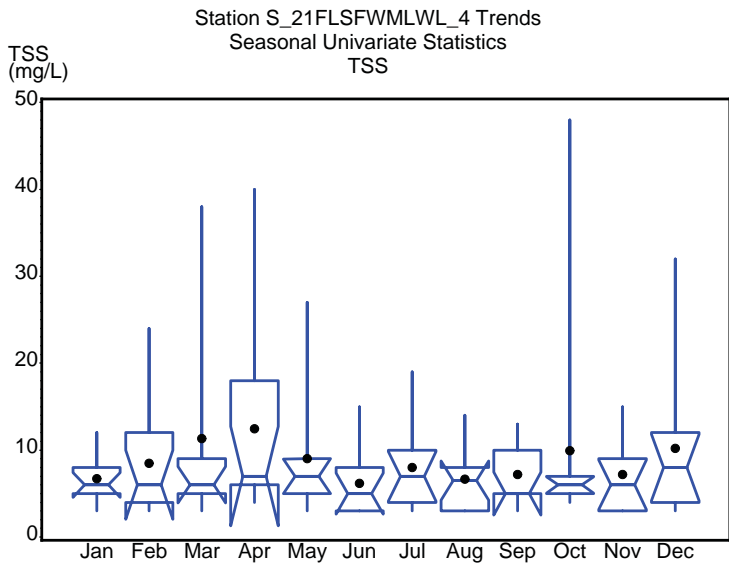
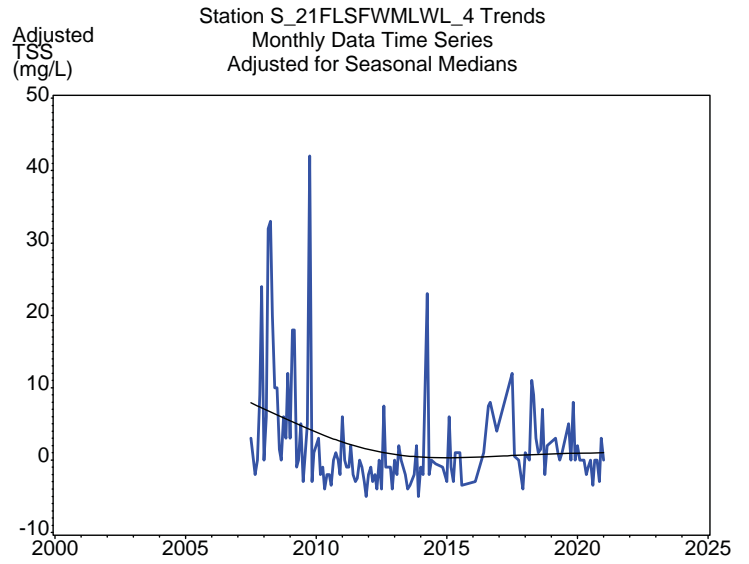
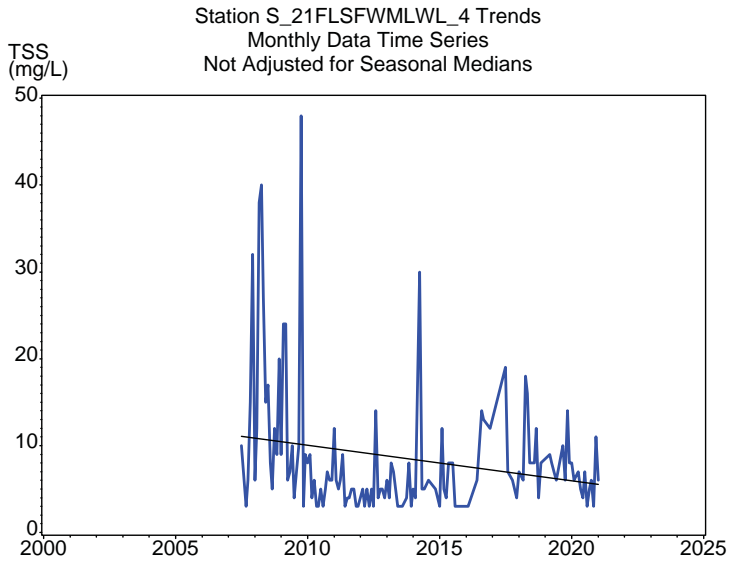
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.027	0.796	0.823	0



Station S_21FLSFWMLWL_4 Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

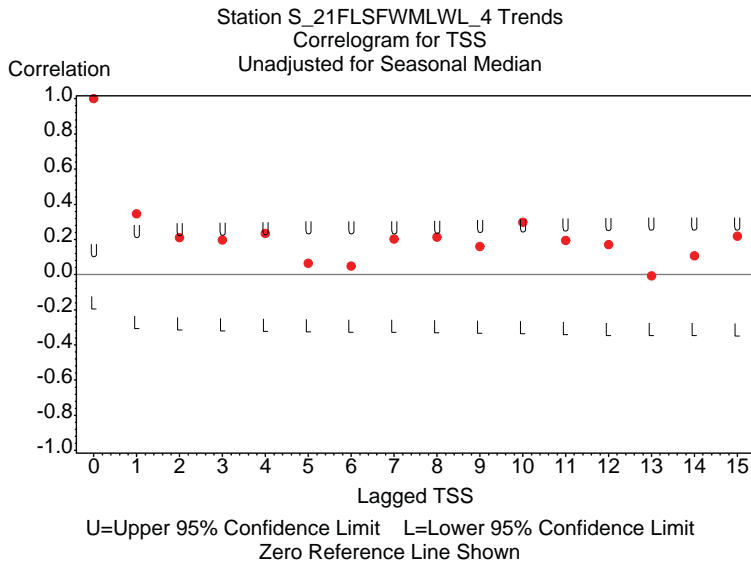
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.107	0.129	0.258	-0.258
2	0.005	0.130	0.259	-0.259
3	-0.012	0.130	0.259	-0.259
4	0.396	0.130	0.259	-0.259
5	0.099	0.136	0.272	-0.272
6	0.021	0.137	0.273	-0.273
7	-0.270	0.137	0.273	-0.273
8	0.035	0.139	0.279	-0.279
9	-0.134	0.140	0.279	-0.279
10	0.024	0.140	0.281	-0.281
11	-0.161	0.140	0.281	-0.281
12	-0.005	0.141	0.283	-0.283
13	-0.271	0.141	0.283	-0.283
14	0.169	0.144	0.288	-0.288
15	-0.033	0.145	0.291	-0.291





Station S_21FLSFWMLWL_4 Trends
Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.345	0.129	0.258	-0.258
2	0.210	0.134	0.268	-0.268
3	0.197	0.136	0.272	-0.272
4	0.233	0.138	0.275	-0.275
5	0.065	0.140	0.279	-0.279
6	0.048	0.140	0.280	-0.280
7	0.203	0.140	0.280	-0.280
8	0.213	0.142	0.283	-0.283
9	0.161	0.143	0.287	-0.287
10	0.297	0.144	0.289	-0.289
11	0.195	0.148	0.295	-0.295
12	0.171	0.149	0.298	-0.298
13	-0.006	0.150	0.300	-0.300
14	0.107	0.150	0.300	-0.300
15	0.219	0.151	0.301	-0.301



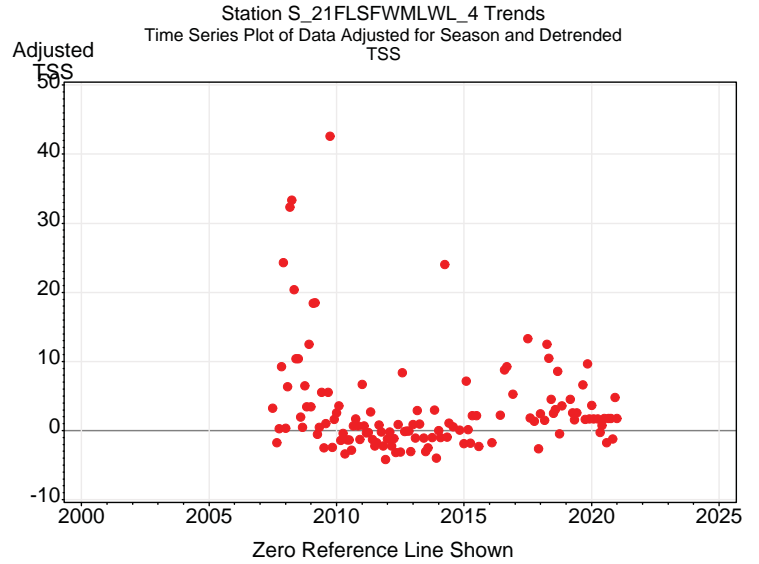
Station S_21FLSFWMLWL_4 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TSS

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.109	0.111	0.4	-0.111

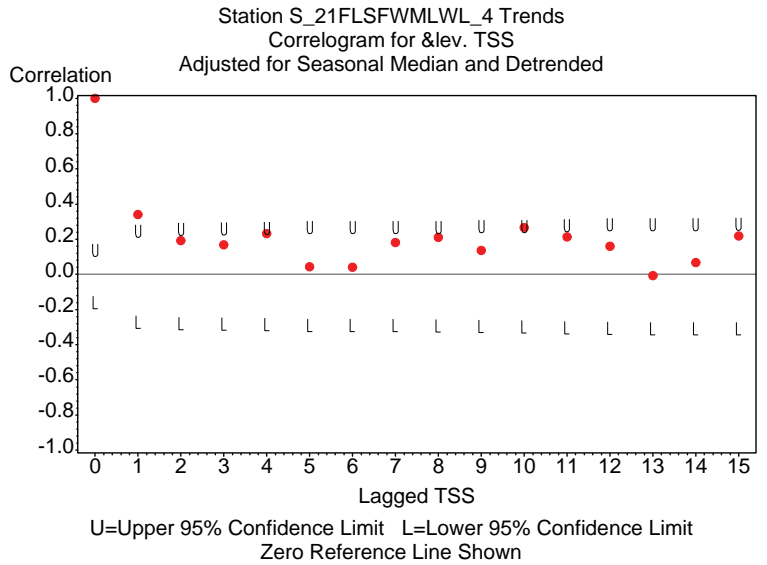
Station S_21FLSFWMLWL_4 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

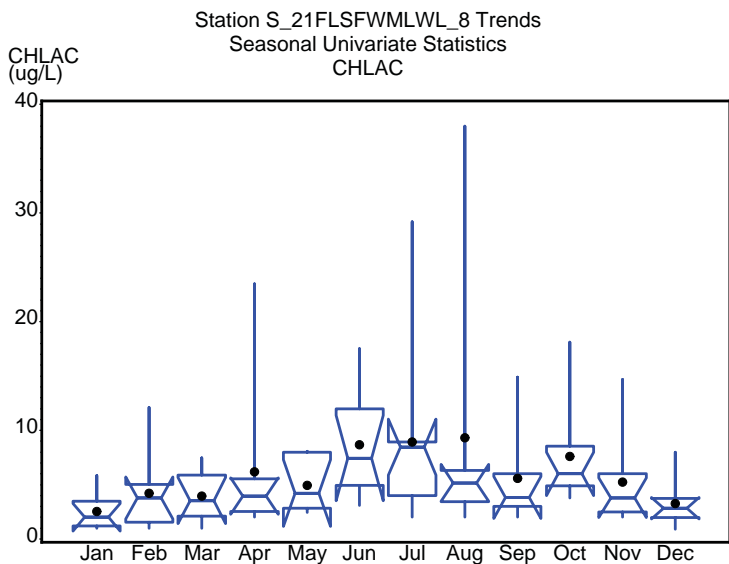
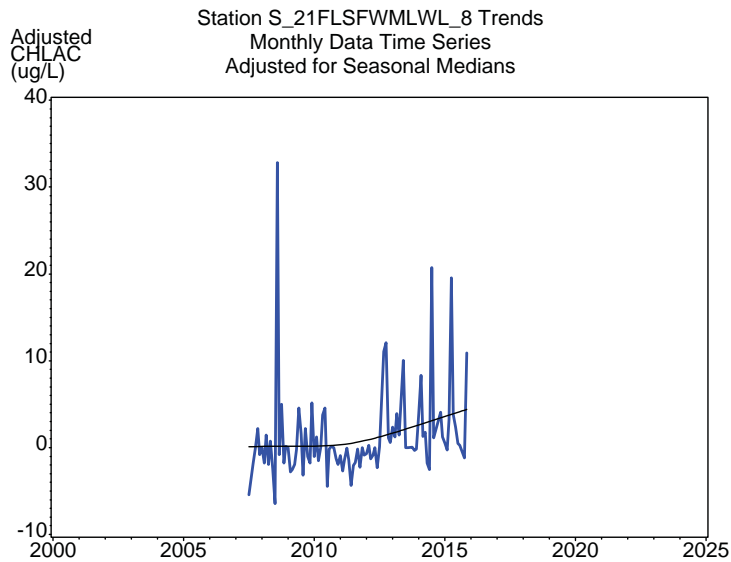
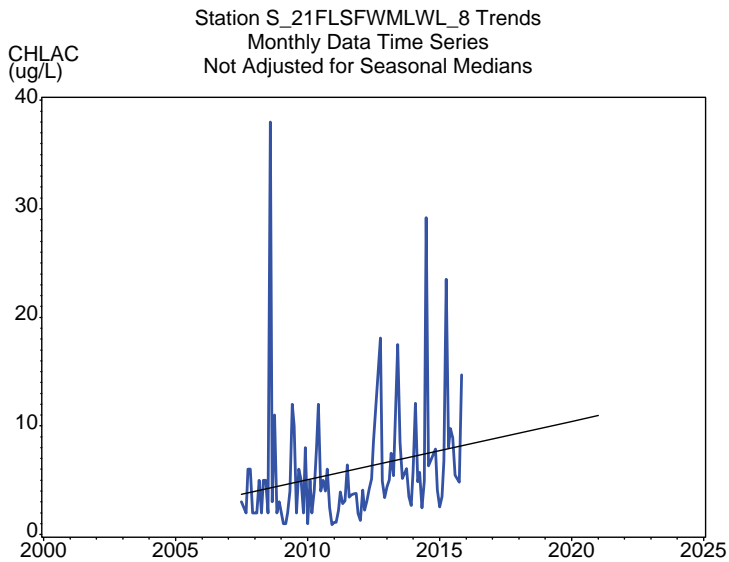
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.109	0.111	0.4	-0.111



Station S_21FLSFWMLWL_4 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

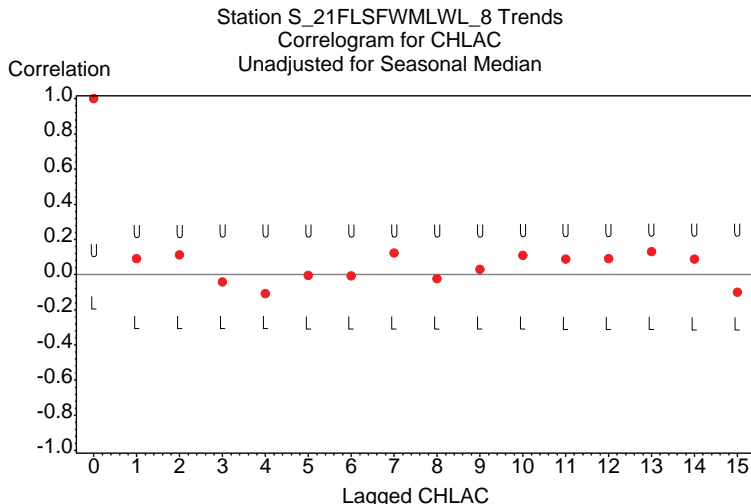
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.340	0.129	0.258	-0.258
2	0.193	0.134	0.268	-0.268
3	0.168	0.136	0.271	-0.271
4	0.231	0.137	0.273	-0.273
5	0.042	0.139	0.278	-0.278
6	0.041	0.139	0.278	-0.278
7	0.181	0.139	0.278	-0.278
8	0.209	0.140	0.280	-0.280
9	0.135	0.142	0.284	-0.284
10	0.266	0.143	0.285	-0.285
11	0.213	0.145	0.291	-0.291
12	0.160	0.147	0.294	-0.294
13	-0.008	0.148	0.296	-0.296
14	0.066	0.148	0.296	-0.296
15	0.217	0.148	0.297	-0.297





Station S_21FLSFWMLWL_8 Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.091	0.129	0.258	-0.258
2	0.111	0.129	0.259	-0.259
3	-0.043	0.130	0.260	-0.260
4	-0.108	0.130	0.260	-0.260
5	-0.004	0.131	0.261	-0.261
6	-0.008	0.131	0.261	-0.261
7	0.122	0.131	0.261	-0.261
8	-0.024	0.131	0.262	-0.262
9	0.031	0.131	0.262	-0.262
10	0.110	0.131	0.263	-0.263
11	0.089	0.132	0.264	-0.264
12	0.092	0.132	0.264	-0.264
13	0.130	0.132	0.265	-0.265
14	0.087	0.133	0.266	-0.266
15	-0.100	0.133	0.267	-0.267



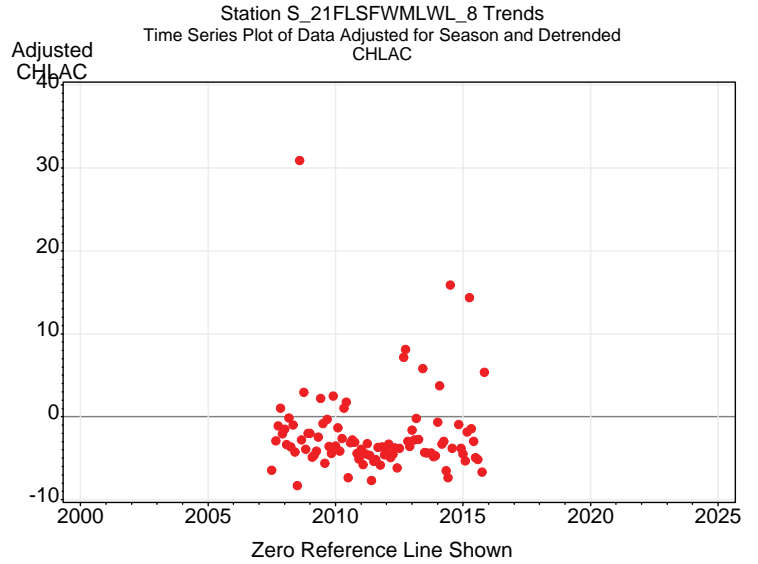
Station S_21FLSFWMLWL_8 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.351	0	0.018	0.5

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

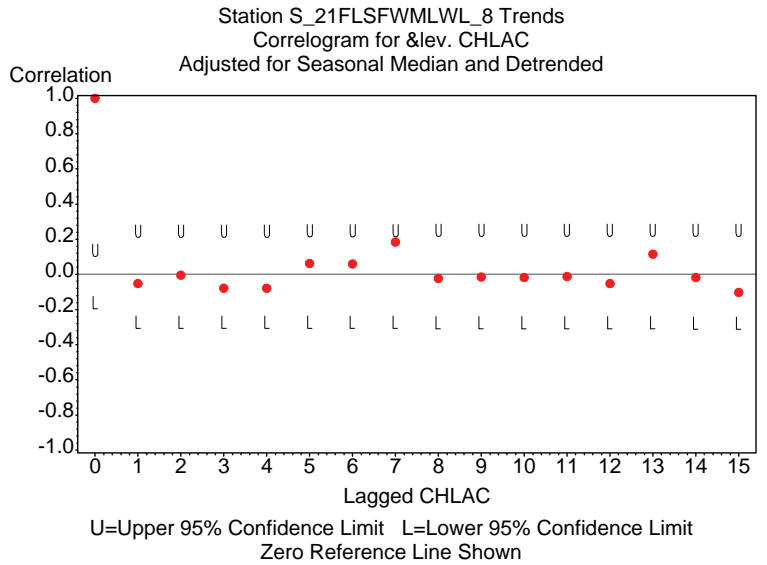
Station S_21FLSFWMLWL_8 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

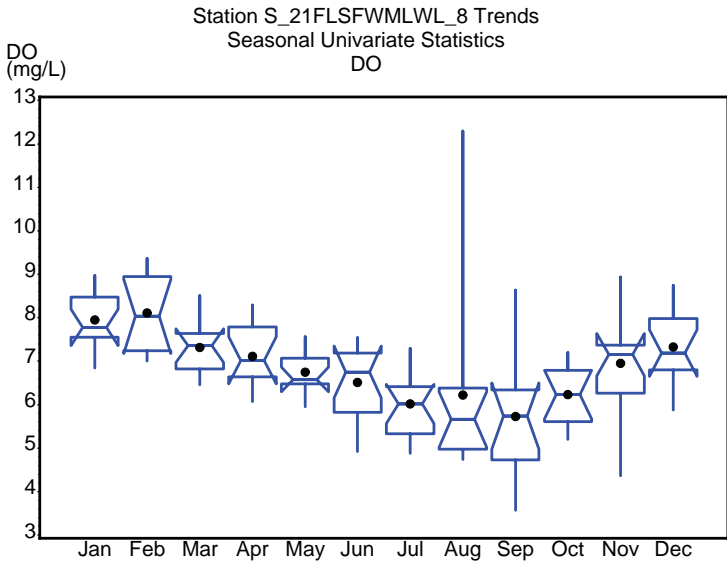
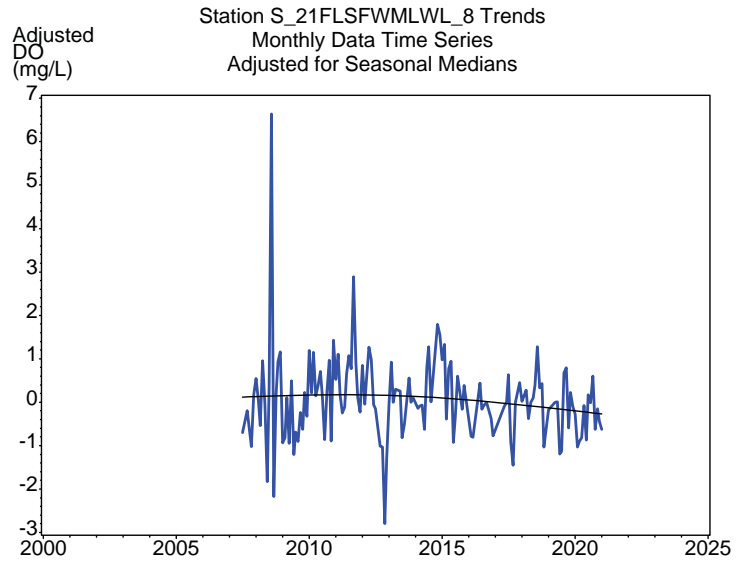
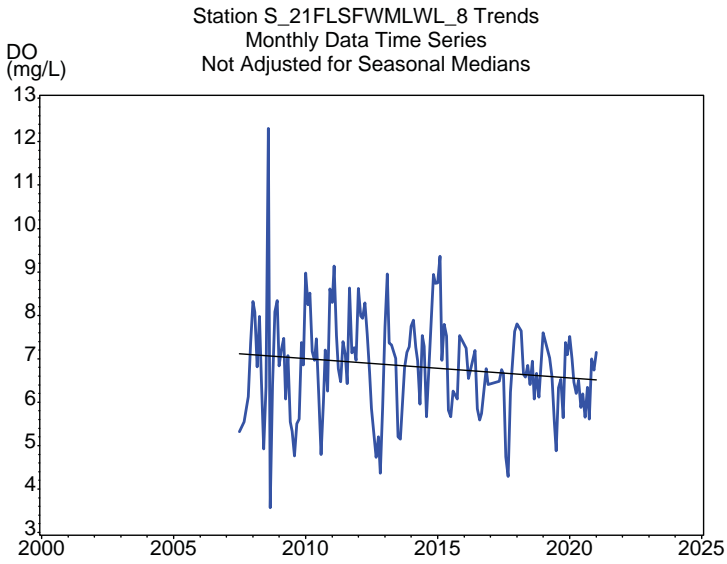
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.351	0	0.018	0.5



Station S_21FLSFWMLWL_8 Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

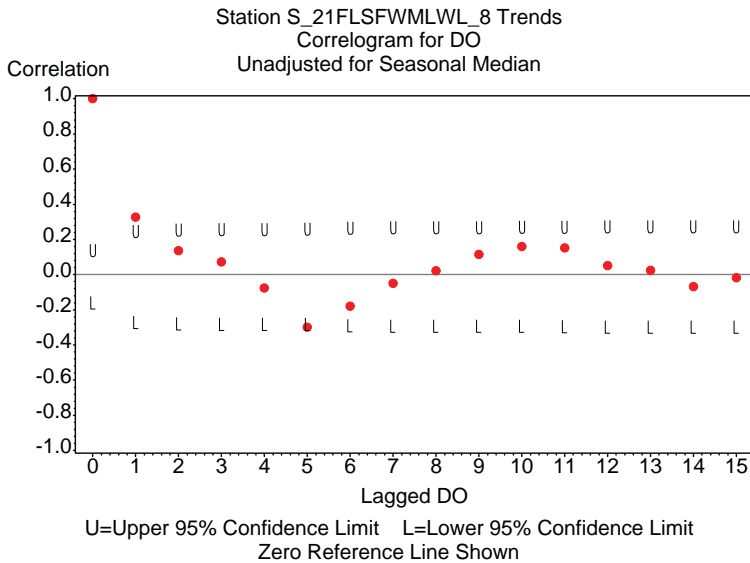
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	-0.052	0.129	0.258	-0.258
2	-0.004	0.129	0.258	-0.258
3	-0.080	0.129	0.258	-0.258
4	-0.079	0.129	0.259	-0.259
5	0.062	0.130	0.260	-0.260
6	0.060	0.130	0.260	-0.260
7	0.183	0.130	0.260	-0.260
8	-0.022	0.132	0.263	-0.263
9	-0.015	0.132	0.263	-0.263
10	-0.018	0.132	0.263	-0.263
11	-0.013	0.132	0.263	-0.263
12	-0.053	0.132	0.263	-0.263
13	0.114	0.132	0.263	-0.263
14	-0.018	0.132	0.264	-0.264
15	-0.104	0.132	0.264	-0.264





Station S_21FLSFWMLWL_8 Trends
Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.328	0.129	0.258	-0.258
2	0.136	0.134	0.267	-0.267
3	0.073	0.134	0.269	-0.269
4	-0.077	0.135	0.269	-0.269
5	-0.298	0.135	0.270	-0.270
6	-0.179	0.138	0.277	-0.277
7	-0.049	0.140	0.280	-0.280
8	0.021	0.140	0.280	-0.280
9	0.116	0.140	0.280	-0.280
10	0.161	0.140	0.281	-0.281
11	0.153	0.141	0.283	-0.283
12	0.052	0.142	0.285	-0.285
13	0.025	0.142	0.285	-0.285
14	-0.069	0.142	0.285	-0.285
15	-0.018	0.143	0.285	-0.285

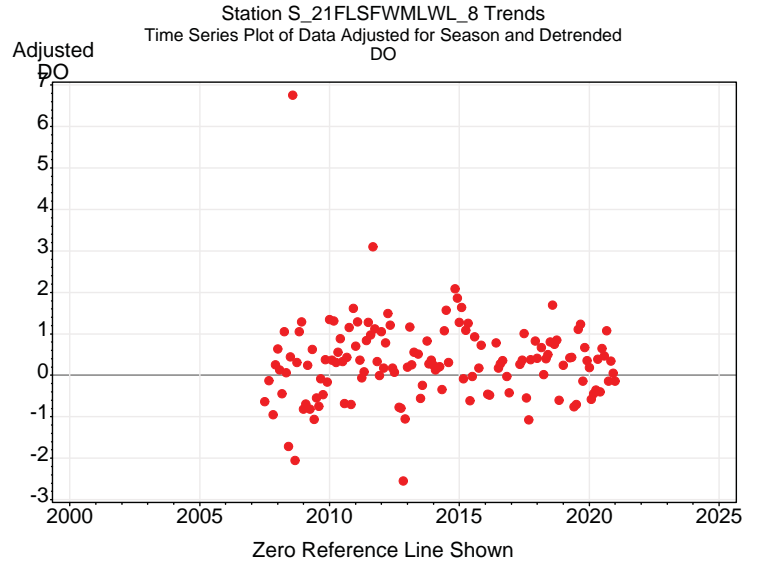


Station S_21FLSFWMLWL_8 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DO
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.088	0.183	0.336	-0.03

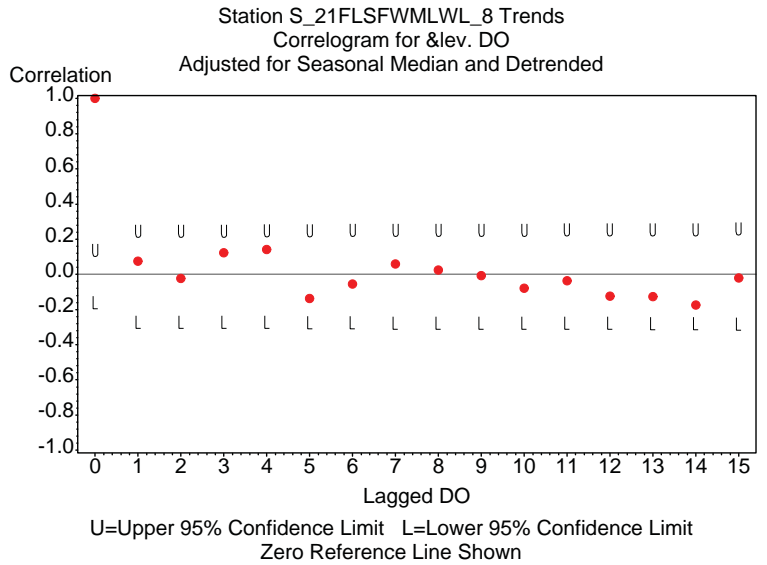
Station S_21FLSFWMLWL_8 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

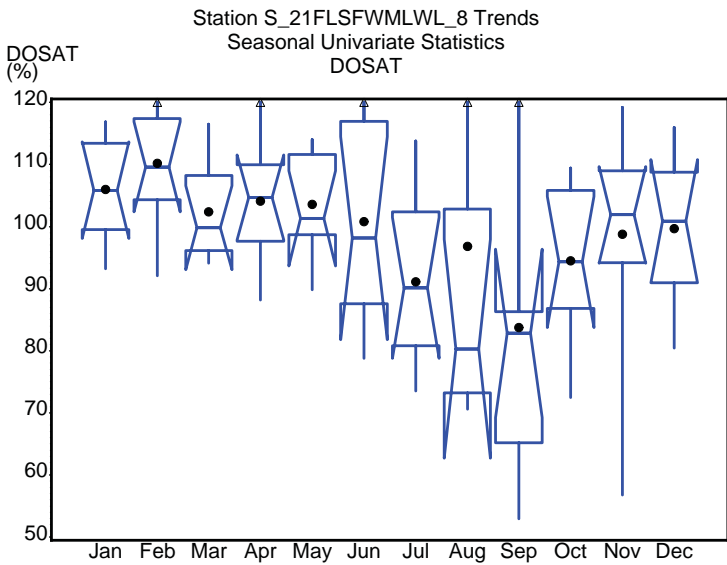
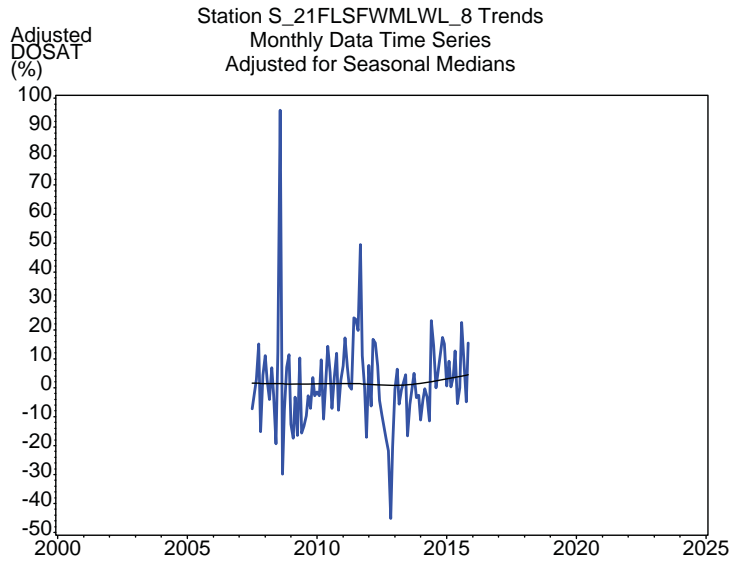
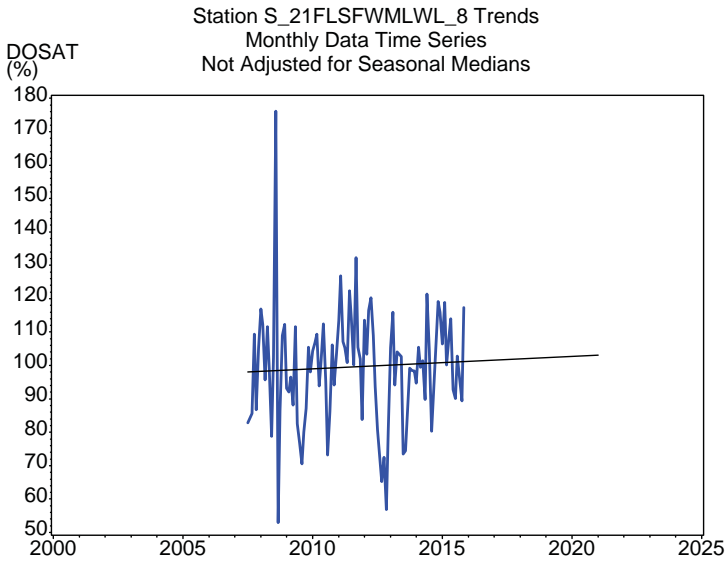
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.088	0.183	0.336	-0.03



Station S_21FLSFWMLWL_8 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

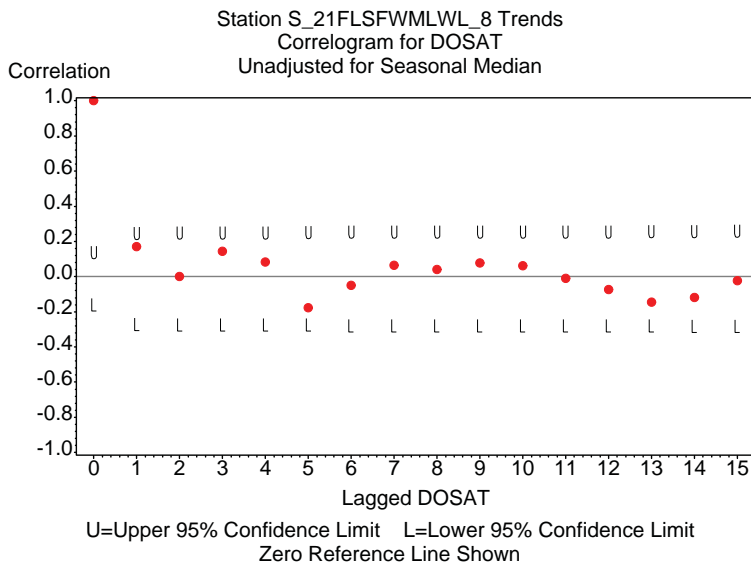
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.076	0.129	0.258	-0.258
2	-0.024	0.129	0.259	-0.259
3	0.124	0.129	0.259	-0.259
4	0.141	0.130	0.260	-0.260
5	-0.138	0.131	0.262	-0.262
6	-0.056	0.132	0.263	-0.263
7	0.059	0.132	0.264	-0.264
8	0.024	0.132	0.264	-0.264
9	-0.007	0.132	0.264	-0.264
10	-0.079	0.132	0.264	-0.264
11	-0.036	0.132	0.265	-0.265
12	-0.125	0.132	0.265	-0.265
13	-0.127	0.133	0.266	-0.266
14	-0.174	0.134	0.267	-0.267
15	-0.020	0.135	0.270	-0.270





Station S_21FLSFWMLWL_8 Trends
Autocorrelation Statistics for DOSAT

Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.171	0.129	0.258	-0.258
2	0.002	0.130	0.261	-0.261
3	0.144	0.130	0.261	-0.261
4	0.084	0.131	0.262	-0.262
5	-0.176	0.132	0.263	-0.263
6	-0.049	0.133	0.266	-0.266
7	0.064	0.133	0.266	-0.266
8	0.041	0.133	0.266	-0.266
9	0.077	0.133	0.266	-0.266
10	0.063	0.133	0.267	-0.267
11	-0.010	0.134	0.267	-0.267
12	-0.074	0.134	0.267	-0.267
13	-0.145	0.134	0.268	-0.268
14	-0.119	0.135	0.269	-0.269
15	-0.022	0.135	0.271	-0.271

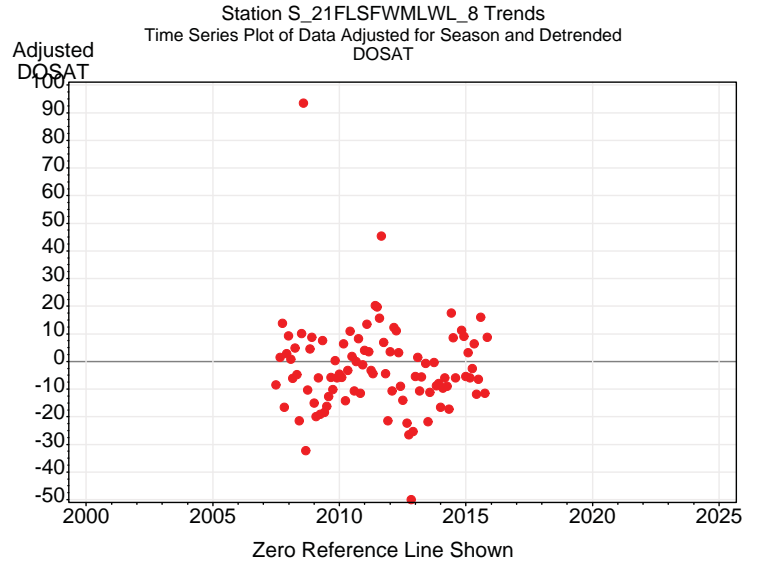


Station S_21FLSFWMLWL_8 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DOSAT
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.089	0.309	0.521	0.6

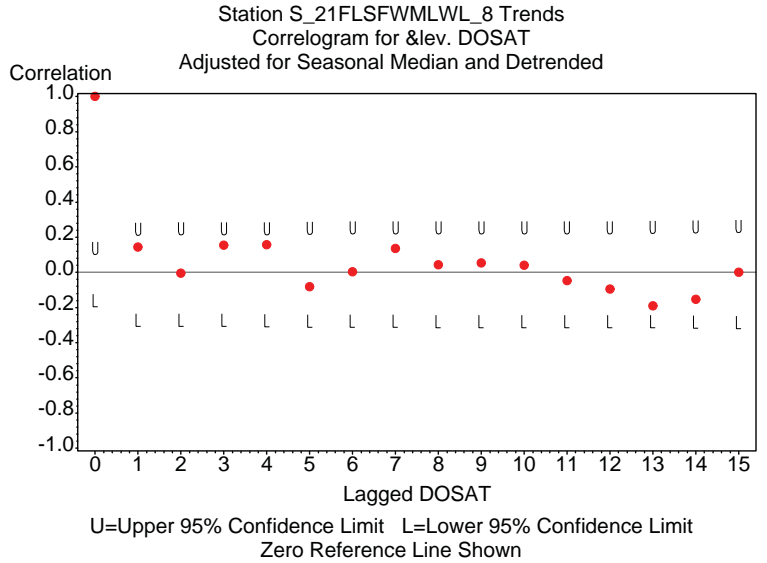
Station S_21FLSFWMLWL_8 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DOSAT
 Adjusted for Seasonal Medians

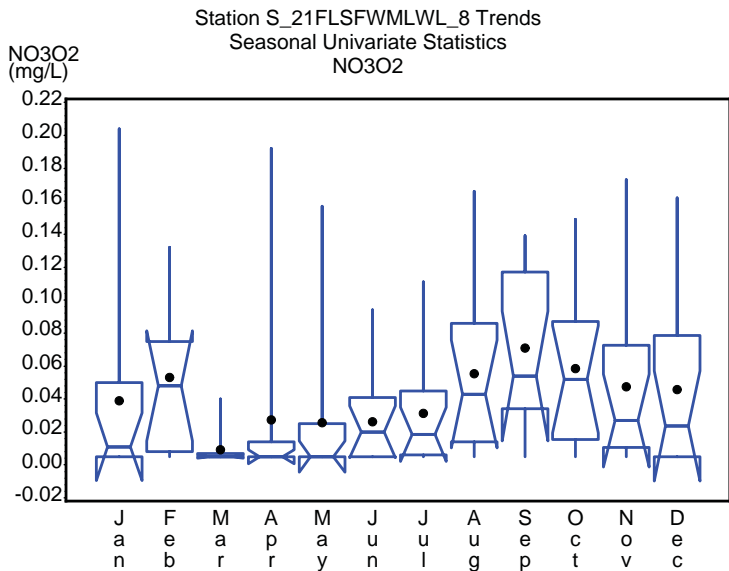
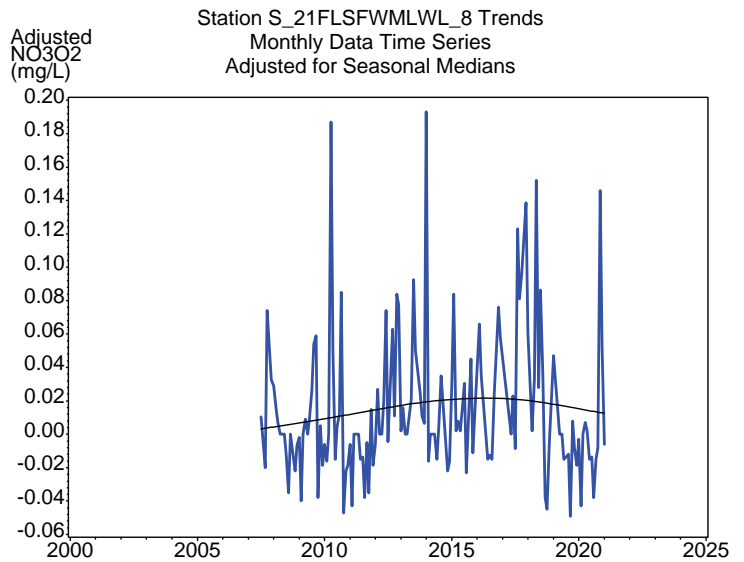
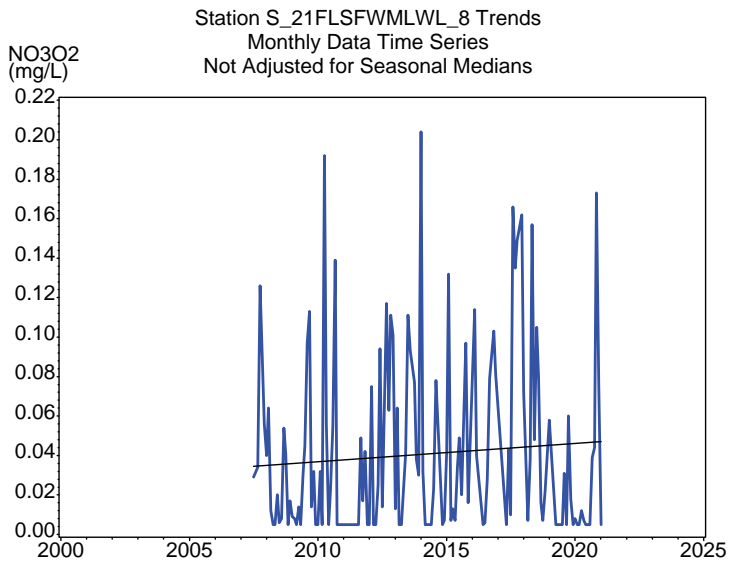
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.089	0.309	0.521	0.6



Station S_21FLSFWMLWL_8 Trends
 Autocorrelation Statistics for DOSAT
 Adjusted for Seasonal Median and Detrended

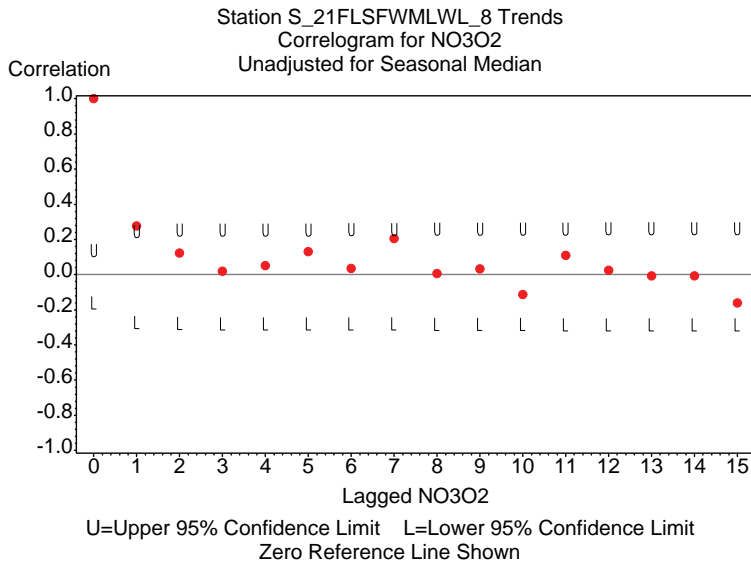
Lagged DOSAT	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.144	0.129	0.258	-0.258
2	-0.005	0.130	0.260	-0.260
3	0.154	0.130	0.260	-0.260
4	0.156	0.131	0.262	-0.262
5	-0.081	0.132	0.264	-0.264
6	0.004	0.132	0.265	-0.265
7	0.135	0.132	0.265	-0.265
8	0.043	0.133	0.266	-0.266
9	0.055	0.133	0.266	-0.266
10	0.040	0.133	0.267	-0.267
11	-0.048	0.133	0.267	-0.267
12	-0.096	0.133	0.267	-0.267
13	-0.190	0.134	0.268	-0.268
14	-0.154	0.135	0.271	-0.271
15	0.000	0.136	0.273	-0.273





Station S_21FLSFWMLWL_8 Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.277	0.129	0.258	-0.258
2	0.124	0.132	0.265	-0.265
3	0.018	0.133	0.266	-0.266
4	0.051	0.133	0.266	-0.266
5	0.130	0.133	0.266	-0.266
6	0.036	0.134	0.268	-0.268
7	0.206	0.134	0.268	-0.268
8	0.007	0.136	0.271	-0.271
9	0.033	0.136	0.271	-0.271
10	-0.114	0.136	0.271	-0.271
11	0.110	0.136	0.272	-0.272
12	0.025	0.137	0.273	-0.273
13	-0.008	0.137	0.273	-0.273
14	-0.007	0.137	0.273	-0.273
15	-0.162	0.137	0.273	-0.273

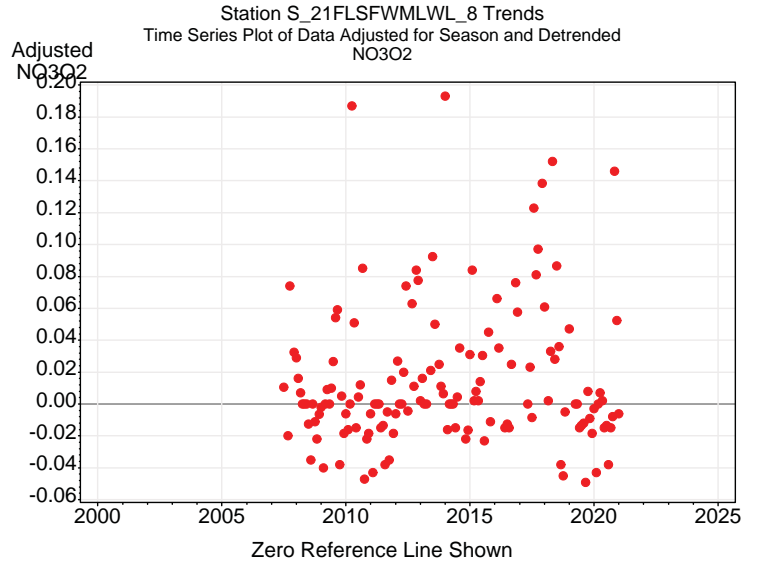


Station S_21FLSFWMLWL_8 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.045	0.49	0.703	0

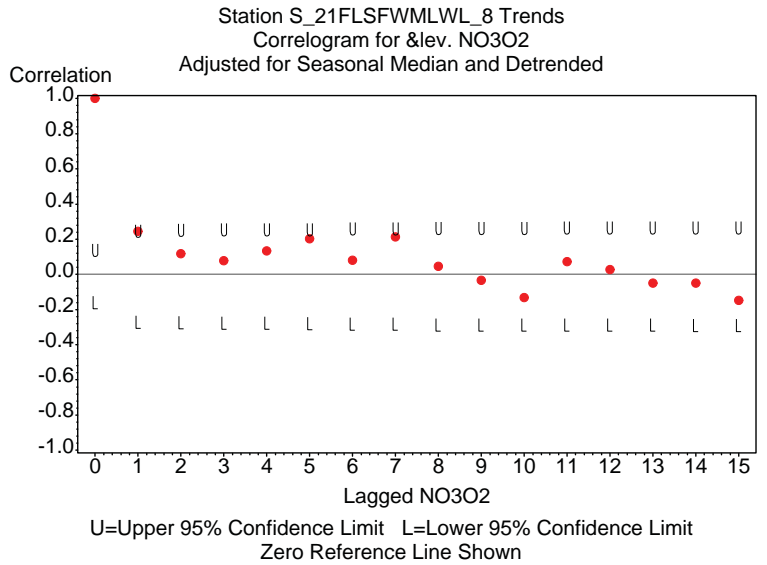
Station S_21FLSFWMLWL_8 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

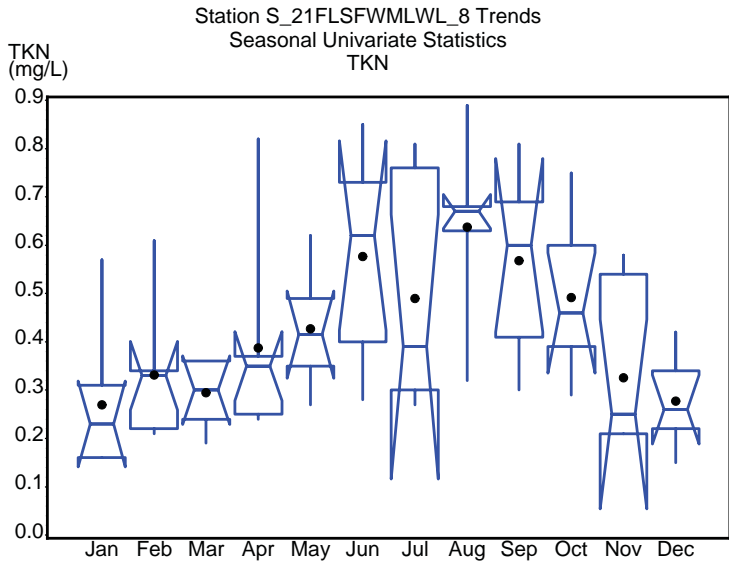
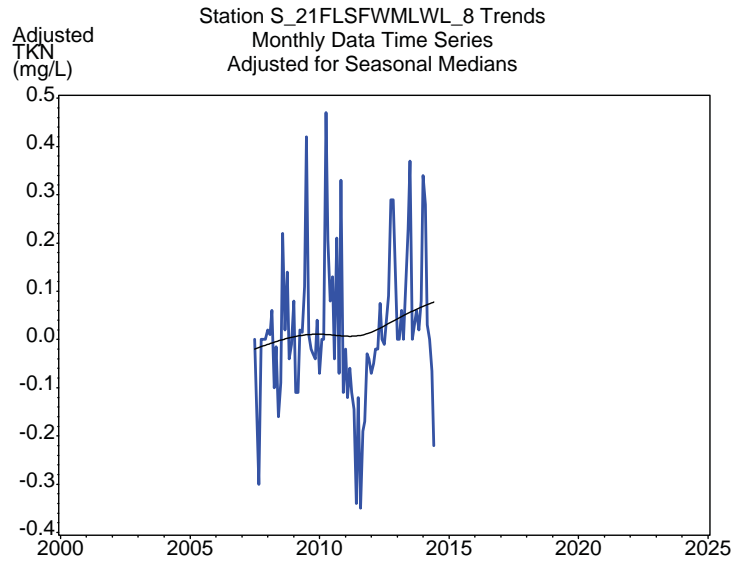
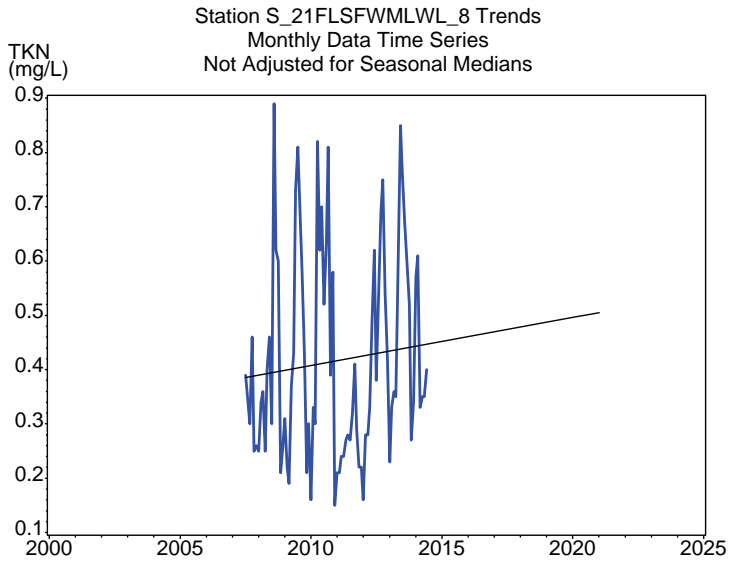
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.045	0.49	0.703	0



Station S_21FLSFWMLWL_8 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

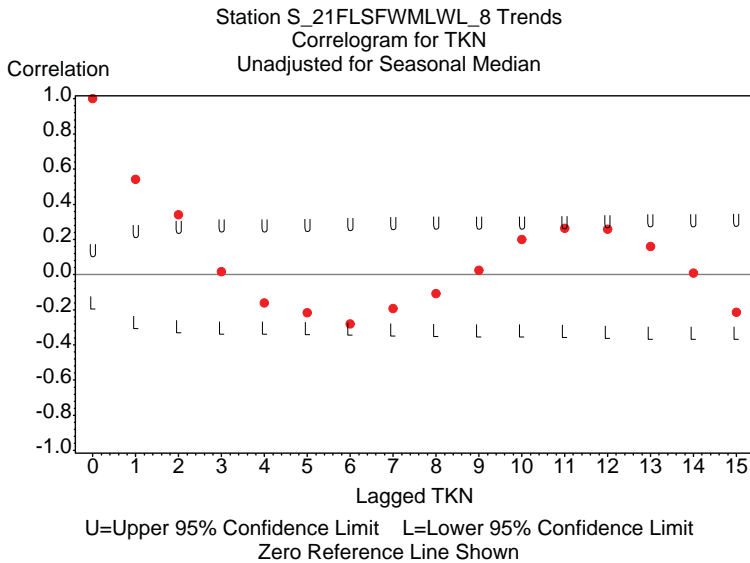
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.246	0.129	0.258	-0.258
2	0.117	0.132	0.263	-0.263
3	0.078	0.132	0.265	-0.265
4	0.133	0.133	0.265	-0.265
5	0.202	0.133	0.267	-0.267
6	0.081	0.135	0.270	-0.270
7	0.213	0.135	0.270	-0.270
8	0.047	0.137	0.274	-0.274
9	-0.034	0.137	0.274	-0.274
10	-0.133	0.137	0.274	-0.274
11	0.072	0.138	0.276	-0.276
12	0.026	0.138	0.276	-0.276
13	-0.049	0.138	0.276	-0.276
14	-0.050	0.138	0.277	-0.277
15	-0.147	0.138	0.277	-0.277





Station S_21FLSFWMLWL_8 Trends
Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.542	0.129	0.258	-0.258
2	0.340	0.141	0.282	-0.282
3	0.016	0.146	0.291	-0.291
4	-0.161	0.146	0.291	-0.291
5	-0.217	0.147	0.293	-0.293
6	-0.280	0.148	0.297	-0.297
7	-0.193	0.151	0.303	-0.303
8	-0.107	0.153	0.305	-0.305
9	0.025	0.153	0.306	-0.306
10	0.201	0.153	0.306	-0.306
11	0.263	0.155	0.309	-0.309
12	0.257	0.157	0.314	-0.314
13	0.160	0.159	0.319	-0.319
14	0.010	0.160	0.320	-0.320
15	-0.214	0.160	0.321	-0.321



Station S_21FLSFWMLWL_8 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TKN

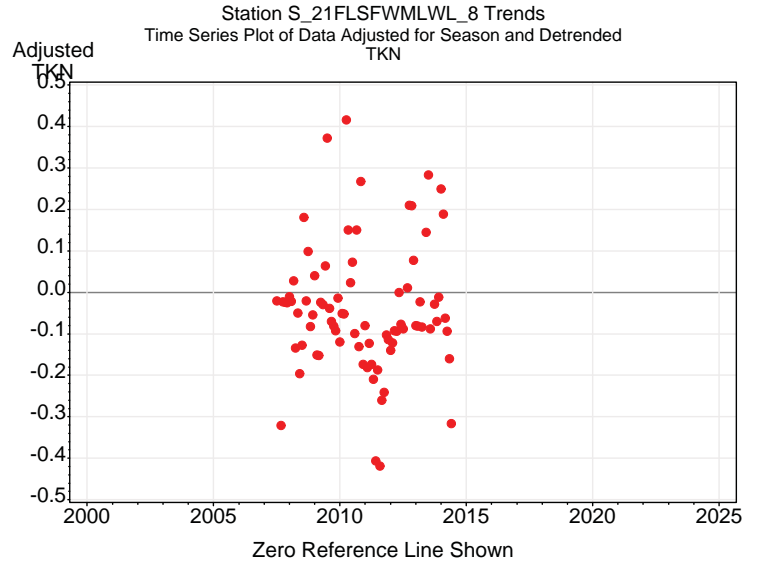
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.087	0.38	0.629	0.01

Station S_21FLSFWMLWL_8 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN

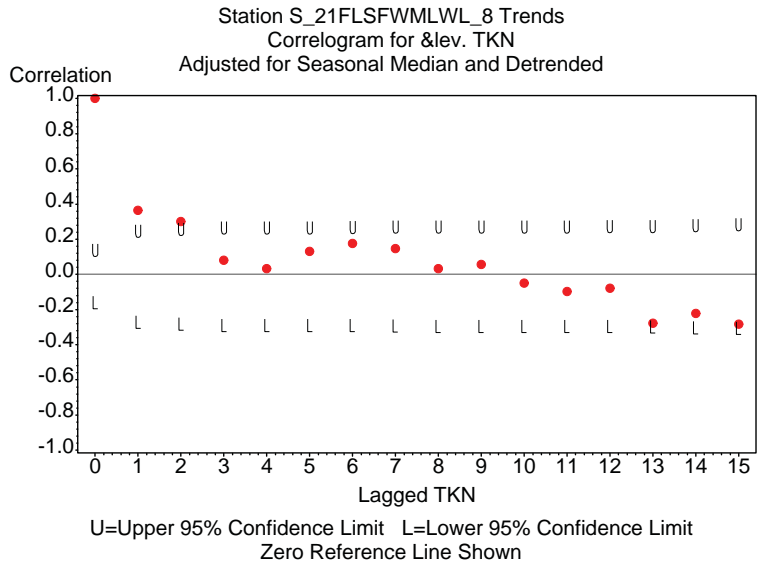
Adjusted for Seasonal Medians

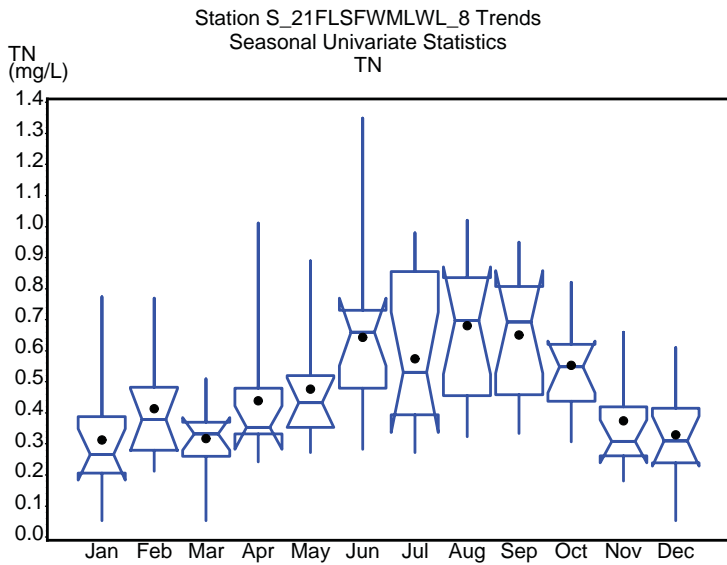
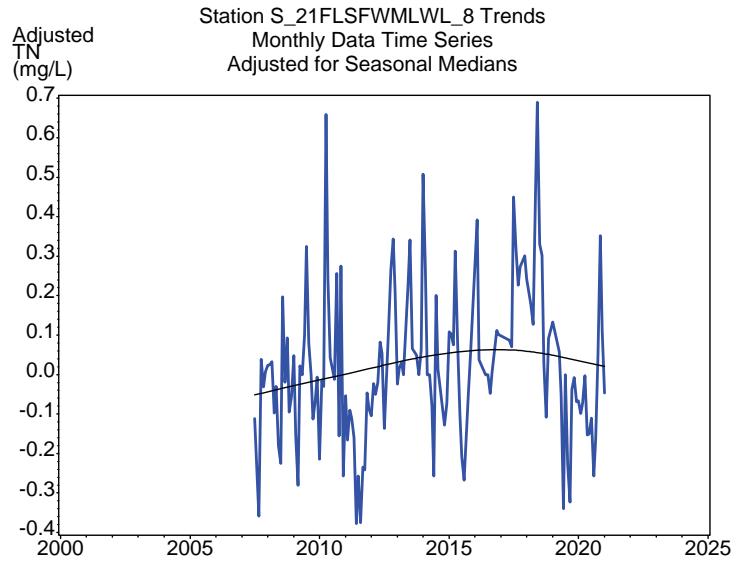
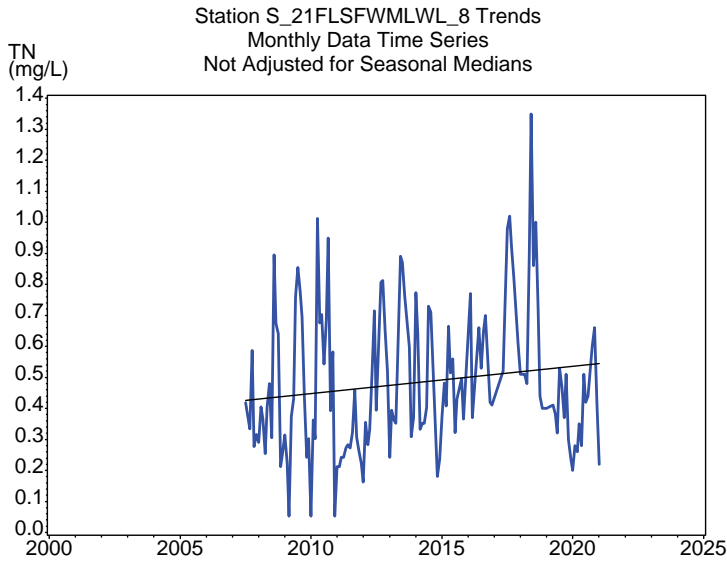
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.087	0.38	0.629	0.01



Station S_21FLSFWMLWL_8 Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

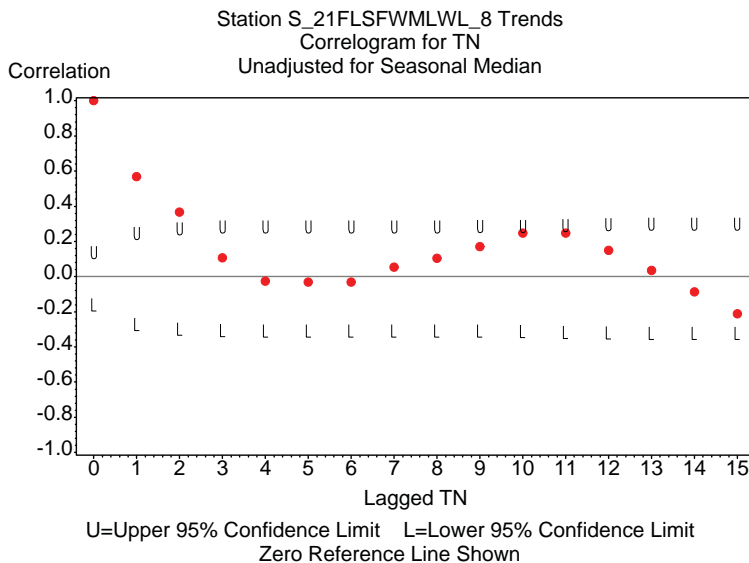
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.363	0.129	0.258	-0.258
2	0.300	0.135	0.269	-0.269
3	0.079	0.138	0.277	-0.277
4	0.032	0.139	0.277	-0.277
5	0.130	0.139	0.277	-0.277
6	0.175	0.139	0.279	-0.279
7	0.147	0.141	0.281	-0.281
8	0.033	0.141	0.283	-0.283
9	0.056	0.141	0.283	-0.283
10	-0.051	0.142	0.283	-0.283
11	-0.097	0.142	0.283	-0.283
12	-0.078	0.142	0.284	-0.284
13	-0.277	0.142	0.285	-0.285
14	-0.221	0.145	0.290	-0.290
15	-0.283	0.147	0.294	-0.294





Station S_21FLSFWMLWL_8 Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.569	0.129	0.258	-0.258
2	0.367	0.142	0.285	-0.285
3	0.106	0.148	0.295	-0.295
4	-0.026	0.148	0.296	-0.296
5	-0.031	0.148	0.296	-0.296
6	-0.030	0.148	0.296	-0.296
7	0.055	0.148	0.296	-0.296
8	0.104	0.148	0.296	-0.296
9	0.170	0.149	0.297	-0.297
10	0.248	0.150	0.299	-0.299
11	0.247	0.152	0.304	-0.304
12	0.148	0.154	0.308	-0.308
13	0.034	0.155	0.310	-0.310
14	-0.086	0.155	0.310	-0.310
15	-0.211	0.155	0.310	-0.310



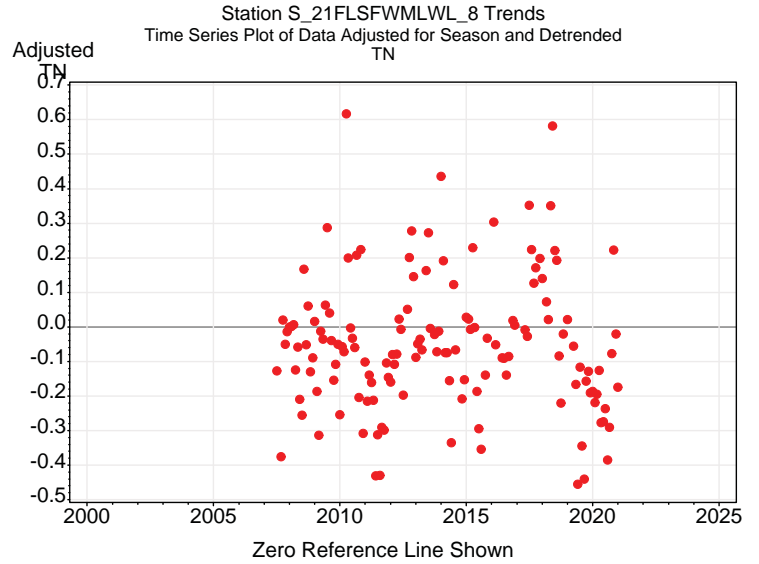
Station S_21FLSFWMLWL_8 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.151	0.02	0.265	.008

Station S_21FLSFWMLWL_8 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

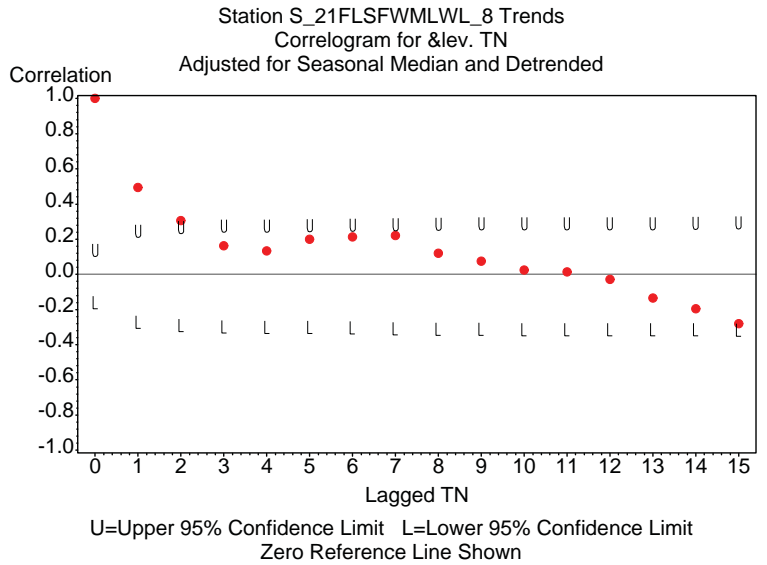
Adjusted for Seasonal Medians

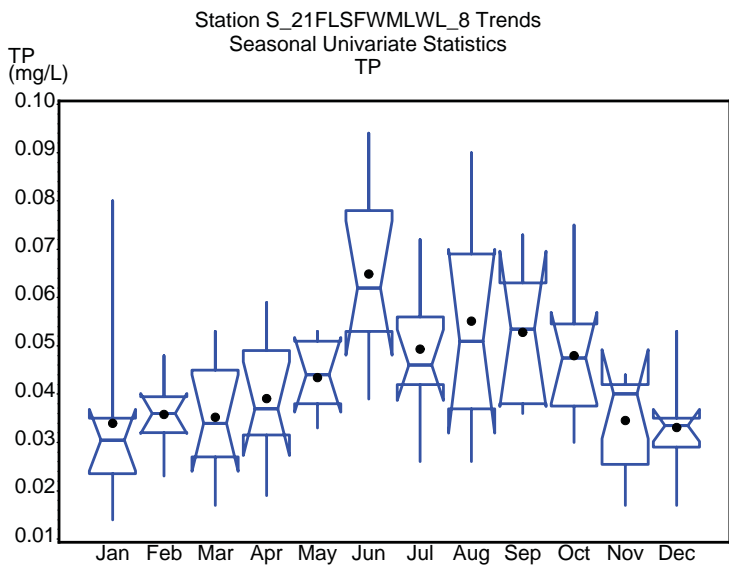
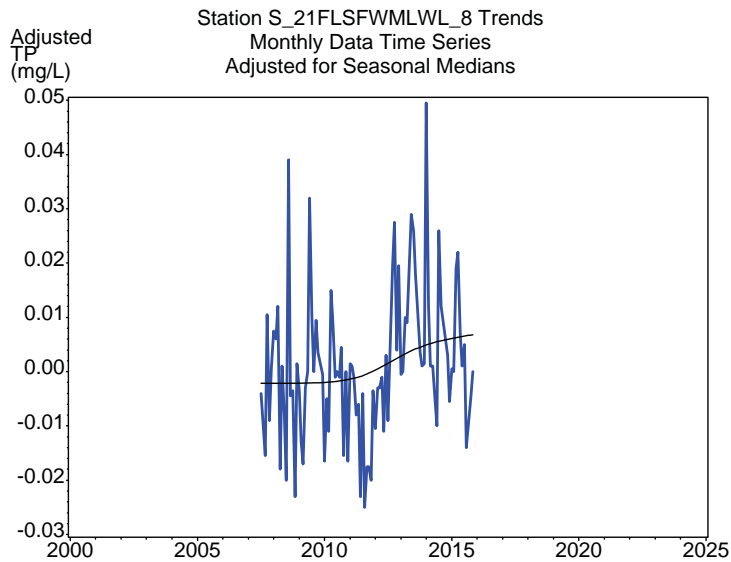
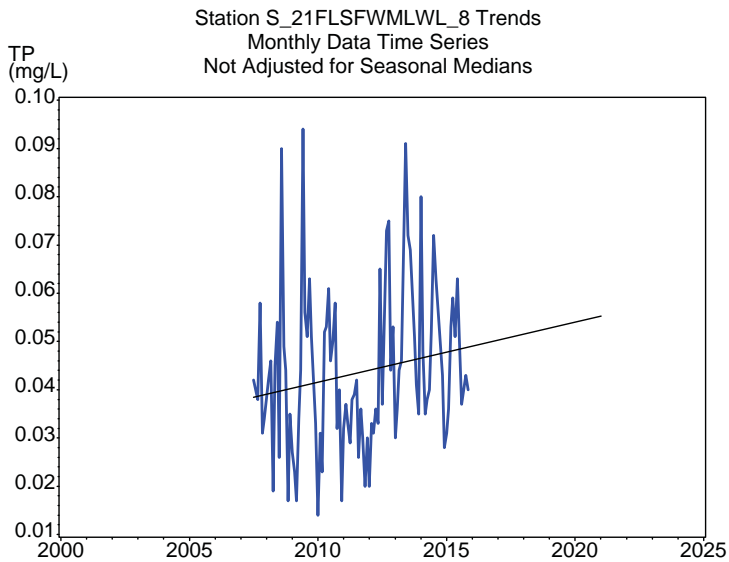
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.151	0.02	0.265	.008



Station S_21FLSFWMLWL_8 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

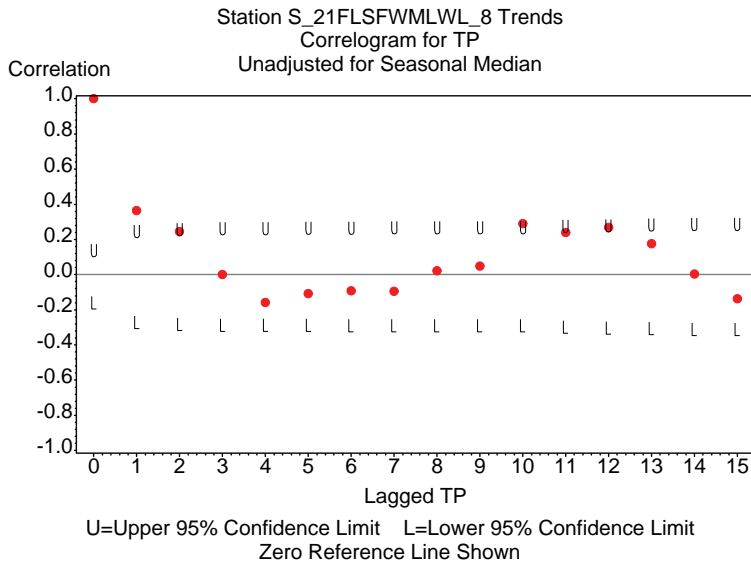
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.494	0.129	0.258	-0.258
2	0.307	0.139	0.278	-0.278
3	0.163	0.143	0.286	-0.286
4	0.134	0.144	0.288	-0.288
5	0.200	0.145	0.289	-0.289
6	0.214	0.146	0.292	-0.292
7	0.221	0.148	0.296	-0.296
8	0.121	0.150	0.299	-0.299
9	0.075	0.150	0.300	-0.300
10	0.025	0.150	0.301	-0.301
11	0.014	0.150	0.301	-0.301
12	-0.028	0.150	0.301	-0.301
13	-0.134	0.151	0.301	-0.301
14	-0.195	0.151	0.302	-0.302
15	-0.280	0.153	0.305	-0.305





Station S_21FLSFWMLWL_8 Trends
Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.365	0.129	0.258	-0.258
2	0.245	0.135	0.269	-0.269
3	0.000	0.137	0.274	-0.274
4	-0.158	0.137	0.274	-0.274
5	-0.108	0.138	0.276	-0.276
6	-0.093	0.139	0.277	-0.277
7	-0.096	0.139	0.278	-0.278
8	0.022	0.139	0.279	-0.279
9	0.048	0.139	0.279	-0.279
10	0.290	0.139	0.279	-0.279
11	0.240	0.143	0.286	-0.286
12	0.269	0.145	0.290	-0.290
13	0.176	0.148	0.295	-0.295
14	0.004	0.149	0.298	-0.298
15	-0.137	0.149	0.298	-0.298



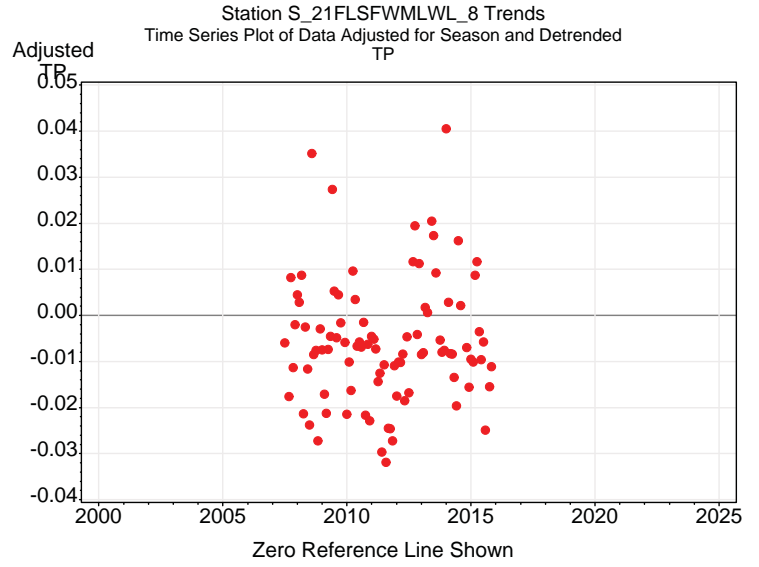
Station S_21FLSFWMLWL_8 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TP
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.155	0.075	0.287	.001

Station S_21FLSFWMLWL_8 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

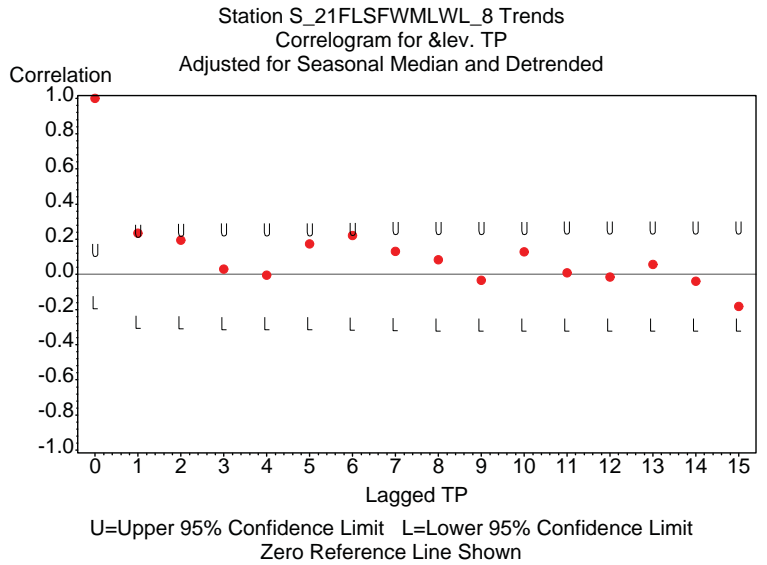
Adjusted for Seasonal Medians

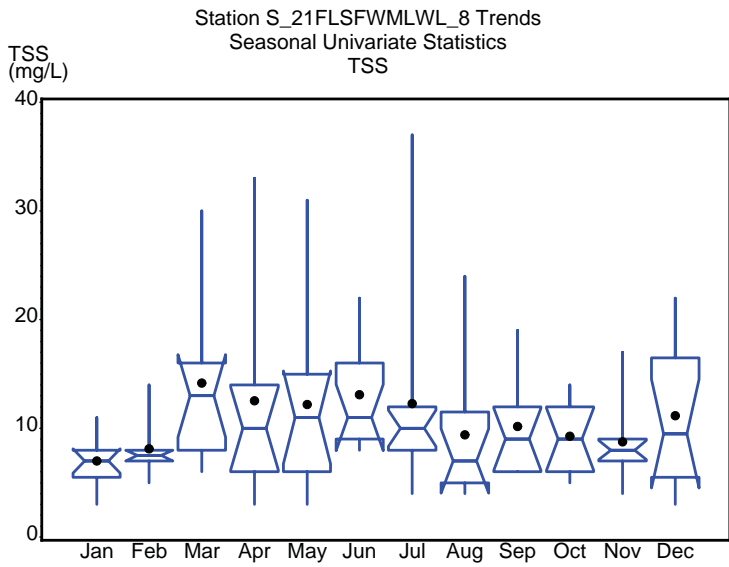
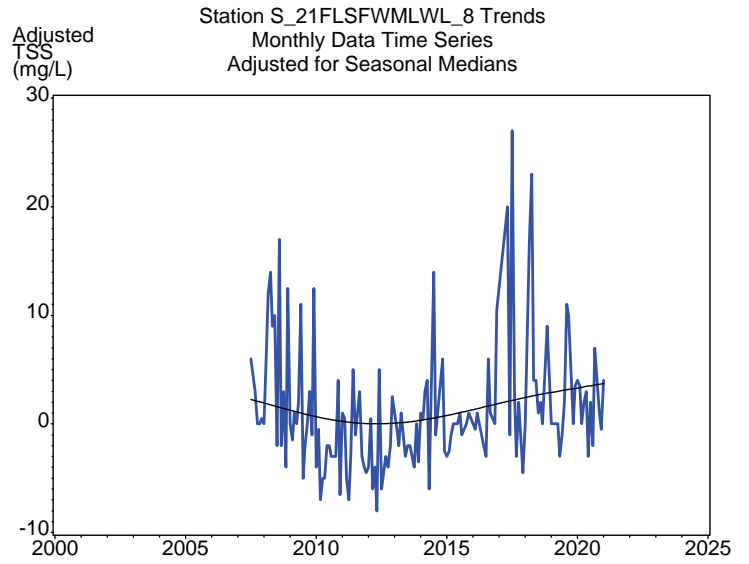
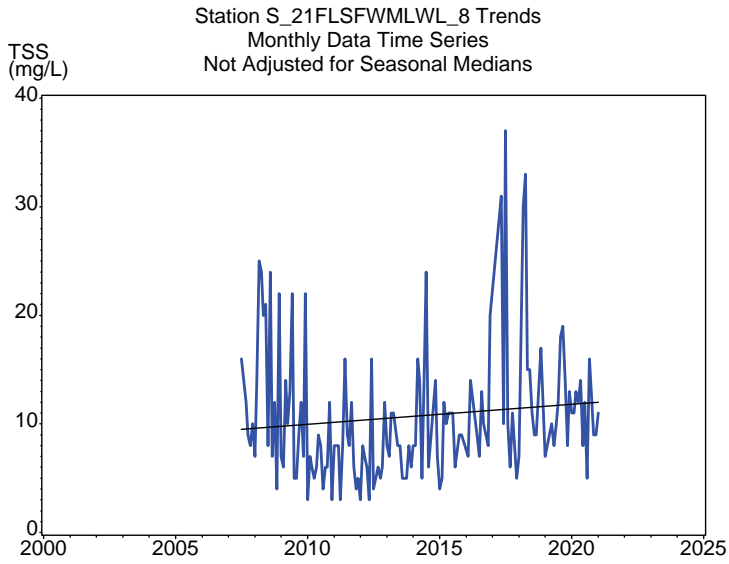
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.155	0.075	0.287	.001



Station S_21FLSFWMLWL_8 Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

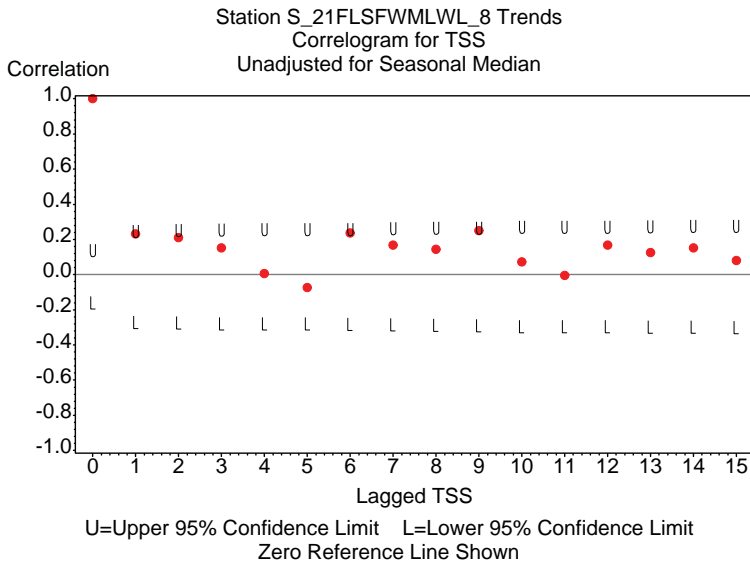
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.233	0.129	0.258	-0.258
2	0.195	0.131	0.263	-0.263
3	0.029	0.133	0.266	-0.266
4	-0.005	0.133	0.266	-0.266
5	0.174	0.133	0.266	-0.266
6	0.221	0.134	0.269	-0.269
7	0.131	0.136	0.273	-0.273
8	0.083	0.137	0.274	-0.274
9	-0.034	0.137	0.275	-0.275
10	0.129	0.137	0.275	-0.275
11	0.008	0.138	0.276	-0.276
12	-0.014	0.138	0.276	-0.276
13	0.057	0.138	0.276	-0.276
14	-0.040	0.138	0.276	-0.276
15	-0.183	0.138	0.276	-0.276





Station S_21FLSFWMLWL_8 Trends
Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.231	0.129	0.258	-0.258
2	0.209	0.131	0.263	-0.263
3	0.151	0.133	0.266	-0.266
4	0.005	0.134	0.268	-0.268
5	-0.073	0.134	0.268	-0.268
6	0.236	0.134	0.269	-0.269
7	0.169	0.137	0.273	-0.273
8	0.143	0.138	0.276	-0.276
9	0.251	0.139	0.277	-0.277
10	0.072	0.141	0.282	-0.282
11	-0.005	0.141	0.283	-0.283
12	0.168	0.141	0.283	-0.283
13	0.126	0.142	0.285	-0.285
14	0.152	0.143	0.286	-0.286
15	0.080	0.144	0.288	-0.288



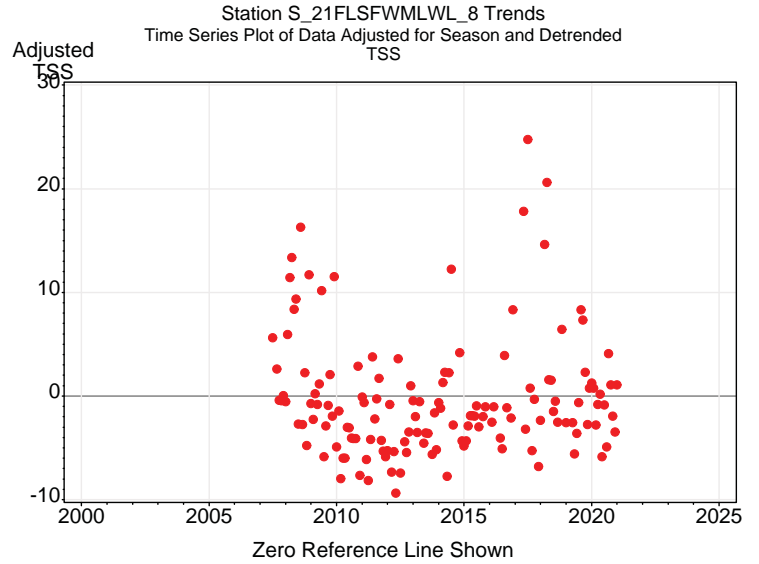
Station S_21FLSFWMLWL_8 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TSS

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.125	0.052	0.207	0.182

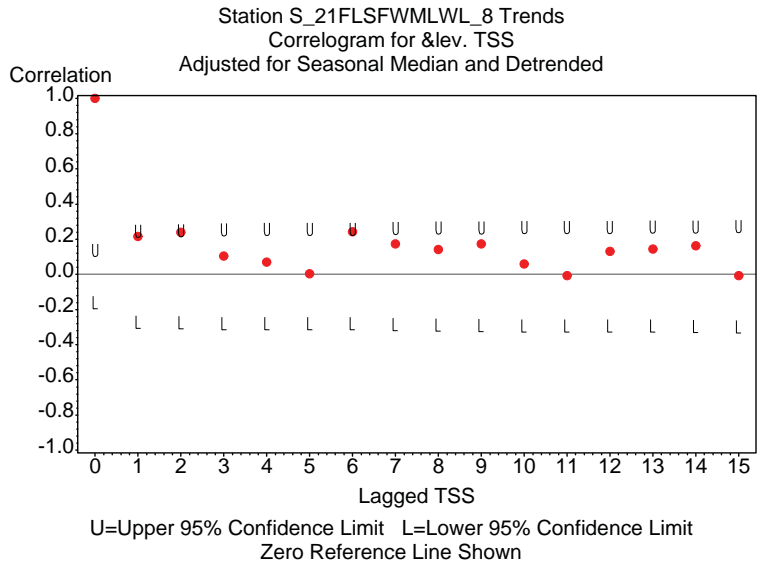
Station S_21FLSFWMLWL_8 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.125	0.052	0.207	0.182

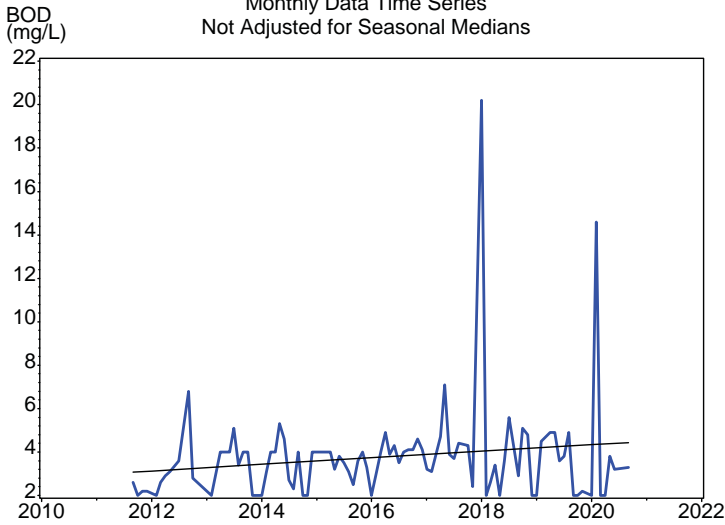


Station S_21FLSFWMLWL_8 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

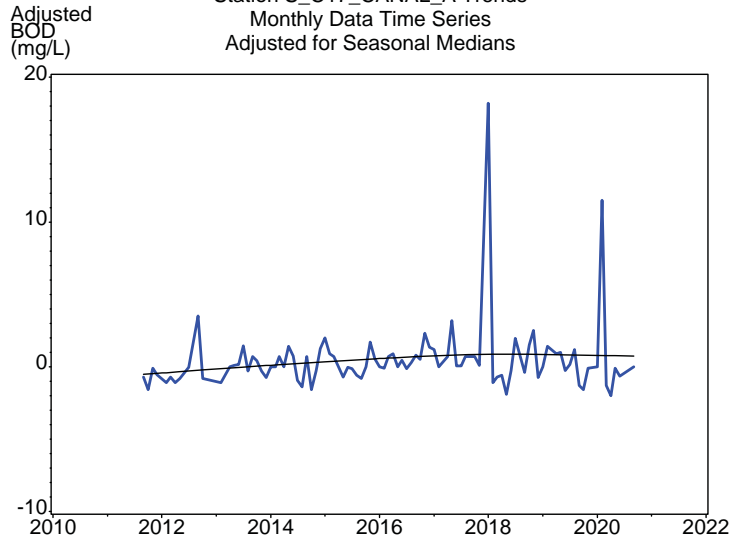
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.075	0.149	-0.149
1	0.215	0.129	0.258	-0.258
2	0.240	0.131	0.262	-0.262
3	0.103	0.133	0.267	-0.267
4	0.069	0.134	0.268	-0.268
5	0.003	0.134	0.268	-0.268
6	0.243	0.134	0.268	-0.268
7	0.173	0.137	0.273	-0.273
8	0.142	0.138	0.276	-0.276
9	0.172	0.139	0.277	-0.277
10	0.060	0.140	0.280	-0.280
11	-0.007	0.140	0.280	-0.280
12	0.132	0.140	0.280	-0.280
13	0.143	0.141	0.281	-0.281
14	0.162	0.141	0.283	-0.283
15	-0.008	0.142	0.285	-0.285



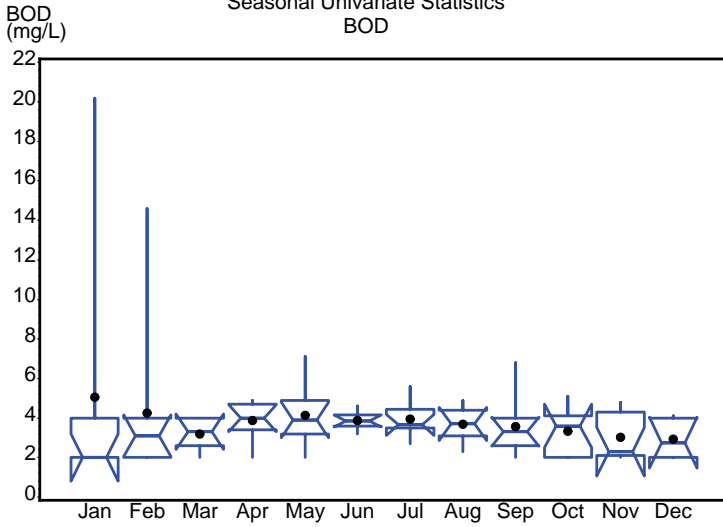
Station S_C17_CANAL_A Trends
Monthly Data Time Series
Not Adjusted for Seasonal Medians



Station S_C17_CANAL_A Trends
Monthly Data Time Series
Adjusted for Seasonal Medians



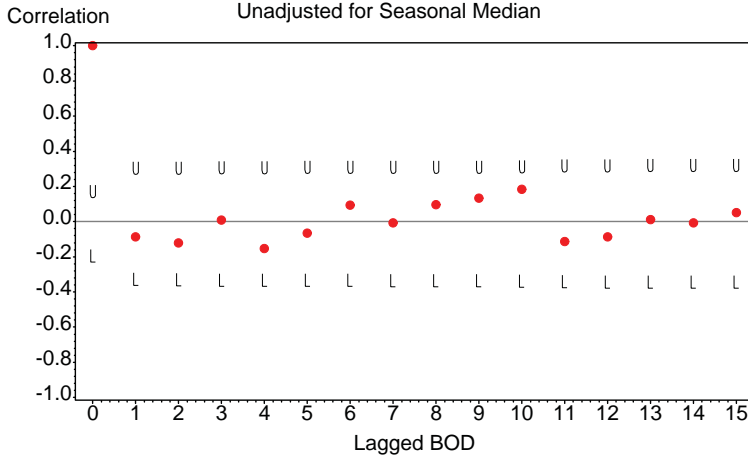
Station S_C17_CANAL_A Trends
Seasonal Univariate Statistics
BOD



Station S_C17_CANAL_A Trends
Autocorrelation Statistics for BOD

Lagged BOD	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.088	0.158	0.316	-0.316
2	-0.120	0.159	0.317	-0.317
3	0.010	0.159	0.319	-0.319
4	-0.153	0.159	0.319	-0.319
5	-0.065	0.161	0.321	-0.321
6	0.094	0.161	0.321	-0.321
7	-0.008	0.161	0.322	-0.322
8	0.096	0.161	0.322	-0.322
9	0.133	0.162	0.323	-0.323
10	0.183	0.163	0.325	-0.325
11	-0.113	0.164	0.329	-0.329
12	-0.086	0.165	0.330	-0.330
13	0.012	0.165	0.331	-0.331
14	-0.006	0.165	0.331	-0.331
15	0.052	0.165	0.331	-0.331

Station S_C17_CANAL_A Trends
Correlogram for BOD
Unadjusted for Seasonal Median



Station S_C17_CANAL_A Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
BOD
Unadjusted for Seasonal Medians

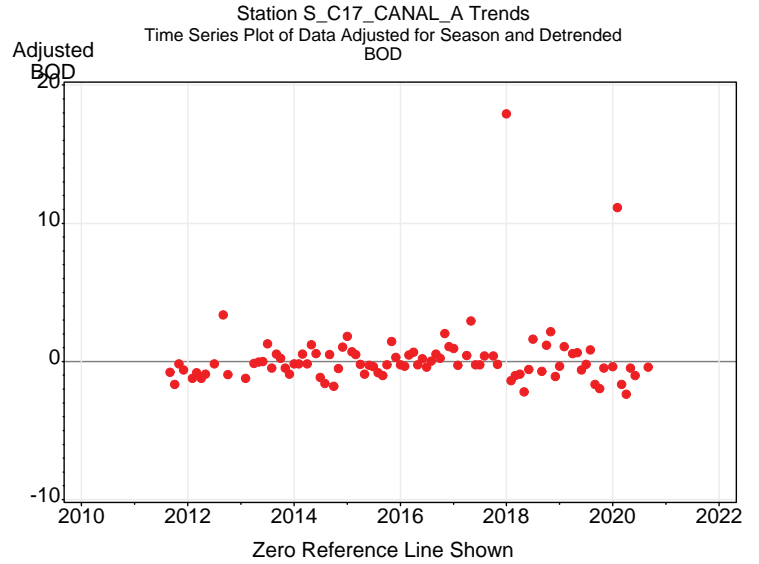
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.112	0.19	0.313	0.033

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_C17_CANAL_A Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 BOD

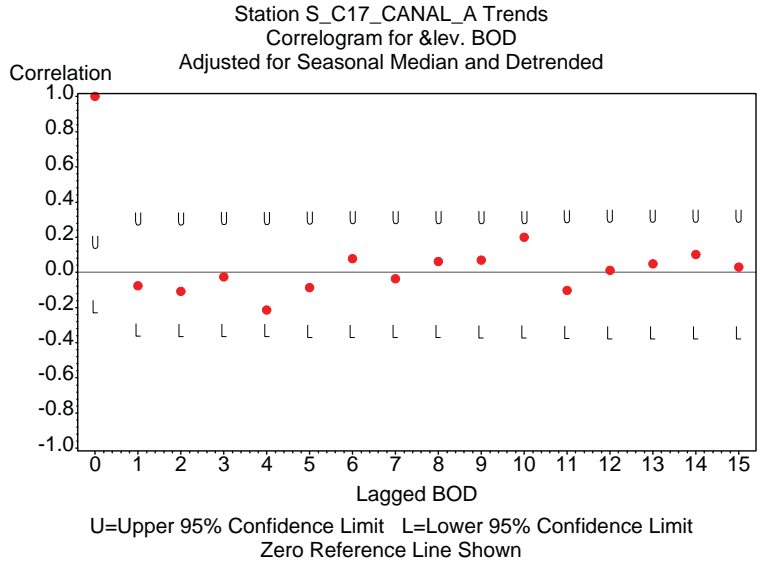
Adjusted for Seasonal Medians

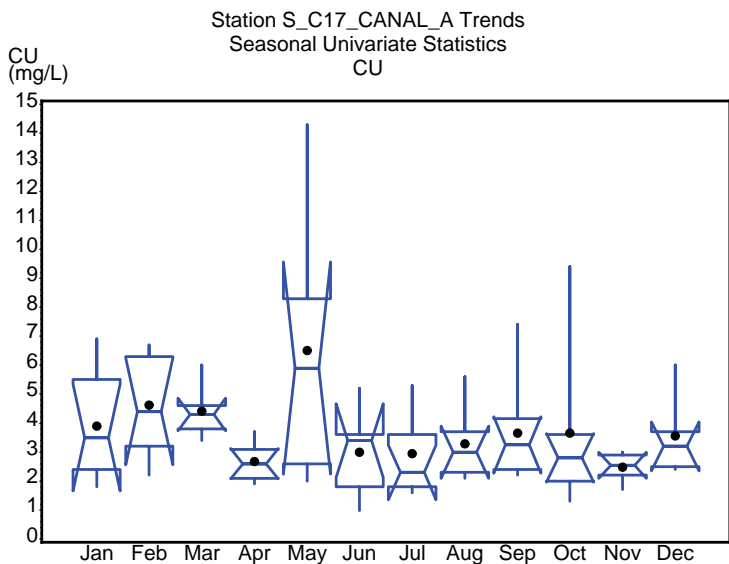
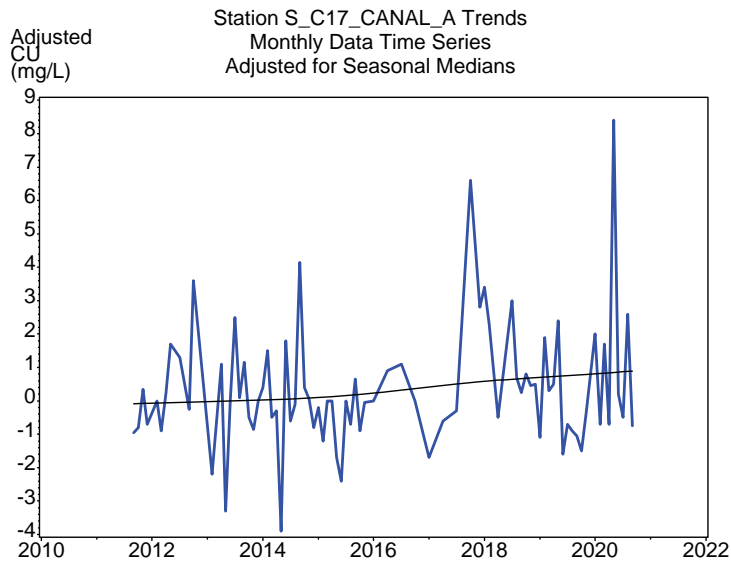
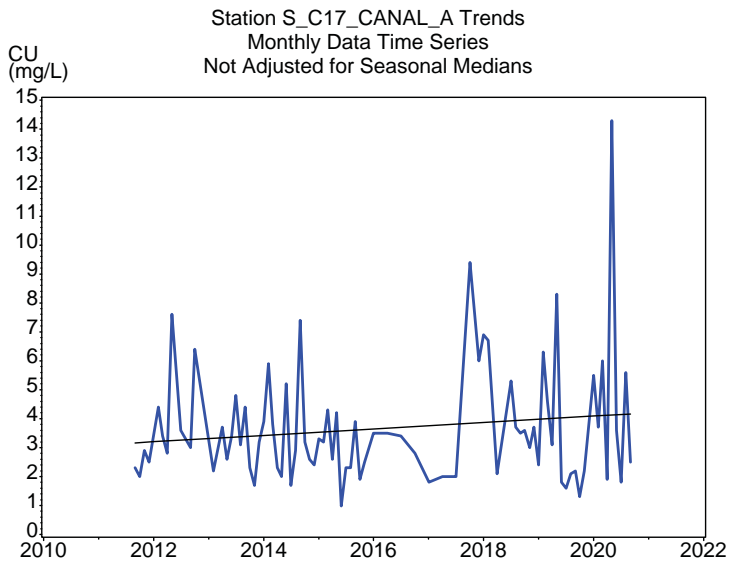
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.112	0.19	0.313	0.033



Station S_C17_CANAL_A Trends
 Autocorrelation Statistics for BOD
 Adjusted for Seasonal Median and Detrended

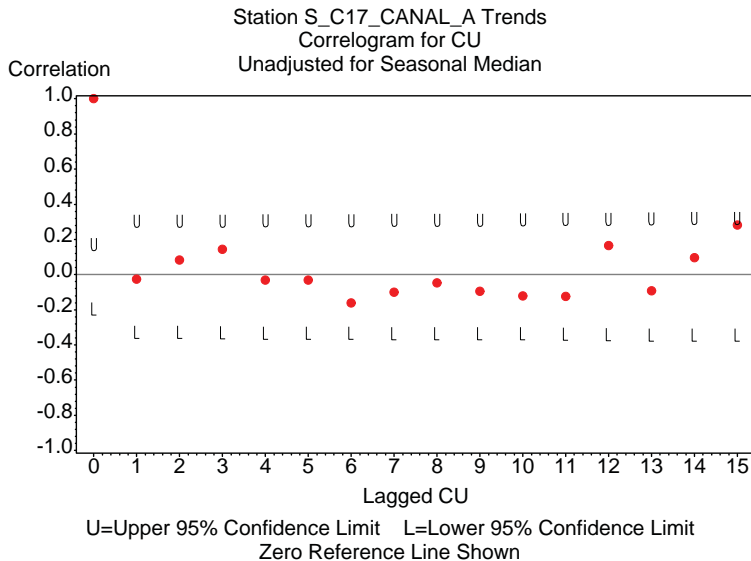
Lagged BOD	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.075	0.158	0.316	-0.316
2	-0.109	0.158	0.317	-0.317
3	-0.027	0.159	0.318	-0.318
4	-0.214	0.159	0.318	-0.318
5	-0.088	0.161	0.323	-0.323
6	0.078	0.162	0.324	-0.324
7	-0.036	0.162	0.324	-0.324
8	0.063	0.162	0.324	-0.324
9	0.070	0.162	0.325	-0.325
10	0.200	0.163	0.325	-0.325
11	-0.104	0.165	0.329	-0.329
12	0.011	0.165	0.331	-0.331
13	0.048	0.165	0.331	-0.331
14	0.102	0.165	0.331	-0.331
15	0.030	0.166	0.332	-0.332





Station S_C17_CANAL_A Trends
Autocorrelation Statistics for CU

Lagged CU	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.025	0.158	0.316	-0.316
2	0.083	0.158	0.316	-0.316
3	0.145	0.159	0.317	-0.317
4	-0.031	0.160	0.319	-0.319
5	-0.031	0.160	0.319	-0.319
6	-0.160	0.160	0.319	-0.319
7	-0.100	0.161	0.322	-0.322
8	-0.048	0.162	0.323	-0.323
9	-0.094	0.162	0.323	-0.323
10	-0.120	0.162	0.324	-0.324
11	-0.125	0.163	0.326	-0.326
12	0.164	0.164	0.327	-0.327
13	-0.093	0.165	0.330	-0.330
14	0.095	0.165	0.331	-0.331
15	0.282	0.166	0.332	-0.332



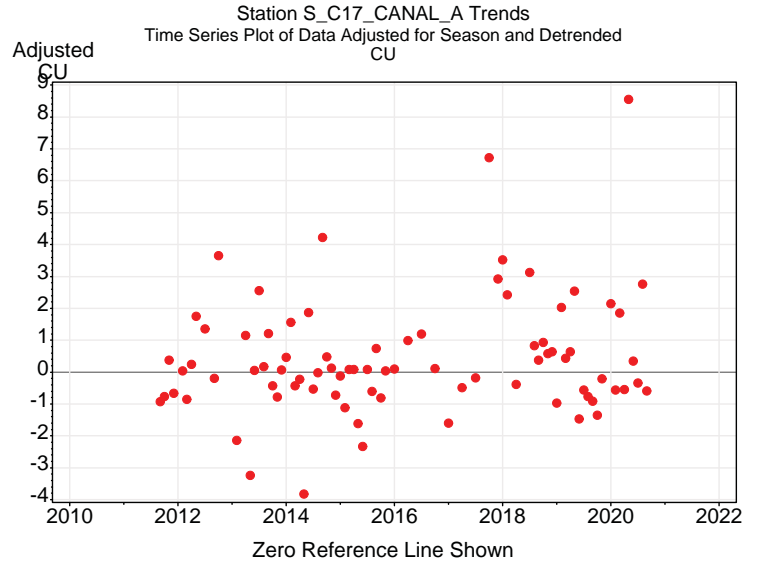
Station S_C17_CANAL_A Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CU
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.004	1	1	-0.013

Station S_C17_CANAL_A Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CU

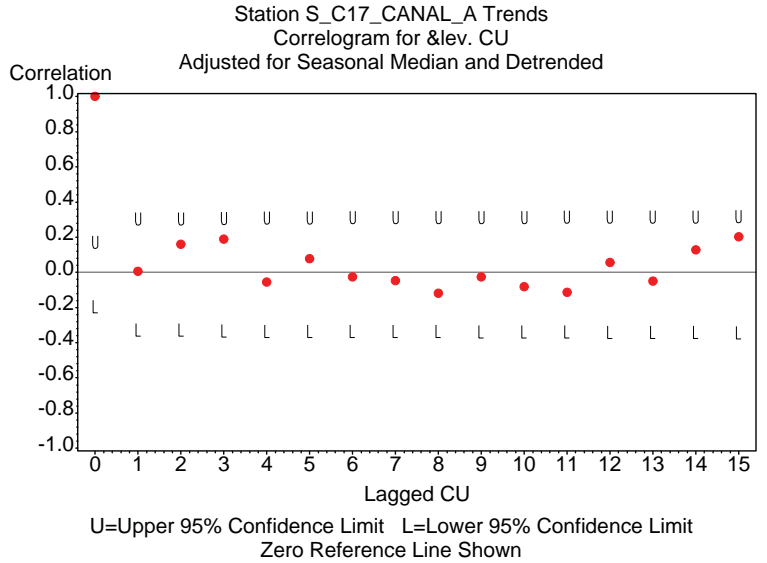
Adjusted for Seasonal Medians

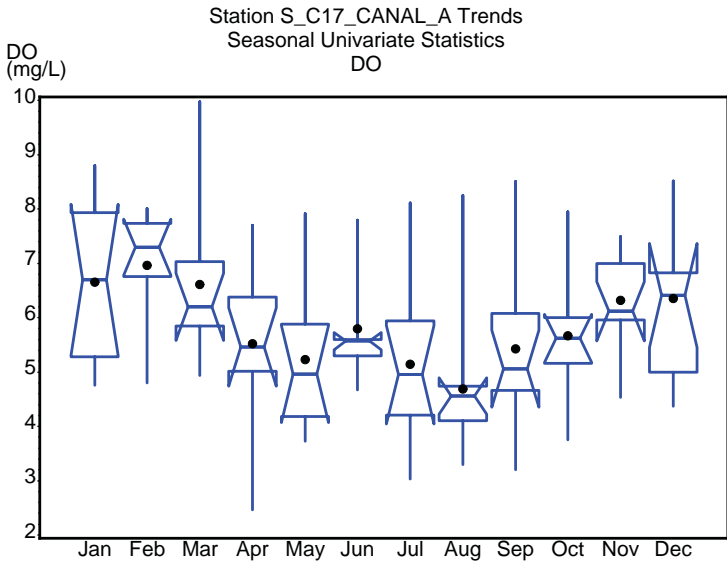
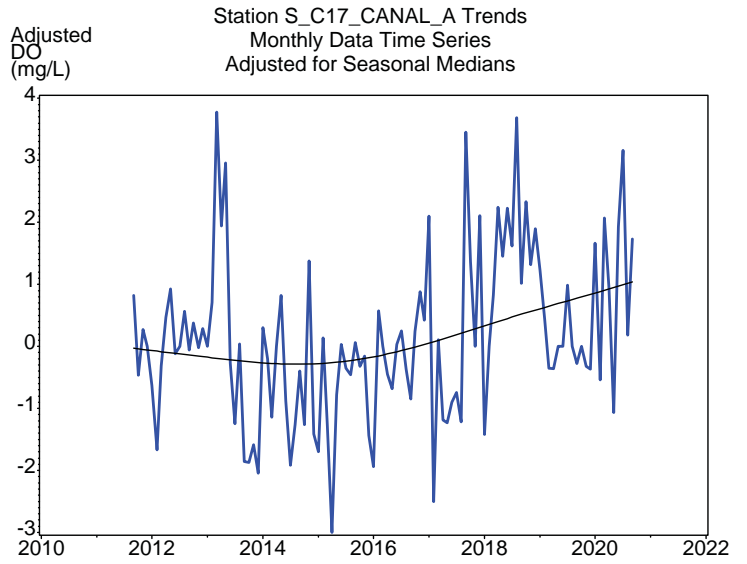
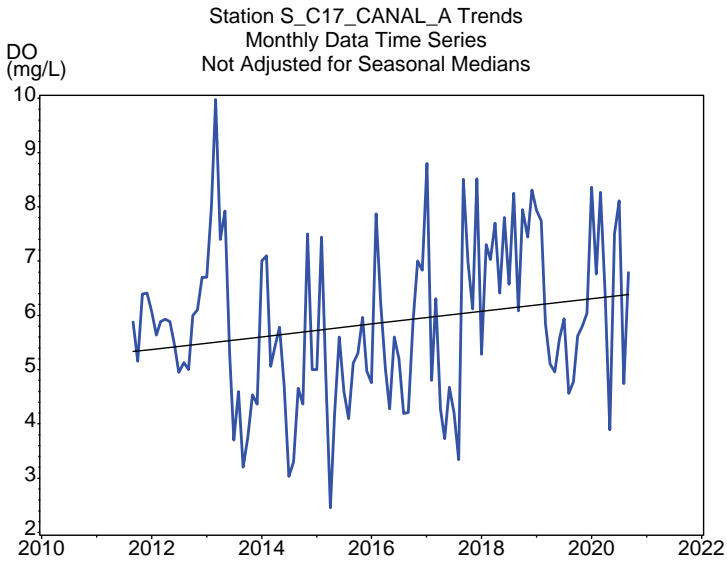
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-.004	1	1	-0.013



Station S_C17_CANAL_A Trends
 Autocorrelation Statistics for CU
 Adjusted for Seasonal Median and Detrended

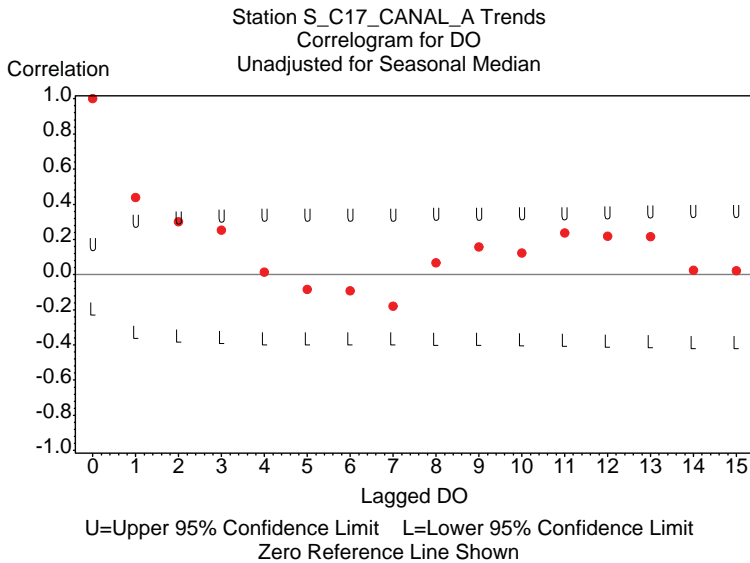
Lagged CU	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.006	0.158	0.316	-0.316
2	0.159	0.158	0.316	-0.316
3	0.189	0.159	0.319	-0.319
4	-0.055	0.161	0.323	-0.323
5	0.078	0.161	0.323	-0.323
6	-0.026	0.162	0.324	-0.324
7	-0.048	0.162	0.324	-0.324
8	-0.119	0.162	0.324	-0.324
9	-0.027	0.163	0.325	-0.325
10	-0.082	0.163	0.325	-0.325
11	-0.113	0.163	0.326	-0.326
12	0.057	0.164	0.327	-0.327
13	-0.051	0.164	0.328	-0.328
14	0.129	0.164	0.328	-0.328
15	0.202	0.165	0.330	-0.330





Station S_C17_CANAL_A Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.438	0.158	0.316	-0.316
2	0.300	0.168	0.336	-0.336
3	0.252	0.172	0.345	-0.345
4	0.015	0.175	0.351	-0.351
5	-0.085	0.175	0.351	-0.351
6	-0.091	0.176	0.352	-0.352
7	-0.181	0.176	0.352	-0.352
8	0.067	0.178	0.355	-0.355
9	0.158	0.178	0.356	-0.356
10	0.124	0.179	0.358	-0.358
11	0.236	0.180	0.360	-0.360
12	0.218	0.182	0.365	-0.365
13	0.216	0.185	0.369	-0.369
14	0.025	0.187	0.373	-0.373
15	0.021	0.187	0.373	-0.373

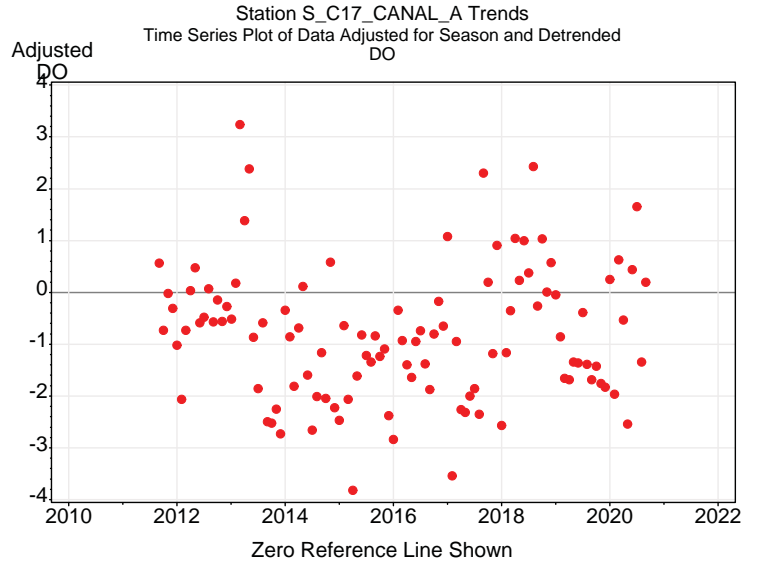


Station S_C17_CANAL_A Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.168	0.03	0.204	0.128

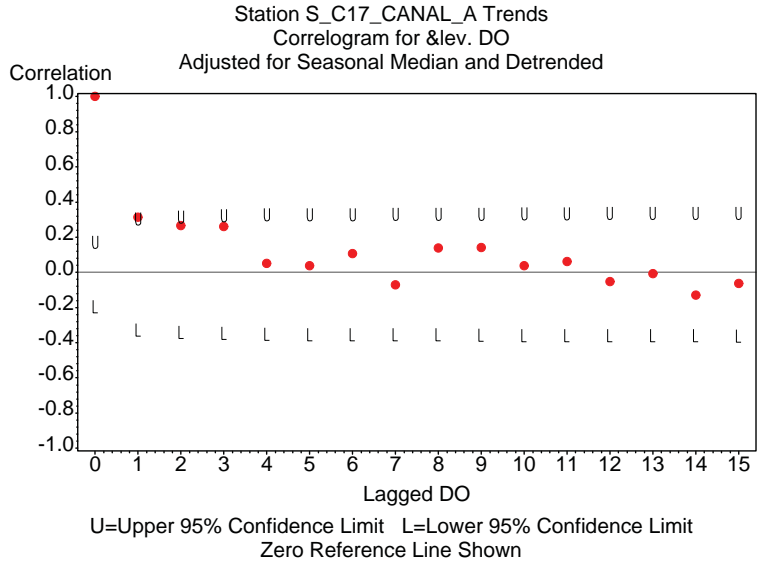
Station S_C17_CANAL_A Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

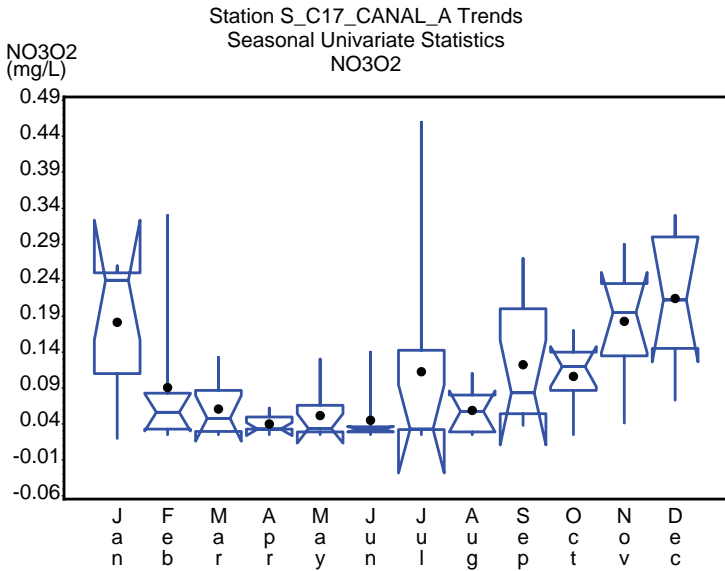
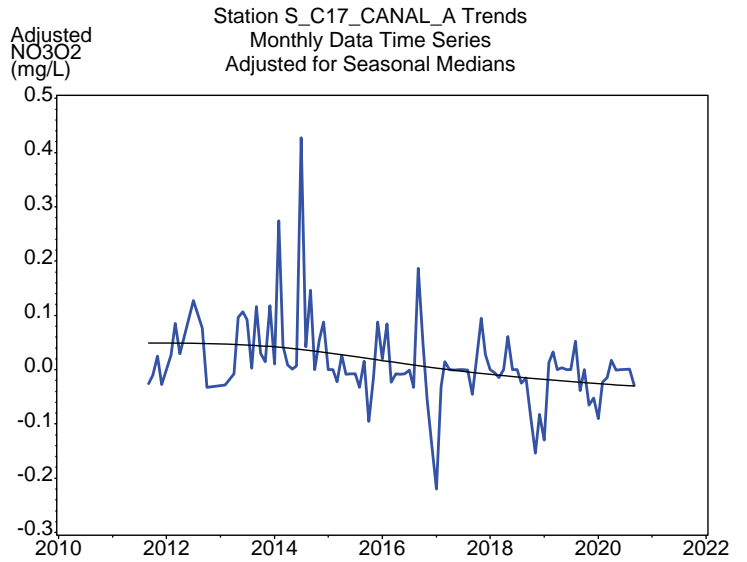
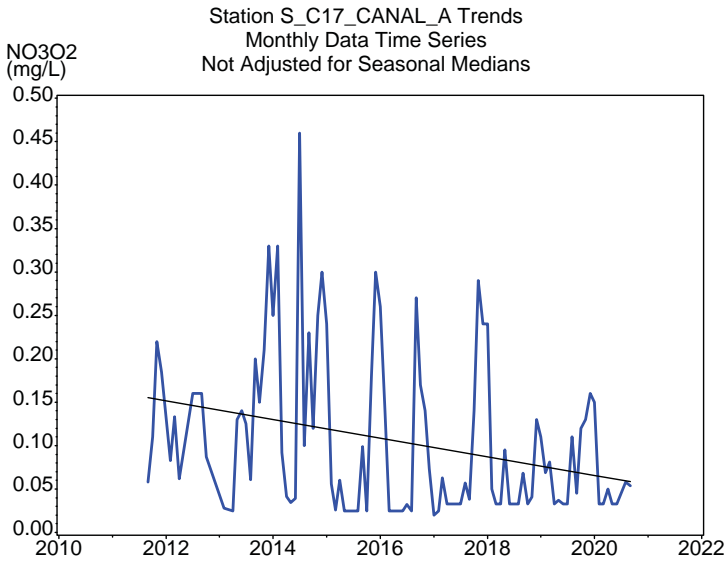
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.168	0.03	0.204	0.128



Station S_C17_CANAL_A Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

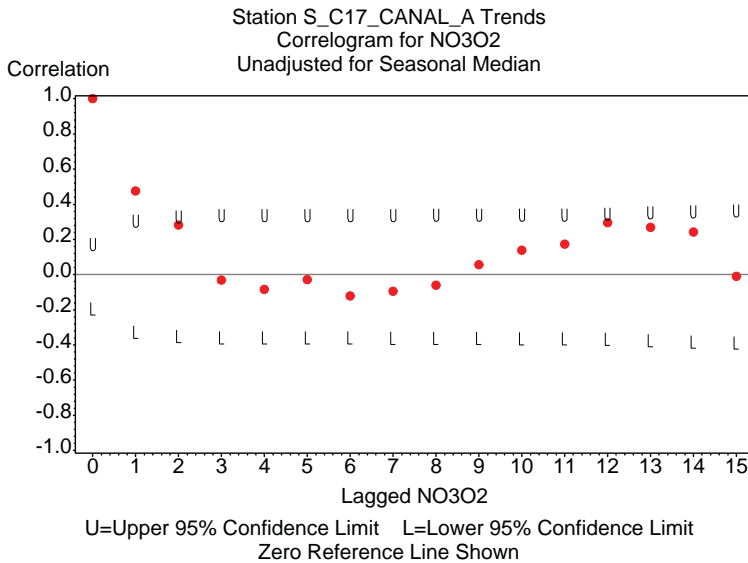
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.315	0.158	0.316	-0.316
2	0.265	0.163	0.327	-0.327
3	0.260	0.167	0.334	-0.334
4	0.052	0.170	0.340	-0.340
5	0.037	0.170	0.341	-0.341
6	0.107	0.170	0.341	-0.341
7	-0.071	0.171	0.342	-0.342
8	0.140	0.171	0.342	-0.342
9	0.141	0.172	0.344	-0.344
10	0.038	0.173	0.346	-0.346
11	0.062	0.173	0.346	-0.346
12	-0.053	0.173	0.347	-0.347
13	-0.006	0.173	0.347	-0.347
14	-0.130	0.173	0.347	-0.347
15	-0.063	0.174	0.349	-0.349





Station S_C17_CANAL_A Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.475	0.158	0.316	-0.316
2	0.281	0.170	0.339	-0.339
3	-0.031	0.173	0.347	-0.347
4	-0.083	0.173	0.347	-0.347
5	-0.029	0.174	0.348	-0.348
6	-0.121	0.174	0.348	-0.348
7	-0.094	0.175	0.349	-0.349
8	-0.061	0.175	0.350	-0.350
9	0.056	0.175	0.350	-0.350
10	0.140	0.175	0.351	-0.351
11	0.172	0.176	0.352	-0.352
12	0.294	0.178	0.355	-0.355
13	0.269	0.182	0.363	-0.363
14	0.243	0.185	0.370	-0.370
15	-0.010	0.188	0.375	-0.375



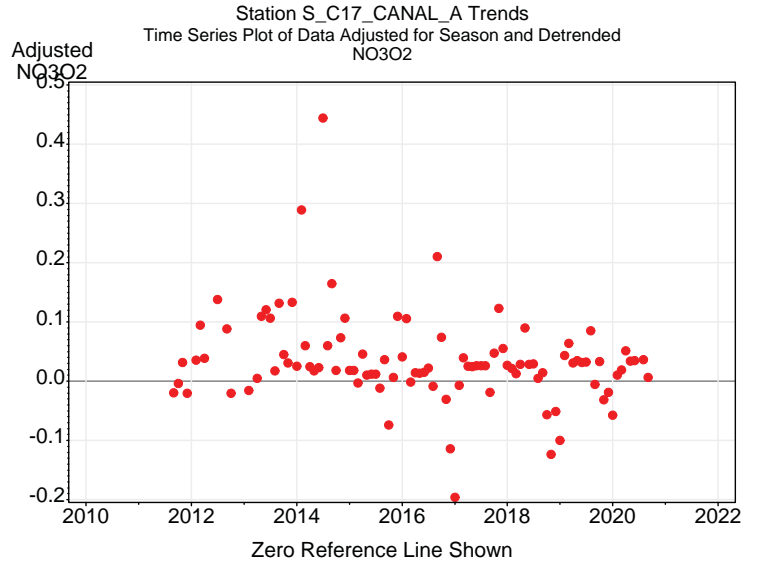
Station S_C17_CANAL_A Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.186	0.022	0.161	-0.003

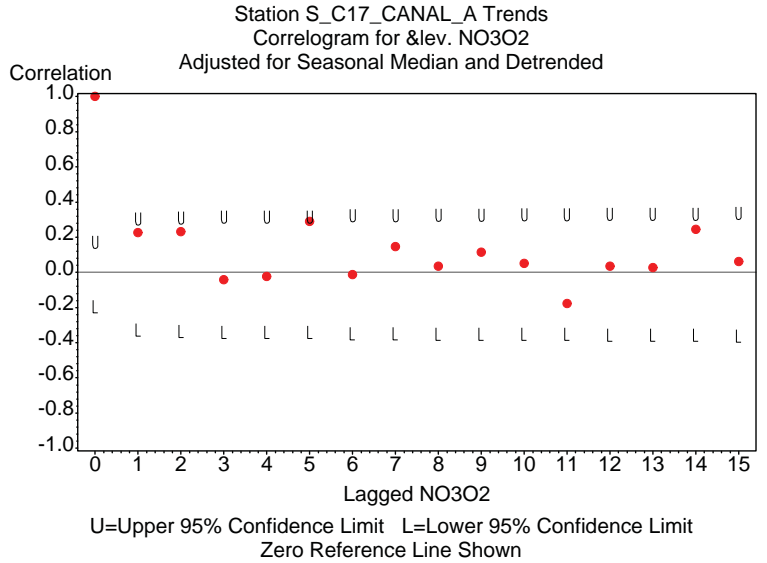
Station S_C17_CANAL_A Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

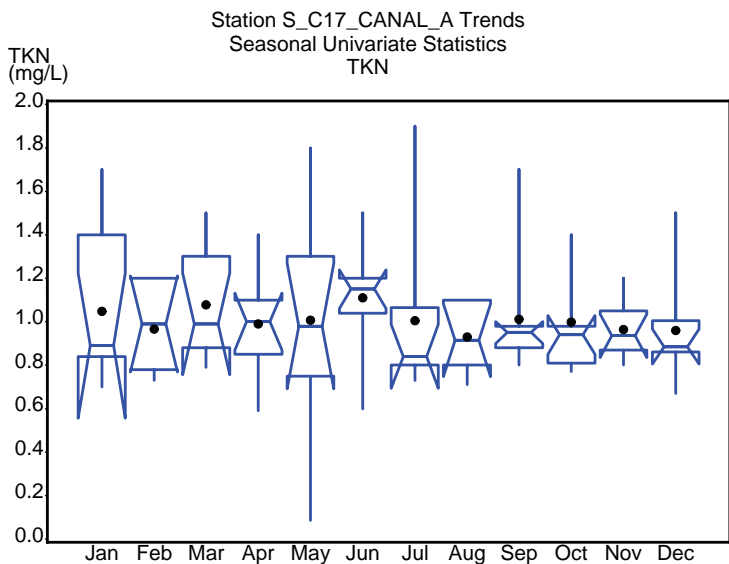
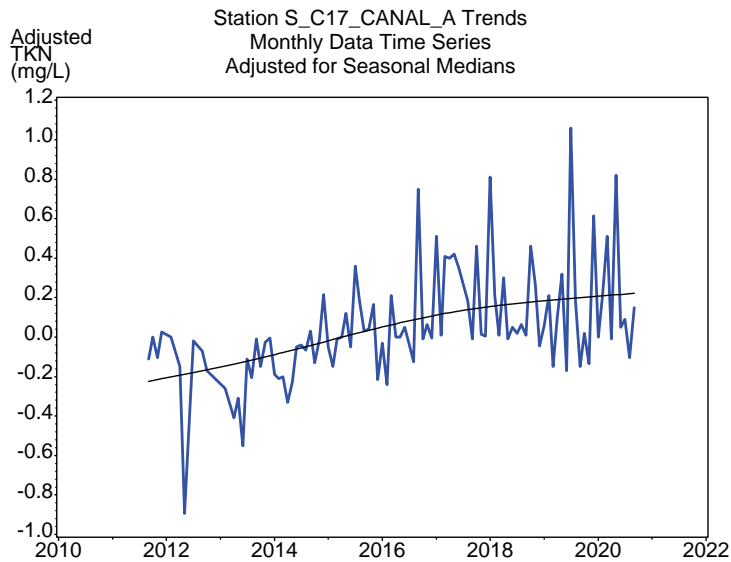
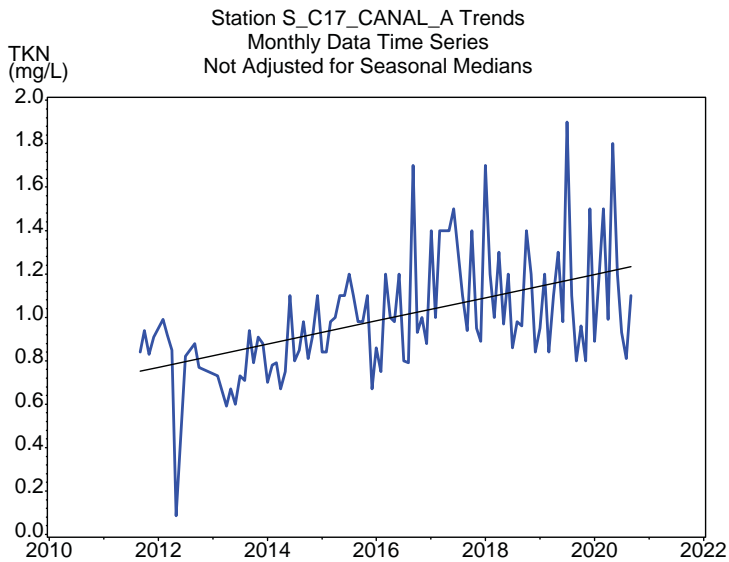
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.186	0.022	0.161	-.003



Station S_C17_CANAL_A Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

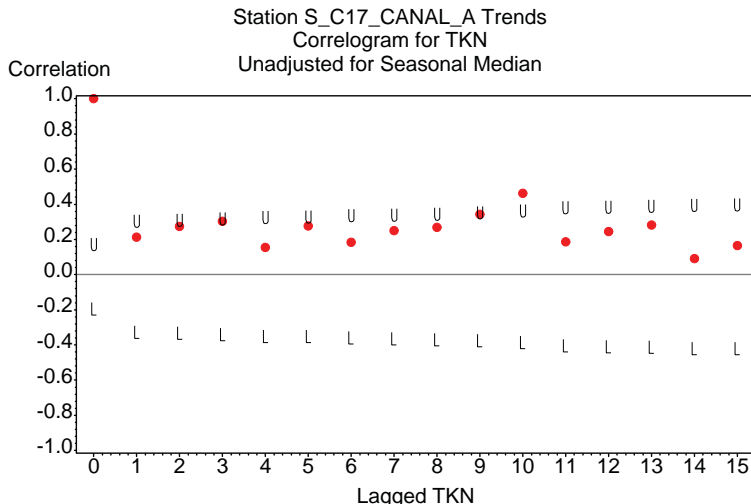
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.227	0.158	0.316	-0.316
2	0.231	0.161	0.322	-0.322
3	-0.042	0.164	0.327	-0.327
4	-0.022	0.164	0.327	-0.327
5	0.291	0.164	0.327	-0.327
6	-0.012	0.168	0.336	-0.336
7	0.147	0.168	0.336	-0.336
8	0.034	0.169	0.338	-0.338
9	0.115	0.169	0.338	-0.338
10	0.052	0.170	0.339	-0.339
11	-0.177	0.170	0.340	-0.340
12	0.036	0.171	0.343	-0.343
13	0.028	0.171	0.343	-0.343
14	0.246	0.171	0.343	-0.343
15	0.062	0.174	0.349	-0.349





Station S_C17_CANAL_A Trends
Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.213	0.158	0.316	-0.316
2	0.274	0.160	0.321	-0.321
3	0.304	0.164	0.329	-0.329
4	0.154	0.169	0.338	-0.338
5	0.277	0.170	0.340	-0.340
6	0.184	0.174	0.348	-0.348
7	0.250	0.175	0.351	-0.351
8	0.270	0.178	0.357	-0.357
9	0.344	0.182	0.364	-0.364
10	0.463	0.187	0.374	-0.374
11	0.186	0.196	0.393	-0.393
12	0.244	0.198	0.396	-0.396
13	0.281	0.200	0.401	-0.401
14	0.091	0.204	0.407	-0.407
15	0.165	0.204	0.408	-0.408



Station S_C17_CANAL_A Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TKN
Unadjusted for Seasonal Medians

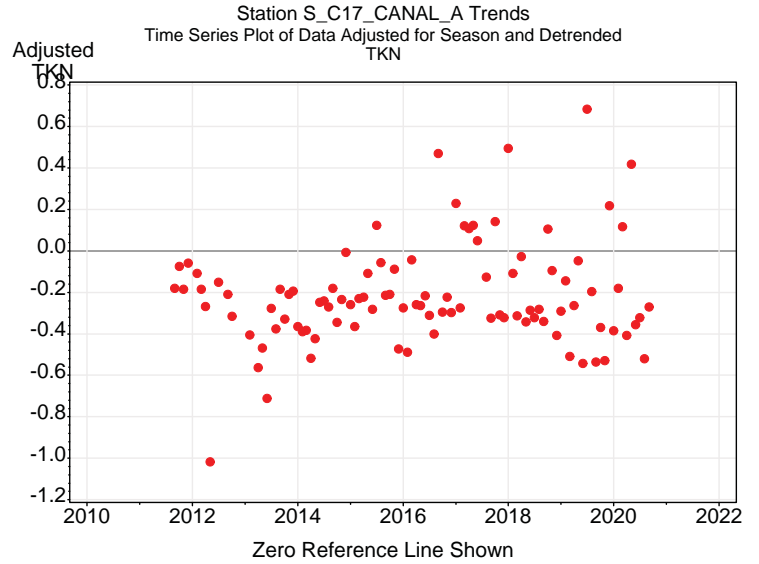
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.413	0	.007	0.035

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_C17_CANAL_A Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN

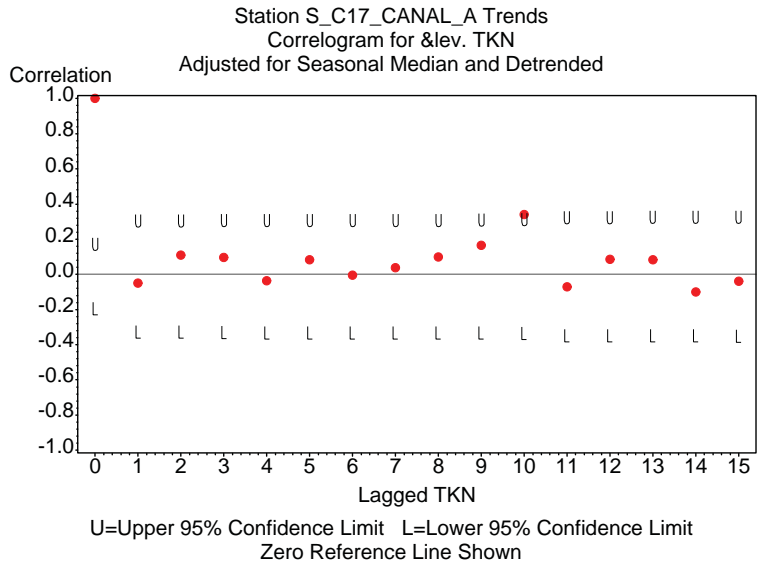
Adjusted for Seasonal Medians

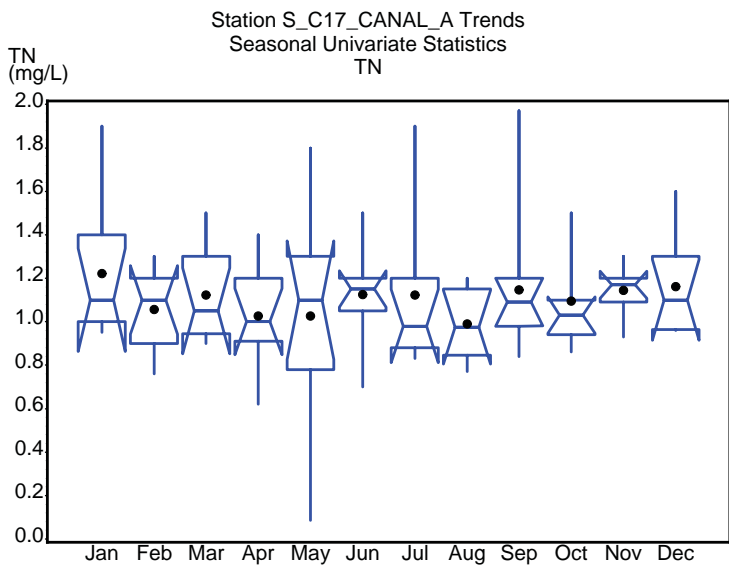
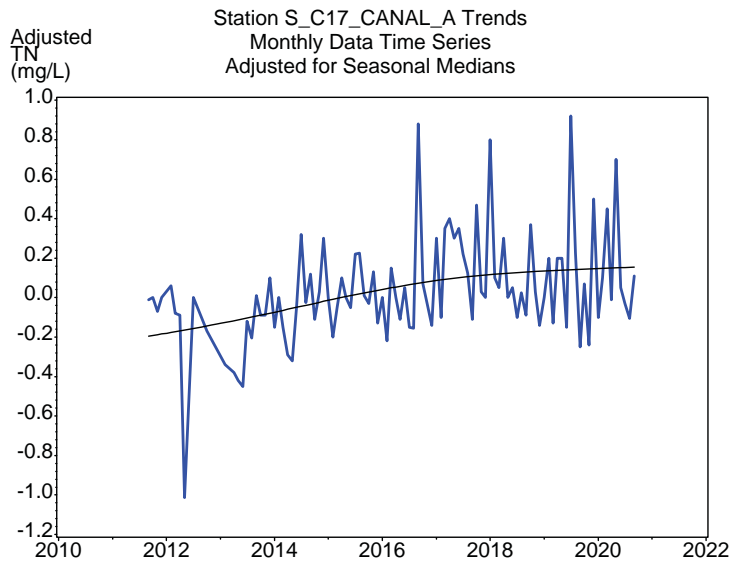
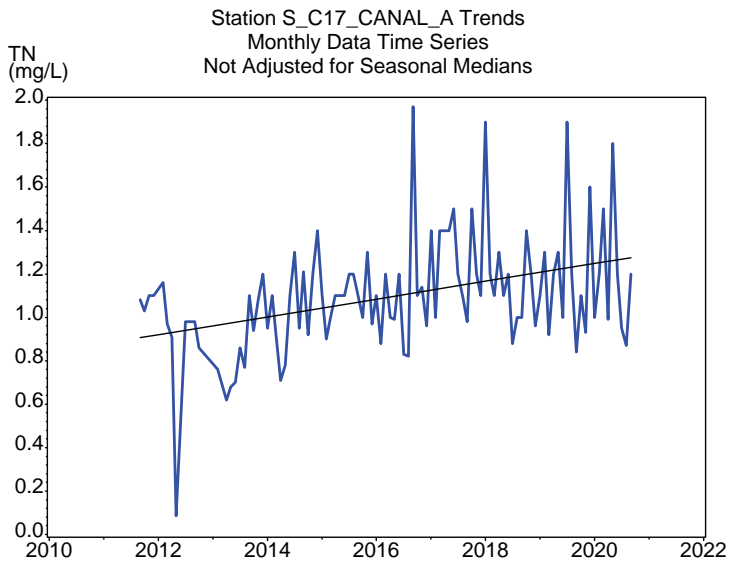
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.413	0	.007	0.035



Station S_C17_CANAL_A Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

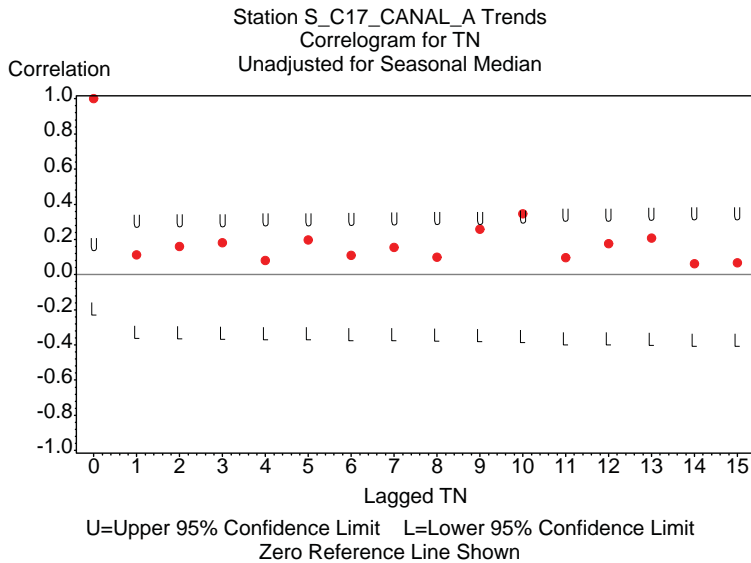
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.049	0.158	0.316	-0.316
2	0.110	0.158	0.316	-0.316
3	0.097	0.159	0.318	-0.318
4	-0.037	0.159	0.319	-0.319
5	0.083	0.159	0.319	-0.319
6	-0.005	0.160	0.320	-0.320
7	0.039	0.160	0.320	-0.320
8	0.100	0.160	0.320	-0.320
9	0.165	0.160	0.321	-0.321
10	0.339	0.162	0.324	-0.324
11	-0.070	0.168	0.335	-0.335
12	0.085	0.168	0.336	-0.336
13	0.083	0.168	0.337	-0.337
14	-0.101	0.169	0.337	-0.337
15	-0.038	0.169	0.338	-0.338





Station S_C17_CANAL_A Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.112	0.158	0.316	-0.316
2	0.159	0.159	0.318	-0.318
3	0.180	0.160	0.320	-0.320
4	0.080	0.162	0.324	-0.324
5	0.197	0.162	0.324	-0.324
6	0.109	0.164	0.328	-0.328
7	0.155	0.165	0.329	-0.329
8	0.100	0.166	0.332	-0.332
9	0.257	0.166	0.333	-0.333
10	0.346	0.170	0.339	-0.339
11	0.096	0.175	0.351	-0.351
12	0.177	0.176	0.352	-0.352
13	0.207	0.177	0.355	-0.355
14	0.062	0.179	0.359	-0.359
15	0.066	0.180	0.359	-0.359



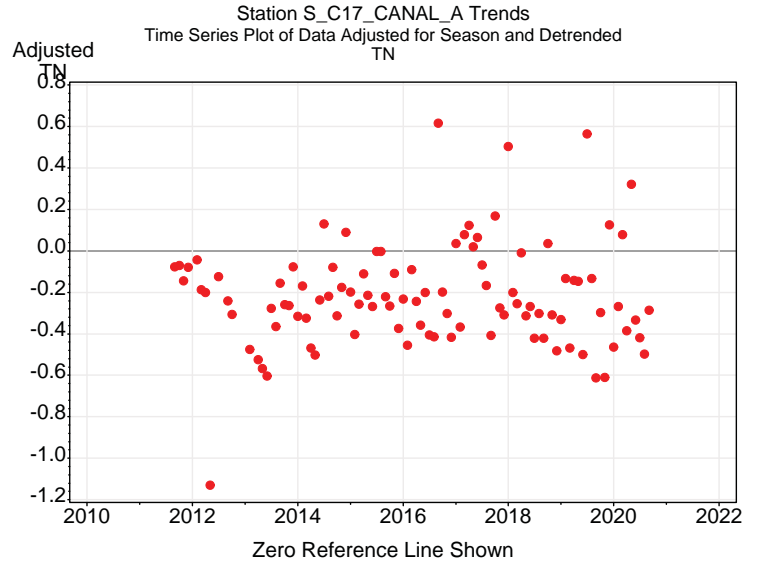
Station S_C17_CANAL_A Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.288	0	0.013	0.033

Station S_C17_CANAL_A Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

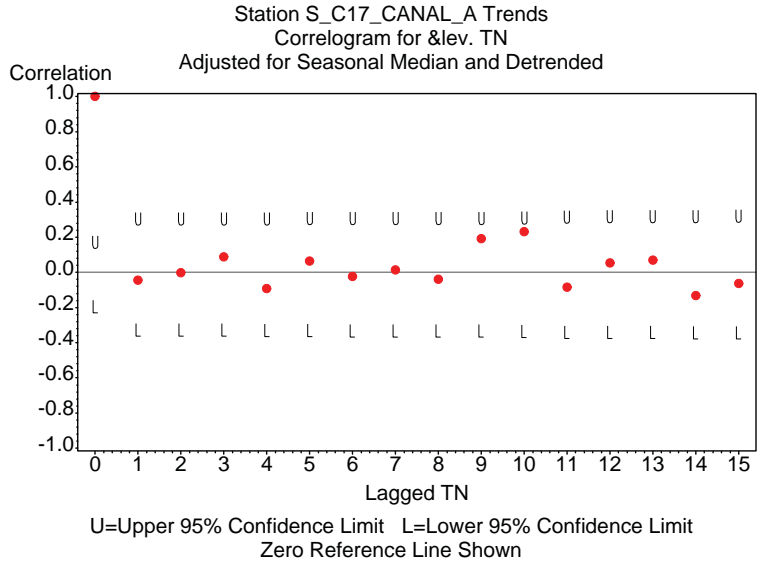
Adjusted for Seasonal Medians

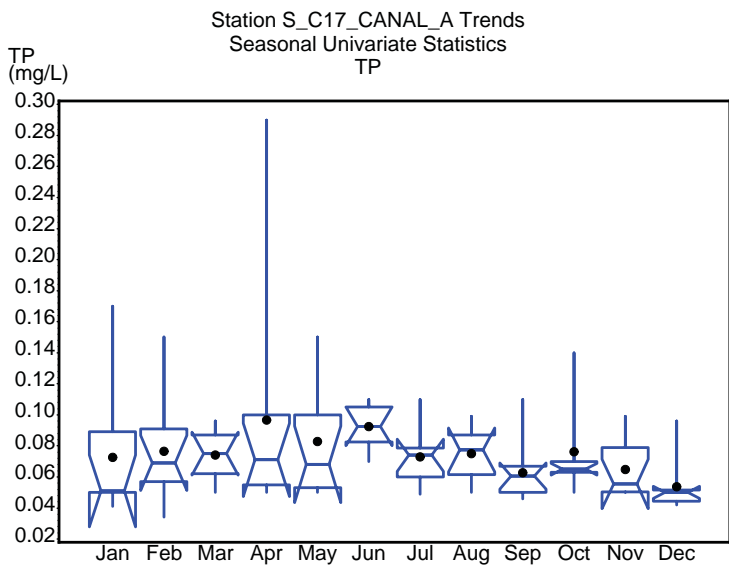
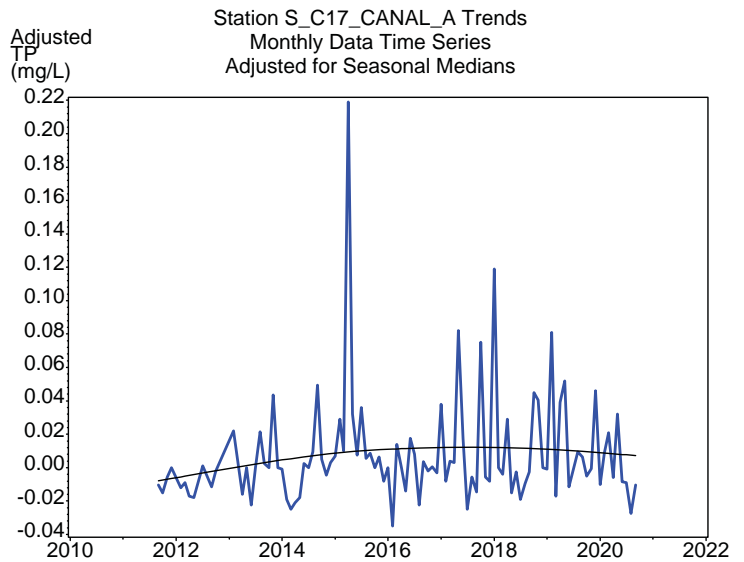
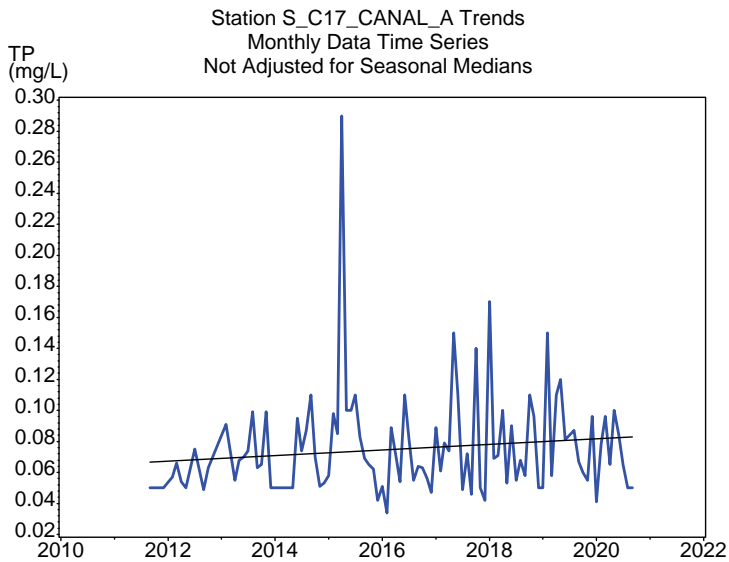
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.288	0	0.013	0.033



Station S_C17_CANAL_A Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

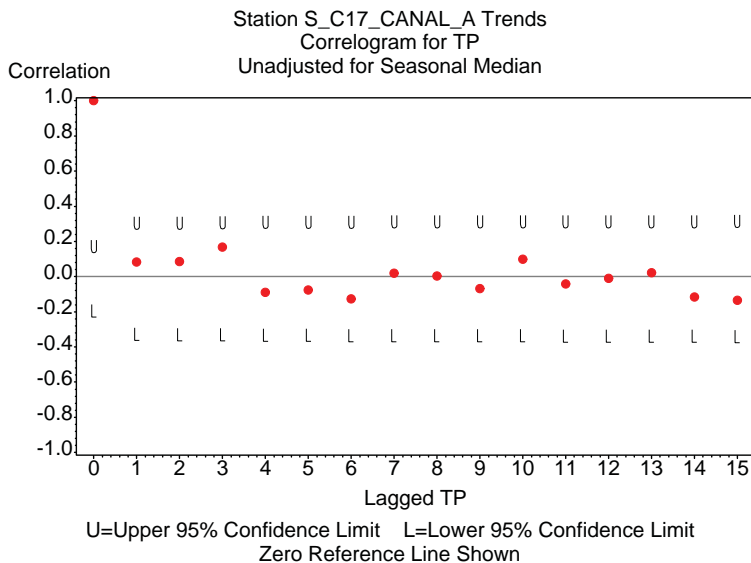
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.045	0.158	0.316	-0.316
2	-0.001	0.158	0.316	-0.316
3	0.089	0.158	0.316	-0.316
4	-0.091	0.159	0.317	-0.317
5	0.065	0.159	0.318	-0.318
6	-0.022	0.159	0.319	-0.319
7	0.014	0.159	0.319	-0.319
8	-0.039	0.159	0.319	-0.319
9	0.193	0.159	0.319	-0.319
10	0.231	0.161	0.323	-0.323
11	-0.084	0.164	0.328	-0.328
12	0.053	0.164	0.329	-0.329
13	0.071	0.165	0.329	-0.329
14	-0.131	0.165	0.330	-0.330
15	-0.063	0.166	0.331	-0.331





Station S_C17_CANAL_A Trends
Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.083	0.158	0.316	-0.316
2	0.085	0.158	0.317	-0.317
3	0.167	0.159	0.318	-0.318
4	-0.090	0.160	0.321	-0.321
5	-0.077	0.161	0.321	-0.321
6	-0.126	0.161	0.322	-0.322
7	0.018	0.162	0.324	-0.324
8	0.003	0.162	0.324	-0.324
9	-0.067	0.162	0.324	-0.324
10	0.099	0.162	0.324	-0.324
11	-0.042	0.163	0.325	-0.325
12	-0.011	0.163	0.325	-0.325
13	0.022	0.163	0.325	-0.325
14	-0.117	0.163	0.325	-0.325
15	-0.134	0.163	0.327	-0.327



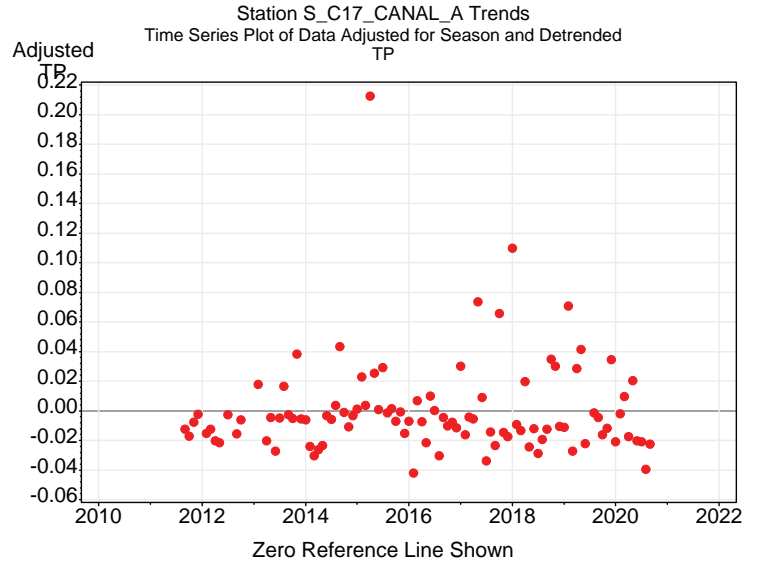
Station S_C17_CANAL_A Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TP
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.079	0.338	0.486	.001

Station S_C17_CANAL_A Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

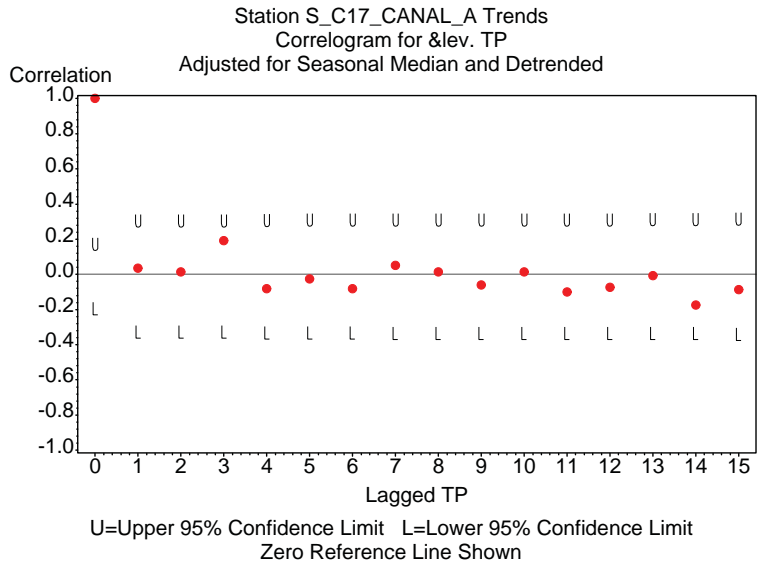
Adjusted for Seasonal Medians

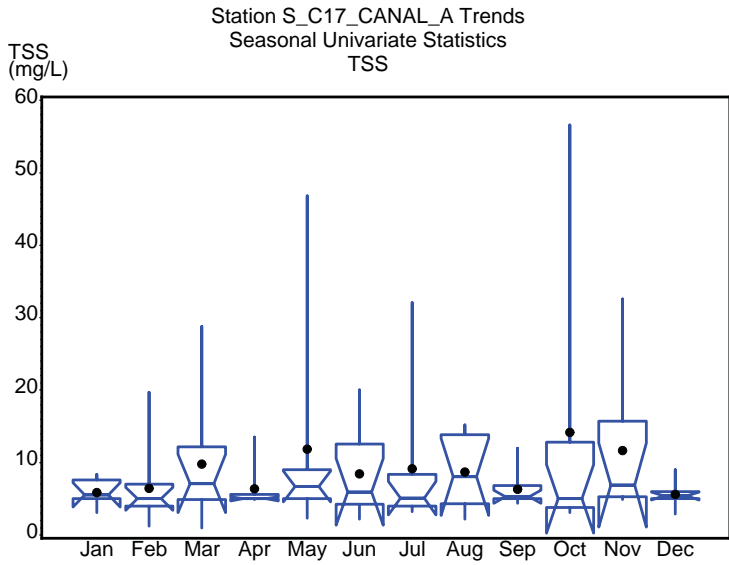
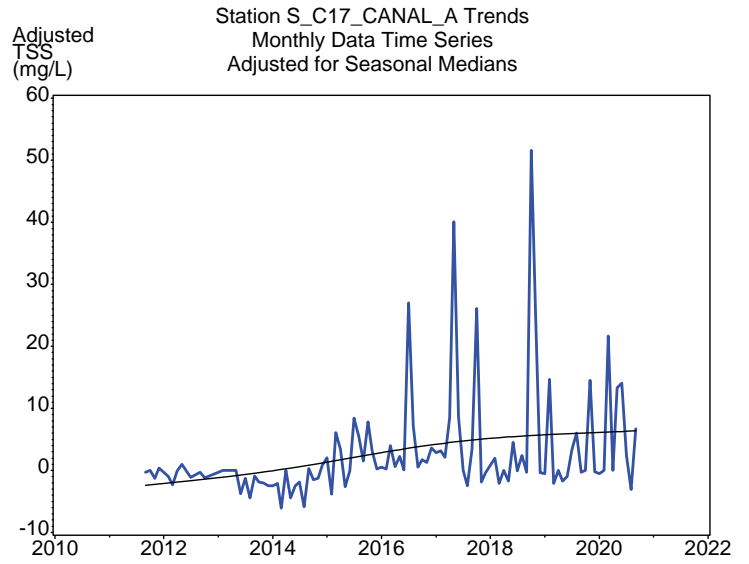
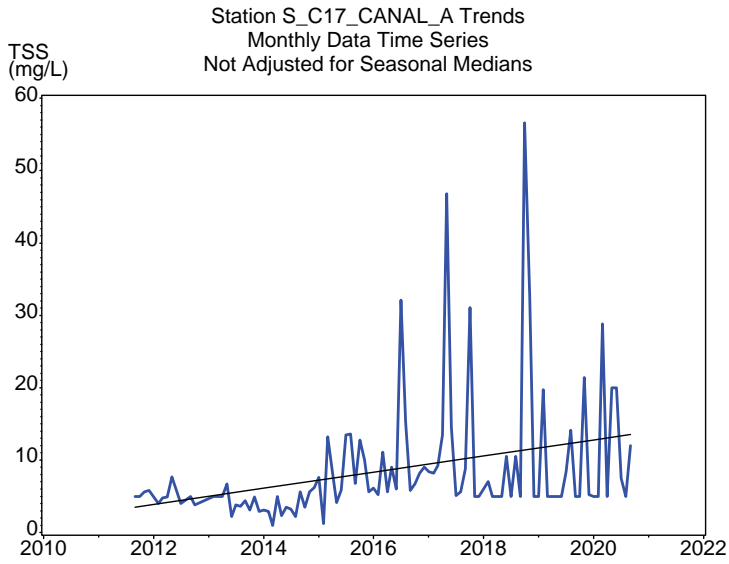
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.079	0.338	0.486	.001



Station S_C17_CANAL_A Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

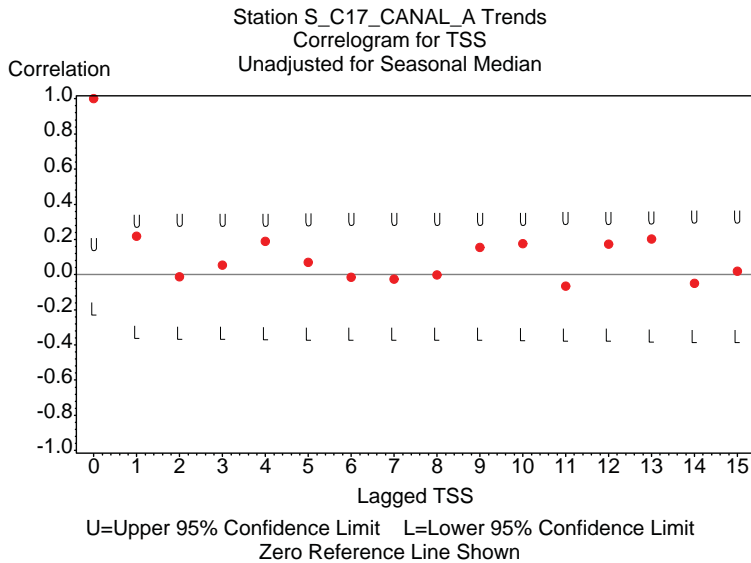
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.034	0.158	0.316	-0.316
2	0.014	0.158	0.316	-0.316
3	0.193	0.158	0.316	-0.316
4	-0.081	0.160	0.320	-0.320
5	-0.025	0.160	0.321	-0.321
6	-0.081	0.161	0.321	-0.321
7	0.051	0.161	0.322	-0.322
8	0.013	0.161	0.322	-0.322
9	-0.059	0.161	0.322	-0.322
10	0.013	0.161	0.322	-0.322
11	-0.100	0.161	0.322	-0.322
12	-0.073	0.162	0.323	-0.323
13	-0.006	0.162	0.324	-0.324
14	-0.174	0.162	0.324	-0.324
15	-0.086	0.164	0.327	-0.327





Station S_C17_CANAL_A Trends
Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.219	0.158	0.316	-0.316
2	-0.012	0.161	0.321	-0.321
3	0.055	0.161	0.321	-0.321
4	0.190	0.161	0.322	-0.322
5	0.071	0.163	0.325	-0.325
6	-0.014	0.163	0.326	-0.326
7	-0.027	0.163	0.326	-0.326
8	-0.003	0.163	0.326	-0.326
9	0.154	0.163	0.326	-0.326
10	0.176	0.164	0.328	-0.328
11	-0.065	0.166	0.331	-0.331
12	0.172	0.166	0.332	-0.332
13	0.202	0.167	0.335	-0.335
14	-0.050	0.169	0.339	-0.339
15	0.018	0.170	0.339	-0.339



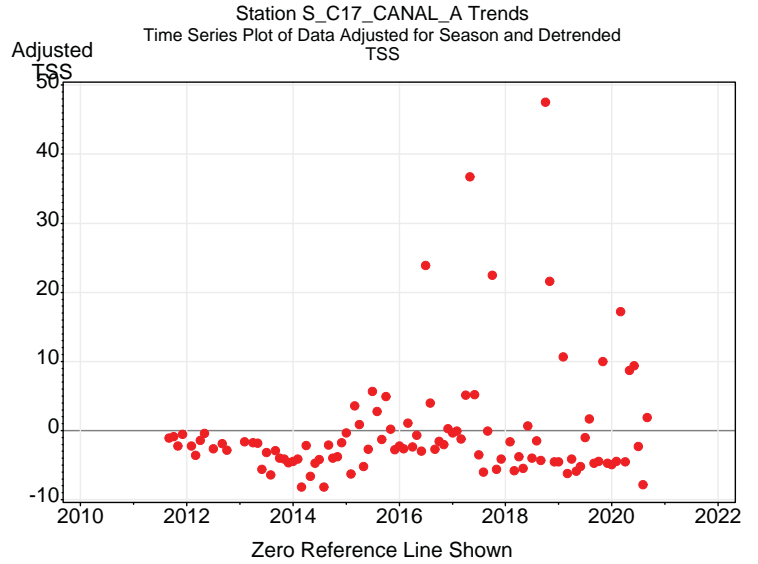
Station S_C17_CANAL_A Trends Appendix
Seasonal Kendall Tau Trend Test Statistics

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.292	0	0.093	0.4

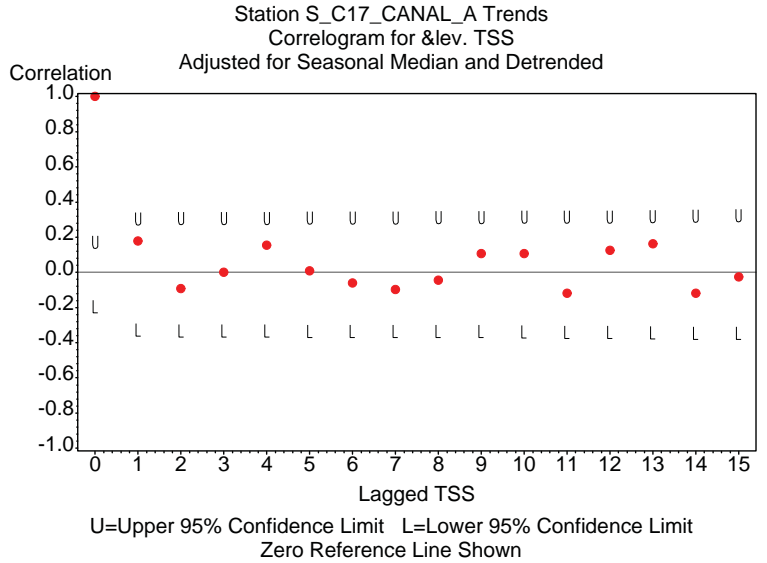
Station S_C17_CANAL_A Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

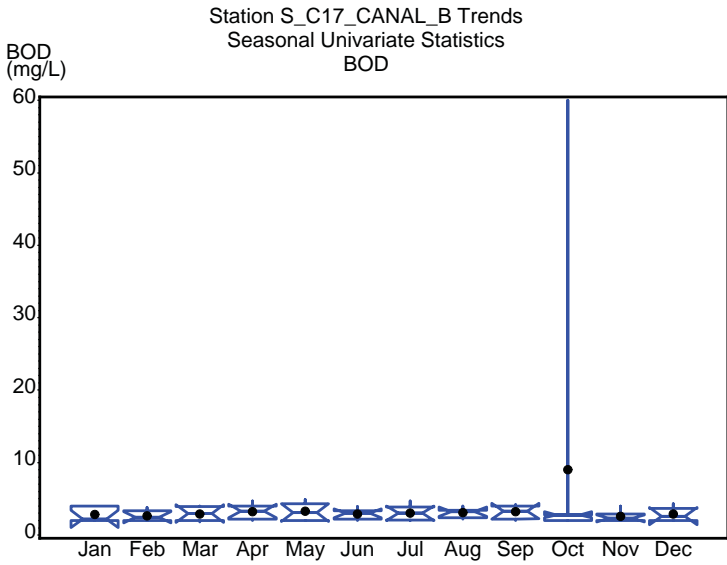
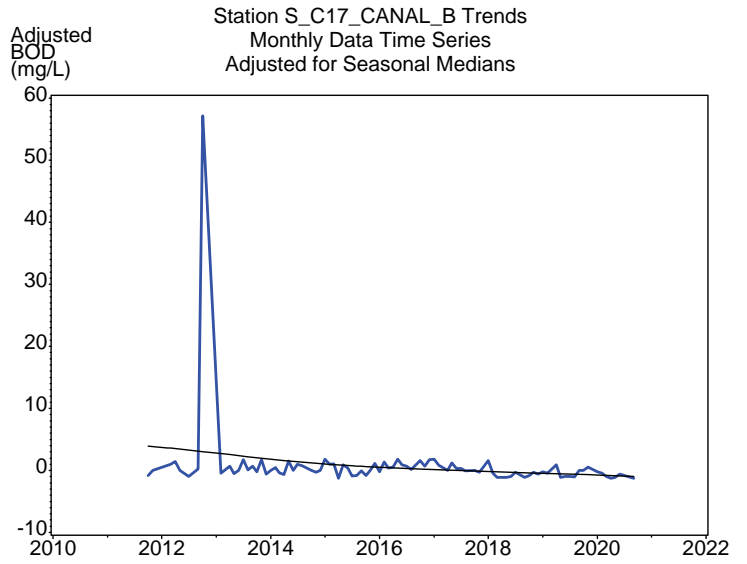
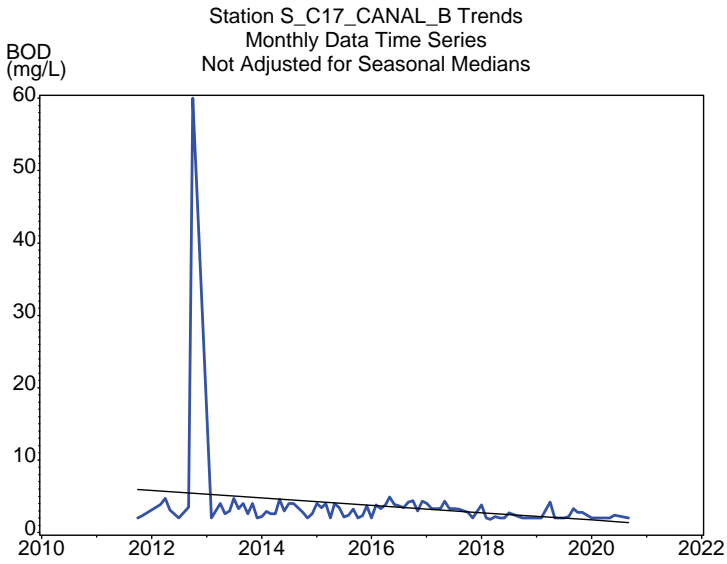
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.292	0	0.093	0.4



Station S_C17_CANAL_A Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

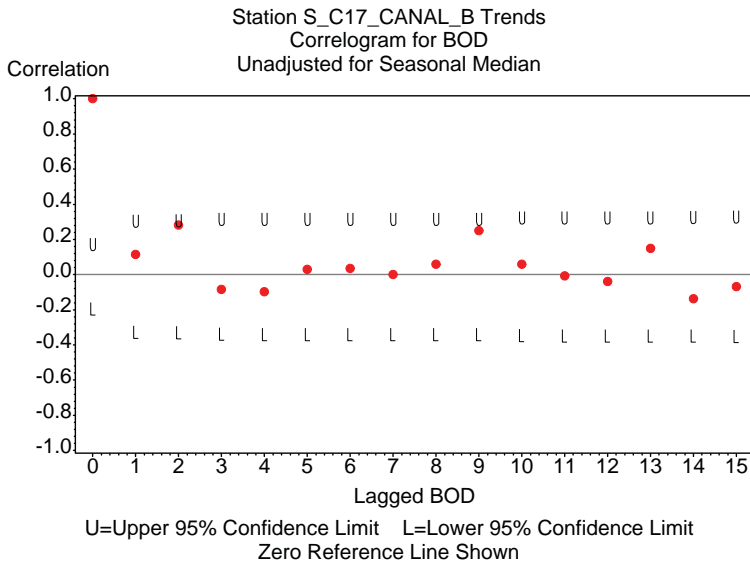
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.178	0.158	0.316	-0.316
2	-0.093	0.160	0.320	-0.320
3	0.000	0.160	0.320	-0.320
4	0.155	0.160	0.320	-0.320
5	0.010	0.161	0.323	-0.323
6	-0.060	0.161	0.323	-0.323
7	-0.097	0.162	0.323	-0.323
8	-0.045	0.162	0.324	-0.324
9	0.107	0.162	0.324	-0.324
10	0.108	0.163	0.326	-0.326
11	-0.118	0.163	0.327	-0.327
12	0.125	0.164	0.328	-0.328
13	0.162	0.165	0.330	-0.330
14	-0.119	0.166	0.333	-0.333
15	-0.025	0.167	0.334	-0.334





Station S_C17_CANAL_B Trends Autocorrelation Statistics for BOD

Lagged BOD	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.114	0.158	0.316	-0.316
2	0.282	0.159	0.318	-0.318
3	-0.085	0.163	0.326	-0.326
4	-0.098	0.163	0.327	-0.327
5	0.031	0.164	0.328	-0.328
6	0.036	0.164	0.328	-0.328
7	0.002	0.164	0.328	-0.328
8	0.060	0.164	0.328	-0.328
9	0.251	0.164	0.328	-0.328
10	0.059	0.167	0.334	-0.334
11	-0.006	0.167	0.335	-0.335
12	-0.038	0.167	0.335	-0.335
13	0.149	0.167	0.335	-0.335
14	-0.136	0.169	0.337	-0.337
15	-0.067	0.169	0.339	-0.339



Station S_C17_CANAL_B Trends Appendix Seasonal Kendall Tau Trend Test Statistics BOD

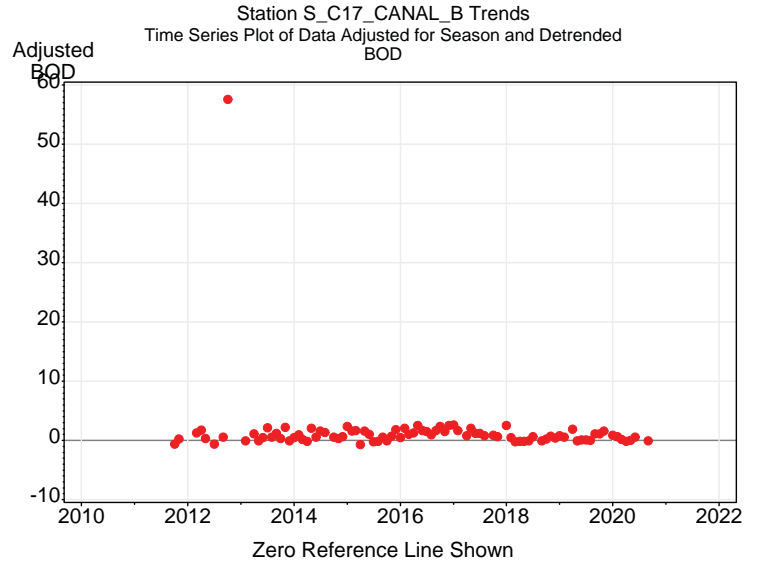
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.258	.003	0.092	-0.1

Station S_C17_CANAL_B Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 BOD

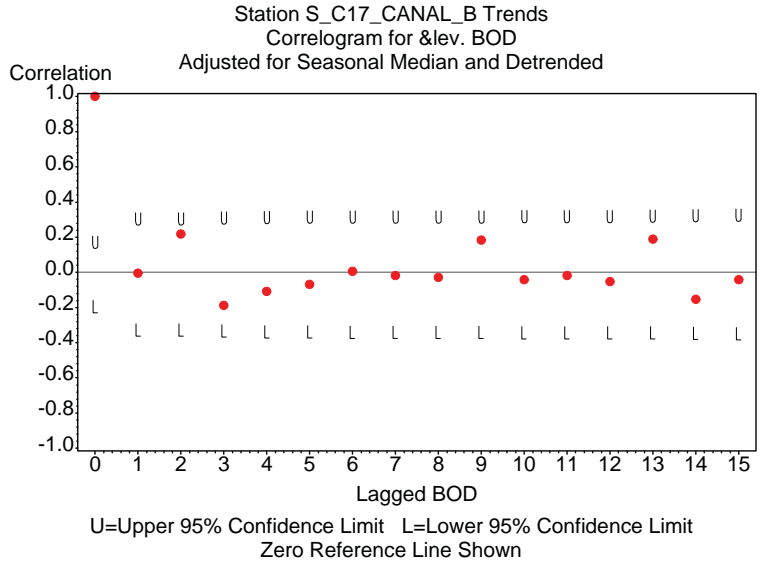
Adjusted for Seasonal Medians

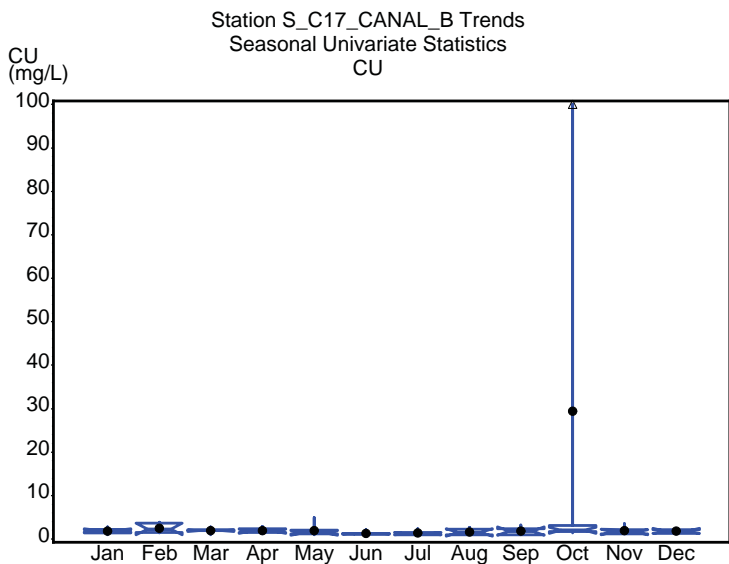
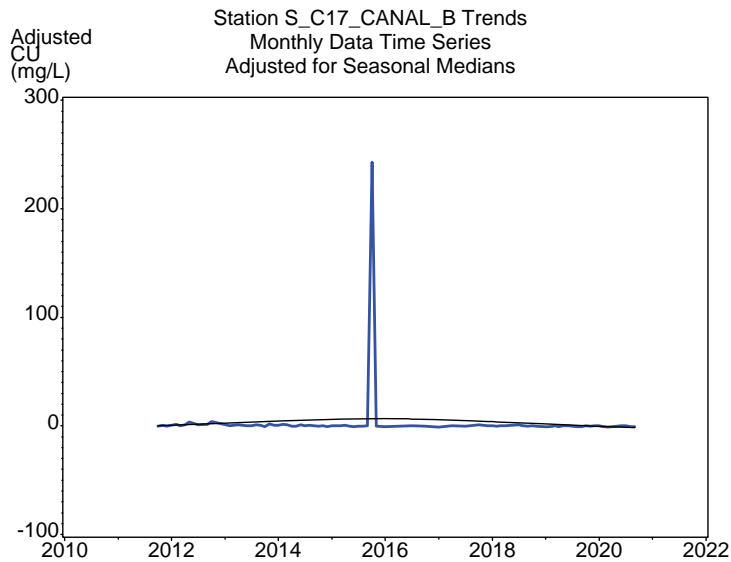
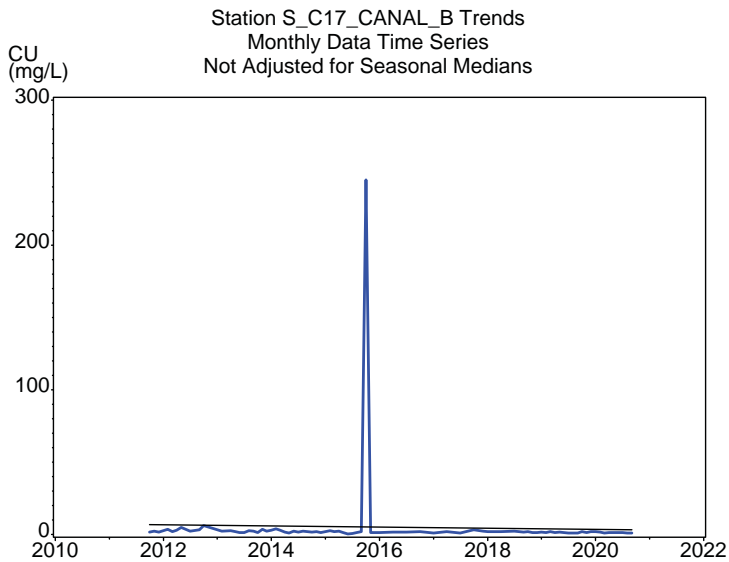
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.258	.003	0.092	-0.1



Station S_C17_CANAL_B Trends
 Autocorrelation Statistics for BOD
 Adjusted for Seasonal Median and Detrended

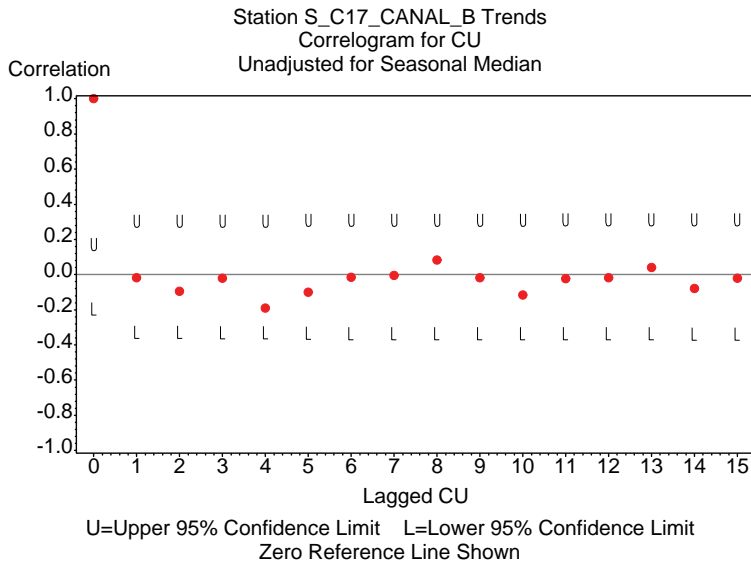
Lagged BOD	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.004	0.158	0.316	-0.316
2	0.219	0.158	0.316	-0.316
3	-0.188	0.161	0.321	-0.321
4	-0.109	0.162	0.325	-0.325
5	-0.067	0.163	0.326	-0.326
6	0.007	0.163	0.327	-0.327
7	-0.019	0.163	0.327	-0.327
8	-0.029	0.163	0.327	-0.327
9	0.183	0.163	0.327	-0.327
10	-0.042	0.165	0.330	-0.330
11	-0.018	0.165	0.330	-0.330
12	-0.052	0.165	0.330	-0.330
13	0.189	0.165	0.331	-0.331
14	-0.154	0.167	0.334	-0.334
15	-0.041	0.168	0.337	-0.337





Station S_C17_CANAL_B Trends
Autocorrelation Statistics for CU

Lagged CU	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.017	0.158	0.316	-0.316
2	-0.096	0.158	0.316	-0.316
3	-0.020	0.159	0.317	-0.317
4	-0.191	0.159	0.317	-0.317
5	-0.099	0.161	0.321	-0.321
6	-0.015	0.161	0.322	-0.322
7	-0.005	0.161	0.322	-0.322
8	0.083	0.161	0.322	-0.322
9	-0.017	0.161	0.323	-0.323
10	-0.116	0.161	0.323	-0.323
11	-0.024	0.162	0.324	-0.324
12	-0.019	0.162	0.324	-0.324
13	0.041	0.162	0.324	-0.324
14	-0.080	0.162	0.325	-0.325
15	-0.021	0.163	0.325	-0.325

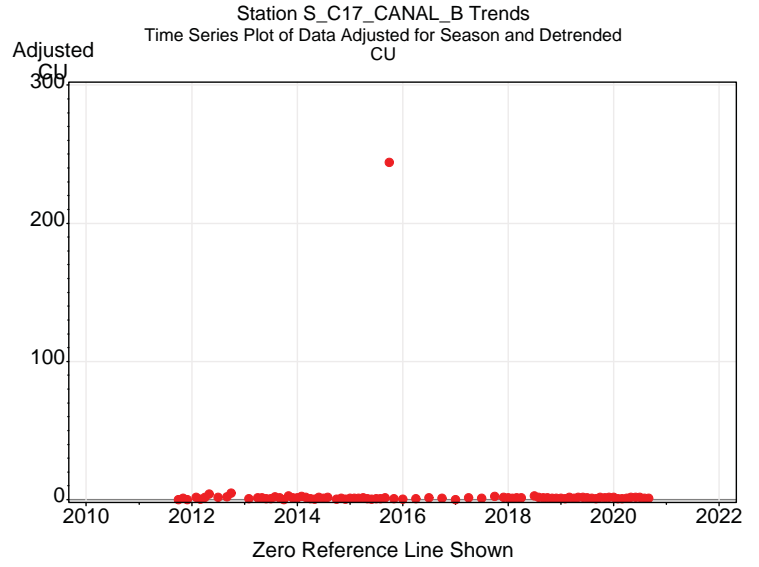


Station S_C17_CANAL_B Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CU
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.32	.001	0.034	-0.15

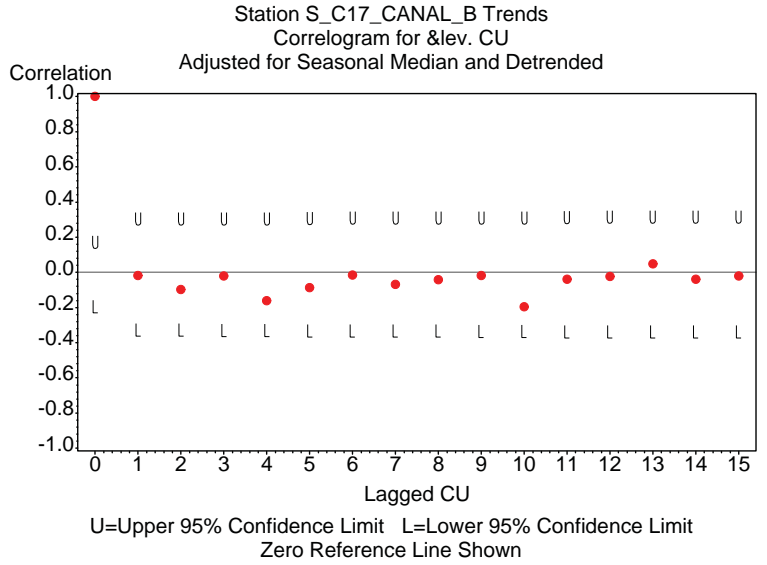
Station S_C17_CANAL_B Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CU
 Adjusted for Seasonal Medians

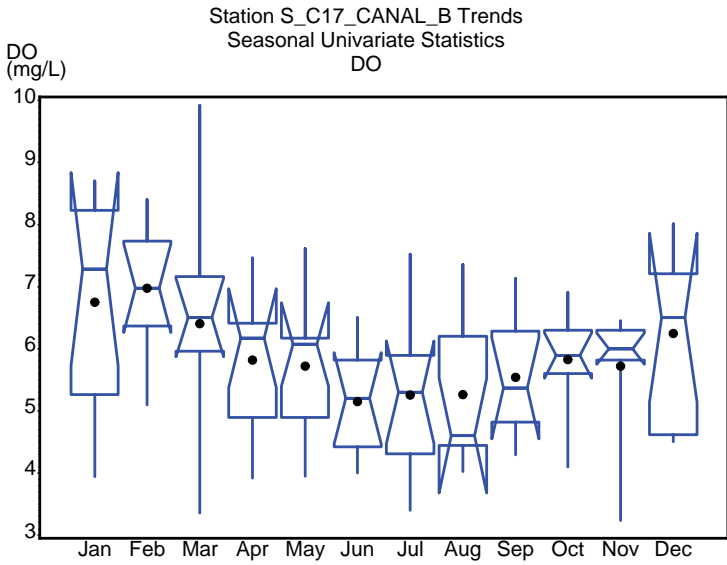
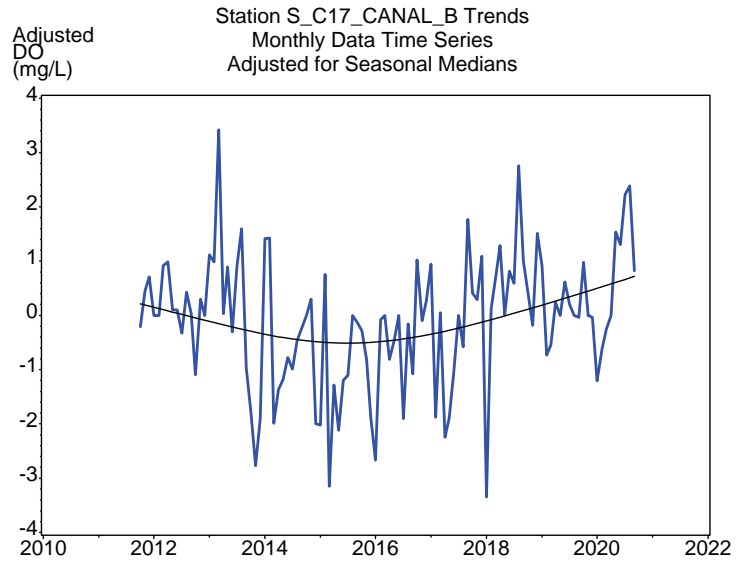
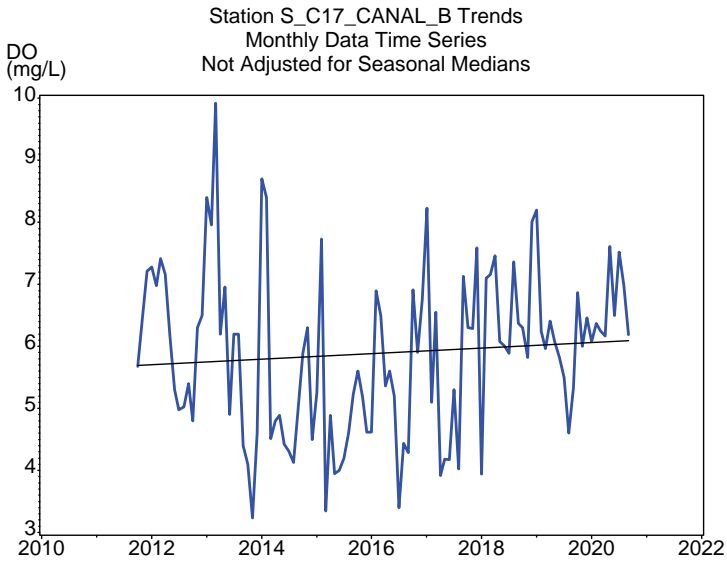
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.32	.001	0.034	-0.15



Station S_C17_CANAL_B Trends
 Autocorrelation Statistics for CU
 Adjusted for Seasonal Median and Detrended

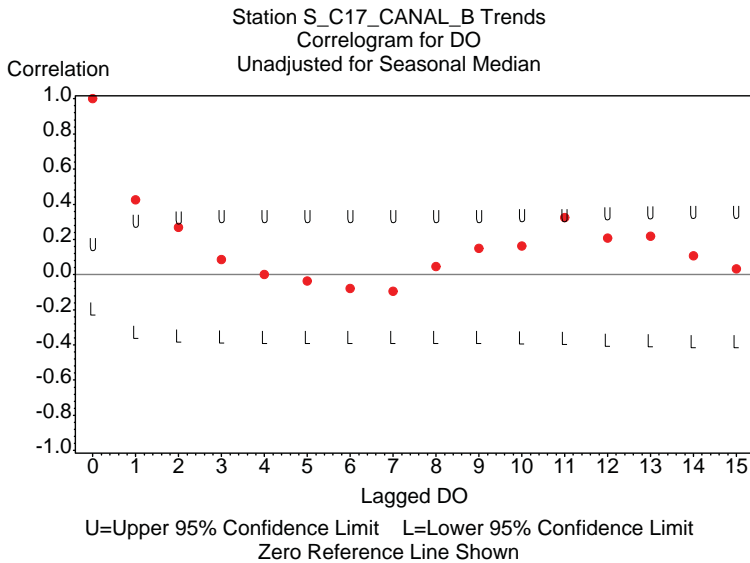
Lagged CU	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.018	0.158	0.316	-0.316
2	-0.098	0.158	0.316	-0.316
3	-0.021	0.159	0.317	-0.317
4	-0.162	0.159	0.317	-0.317
5	-0.086	0.160	0.320	-0.320
6	-0.016	0.160	0.321	-0.321
7	-0.067	0.160	0.321	-0.321
8	-0.043	0.161	0.321	-0.321
9	-0.017	0.161	0.322	-0.322
10	-0.195	0.161	0.322	-0.322
11	-0.038	0.163	0.325	-0.325
12	-0.022	0.163	0.326	-0.326
13	0.048	0.163	0.326	-0.326
14	-0.040	0.163	0.326	-0.326
15	-0.021	0.163	0.326	-0.326





Station S_C17_CANAL_B Trends
Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.424	0.158	0.316	-0.316
2	0.270	0.167	0.335	-0.335
3	0.086	0.171	0.342	-0.342
4	0.000	0.171	0.343	-0.343
5	-0.037	0.171	0.343	-0.343
6	-0.080	0.171	0.343	-0.343
7	-0.096	0.172	0.343	-0.343
8	0.046	0.172	0.344	-0.344
9	0.148	0.172	0.344	-0.344
10	0.162	0.173	0.347	-0.347
11	0.324	0.175	0.349	-0.349
12	0.208	0.179	0.359	-0.359
13	0.218	0.181	0.363	-0.363
14	0.108	0.184	0.367	-0.367
15	0.032	0.184	0.368	-0.368

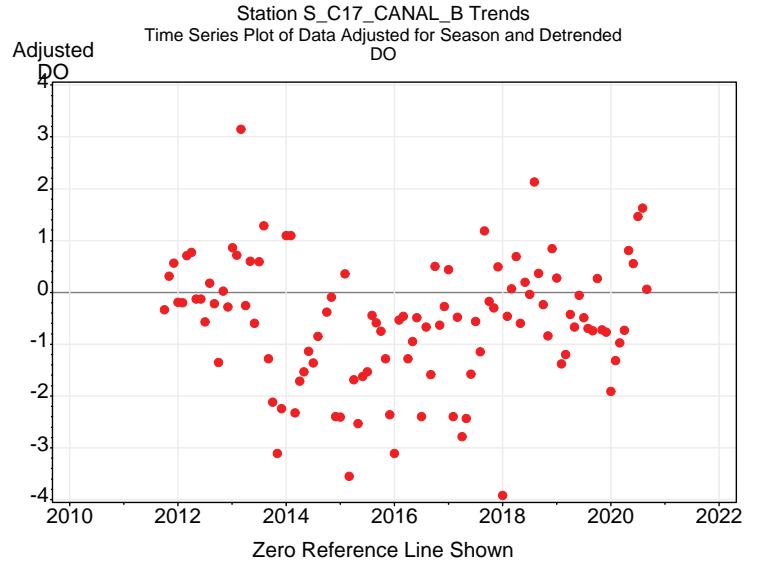


Station S_C17_CANAL_B Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
DO
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.05	0.542	0.739	0.064

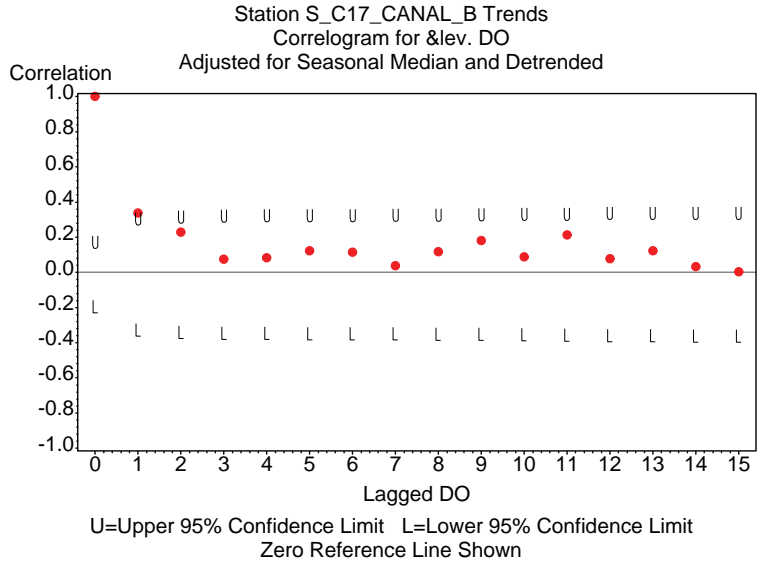
Station S_C17_CANAL_B Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

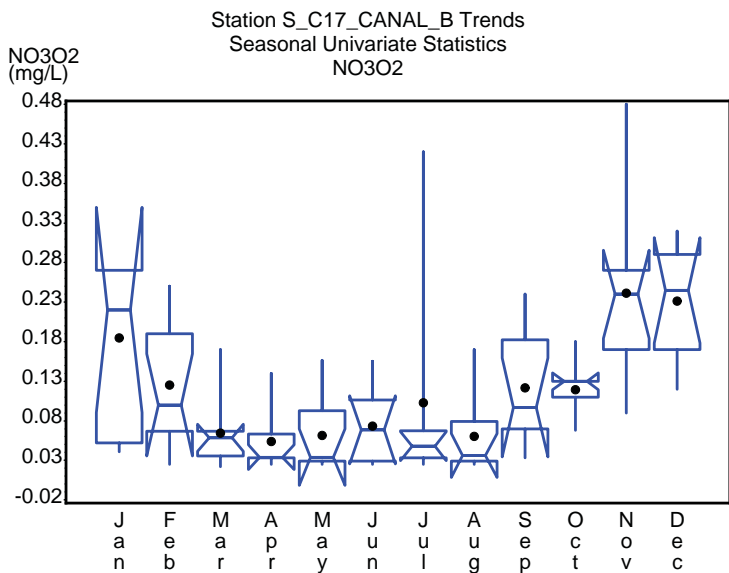
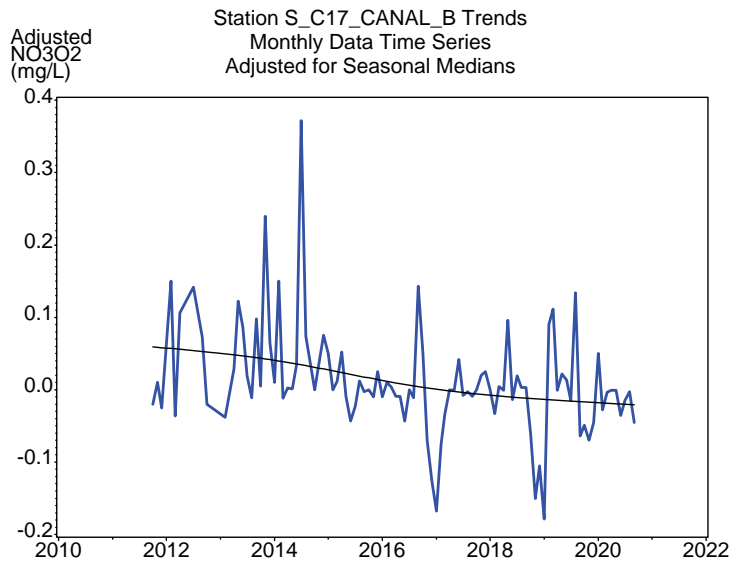
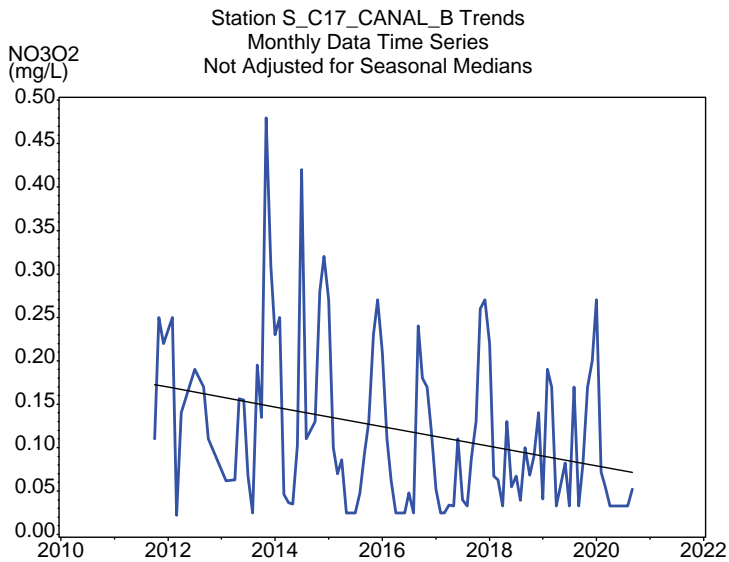
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.05	0.542	0.739	0.064



Station S_C17_CANAL_B Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

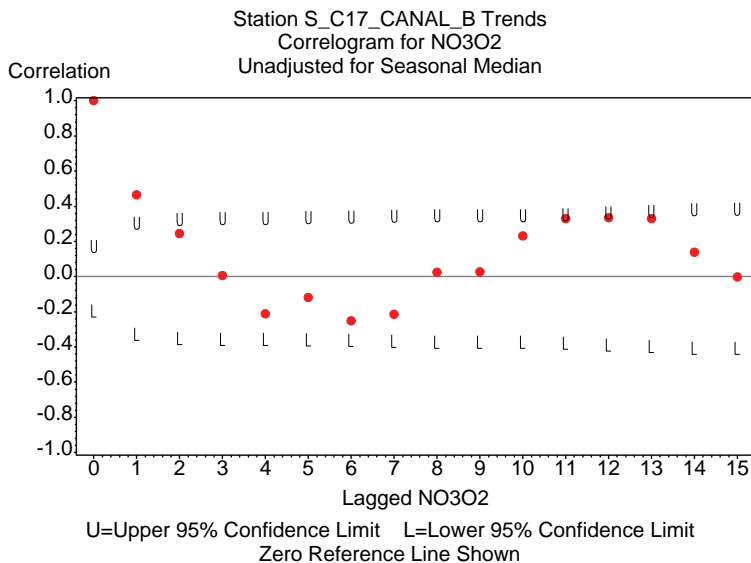
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.338	0.158	0.316	-0.316
2	0.230	0.164	0.328	-0.328
3	0.075	0.167	0.333	-0.333
4	0.082	0.167	0.334	-0.334
5	0.122	0.167	0.335	-0.335
6	0.115	0.168	0.336	-0.336
7	0.039	0.169	0.337	-0.337
8	0.117	0.169	0.338	-0.338
9	0.180	0.169	0.339	-0.339
10	0.087	0.171	0.342	-0.342
11	0.212	0.171	0.343	-0.343
12	0.077	0.174	0.347	-0.347
13	0.123	0.174	0.348	-0.348
14	0.032	0.175	0.349	-0.349
15	0.004	0.175	0.349	-0.349





Station S_C17_CANAL_B Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.464	0.158	0.316	-0.316
2	0.244	0.169	0.338	-0.338
3	0.007	0.172	0.344	-0.344
4	-0.211	0.172	0.344	-0.344
5	-0.119	0.174	0.348	-0.348
6	-0.251	0.175	0.350	-0.350
7	-0.213	0.178	0.356	-0.356
8	0.024	0.180	0.360	-0.360
9	0.027	0.180	0.360	-0.360
10	0.232	0.180	0.360	-0.360
11	0.329	0.182	0.365	-0.365
12	0.334	0.187	0.375	-0.375
13	0.329	0.192	0.384	-0.384
14	0.140	0.197	0.394	-0.394
15	-0.003	0.198	0.395	-0.395

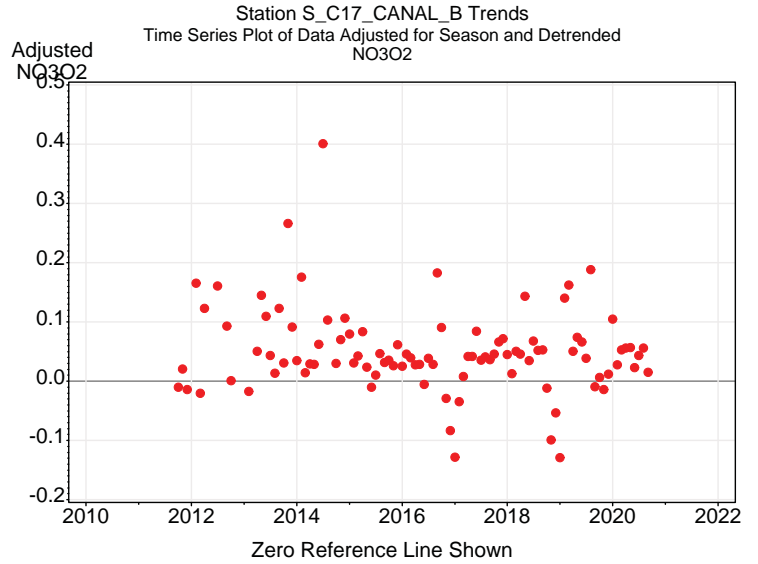


Station S_C17_CANAL_B Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.238	.004	0.043	-.005

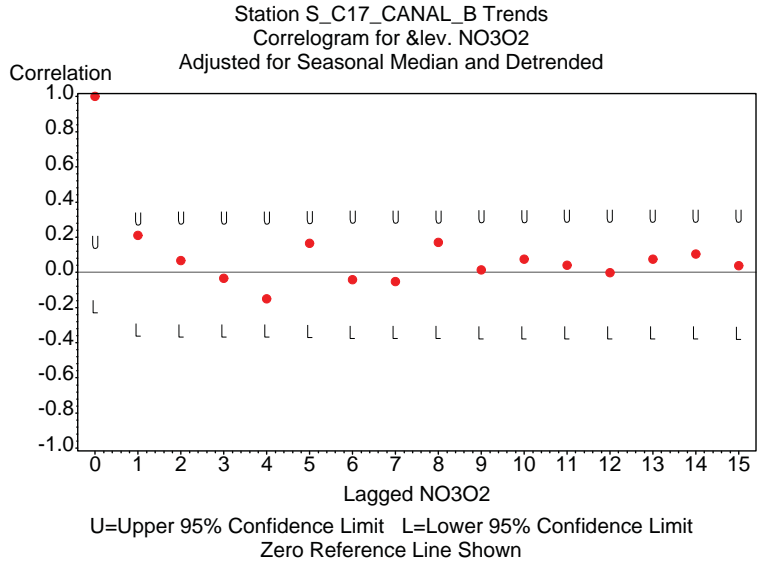
Station S_C17_CANAL_B Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

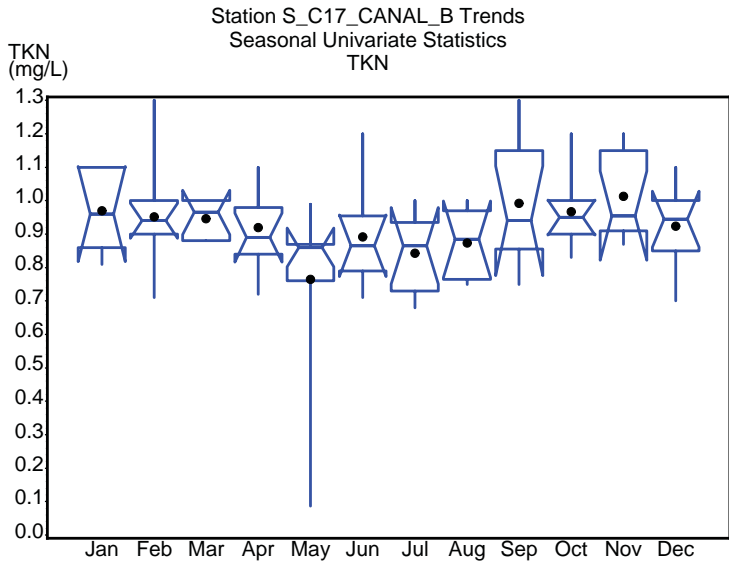
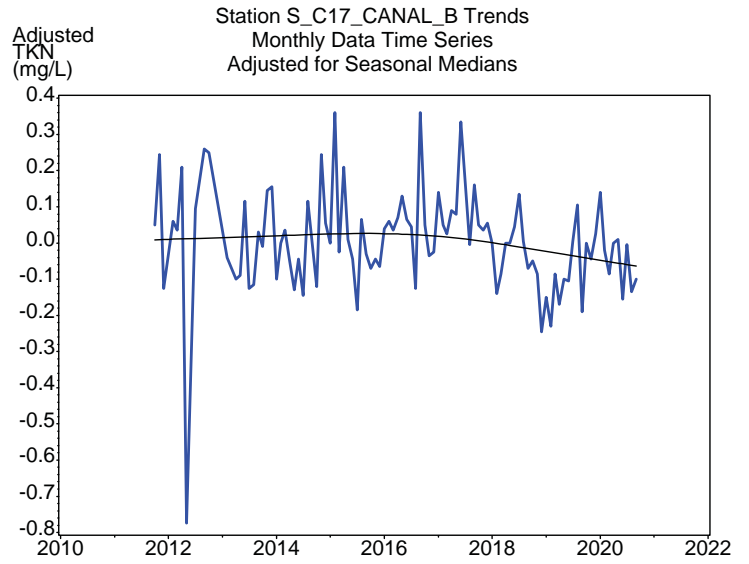
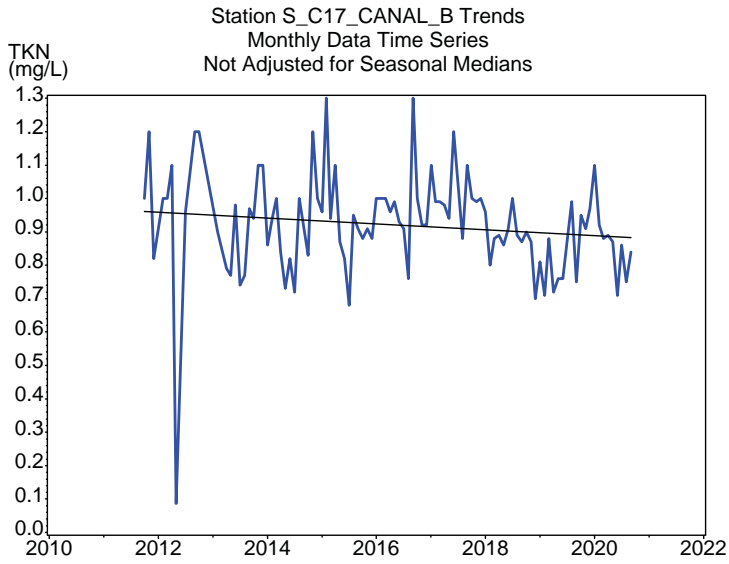
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.238	.004	0.043	-.005



Station S_C17_CANAL_B Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

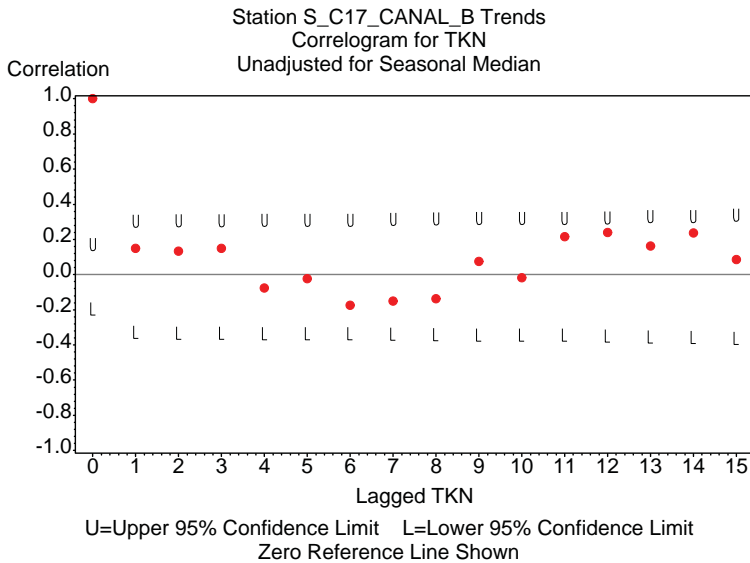
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.211	0.158	0.316	-0.316
2	0.067	0.160	0.321	-0.321
3	-0.035	0.161	0.321	-0.321
4	-0.151	0.161	0.321	-0.321
5	0.166	0.162	0.324	-0.324
6	-0.042	0.163	0.327	-0.327
7	-0.053	0.163	0.327	-0.327
8	0.171	0.164	0.327	-0.327
9	0.015	0.165	0.330	-0.330
10	0.074	0.165	0.330	-0.330
11	0.041	0.165	0.331	-0.331
12	-0.003	0.165	0.331	-0.331
13	0.074	0.165	0.331	-0.331
14	0.104	0.166	0.331	-0.331
15	0.037	0.166	0.333	-0.333





Station S_C17_CANAL_B Trends
Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.148	0.158	0.316	-0.316
2	0.133	0.159	0.319	-0.319
3	0.150	0.160	0.320	-0.320
4	-0.076	0.161	0.323	-0.323
5	-0.022	0.162	0.323	-0.323
6	-0.174	0.162	0.323	-0.323
7	-0.151	0.163	0.326	-0.326
8	-0.136	0.164	0.329	-0.329
9	0.075	0.165	0.331	-0.331
10	-0.019	0.166	0.331	-0.331
11	0.215	0.166	0.331	-0.331
12	0.239	0.168	0.336	-0.336
13	0.162	0.171	0.342	-0.342
14	0.238	0.172	0.344	-0.344
15	0.086	0.175	0.350	-0.350



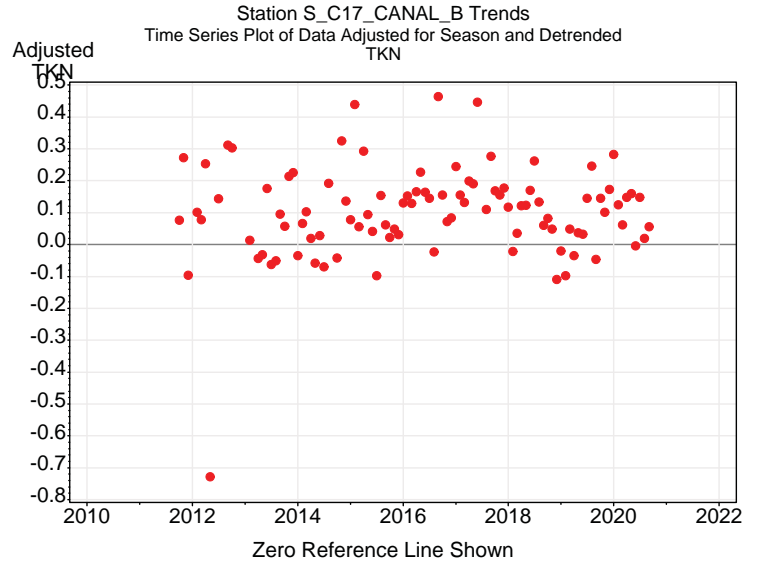
Station S_C17_CANAL_B Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TKN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.216	.008	0.087	-0.013

Station S_C17_CANAL_B Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN

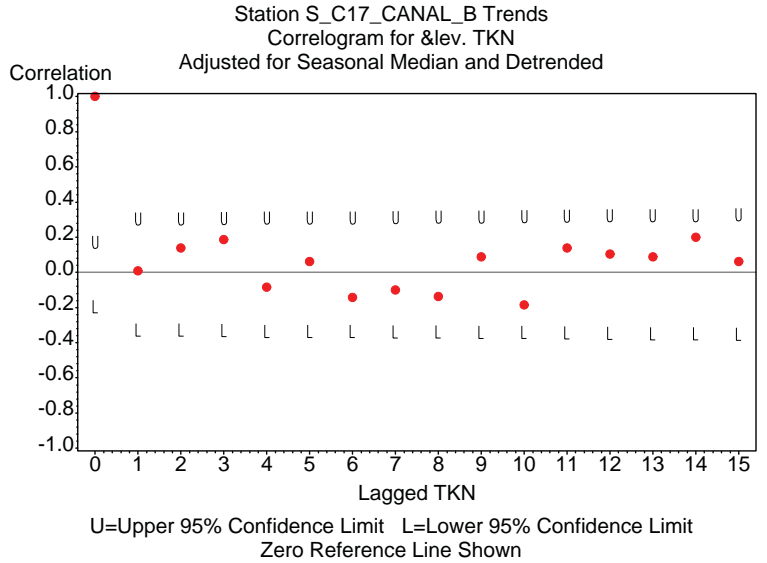
Adjusted for Seasonal Medians

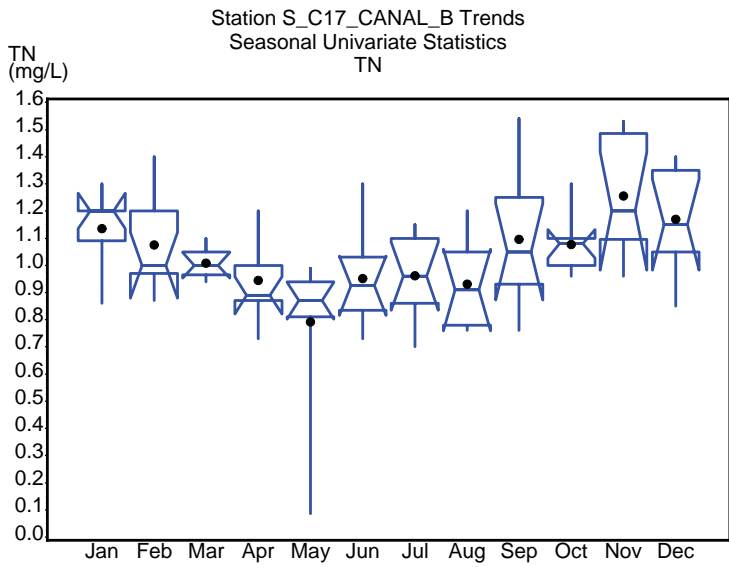
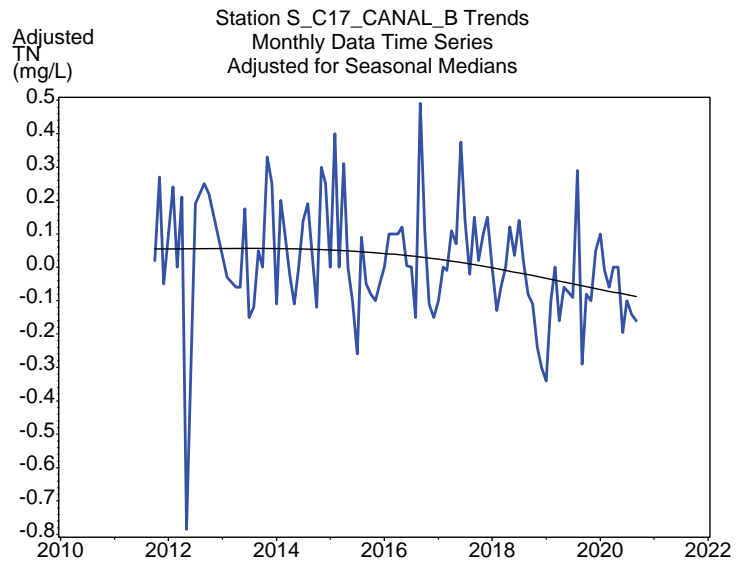
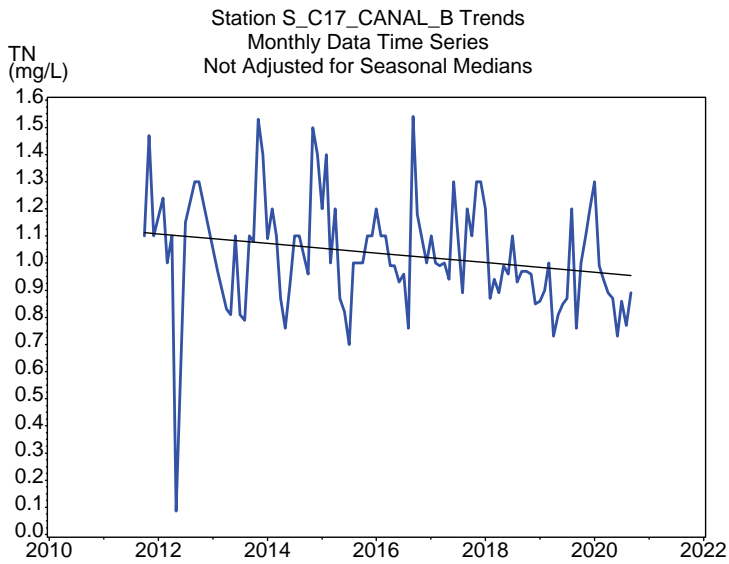
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.216	.008	0.087	-0.013



Station S_C17_CANAL_B Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

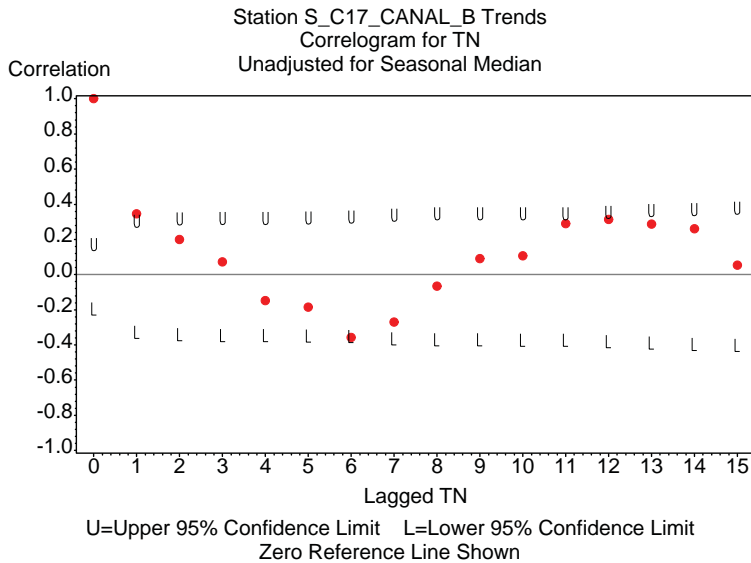
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.009	0.158	0.316	-0.316
2	0.139	0.158	0.316	-0.316
3	0.186	0.159	0.318	-0.318
4	-0.084	0.161	0.322	-0.322
5	0.062	0.161	0.323	-0.323
6	-0.142	0.161	0.323	-0.323
7	-0.101	0.163	0.325	-0.325
8	-0.136	0.163	0.326	-0.326
9	0.087	0.164	0.328	-0.328
10	-0.184	0.164	0.329	-0.329
11	0.140	0.166	0.332	-0.332
12	0.103	0.167	0.334	-0.334
13	0.088	0.168	0.335	-0.335
14	0.201	0.168	0.336	-0.336
15	0.061	0.170	0.340	-0.340





Station S_C17_CANAL_B Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.346	0.158	0.316	-0.316
2	0.199	0.164	0.329	-0.329
3	0.073	0.166	0.333	-0.333
4	-0.147	0.167	0.333	-0.333
5	-0.186	0.168	0.335	-0.335
6	-0.358	0.169	0.339	-0.339
7	-0.271	0.176	0.351	-0.351
8	-0.066	0.179	0.358	-0.358
9	0.091	0.179	0.358	-0.358
10	0.106	0.180	0.359	-0.359
11	0.289	0.180	0.360	-0.360
12	0.314	0.184	0.368	-0.368
13	0.287	0.188	0.377	-0.377
14	0.260	0.192	0.384	-0.384
15	0.053	0.195	0.390	-0.390



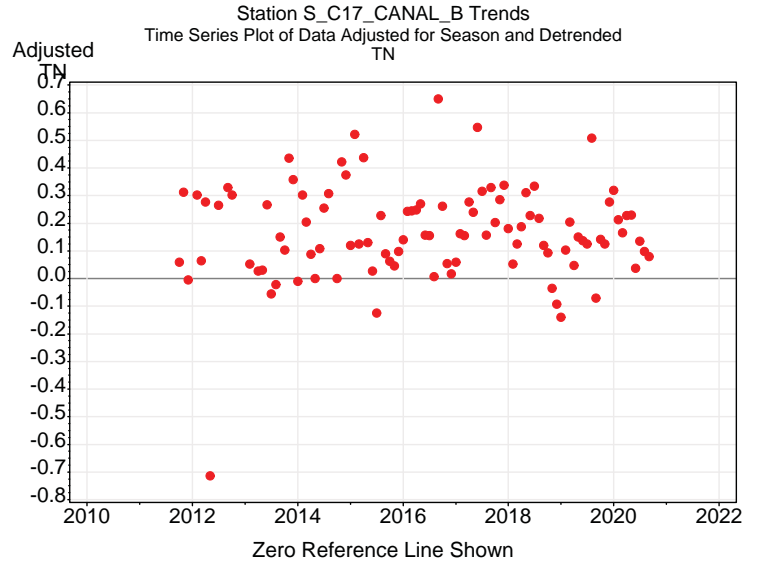
Station S_C17_CANAL_B Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.22	.007	0.047	-0.02

Station S_C17_CANAL_B Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

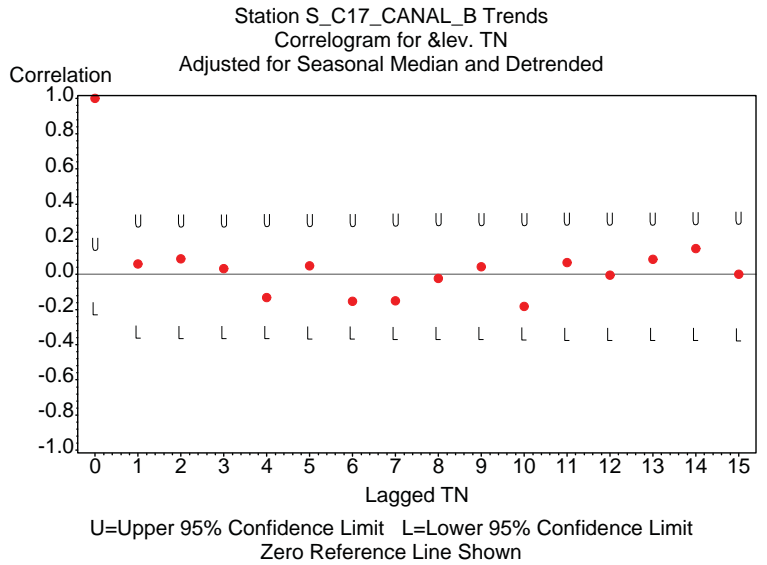
Adjusted for Seasonal Medians

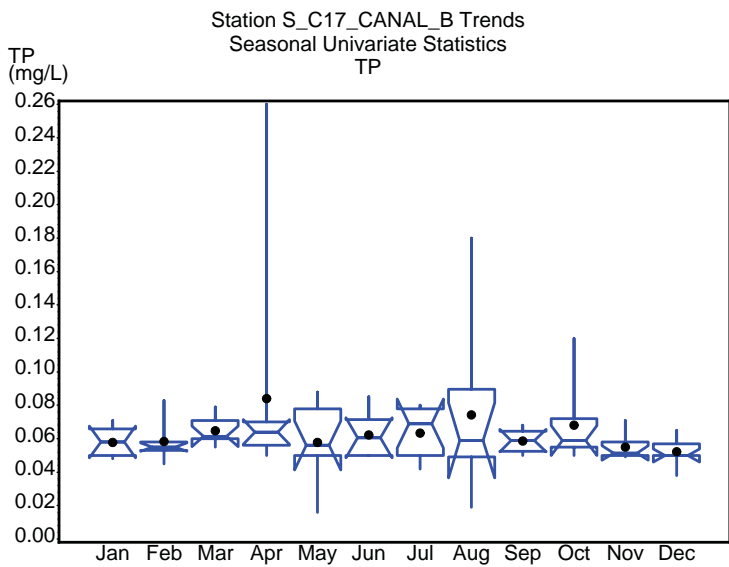
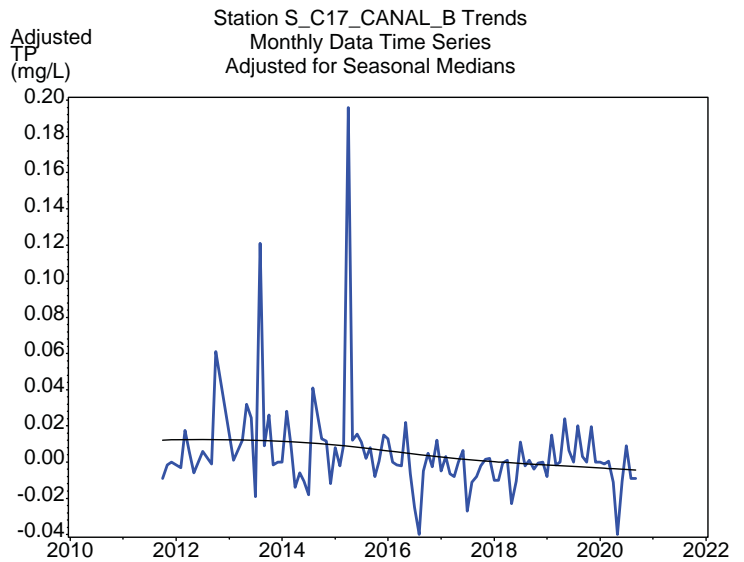
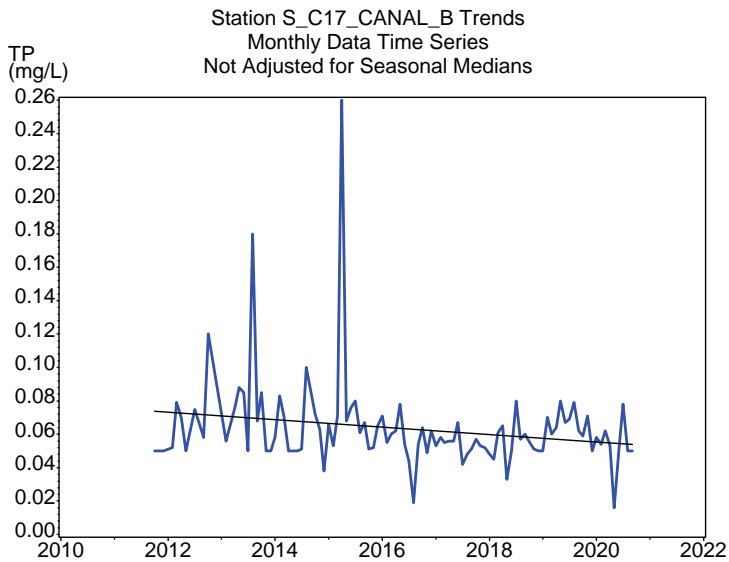
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.22	.007	0.047	-0.02



Station S_C17_CANAL_B Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

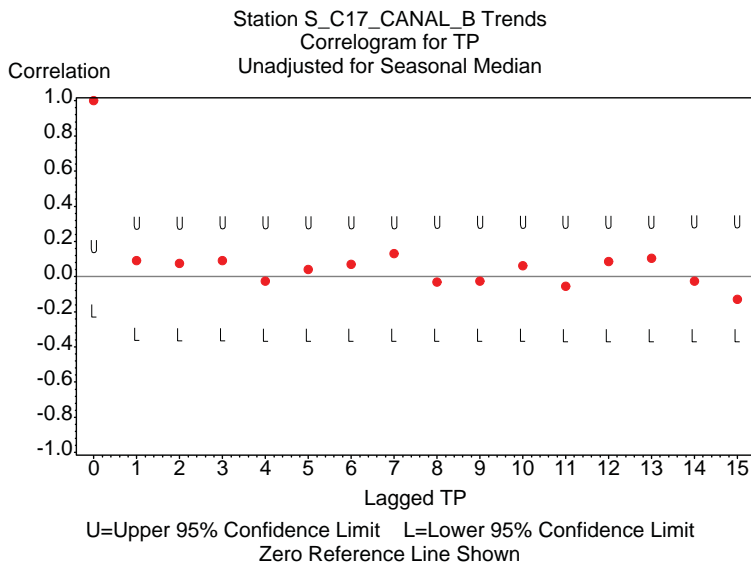
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.059	0.158	0.316	-0.316
2	0.089	0.158	0.317	-0.317
3	0.032	0.159	0.317	-0.317
4	-0.133	0.159	0.318	-0.318
5	0.048	0.160	0.319	-0.319
6	-0.153	0.160	0.320	-0.320
7	-0.150	0.161	0.322	-0.322
8	-0.022	0.162	0.324	-0.324
9	0.044	0.162	0.324	-0.324
10	-0.183	0.162	0.325	-0.325
11	0.066	0.164	0.328	-0.328
12	-0.005	0.164	0.328	-0.328
13	0.086	0.164	0.328	-0.328
14	0.147	0.165	0.329	-0.329
15	0.002	0.166	0.331	-0.331





Station S_C17_CANAL_B Trends
Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.091	0.158	0.316	-0.316
2	0.076	0.159	0.317	-0.317
3	0.092	0.159	0.318	-0.318
4	-0.027	0.159	0.319	-0.319
5	0.040	0.159	0.319	-0.319
6	0.069	0.159	0.319	-0.319
7	0.131	0.160	0.319	-0.319
8	-0.031	0.161	0.321	-0.321
9	-0.027	0.161	0.321	-0.321
10	0.063	0.161	0.321	-0.321
11	-0.056	0.161	0.322	-0.322
12	0.086	0.161	0.322	-0.322
13	0.103	0.161	0.323	-0.323
14	-0.025	0.162	0.324	-0.324
15	-0.130	0.162	0.324	-0.324



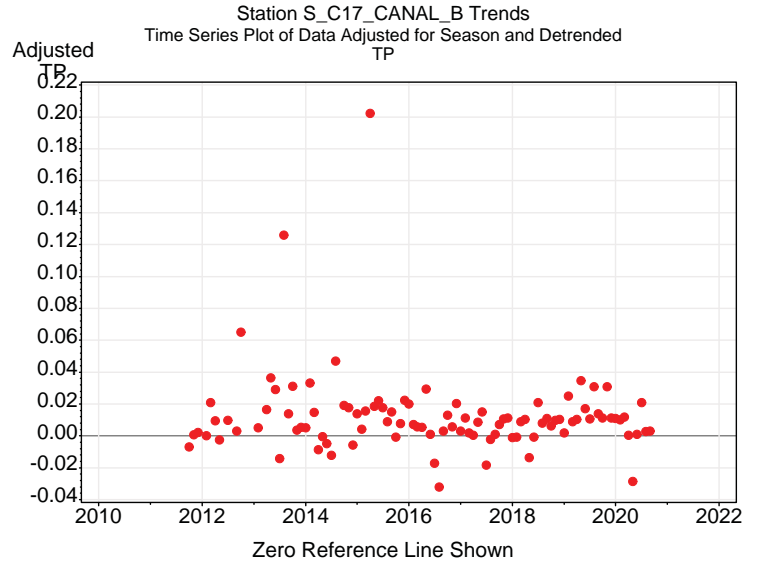
Station S_C17_CANAL_B Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TP
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.16	0.05	0.15	-.001

Station S_C17_CANAL_B Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

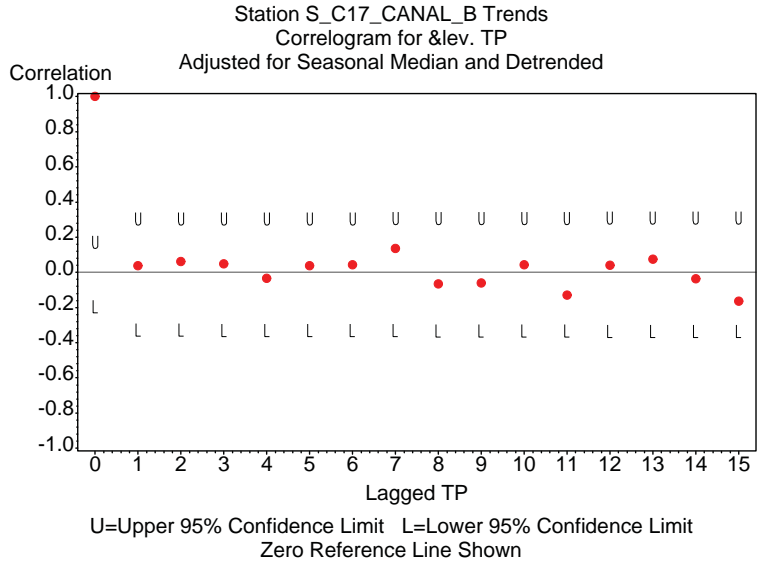
Adjusted for Seasonal Medians

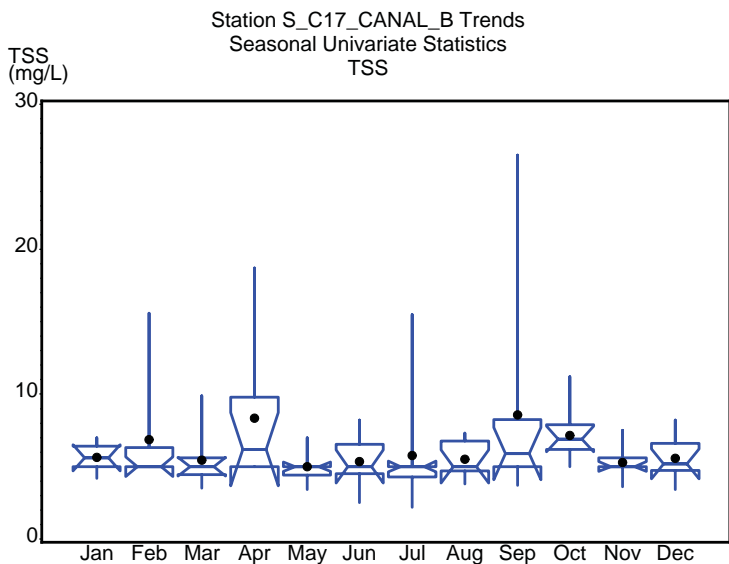
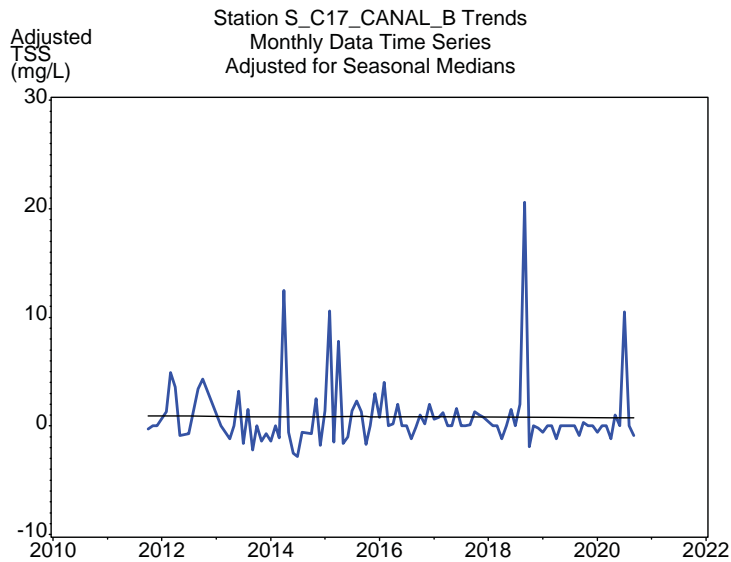
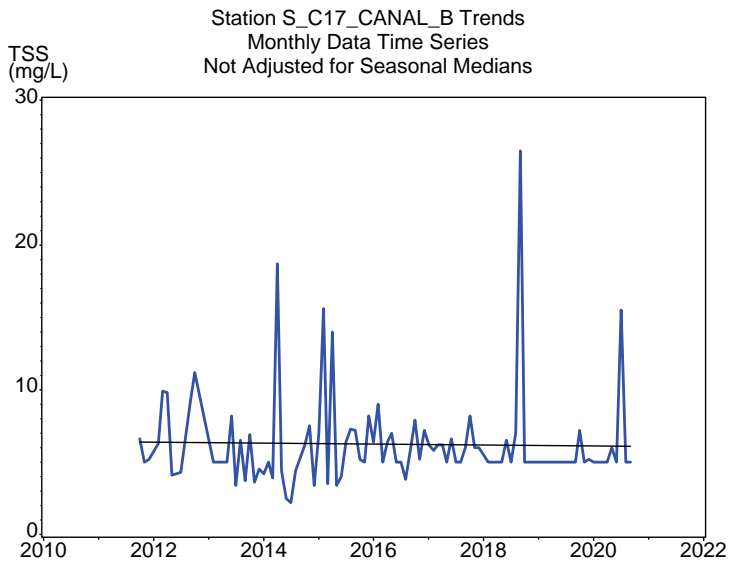
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.16	0.05	0.15	-.001



Station S_C17_CANAL_B Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

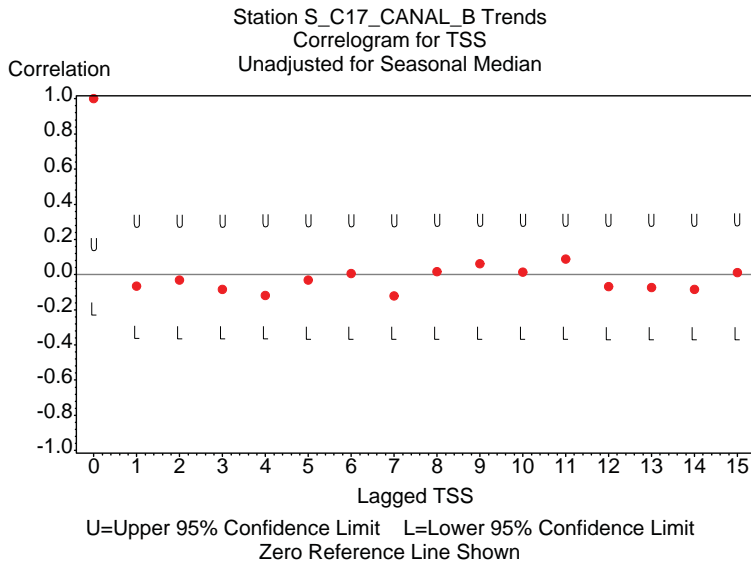
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.039	0.158	0.316	-0.316
2	0.063	0.158	0.316	-0.316
3	0.049	0.158	0.317	-0.317
4	-0.035	0.159	0.317	-0.317
5	0.037	0.159	0.317	-0.317
6	0.042	0.159	0.317	-0.317
7	0.137	0.159	0.318	-0.318
8	-0.065	0.160	0.319	-0.319
9	-0.060	0.160	0.320	-0.320
10	0.043	0.160	0.320	-0.320
11	-0.130	0.160	0.320	-0.320
12	0.041	0.161	0.322	-0.322
13	0.075	0.161	0.322	-0.322
14	-0.036	0.161	0.323	-0.323
15	-0.164	0.162	0.323	-0.323





Station S_C17_CANAL_B Trends
Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.066	0.158	0.316	-0.316
2	-0.031	0.158	0.317	-0.317
3	-0.085	0.158	0.317	-0.317
4	-0.119	0.159	0.318	-0.318
5	-0.031	0.160	0.319	-0.319
6	0.006	0.160	0.319	-0.319
7	-0.120	0.160	0.319	-0.319
8	0.017	0.160	0.321	-0.321
9	0.063	0.160	0.321	-0.321
10	0.014	0.161	0.321	-0.321
11	0.087	0.161	0.321	-0.321
12	-0.067	0.161	0.322	-0.322
13	-0.073	0.161	0.322	-0.322
14	-0.084	0.161	0.323	-0.323
15	0.012	0.162	0.324	-0.324

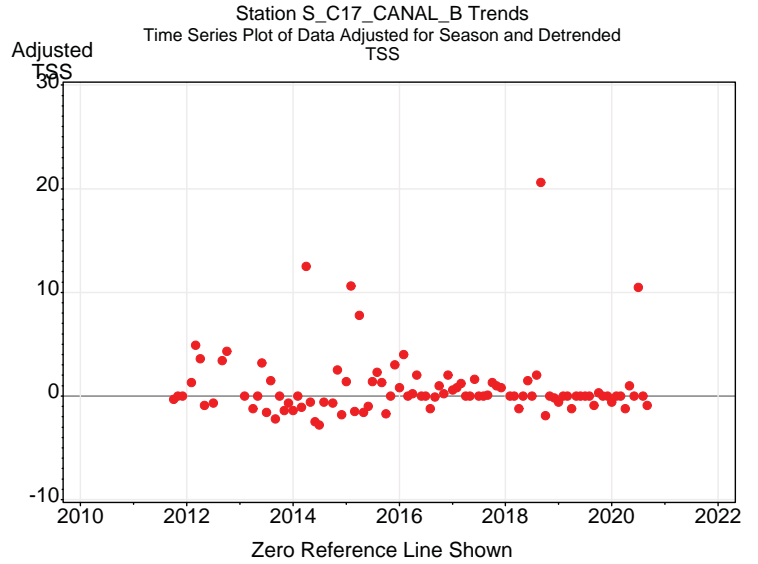


Station S_C17_CANAL_B Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TSS
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.022	0.806	0.859	0

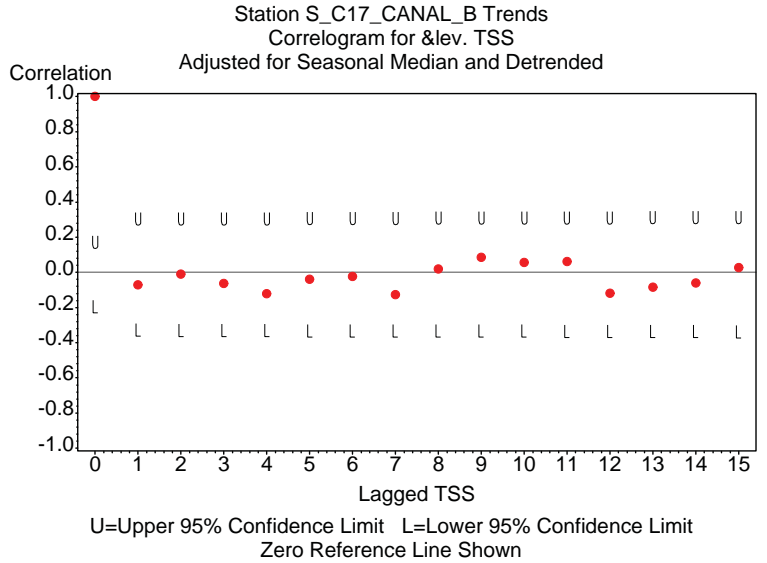
Station S_C17_CANAL_B Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

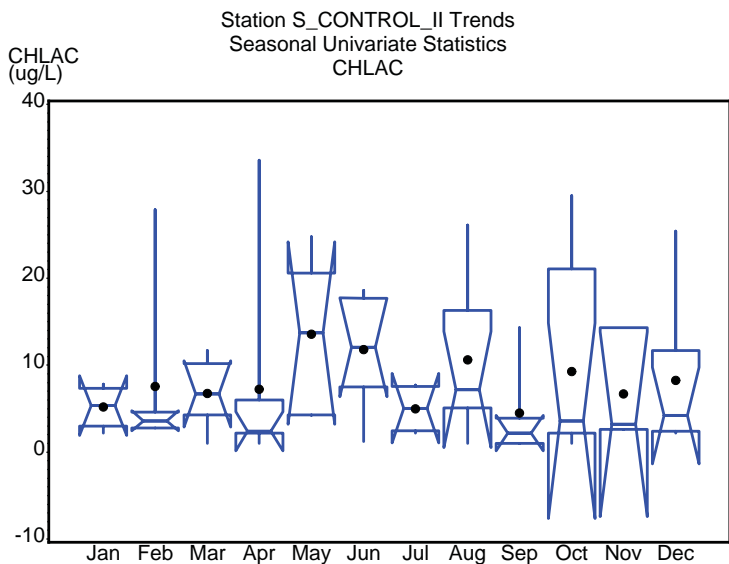
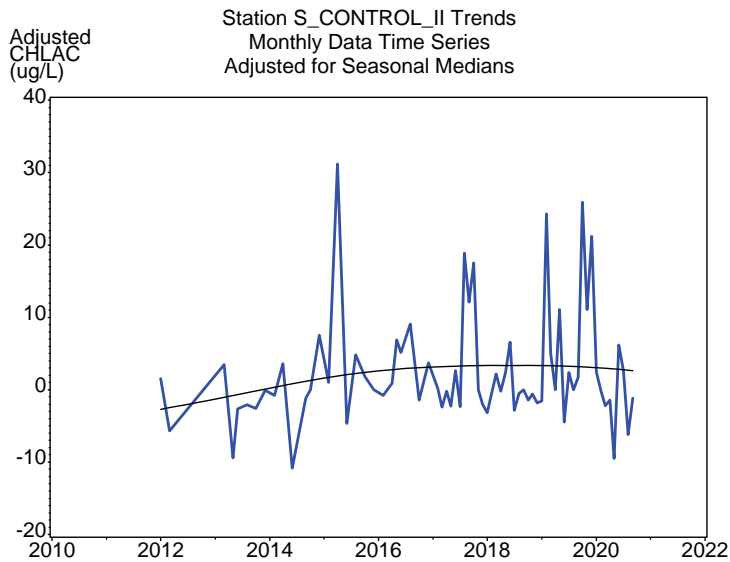
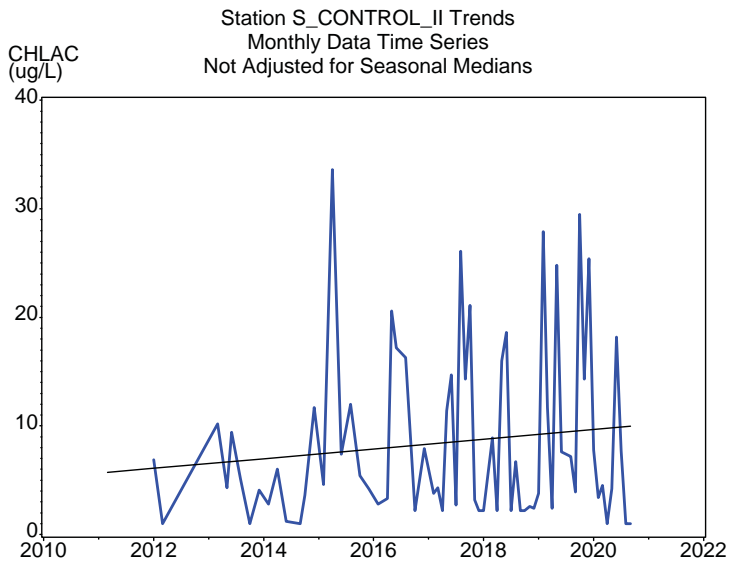
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.022	0.806	0.859	0



Station S_C17_CANAL_B Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

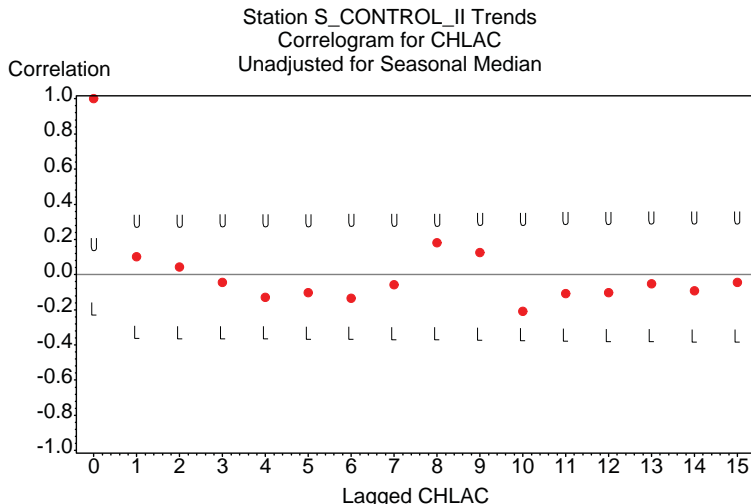
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.072	0.158	0.316	-0.316
2	-0.009	0.158	0.317	-0.317
3	-0.063	0.158	0.317	-0.317
4	-0.122	0.159	0.317	-0.317
5	-0.039	0.159	0.319	-0.319
6	-0.022	0.159	0.319	-0.319
7	-0.127	0.159	0.319	-0.319
8	0.019	0.160	0.321	-0.321
9	0.086	0.160	0.321	-0.321
10	0.056	0.161	0.321	-0.321
11	0.061	0.161	0.322	-0.322
12	-0.119	0.161	0.322	-0.322
13	-0.085	0.162	0.324	-0.324
14	-0.061	0.162	0.324	-0.324
15	0.026	0.162	0.325	-0.325





Station S_CONTROL_II Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.102	0.158	0.316	-0.316
2	0.042	0.159	0.317	-0.317
3	-0.045	0.159	0.318	-0.318
4	-0.130	0.159	0.318	-0.318
5	-0.103	0.160	0.319	-0.319
6	-0.135	0.160	0.321	-0.321
7	-0.058	0.161	0.322	-0.322
8	0.180	0.161	0.323	-0.323
9	0.126	0.163	0.326	-0.326
10	-0.209	0.164	0.328	-0.328
11	-0.107	0.166	0.332	-0.332
12	-0.103	0.167	0.333	-0.333
13	-0.053	0.167	0.334	-0.334
14	-0.092	0.167	0.335	-0.335
15	-0.044	0.168	0.336	-0.336



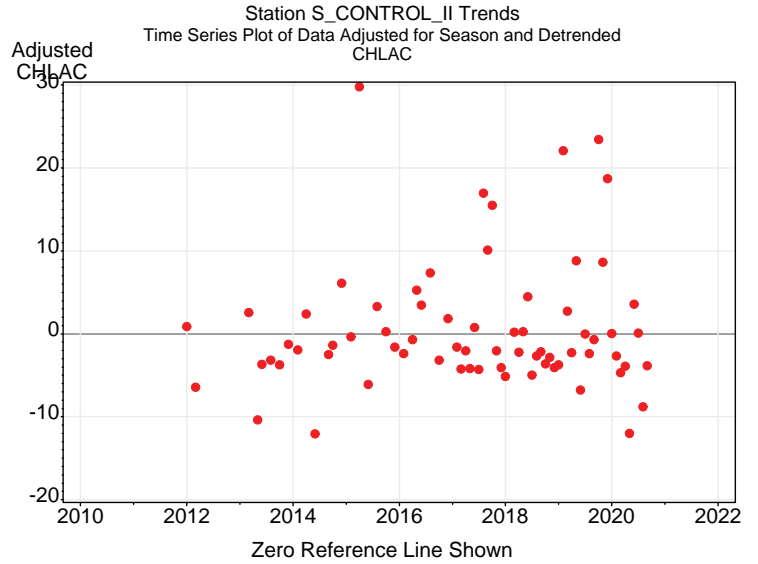
Station S_CONTROL_II Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.121	0.269	0.189	0.22

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

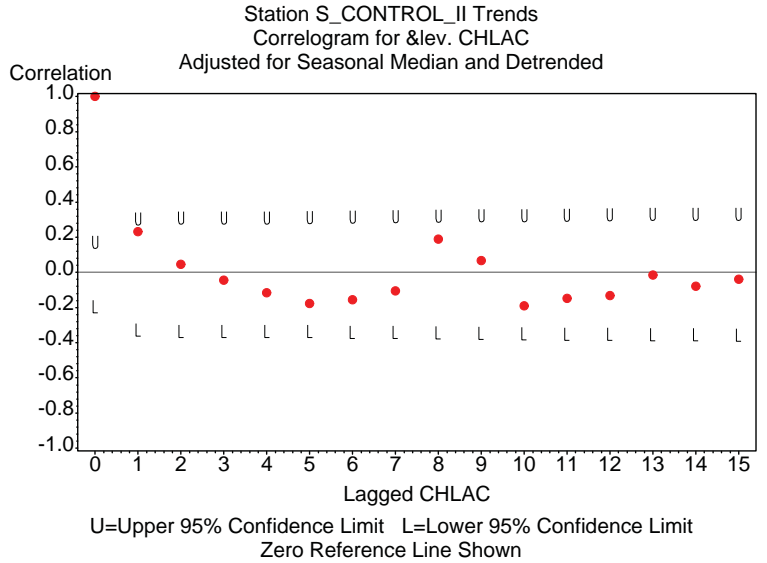
Station S_CONTROL_II Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

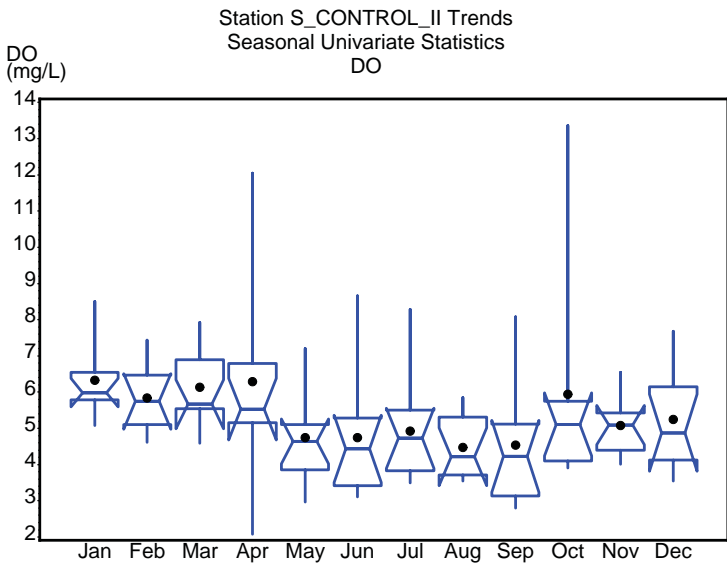
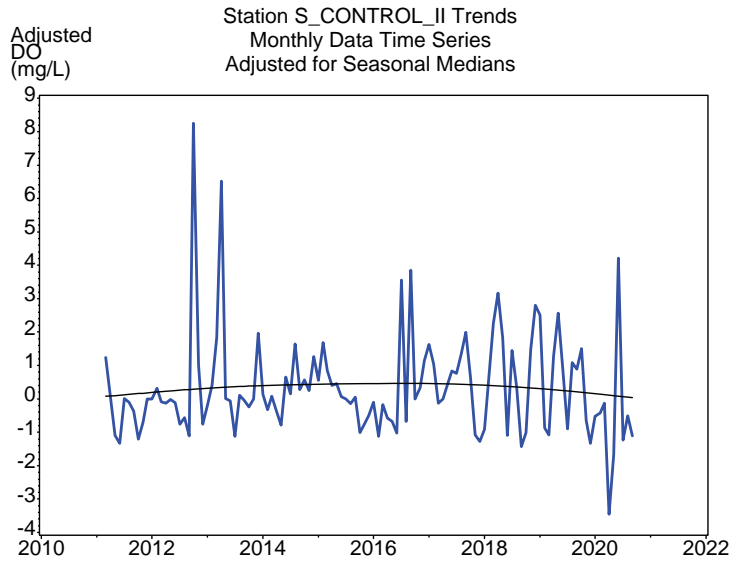
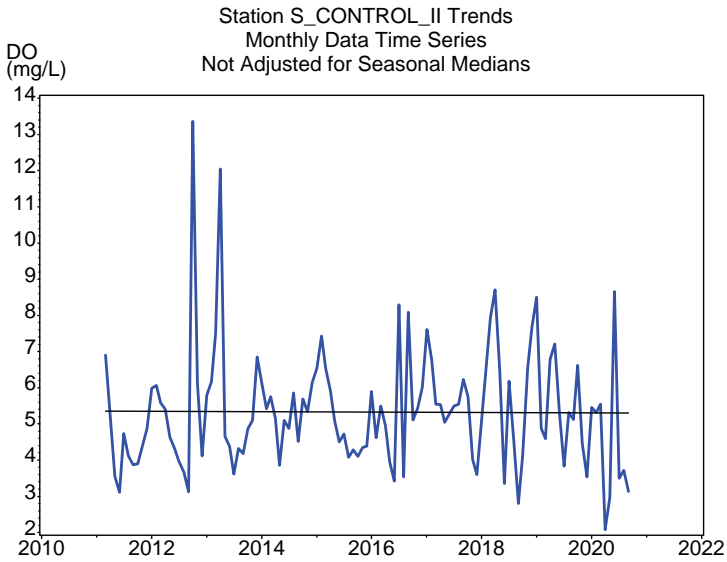
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.121	0.269	0.189	0.22



Station S_CONTROL_II Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

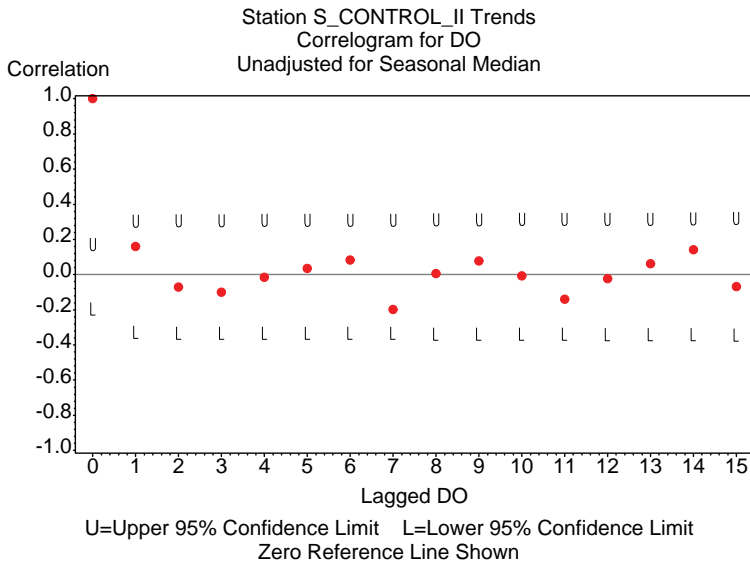
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.231	0.158	0.316	-0.316
2	0.046	0.161	0.322	-0.322
3	-0.045	0.161	0.322	-0.322
4	-0.117	0.161	0.322	-0.322
5	-0.178	0.162	0.324	-0.324
6	-0.157	0.163	0.327	-0.327
7	-0.106	0.165	0.329	-0.329
8	0.190	0.165	0.331	-0.331
9	0.067	0.167	0.334	-0.334
10	-0.191	0.167	0.335	-0.335
11	-0.147	0.169	0.338	-0.338
12	-0.131	0.170	0.340	-0.340
13	-0.016	0.171	0.342	-0.342
14	-0.080	0.171	0.342	-0.342
15	-0.038	0.171	0.343	-0.343





Station S_CONTROL_II Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.161	0.158	0.316	-0.316
2	-0.070	0.159	0.319	-0.319
3	-0.101	0.160	0.319	-0.319
4	-0.014	0.160	0.321	-0.321
5	0.036	0.160	0.321	-0.321
6	0.084	0.160	0.321	-0.321
7	-0.197	0.161	0.321	-0.321
8	0.007	0.163	0.325	-0.325
9	0.078	0.163	0.325	-0.325
10	-0.007	0.163	0.326	-0.326
11	-0.141	0.163	0.326	-0.326
12	-0.023	0.164	0.328	-0.328
13	0.061	0.164	0.328	-0.328
14	0.142	0.164	0.329	-0.329
15	-0.067	0.165	0.331	-0.331



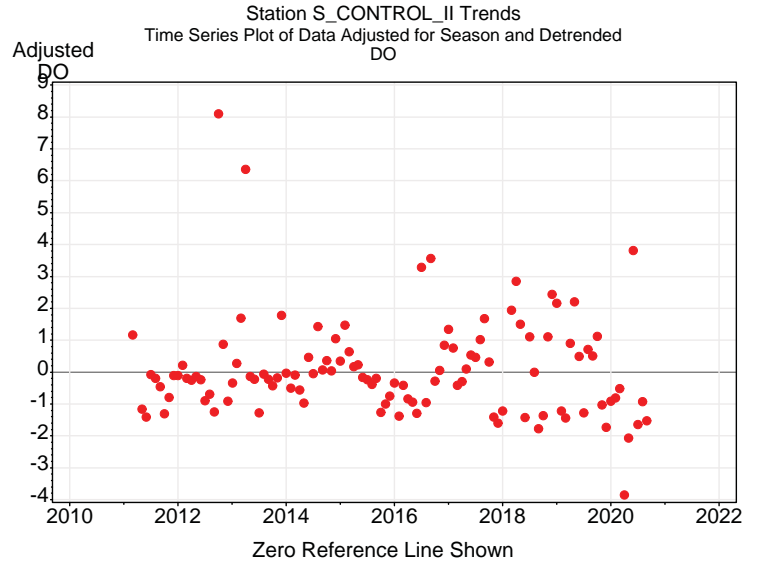
Station S_CONTROL_II Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.054	0.484	0.655	0.035

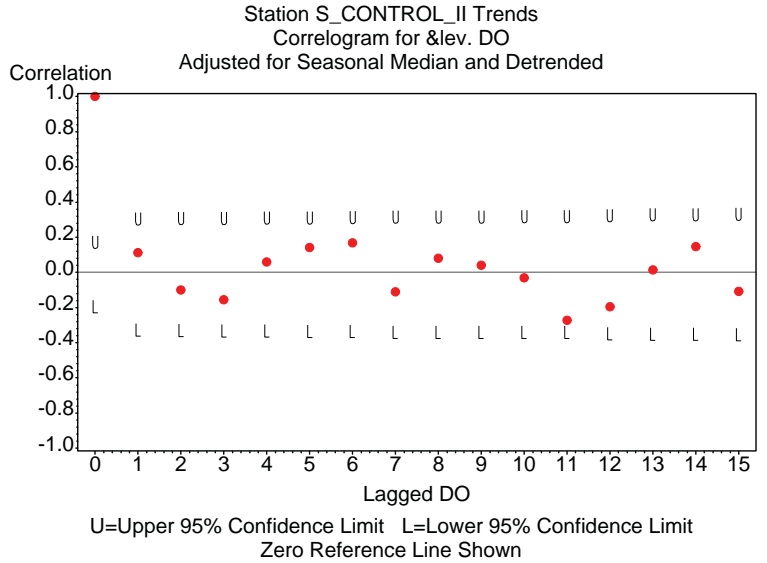
Station S_CONTROL_II Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

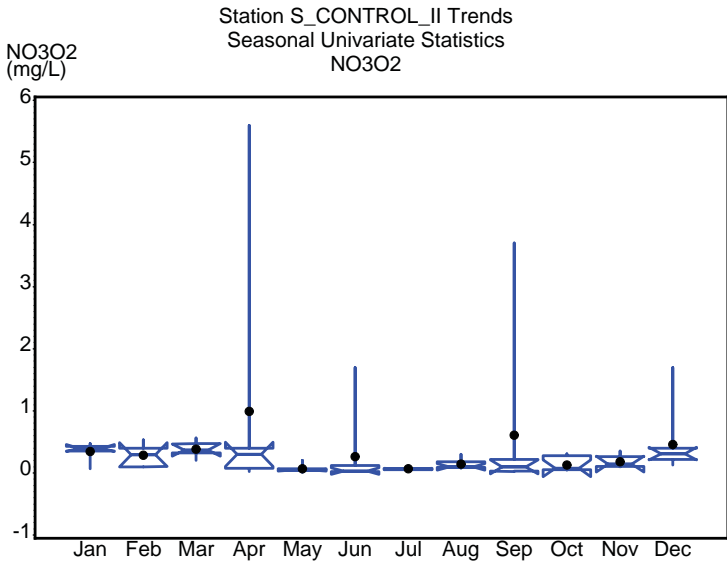
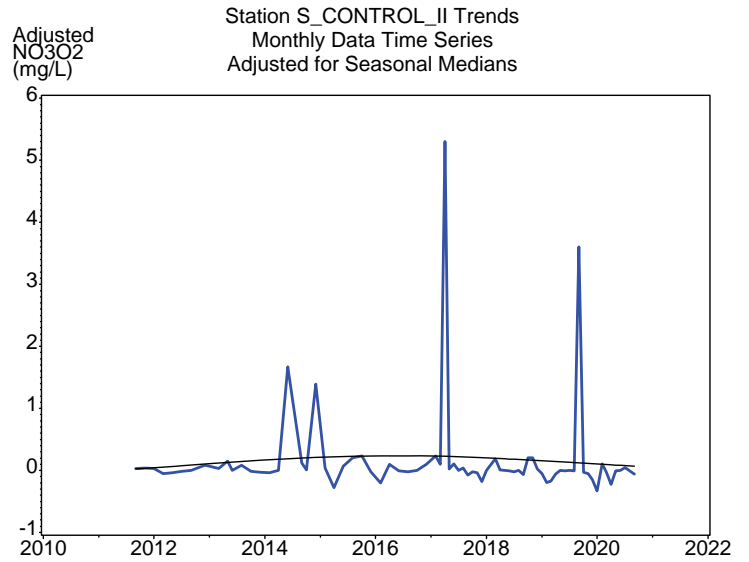
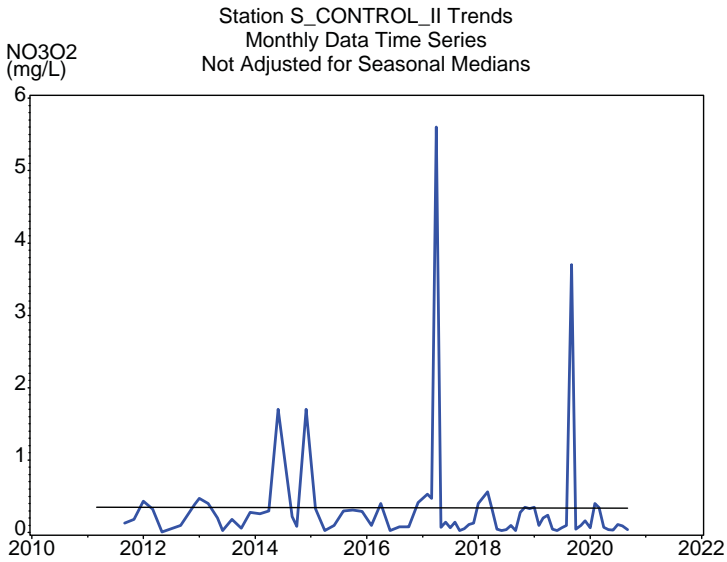
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.054	0.484	0.655	0.035



Station S_CONTROL_II Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

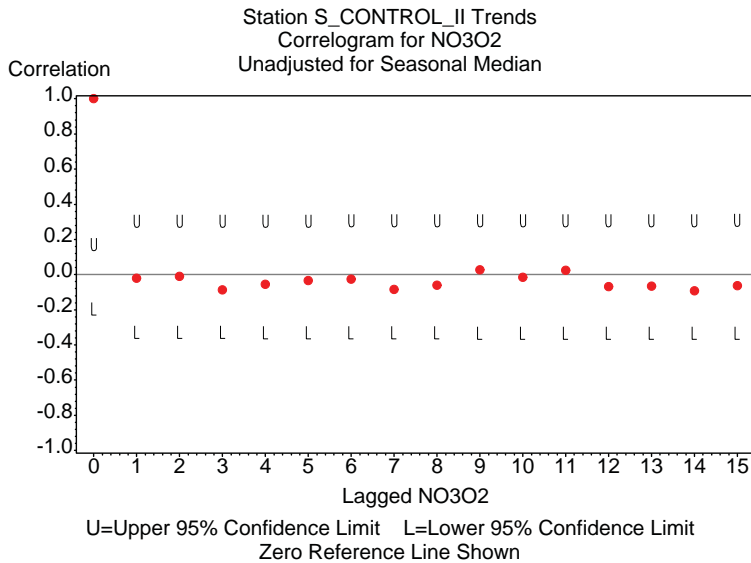
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.112	0.158	0.316	-0.316
2	-0.100	0.159	0.318	-0.318
3	-0.157	0.159	0.319	-0.319
4	0.058	0.161	0.321	-0.321
5	0.142	0.161	0.322	-0.322
6	0.169	0.162	0.324	-0.324
7	-0.112	0.163	0.327	-0.327
8	0.079	0.164	0.328	-0.328
9	0.041	0.164	0.328	-0.328
10	-0.032	0.164	0.329	-0.329
11	-0.272	0.164	0.329	-0.329
12	-0.195	0.168	0.336	-0.336
13	0.014	0.170	0.340	-0.340
14	0.146	0.170	0.340	-0.340
15	-0.107	0.171	0.342	-0.342





Station S_CONTROL_II Trends
Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.021	0.158	0.316	-0.316
2	-0.011	0.158	0.316	-0.316
3	-0.087	0.158	0.316	-0.316
4	-0.055	0.159	0.317	-0.317
5	-0.034	0.159	0.317	-0.317
6	-0.025	0.159	0.318	-0.318
7	-0.083	0.159	0.318	-0.318
8	-0.060	0.159	0.318	-0.318
9	0.027	0.159	0.319	-0.319
10	-0.015	0.159	0.319	-0.319
11	0.025	0.159	0.319	-0.319
12	-0.068	0.159	0.319	-0.319
13	-0.066	0.160	0.319	-0.319
14	-0.092	0.160	0.320	-0.320
15	-0.062	0.160	0.321	-0.321

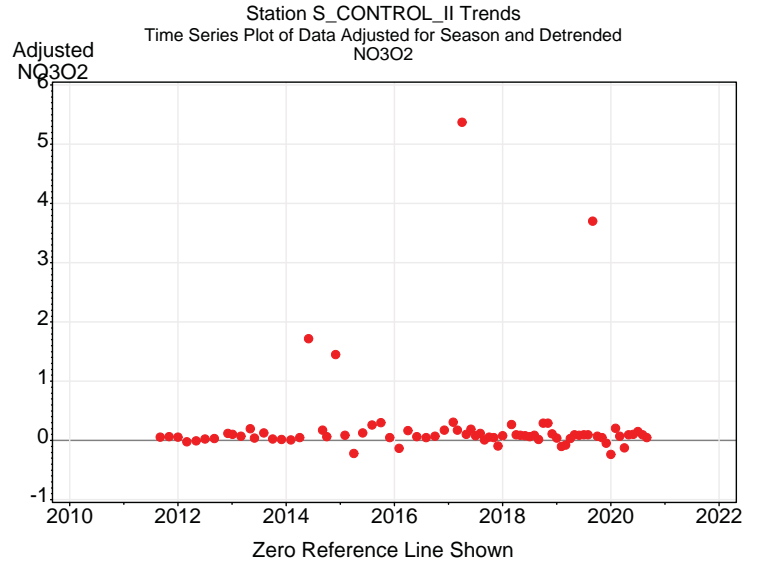


Station S_CONTROL_II Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
NO3O2
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.199	0.048	0.146	-0.009

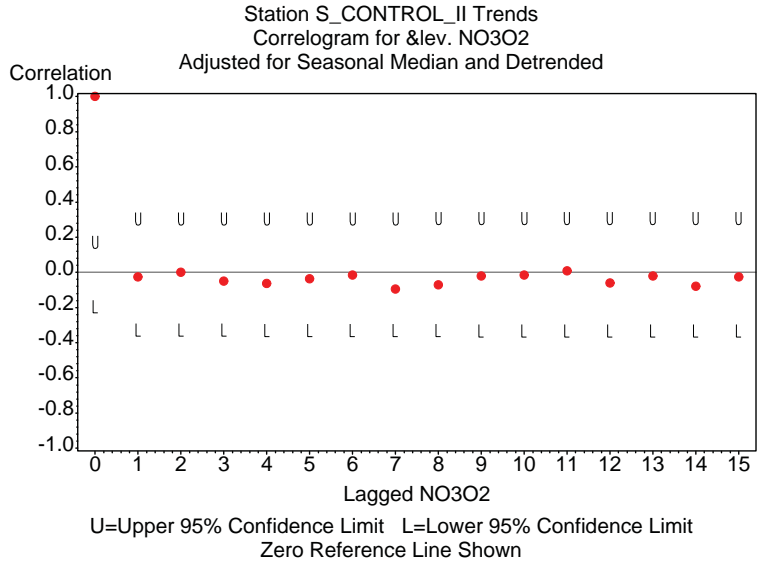
Station S_CONTROL_II Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

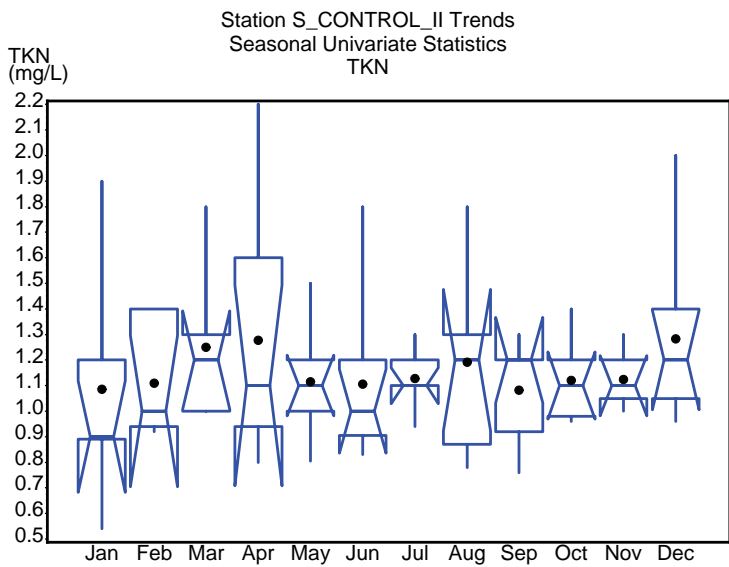
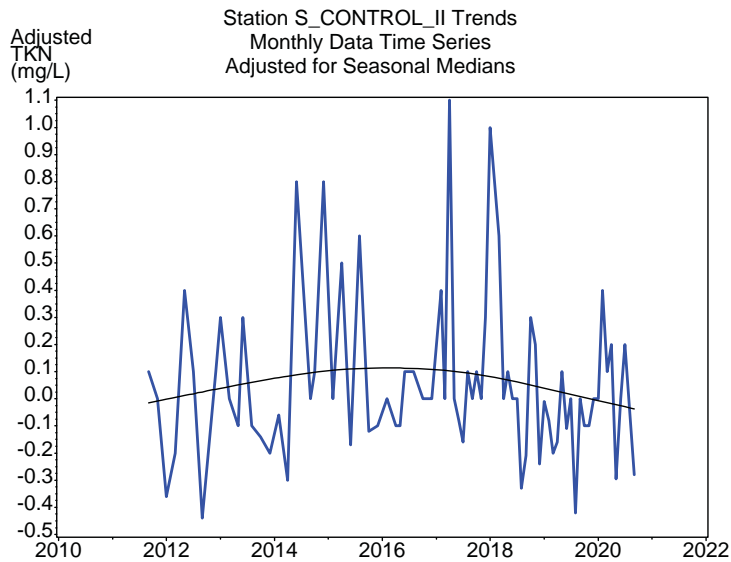
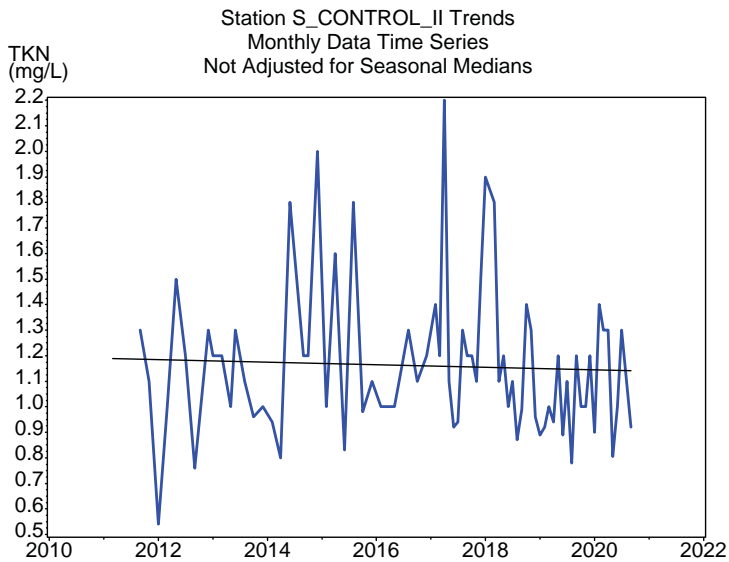
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.199	0.048	0.146	-.009



Station S_CONTROL_II Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

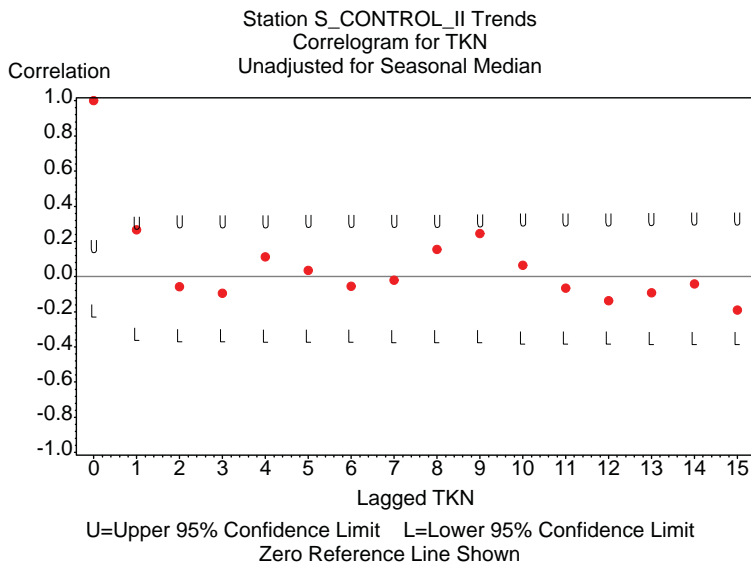
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.026	0.158	0.316	-0.316
2	0.001	0.158	0.316	-0.316
3	-0.049	0.158	0.316	-0.316
4	-0.064	0.158	0.317	-0.317
5	-0.036	0.158	0.317	-0.317
6	-0.016	0.159	0.317	-0.317
7	-0.096	0.159	0.317	-0.317
8	-0.072	0.159	0.318	-0.318
9	-0.020	0.159	0.319	-0.319
10	-0.014	0.159	0.319	-0.319
11	0.008	0.159	0.319	-0.319
12	-0.059	0.159	0.319	-0.319
13	-0.020	0.160	0.319	-0.319
14	-0.080	0.160	0.319	-0.319
15	-0.027	0.160	0.320	-0.320





Station S_CONTROL_II Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.266	0.158	0.316	-0.316
2	-0.057	0.162	0.324	-0.324
3	-0.096	0.162	0.324	-0.324
4	0.111	0.162	0.325	-0.325
5	0.035	0.163	0.326	-0.326
6	-0.055	0.163	0.326	-0.326
7	-0.021	0.163	0.327	-0.327
8	0.155	0.163	0.327	-0.327
9	0.245	0.165	0.329	-0.329
10	0.065	0.168	0.335	-0.335
11	-0.065	0.168	0.336	-0.336
12	-0.136	0.168	0.336	-0.336
13	-0.092	0.169	0.338	-0.338
14	-0.041	0.169	0.339	-0.339
15	-0.190	0.169	0.339	-0.339



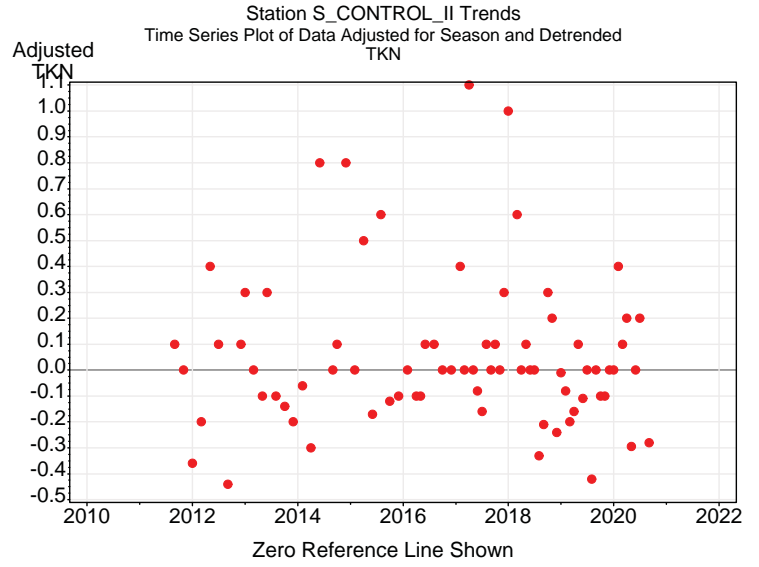
Station S_CONTROL_II Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.019	0.884	0.882	0

Station S_CONTROL_II Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN

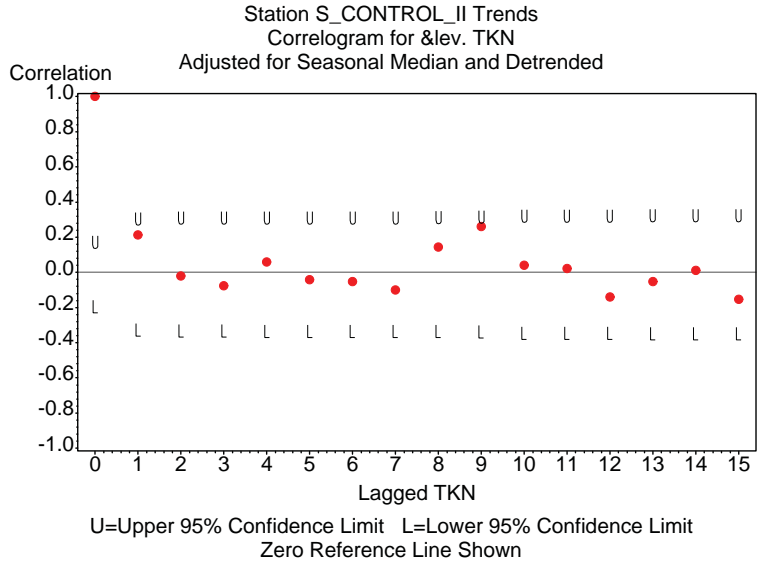
Adjusted for Seasonal Medians

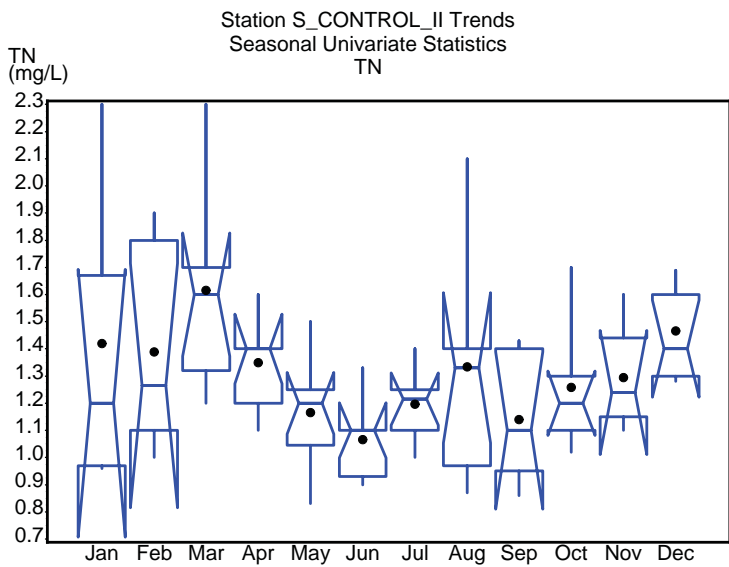
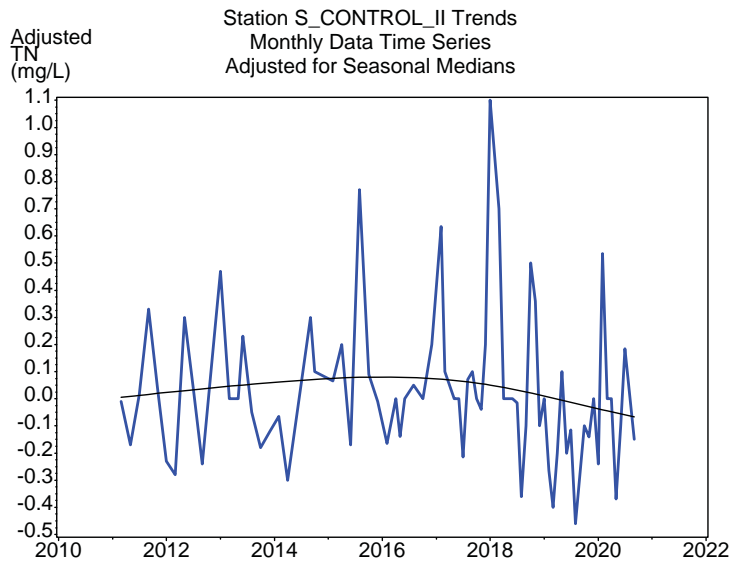
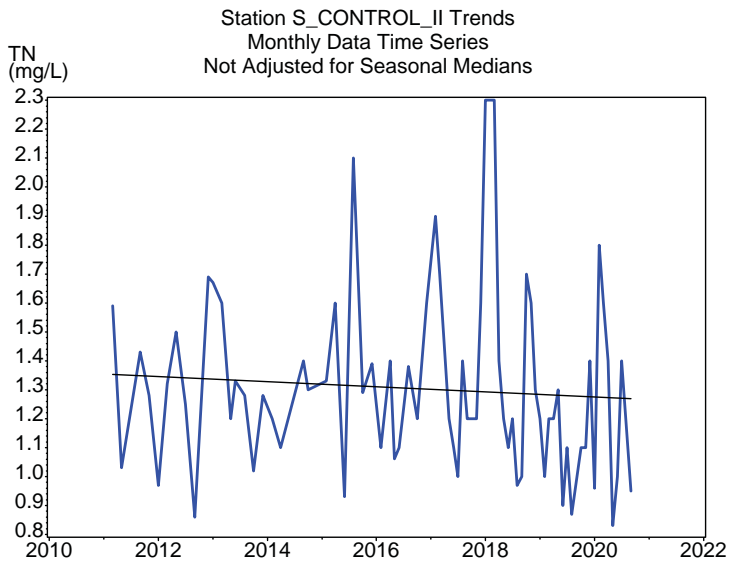
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.019	0.884	0.882	0



Station S_CONTROL_II Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

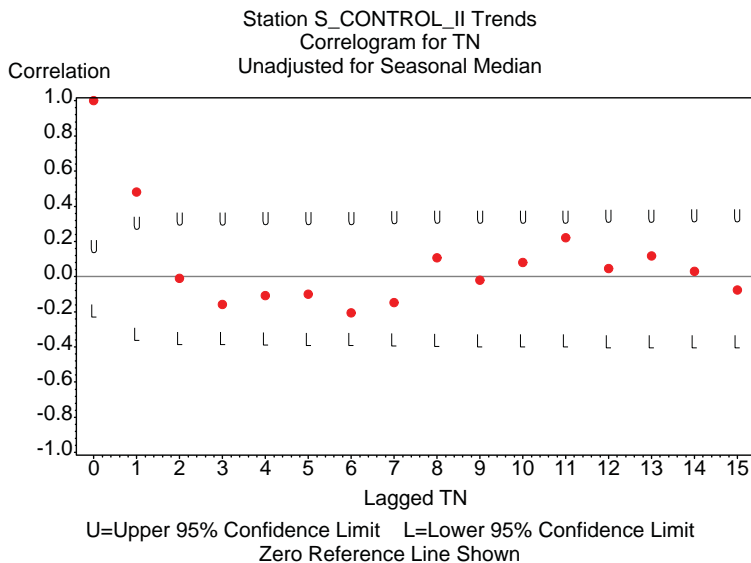
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.214	0.158	0.316	-0.316
2	-0.021	0.161	0.321	-0.321
3	-0.076	0.161	0.321	-0.321
4	0.058	0.161	0.322	-0.322
5	-0.042	0.161	0.322	-0.322
6	-0.053	0.161	0.322	-0.322
7	-0.099	0.161	0.322	-0.322
8	0.144	0.162	0.324	-0.324
9	0.261	0.163	0.326	-0.326
10	0.041	0.166	0.333	-0.333
11	0.021	0.166	0.333	-0.333
12	-0.141	0.166	0.333	-0.333
13	-0.052	0.167	0.335	-0.335
14	0.011	0.168	0.335	-0.335
15	-0.152	0.168	0.335	-0.335





Station S_CONTROL_II Trends Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.481	0.158	0.316	-0.316
2	-0.010	0.170	0.340	-0.340
3	-0.158	0.170	0.340	-0.340
4	-0.108	0.171	0.342	-0.342
5	-0.099	0.172	0.343	-0.343
6	-0.205	0.172	0.344	-0.344
7	-0.147	0.174	0.348	-0.348
8	0.107	0.175	0.350	-0.350
9	-0.020	0.176	0.351	-0.351
10	0.081	0.176	0.351	-0.351
11	0.221	0.176	0.352	-0.352
12	0.046	0.178	0.357	-0.357
13	0.117	0.178	0.357	-0.357
14	0.031	0.179	0.358	-0.358
15	-0.077	0.179	0.358	-0.358



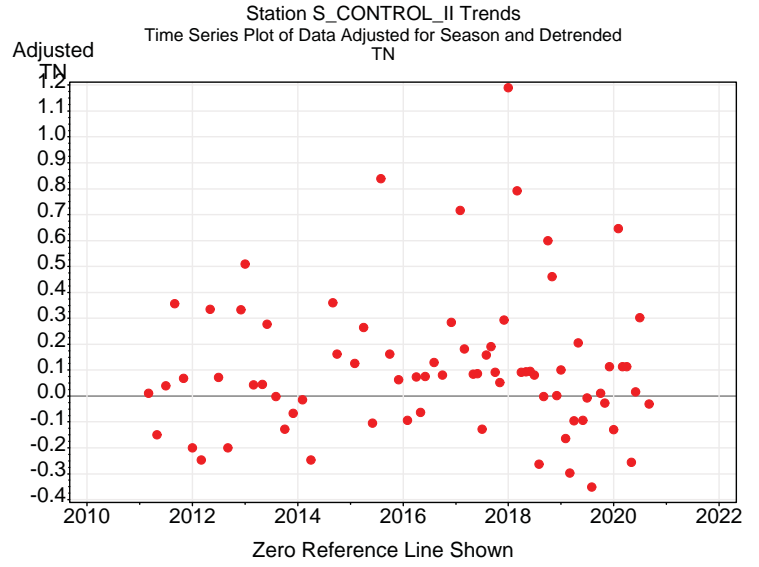
Station S_CONTROL_II Trends Appendix Seasonal Kendall Tau Trend Test Statistics TN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.113	0.269	0.336	-0.01

Station S_CONTROL_II Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN

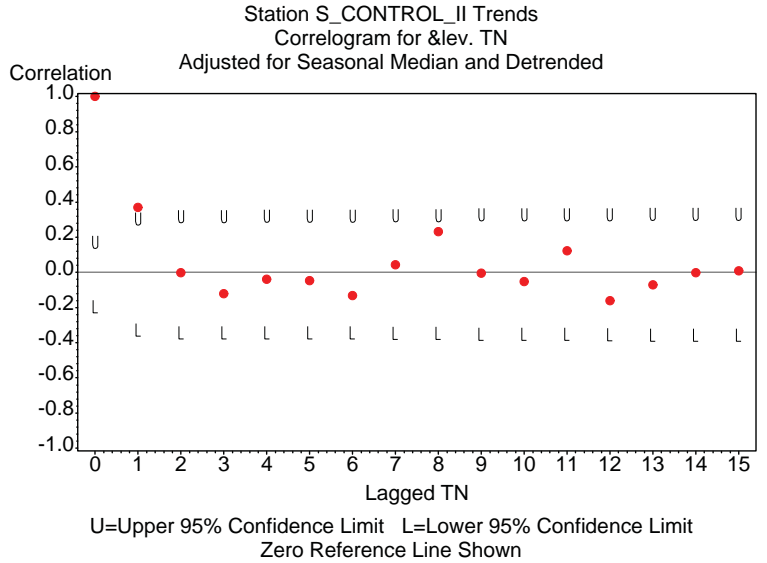
Adjusted for Seasonal Medians

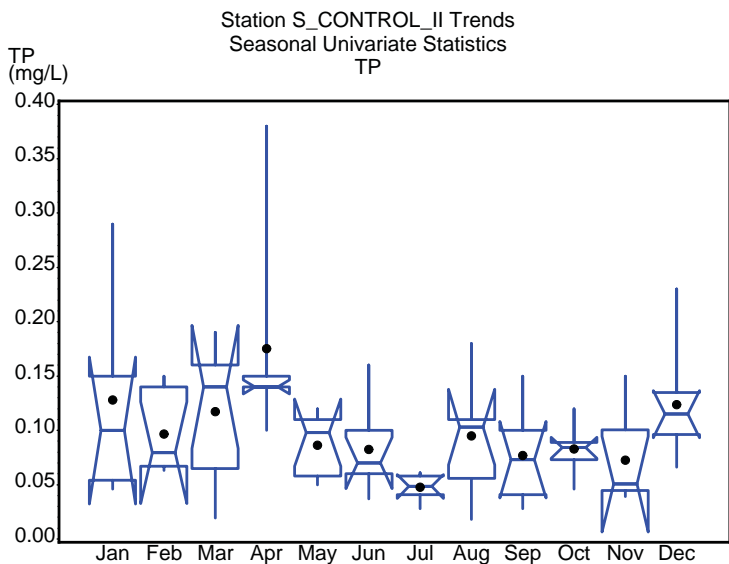
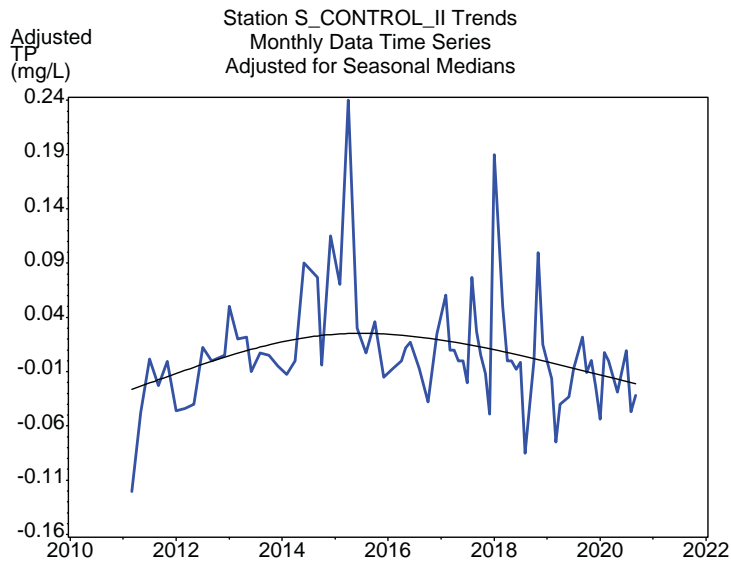
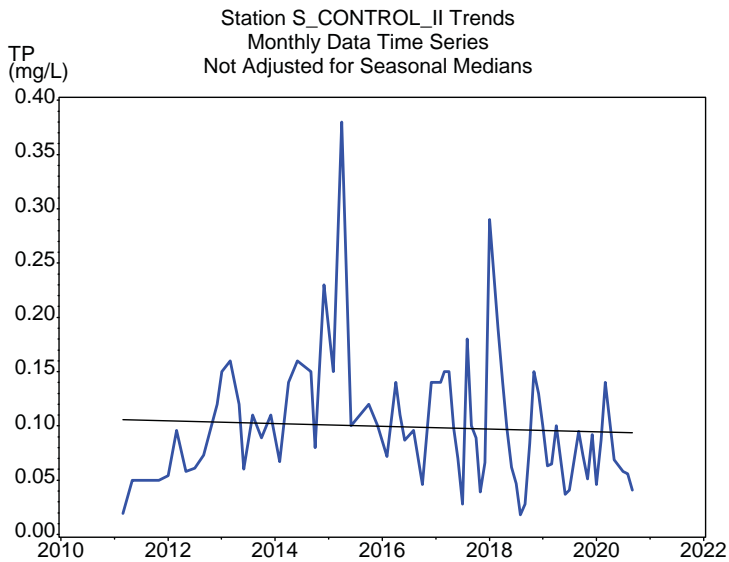
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.113	0.269	0.336	-0.01



Station S_CONTROL_II Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

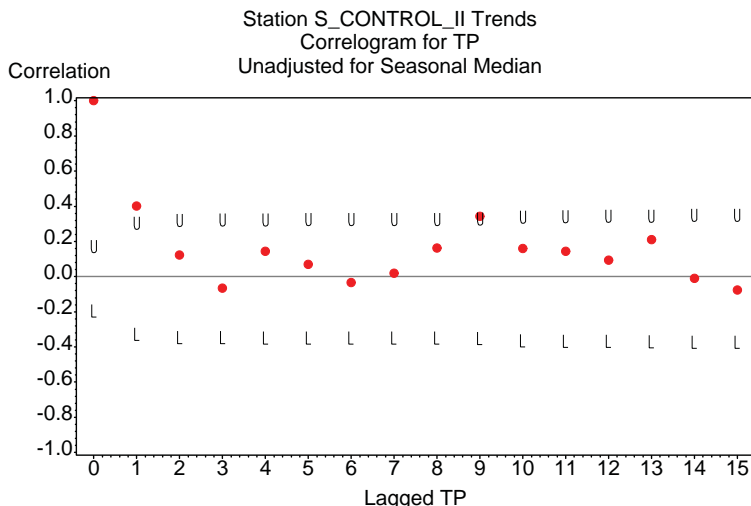
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.369	0.158	0.316	-0.316
2	-0.001	0.165	0.330	-0.330
3	-0.120	0.165	0.330	-0.330
4	-0.040	0.166	0.332	-0.332
5	-0.047	0.166	0.332	-0.332
6	-0.131	0.166	0.332	-0.332
7	0.043	0.167	0.334	-0.334
8	0.232	0.167	0.334	-0.334
9	-0.005	0.170	0.339	-0.339
10	-0.052	0.170	0.339	-0.339
11	0.123	0.170	0.340	-0.340
12	-0.161	0.171	0.341	-0.341
13	-0.071	0.172	0.344	-0.344
14	-0.002	0.172	0.344	-0.344
15	0.008	0.172	0.344	-0.344





Station S_CONTROL_II Trends Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.402	0.158	0.316	-0.316
2	0.123	0.166	0.333	-0.333
3	-0.066	0.167	0.334	-0.334
4	0.145	0.167	0.335	-0.335
5	0.070	0.168	0.337	-0.337
6	-0.034	0.169	0.337	-0.337
7	0.020	0.169	0.337	-0.337
8	0.162	0.169	0.337	-0.337
9	0.344	0.170	0.340	-0.340
10	0.161	0.176	0.351	-0.351
11	0.145	0.177	0.354	-0.354
12	0.093	0.178	0.356	-0.356
13	0.210	0.178	0.357	-0.357
14	-0.009	0.180	0.361	-0.361
15	-0.077	0.180	0.361	-0.361



Station S_CONTROL_II Trends Appendix Seasonal Kendall Tau Trend Test Statistics TP Unadjusted for Seasonal Medians

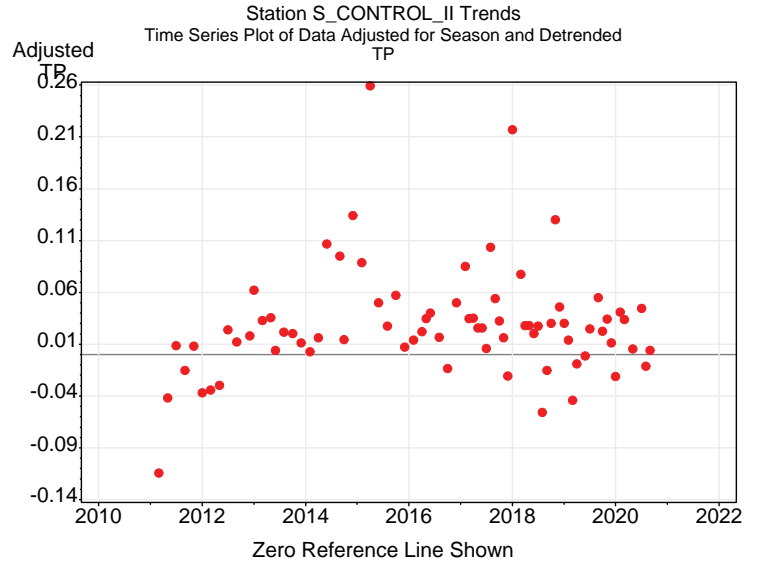
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.167	0.097	0.181	-0.003

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_CONTROL_II Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

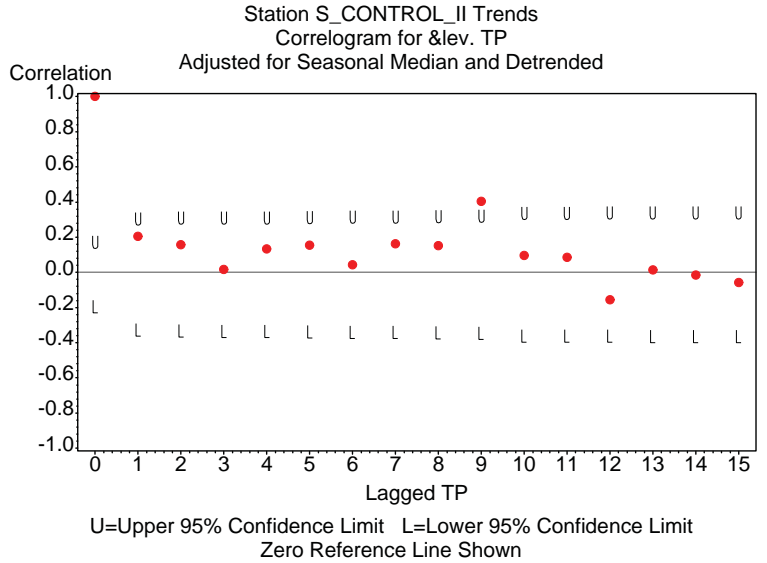
Adjusted for Seasonal Medians

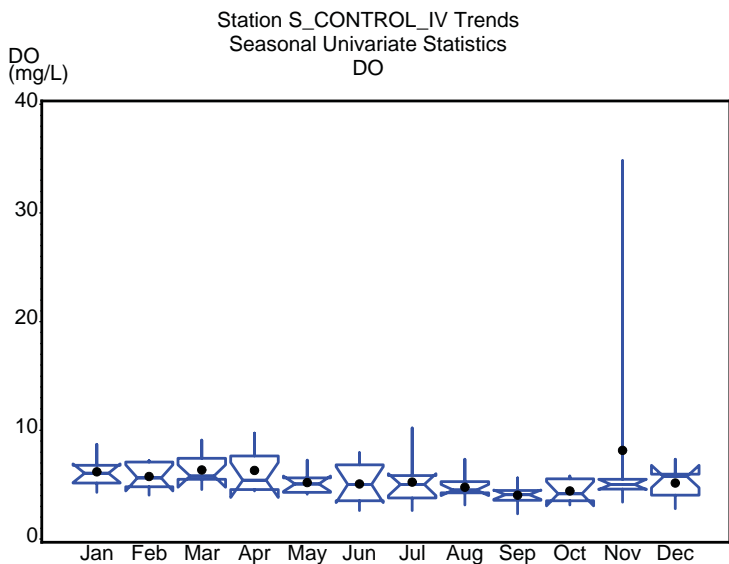
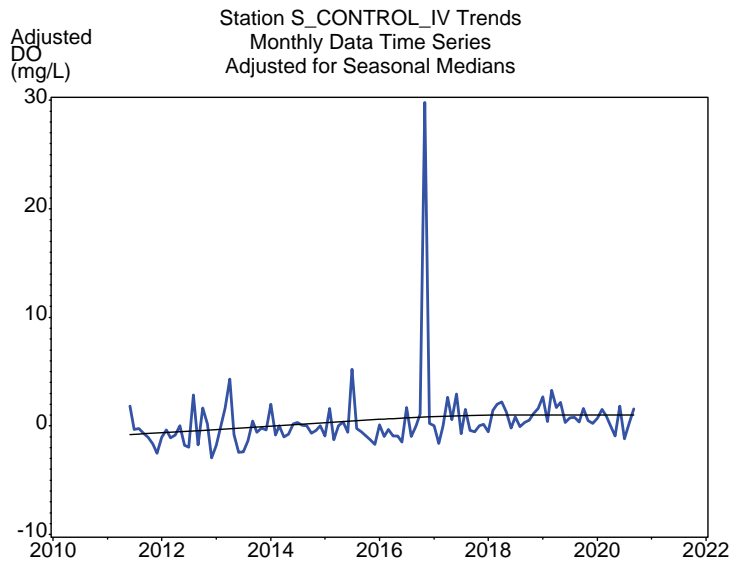
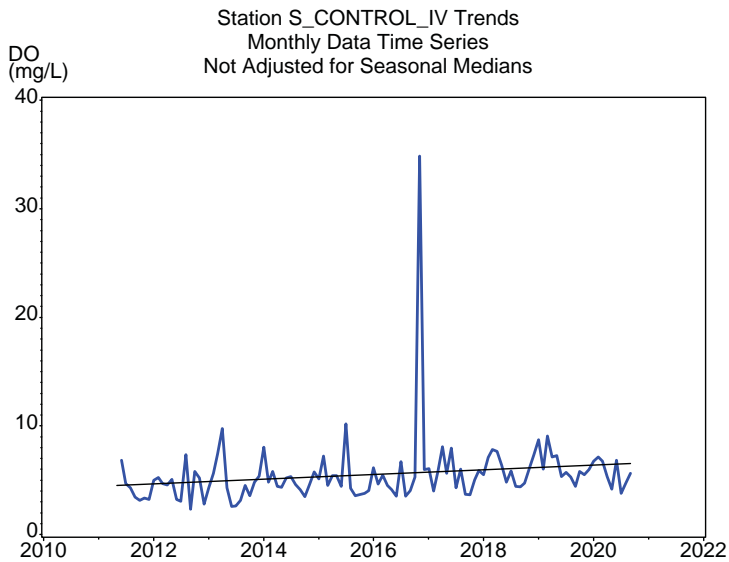
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.167	0.097	0.181	-.003



Station S_CONTROL_II Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

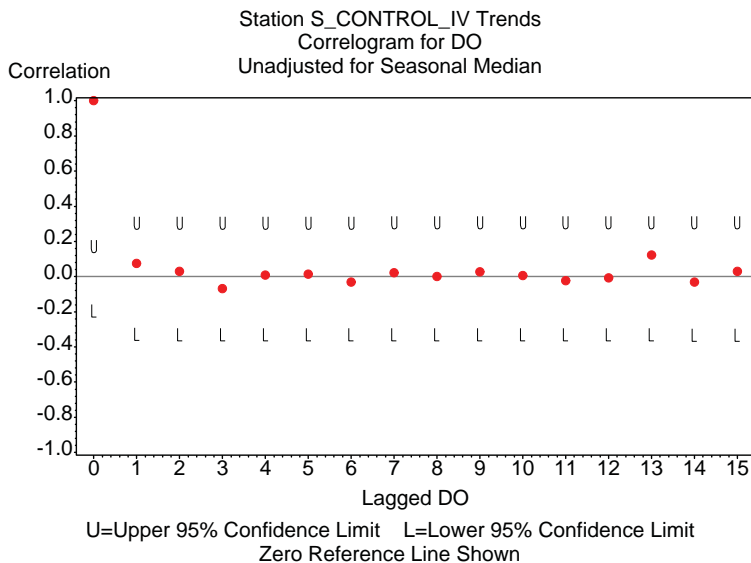
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.205	0.158	0.316	-0.316
2	0.156	0.160	0.321	-0.321
3	0.017	0.162	0.323	-0.323
4	0.134	0.162	0.323	-0.323
5	0.155	0.163	0.325	-0.325
6	0.042	0.164	0.327	-0.327
7	0.162	0.164	0.328	-0.328
8	0.153	0.165	0.330	-0.330
9	0.404	0.166	0.333	-0.333
10	0.095	0.174	0.349	-0.349
11	0.085	0.175	0.349	-0.349
12	-0.155	0.175	0.350	-0.350
13	0.015	0.176	0.352	-0.352
14	-0.015	0.176	0.352	-0.352
15	-0.058	0.176	0.352	-0.352





Station S_CONTROL_IV Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.074	0.158	0.316	-0.316
2	0.029	0.158	0.317	-0.317
3	-0.068	0.158	0.317	-0.317
4	0.010	0.159	0.317	-0.317
5	0.014	0.159	0.317	-0.317
6	-0.031	0.159	0.317	-0.317
7	0.023	0.159	0.318	-0.318
8	0.001	0.159	0.318	-0.318
9	0.026	0.159	0.318	-0.318
10	0.005	0.159	0.318	-0.318
11	-0.022	0.159	0.318	-0.318
12	-0.008	0.159	0.318	-0.318
13	0.124	0.159	0.318	-0.318
14	-0.031	0.160	0.319	-0.319
15	0.031	0.160	0.319	-0.319

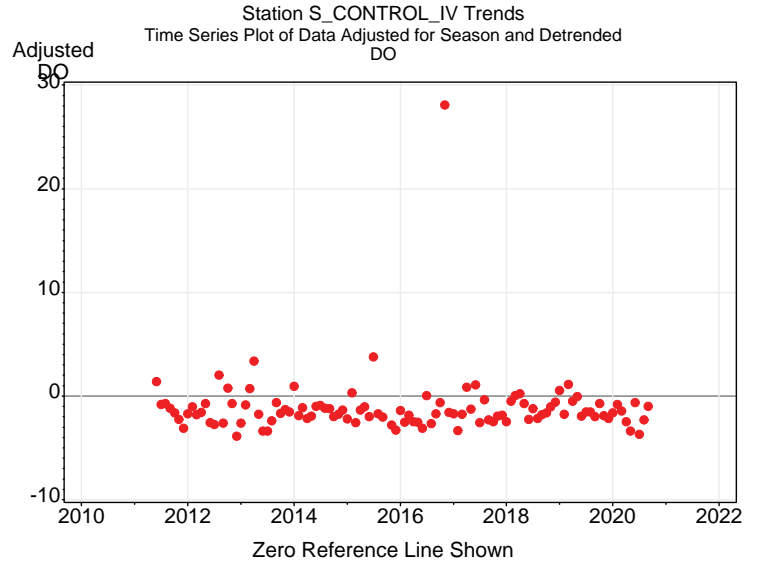


Station S_CONTROL_IV Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.32	0	0.021	0.212

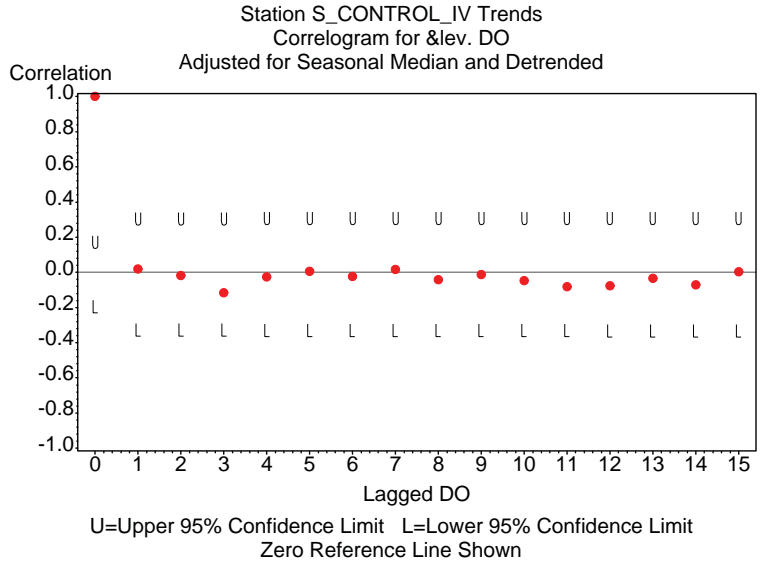
Station S_CONTROL_IV Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

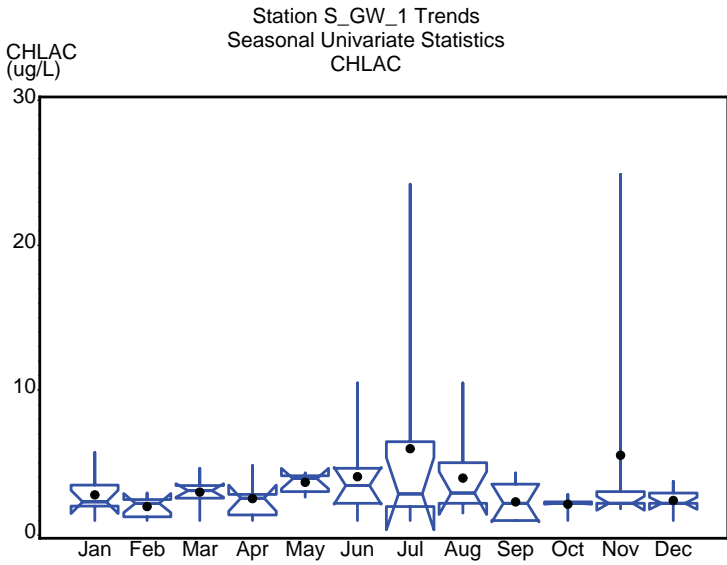
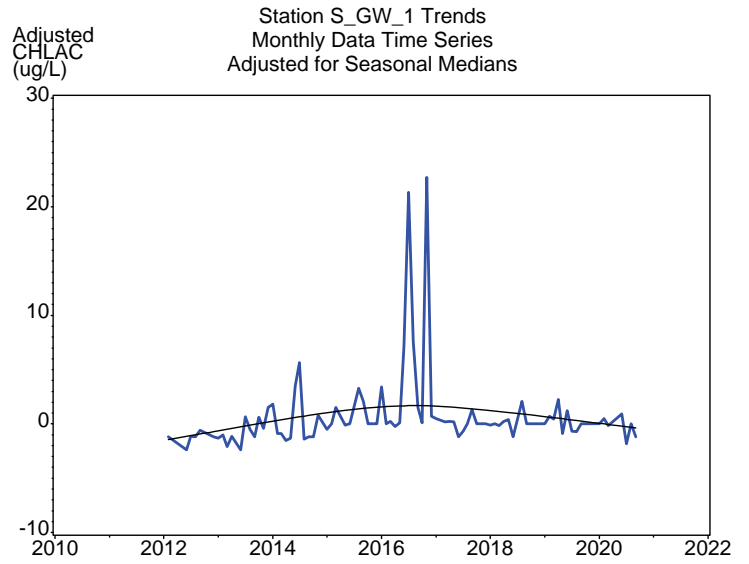
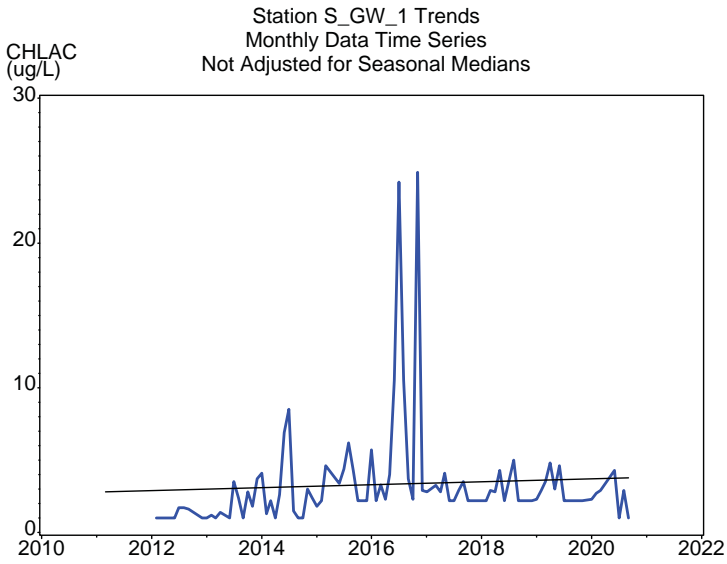
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.32	0	0.021	0.212



Station S_CONTROL_IV Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

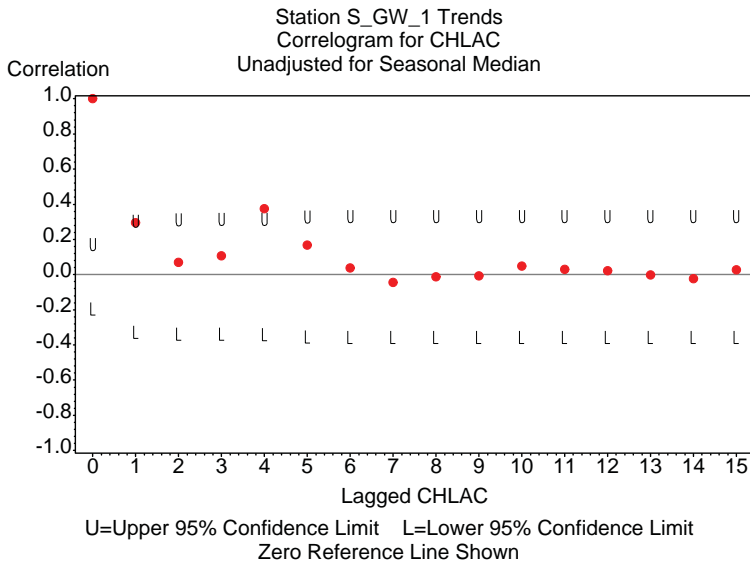
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.019	0.158	0.316	-0.316
2	-0.018	0.158	0.316	-0.316
3	-0.115	0.158	0.316	-0.316
4	-0.025	0.159	0.318	-0.318
5	0.007	0.159	0.318	-0.318
6	-0.024	0.159	0.318	-0.318
7	0.017	0.159	0.318	-0.318
8	-0.042	0.159	0.318	-0.318
9	-0.013	0.159	0.318	-0.318
10	-0.046	0.159	0.318	-0.318
11	-0.081	0.159	0.318	-0.318
12	-0.077	0.159	0.319	-0.319
13	-0.033	0.160	0.320	-0.320
14	-0.071	0.160	0.320	-0.320
15	0.004	0.160	0.320	-0.320





Station S_GW_1 Trends Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.295	0.158	0.316	-0.316
2	0.071	0.163	0.325	-0.325
3	0.108	0.163	0.326	-0.326
4	0.375	0.163	0.327	-0.327
5	0.167	0.171	0.341	-0.341
6	0.037	0.172	0.344	-0.344
7	-0.044	0.172	0.344	-0.344
8	-0.012	0.172	0.344	-0.344
9	-0.008	0.172	0.344	-0.344
10	0.048	0.172	0.344	-0.344
11	0.030	0.172	0.344	-0.344
12	0.021	0.172	0.344	-0.344
13	-0.002	0.172	0.344	-0.344
14	-0.023	0.172	0.344	-0.344
15	0.026	0.172	0.344	-0.344

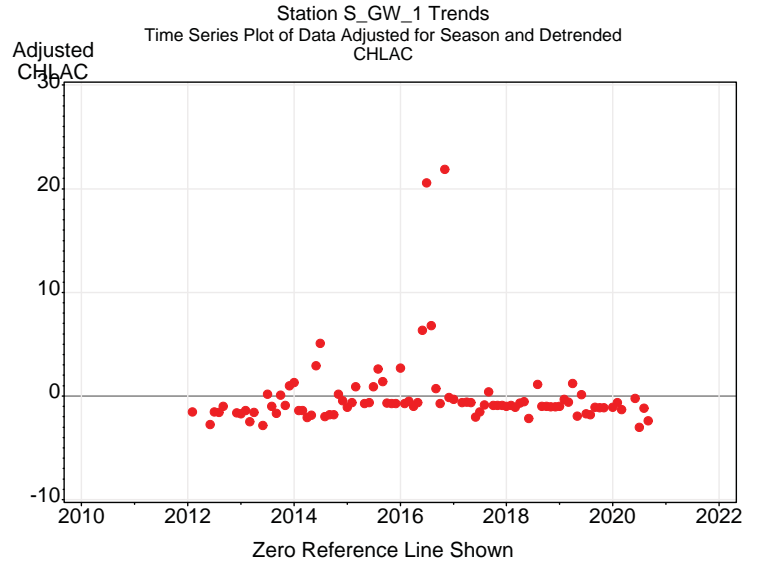


Station S_GW_1 Trends Appendix Seasonal Kendall Tau Trend Test Statistics CHLAC Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.179	0.036	0.203	0.1

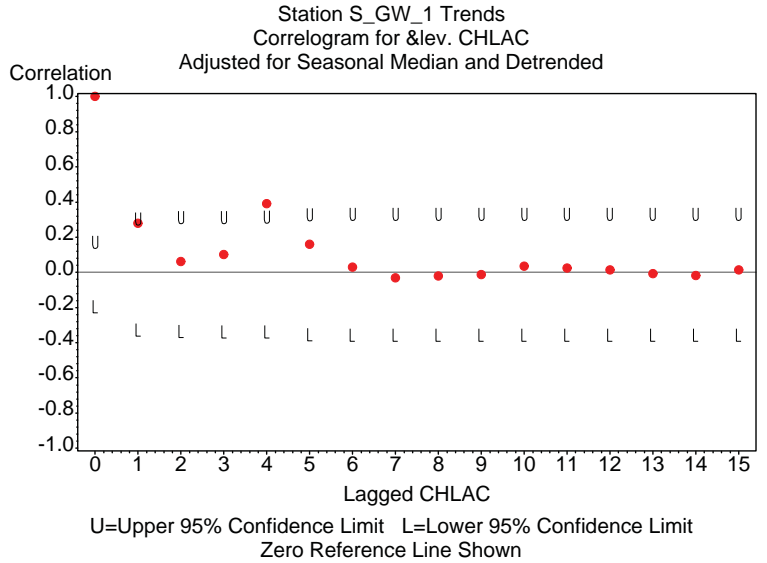
Station S_GW_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

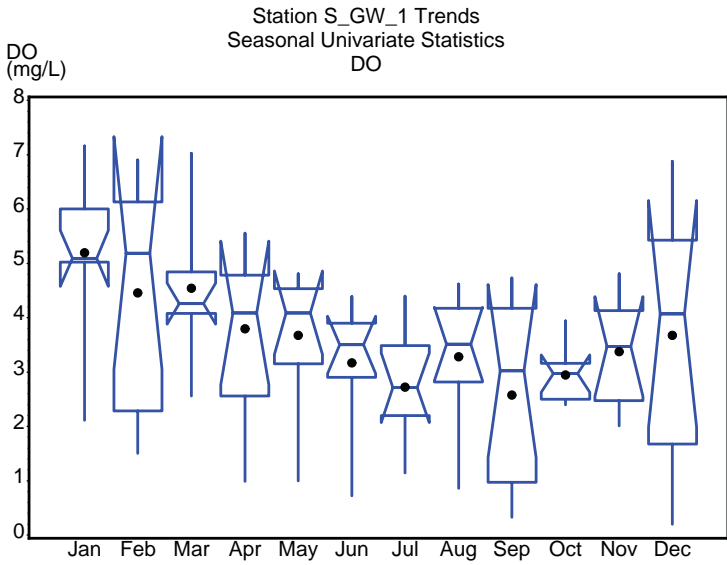
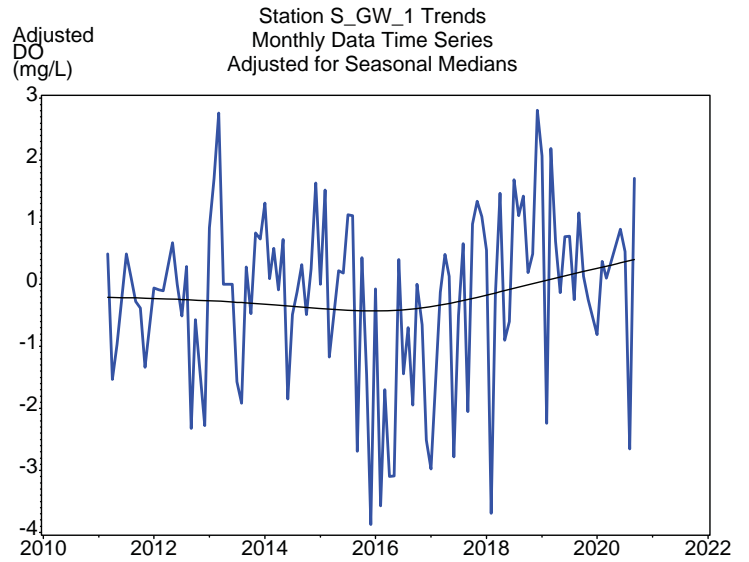
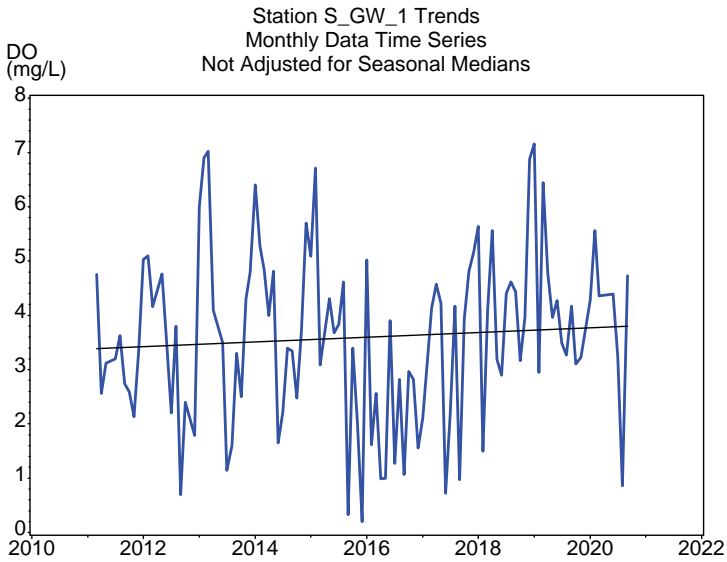
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.179	0.036	0.203	0.1



Station S_GW_1 Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

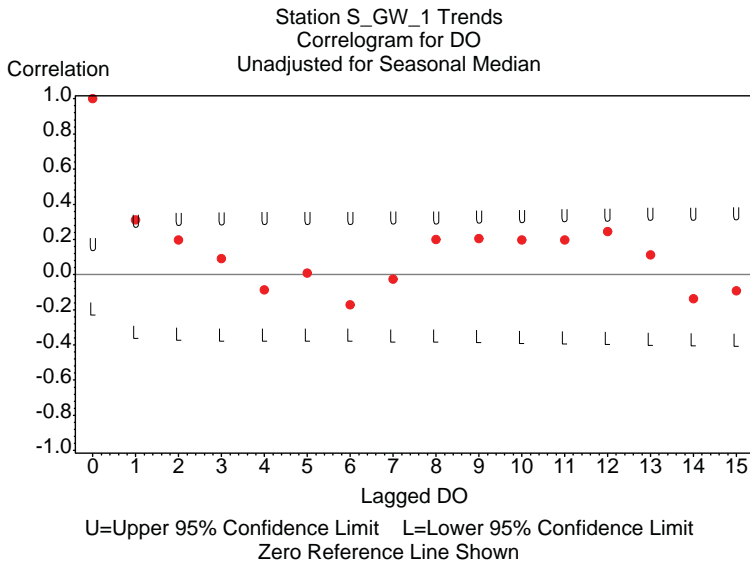
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.279	0.158	0.316	-0.316
2	0.062	0.162	0.324	-0.324
3	0.102	0.162	0.325	-0.325
4	0.391	0.163	0.326	-0.326
5	0.159	0.171	0.341	-0.341
6	0.029	0.172	0.344	-0.344
7	-0.030	0.172	0.344	-0.344
8	-0.020	0.172	0.344	-0.344
9	-0.012	0.172	0.344	-0.344
10	0.036	0.172	0.344	-0.344
11	0.025	0.172	0.344	-0.344
12	0.014	0.172	0.344	-0.344
13	-0.007	0.172	0.344	-0.344
14	-0.017	0.172	0.344	-0.344
15	0.013	0.172	0.344	-0.344





Station S_GW_1 Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.310	0.158	0.316	-0.316
2	0.196	0.163	0.326	-0.326
3	0.092	0.165	0.330	-0.330
4	-0.086	0.165	0.331	-0.331
5	0.008	0.166	0.332	-0.332
6	-0.173	0.166	0.332	-0.332
7	-0.027	0.167	0.335	-0.335
8	0.201	0.167	0.335	-0.335
9	0.205	0.169	0.339	-0.339
10	0.198	0.171	0.343	-0.343
11	0.198	0.173	0.347	-0.347
12	0.244	0.175	0.350	-0.350
13	0.112	0.178	0.356	-0.356
14	-0.138	0.179	0.357	-0.357
15	-0.093	0.179	0.359	-0.359

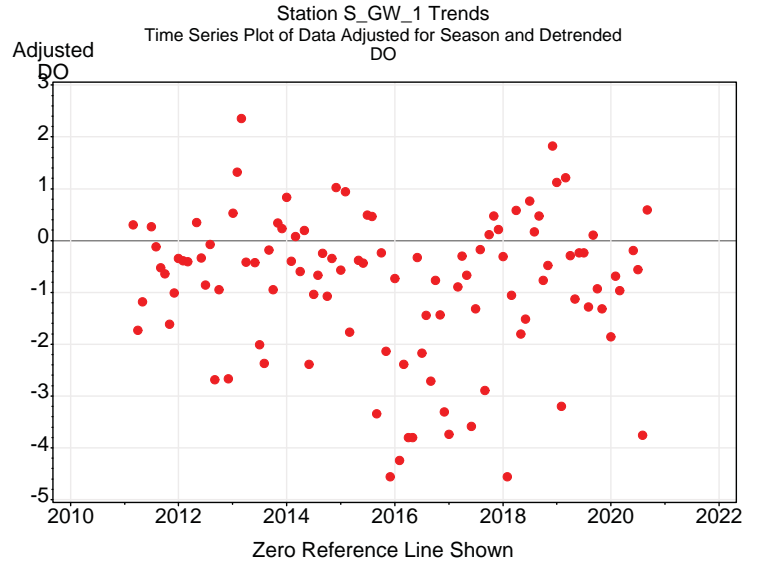


Station S_GW_1 Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.14	0.078	0.244	0.095

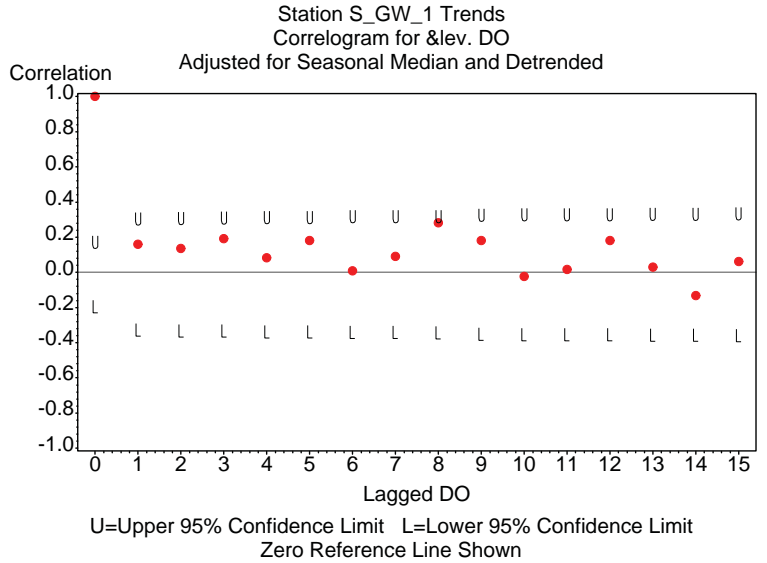
Station S_GW_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

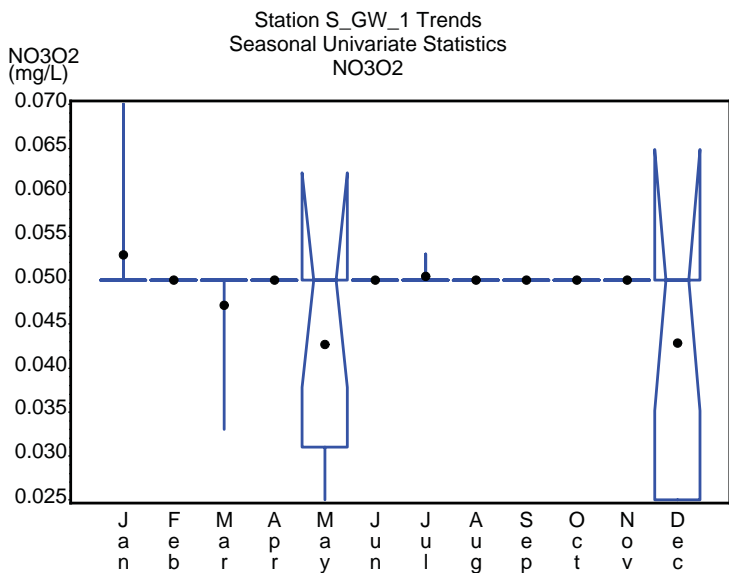
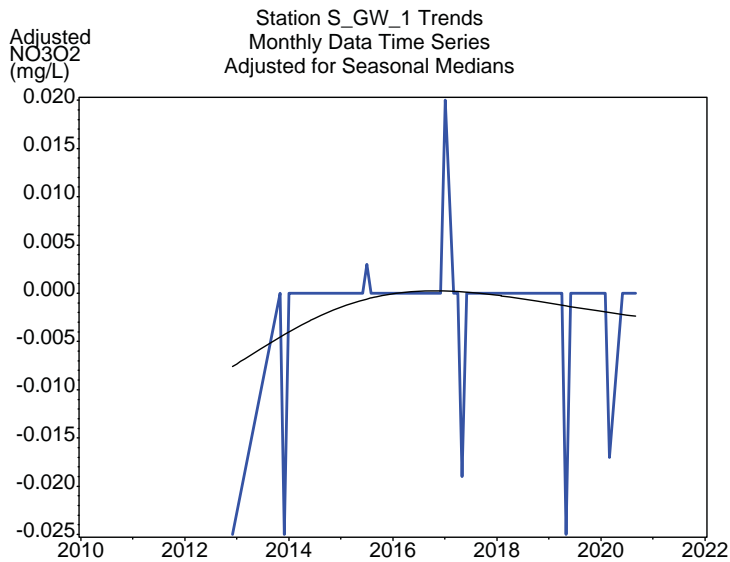
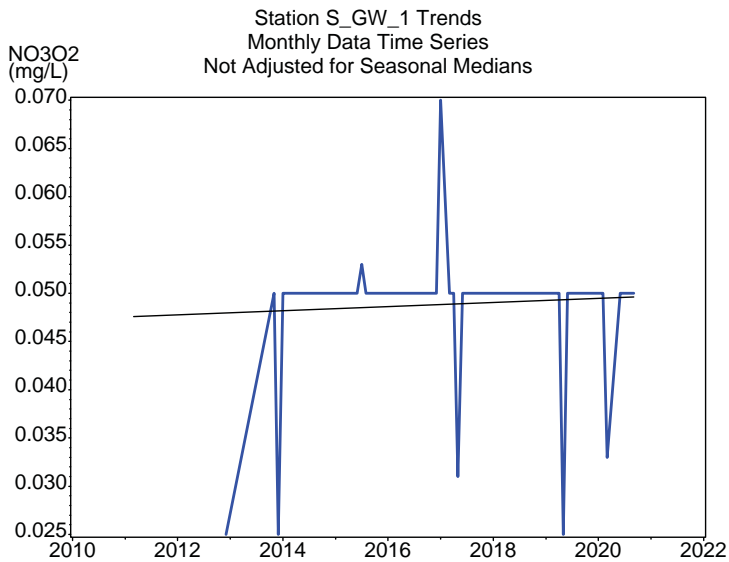
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.14	0.078	0.244	0.095



Station S_GW_1 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

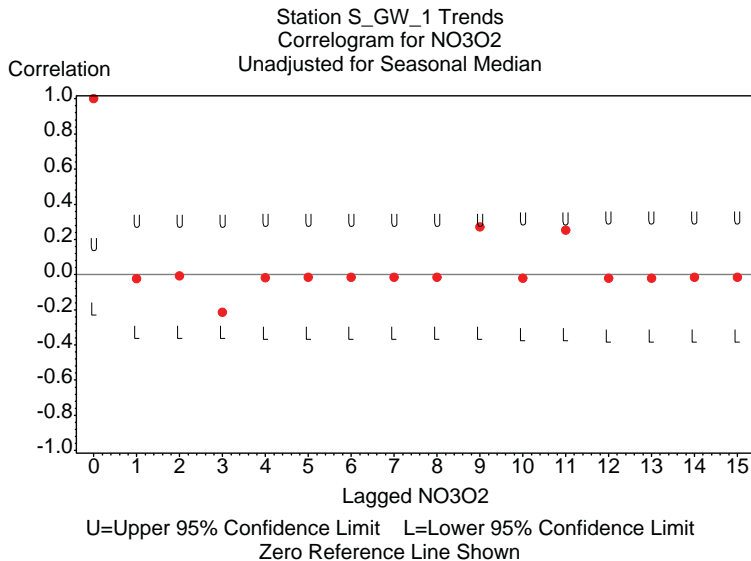
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.160	0.158	0.316	-0.316
2	0.136	0.159	0.319	-0.319
3	0.192	0.160	0.321	-0.321
4	0.083	0.162	0.325	-0.325
5	0.180	0.163	0.325	-0.325
6	0.010	0.164	0.329	-0.329
7	0.092	0.164	0.329	-0.329
8	0.283	0.165	0.330	-0.330
9	0.182	0.169	0.338	-0.338
10	-0.022	0.170	0.341	-0.341
11	0.017	0.170	0.341	-0.341
12	0.181	0.170	0.341	-0.341
13	0.029	0.172	0.344	-0.344
14	-0.131	0.172	0.344	-0.344
15	0.062	0.173	0.346	-0.346





Station S_GW_1 Trends Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.024	0.158	0.316	-0.316
2	-0.007	0.158	0.316	-0.316
3	-0.214	0.158	0.316	-0.316
4	-0.018	0.161	0.321	-0.321
5	-0.014	0.161	0.321	-0.321
6	-0.014	0.161	0.321	-0.321
7	-0.014	0.161	0.321	-0.321
8	-0.015	0.161	0.321	-0.321
9	0.272	0.161	0.321	-0.321
10	-0.020	0.164	0.329	-0.329
11	0.254	0.164	0.329	-0.329
12	-0.020	0.168	0.335	-0.335
13	-0.021	0.168	0.335	-0.335
14	-0.016	0.168	0.335	-0.335
15	-0.016	0.168	0.335	-0.335

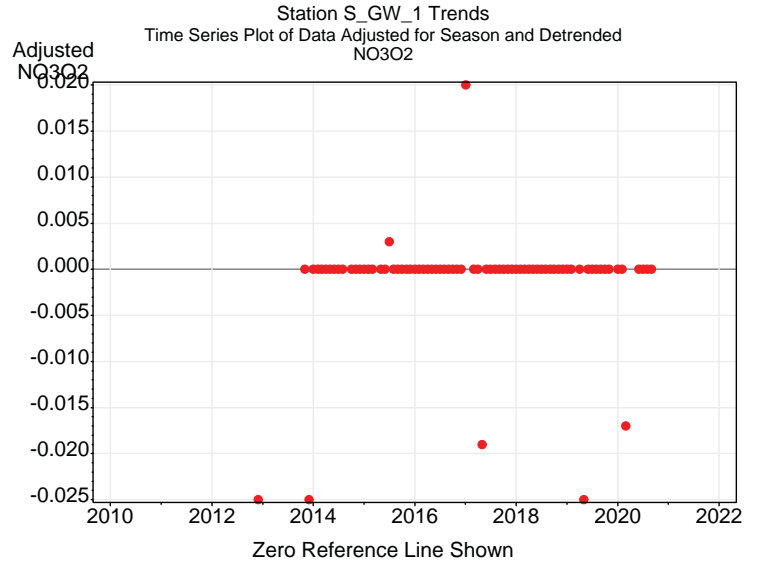


Station S_GW_1 Trends Appendix Seasonal Kendall Tau Trend Test Statistics NO3O2 Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.028	0.598	0.614	0

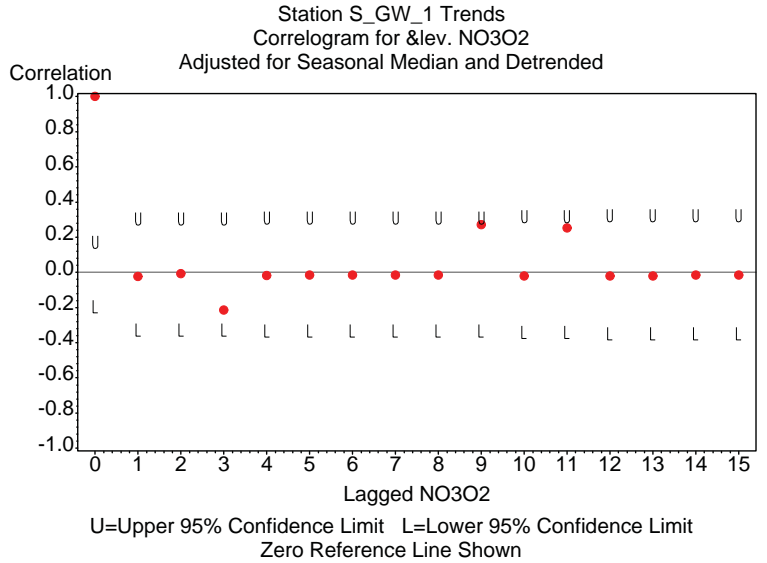
Station S_GW_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

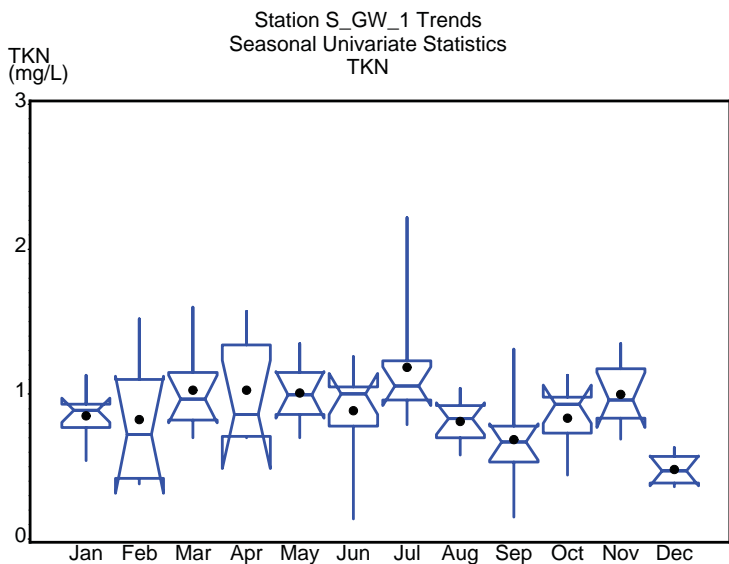
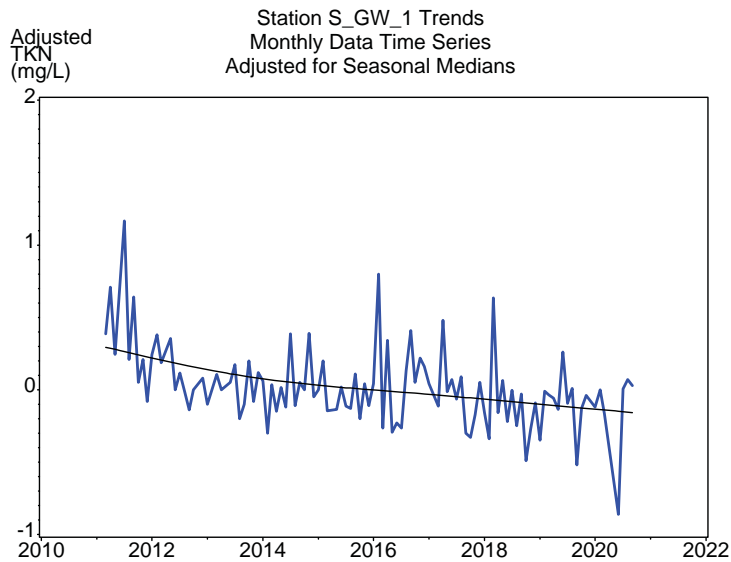
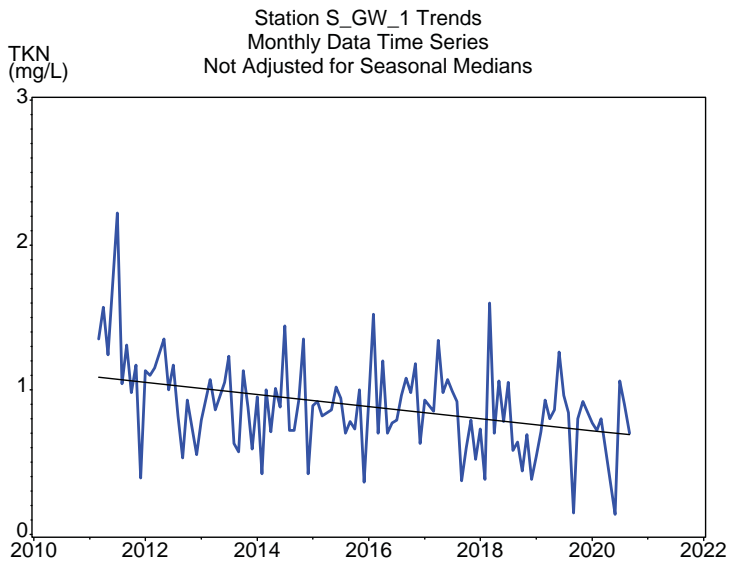
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.028	0.598	0.614	0



Station S_GW_1 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

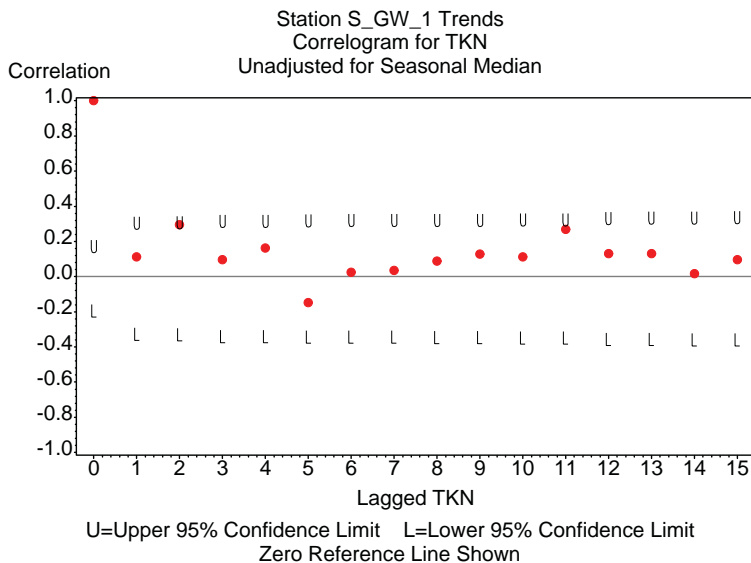
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.024	0.158	0.316	-0.316
2	-0.007	0.158	0.316	-0.316
3	-0.214	0.158	0.316	-0.316
4	-0.018	0.161	0.321	-0.321
5	-0.014	0.161	0.321	-0.321
6	-0.014	0.161	0.321	-0.321
7	-0.014	0.161	0.321	-0.321
8	-0.015	0.161	0.321	-0.321
9	0.272	0.161	0.321	-0.321
10	-0.020	0.164	0.329	-0.329
11	0.254	0.164	0.329	-0.329
12	-0.020	0.168	0.335	-0.335
13	-0.021	0.168	0.335	-0.335
14	-0.016	0.168	0.335	-0.335
15	-0.016	0.168	0.335	-0.335





Station S_GW_1 Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.112	0.158	0.316	-0.316
2	0.294	0.159	0.318	-0.318
3	0.096	0.163	0.327	-0.327
4	0.162	0.164	0.327	-0.327
5	-0.149	0.165	0.330	-0.330
6	0.024	0.166	0.332	-0.332
7	0.035	0.166	0.332	-0.332
8	0.087	0.166	0.333	-0.333
9	0.128	0.167	0.333	-0.333
10	0.111	0.167	0.335	-0.335
11	0.268	0.168	0.336	-0.336
12	0.130	0.172	0.343	-0.343
13	0.132	0.172	0.345	-0.345
14	0.017	0.173	0.346	-0.346
15	0.096	0.173	0.347	-0.347

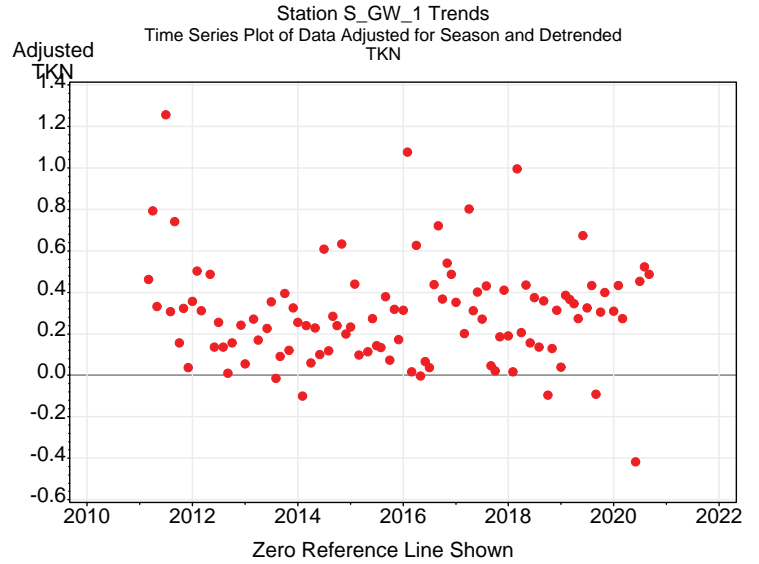


Station S_GW_1 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.29	0	0.017	-0.039

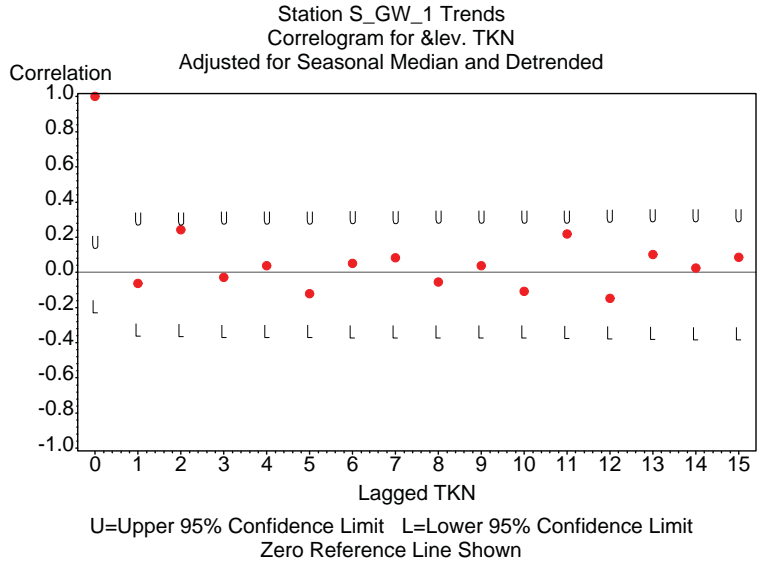
Station S_GW_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN
 Adjusted for Seasonal Medians

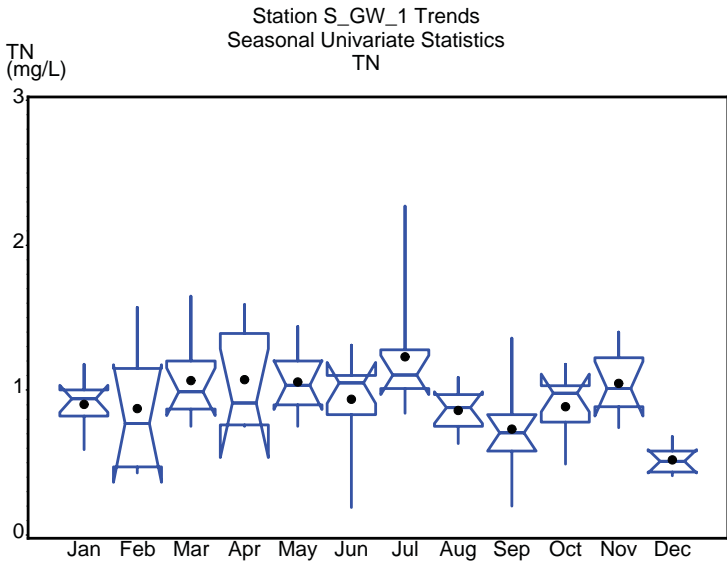
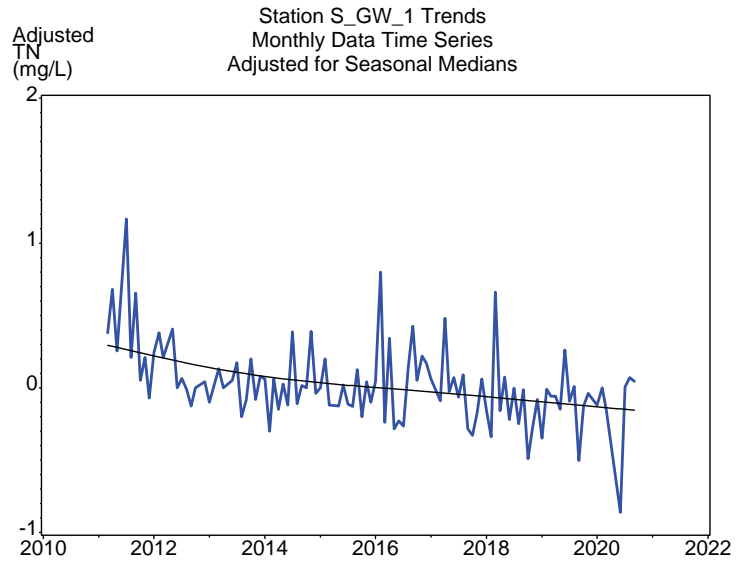
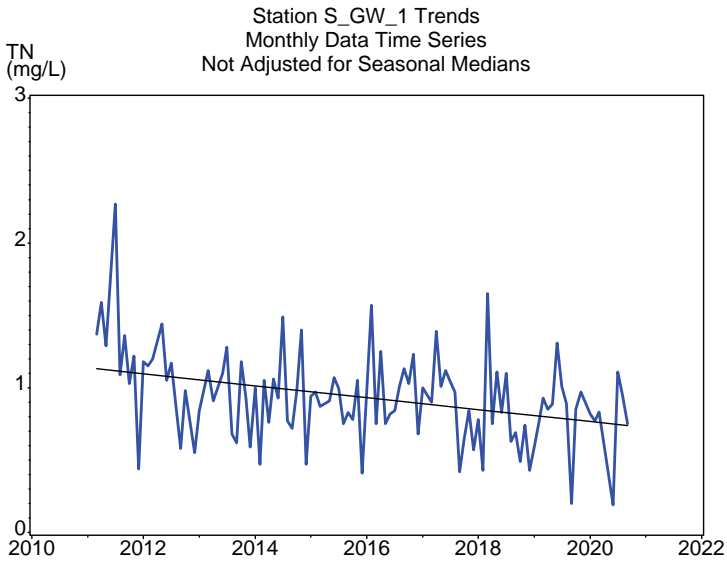
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.29	0	0.017	-0.039



Station S_GW_1 Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

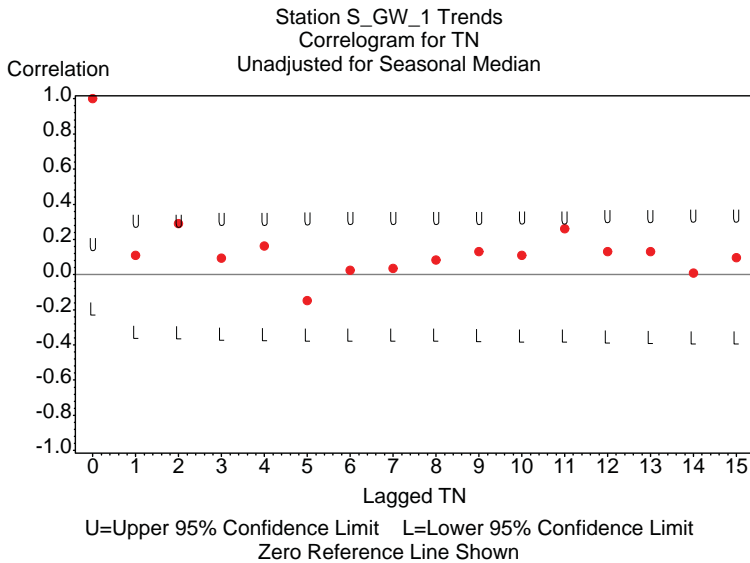
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.063	0.158	0.316	-0.316
2	0.243	0.158	0.317	-0.317
3	-0.029	0.161	0.323	-0.323
4	0.037	0.161	0.323	-0.323
5	-0.121	0.162	0.323	-0.323
6	0.051	0.162	0.325	-0.325
7	0.082	0.162	0.325	-0.325
8	-0.054	0.163	0.326	-0.326
9	0.039	0.163	0.326	-0.326
10	-0.109	0.163	0.326	-0.326
11	0.219	0.164	0.327	-0.327
12	-0.149	0.166	0.332	-0.332
13	0.102	0.167	0.334	-0.334
14	0.025	0.168	0.335	-0.335
15	0.086	0.168	0.335	-0.335





Station S_GW_1 Trends
Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.109	0.158	0.316	-0.316
2	0.290	0.159	0.317	-0.317
3	0.093	0.163	0.326	-0.326
4	0.163	0.164	0.327	-0.327
5	-0.147	0.165	0.330	-0.330
6	0.024	0.166	0.332	-0.332
7	0.036	0.166	0.332	-0.332
8	0.084	0.166	0.332	-0.332
9	0.132	0.166	0.333	-0.333
10	0.109	0.167	0.335	-0.335
11	0.262	0.168	0.336	-0.336
12	0.132	0.171	0.342	-0.342
13	0.130	0.172	0.344	-0.344
14	0.008	0.173	0.346	-0.346
15	0.095	0.173	0.346	-0.346



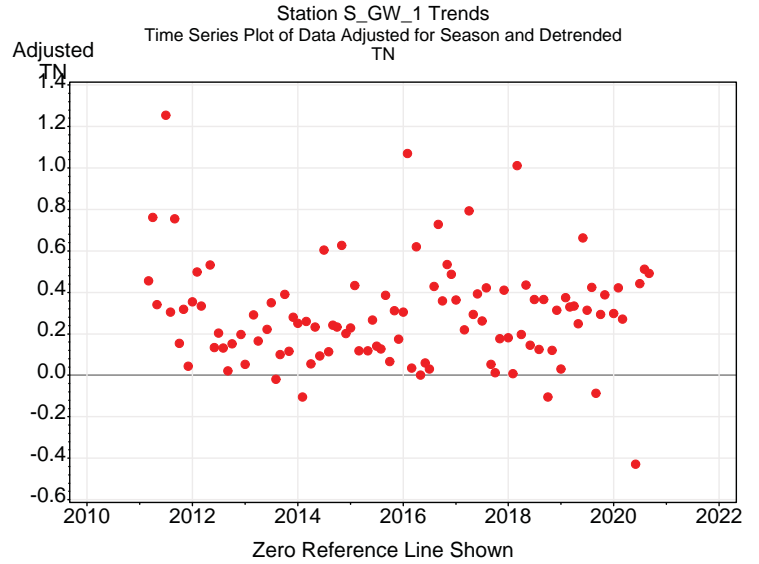
Station S_GW_1 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TN

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.278	.001	0.022	-0.038

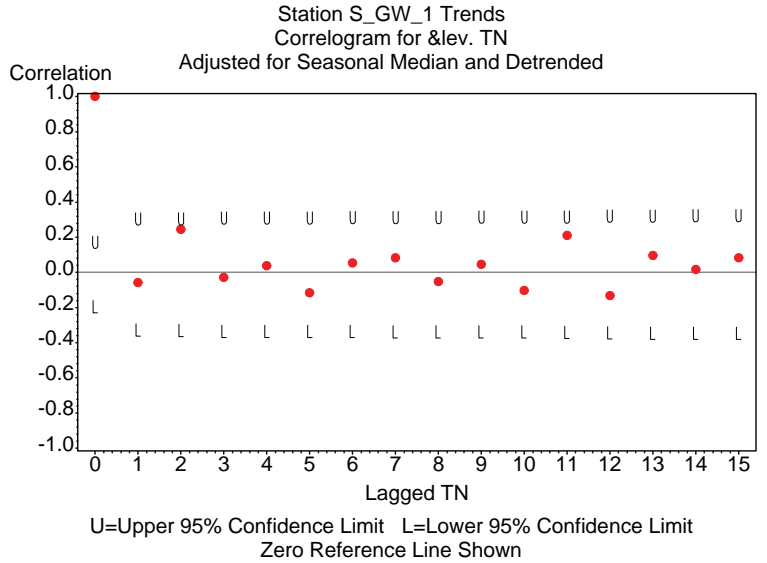
Station S_GW_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN
 Adjusted for Seasonal Medians

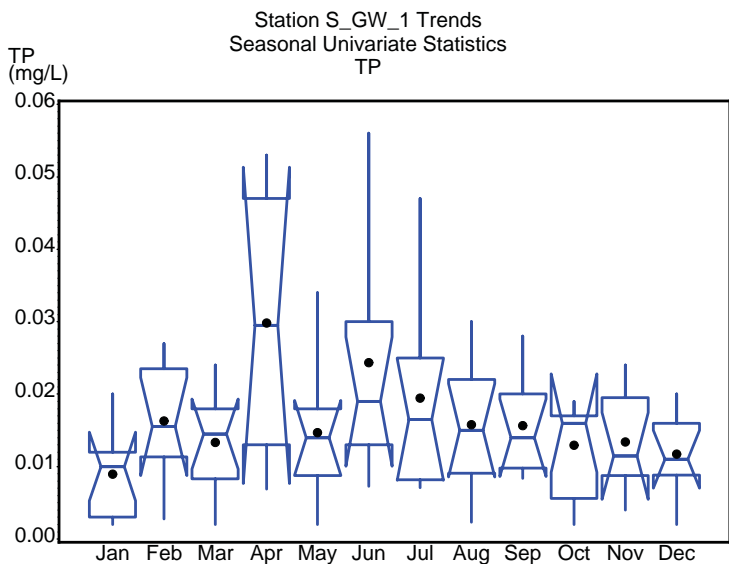
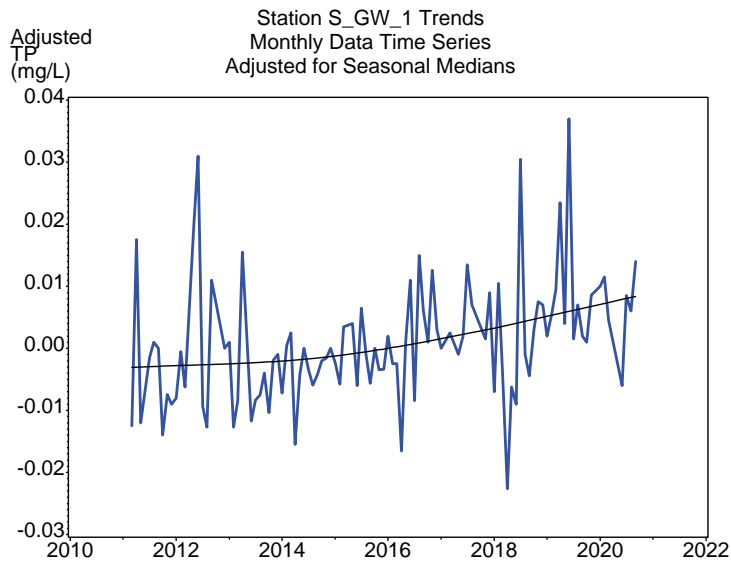
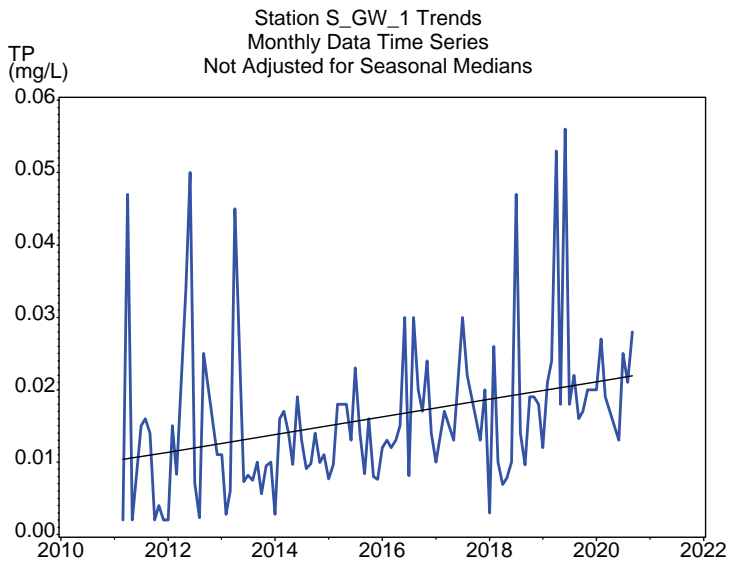
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.278	.001	0.022	-0.038



Station S_GW_1 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

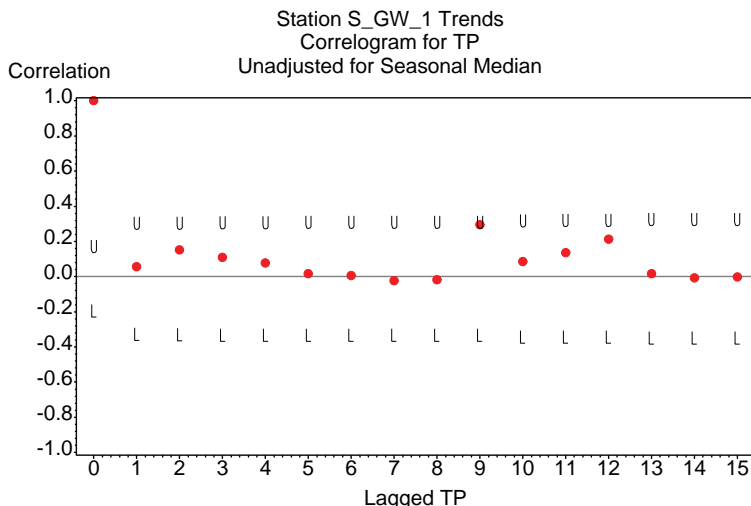
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.058	0.158	0.316	-0.316
2	0.244	0.158	0.317	-0.317
3	-0.029	0.161	0.323	-0.323
4	0.038	0.161	0.323	-0.323
5	-0.116	0.162	0.323	-0.323
6	0.055	0.162	0.324	-0.324
7	0.082	0.162	0.325	-0.325
8	-0.052	0.163	0.325	-0.325
9	0.047	0.163	0.326	-0.326
10	-0.104	0.163	0.326	-0.326
11	0.211	0.164	0.327	-0.327
12	-0.133	0.166	0.332	-0.332
13	0.095	0.167	0.333	-0.333
14	0.017	0.167	0.334	-0.334
15	0.084	0.167	0.334	-0.334





Station S_GW_1 Trends Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.057	0.158	0.316	-0.316
2	0.151	0.158	0.317	-0.317
3	0.109	0.159	0.319	-0.319
4	0.077	0.160	0.320	-0.320
5	0.016	0.160	0.321	-0.321
6	0.007	0.160	0.321	-0.321
7	-0.023	0.160	0.321	-0.321
8	-0.018	0.160	0.321	-0.321
9	0.294	0.160	0.321	-0.321
10	0.085	0.165	0.330	-0.330
11	0.136	0.165	0.331	-0.331
12	0.214	0.166	0.332	-0.332
13	0.016	0.168	0.337	-0.337
14	-0.006	0.168	0.337	-0.337
15	-0.002	0.168	0.337	-0.337



Station S_GW_1 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TP Unadjusted for Seasonal Medians

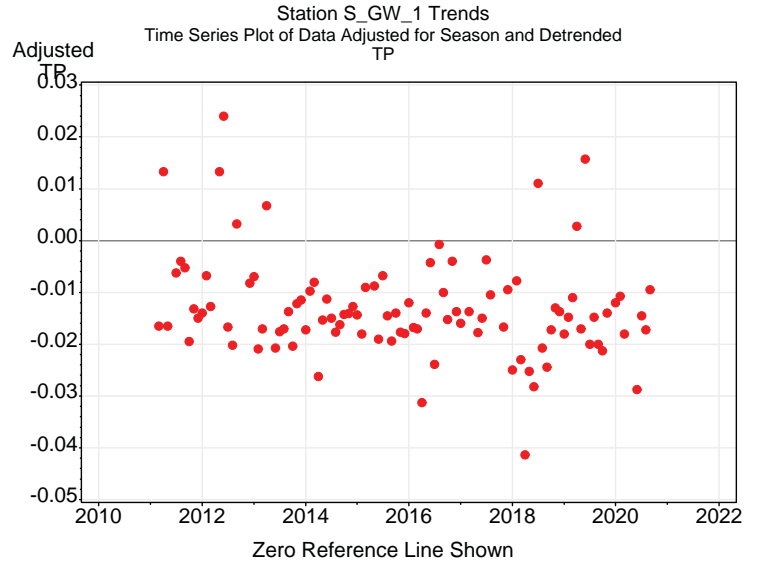
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.396	0	.009	.002

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_GW_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

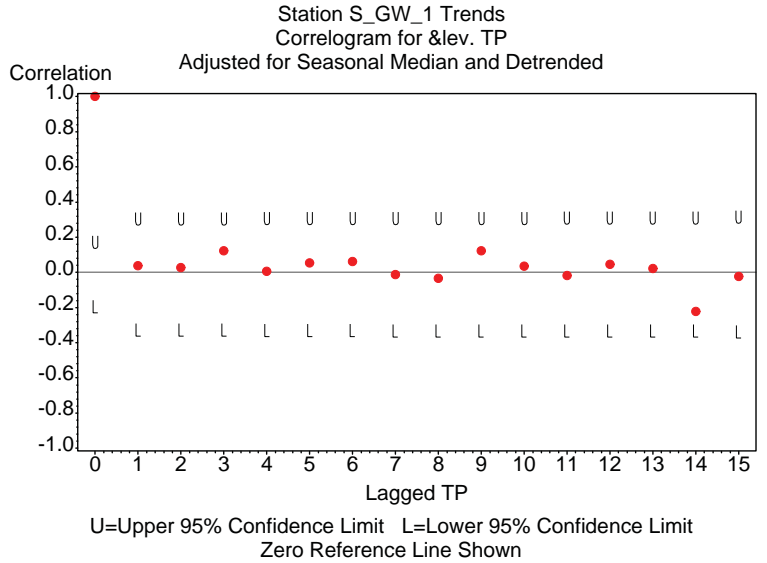
Adjusted for Seasonal Medians

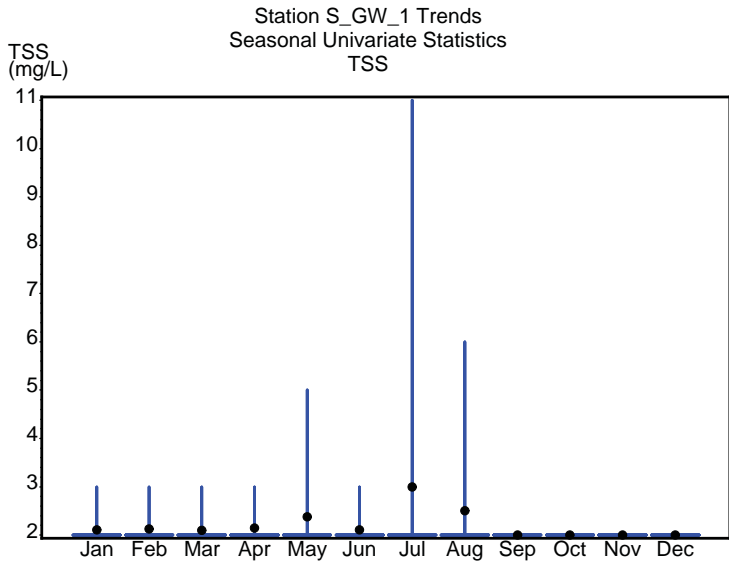
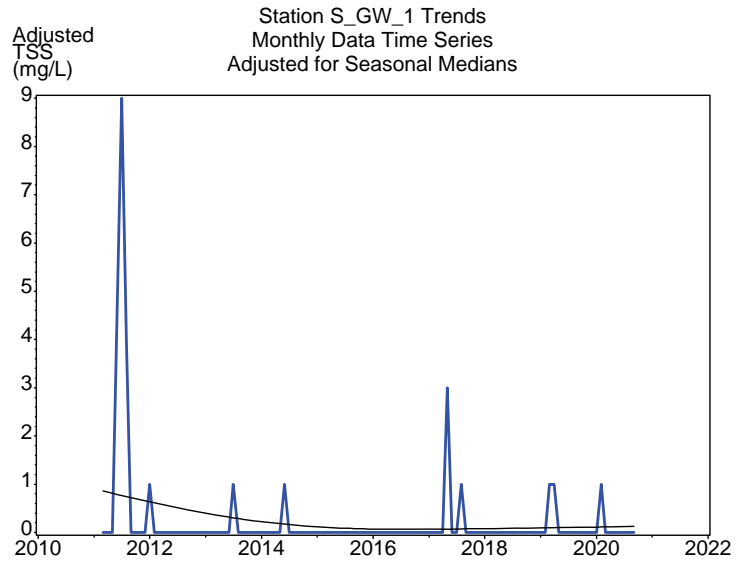
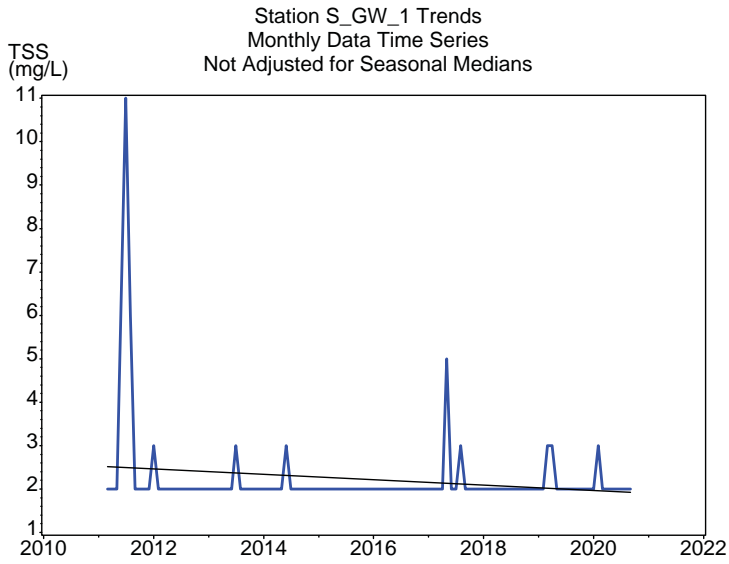
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.396	0	.009	.002



Station S_GW_1 Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

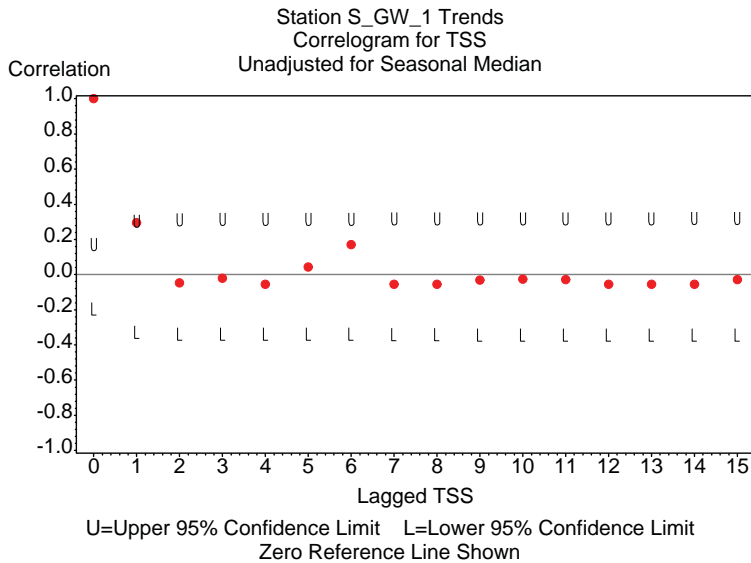
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.039	0.158	0.316	-0.316
2	0.026	0.158	0.316	-0.316
3	0.123	0.158	0.316	-0.316
4	0.006	0.159	0.318	-0.318
5	0.053	0.159	0.318	-0.318
6	0.063	0.159	0.318	-0.318
7	-0.013	0.159	0.319	-0.319
8	-0.035	0.159	0.319	-0.319
9	0.123	0.159	0.319	-0.319
10	0.036	0.160	0.320	-0.320
11	-0.018	0.160	0.321	-0.321
12	0.045	0.160	0.321	-0.321
13	0.022	0.160	0.321	-0.321
14	-0.222	0.160	0.321	-0.321
15	-0.022	0.163	0.326	-0.326





Station S_GW_1 Trends Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.296	0.158	0.316	-0.316
2	-0.047	0.163	0.325	-0.325
3	-0.020	0.163	0.326	-0.326
4	-0.055	0.163	0.326	-0.326
5	0.043	0.163	0.326	-0.326
6	0.170	0.163	0.326	-0.326
7	-0.055	0.165	0.329	-0.329
8	-0.056	0.165	0.329	-0.329
9	-0.032	0.165	0.330	-0.330
10	-0.027	0.165	0.330	-0.330
11	-0.028	0.165	0.330	-0.330
12	-0.054	0.165	0.330	-0.330
13	-0.055	0.165	0.330	-0.330
14	-0.055	0.165	0.331	-0.331
15	-0.028	0.165	0.331	-0.331

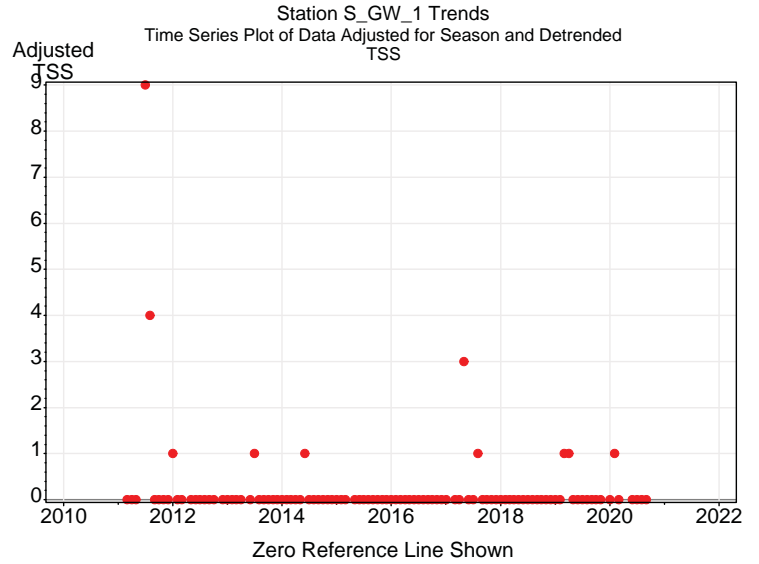


Station S_GW_1 Trends Appendix Seasonal Kendall Tau Trend Test Statistics Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.026	0.538	0.509	0

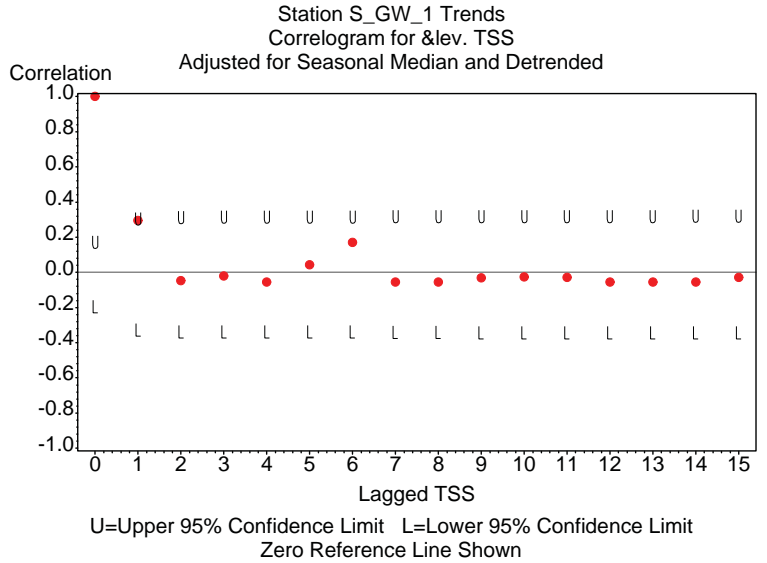
Station S_GW_1 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

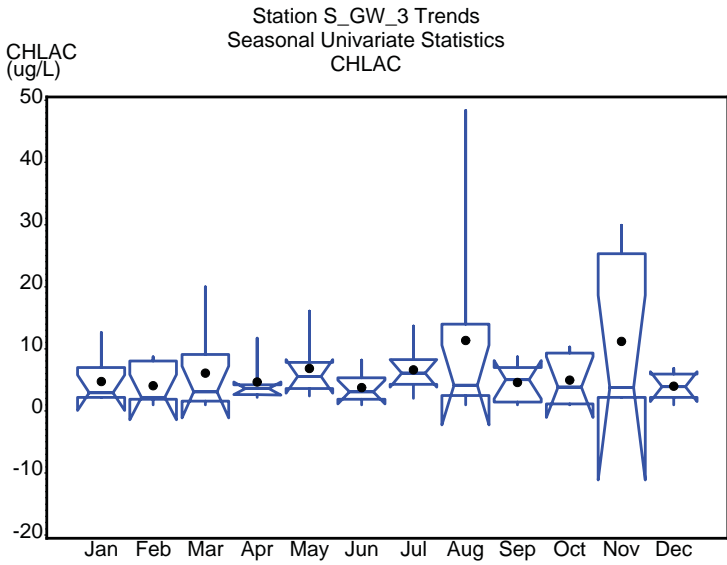
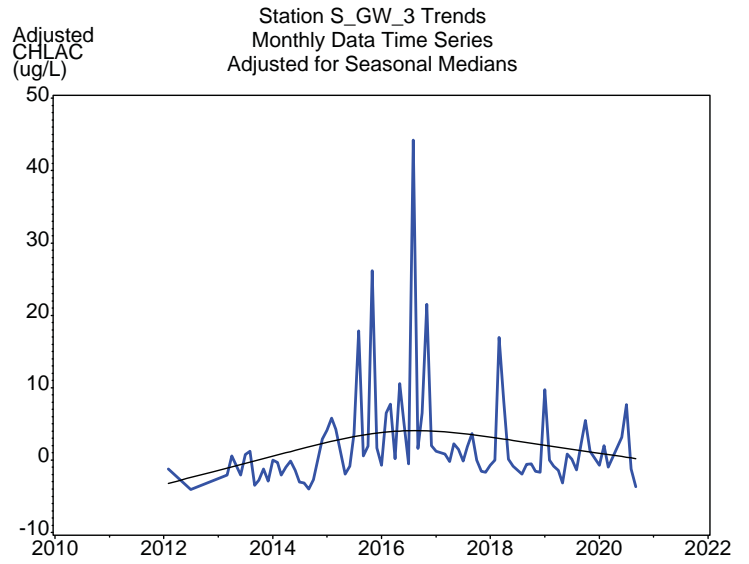
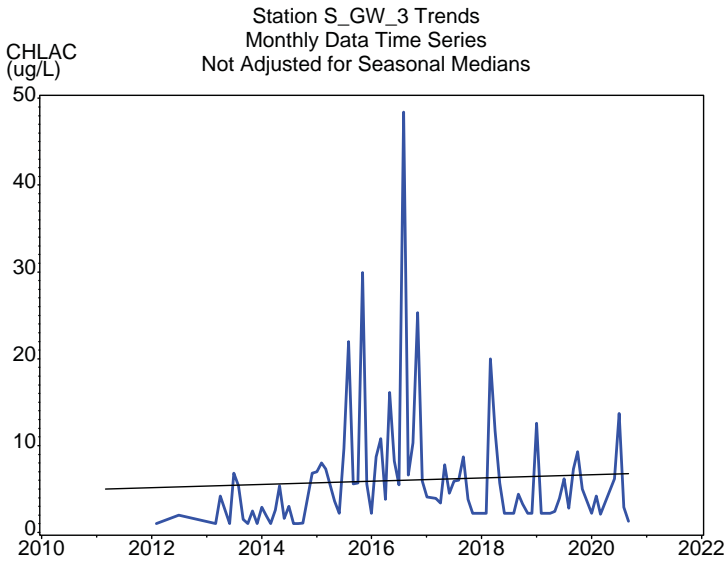
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.026	0.538	0.509	0



Station S_GW_1 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

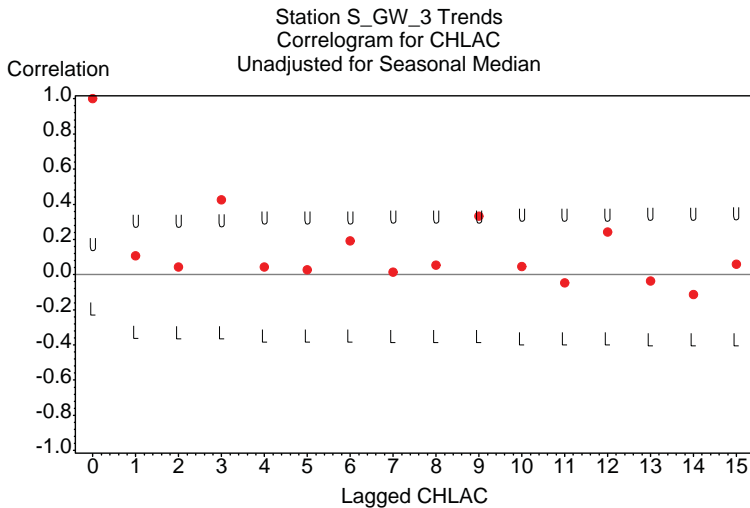
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.296	0.158	0.316	-0.316
2	-0.047	0.163	0.325	-0.325
3	-0.020	0.163	0.326	-0.326
4	-0.055	0.163	0.326	-0.326
5	0.043	0.163	0.326	-0.326
6	0.170	0.163	0.326	-0.326
7	-0.055	0.165	0.329	-0.329
8	-0.056	0.165	0.329	-0.329
9	-0.032	0.165	0.330	-0.330
10	-0.027	0.165	0.330	-0.330
11	-0.028	0.165	0.330	-0.330
12	-0.054	0.165	0.330	-0.330
13	-0.055	0.165	0.330	-0.330
14	-0.055	0.165	0.331	-0.331
15	-0.028	0.165	0.331	-0.331





Station S_GW_3 Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.107	0.158	0.316	-0.316
2	0.043	0.159	0.317	-0.317
3	0.425	0.159	0.318	-0.318
4	0.043	0.168	0.336	-0.336
5	0.028	0.168	0.336	-0.336
6	0.192	0.168	0.336	-0.336
7	0.013	0.170	0.340	-0.340
8	0.055	0.170	0.340	-0.340
9	0.333	0.170	0.340	-0.340
10	0.046	0.175	0.351	-0.351
11	-0.048	0.176	0.351	-0.351
12	0.241	0.176	0.351	-0.351
13	-0.037	0.178	0.357	-0.357
14	-0.113	0.179	0.357	-0.357
15	0.060	0.179	0.358	-0.358



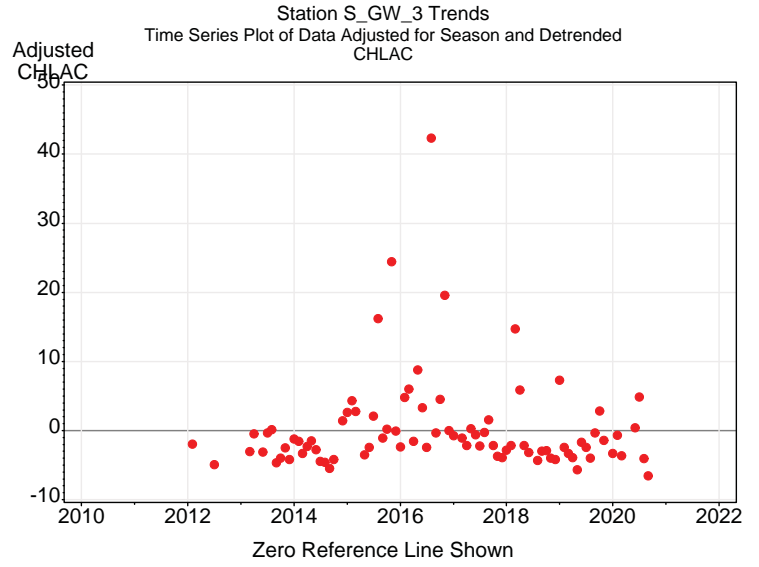
Station S_GW_3 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.156	0.092	0.373	0.24

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

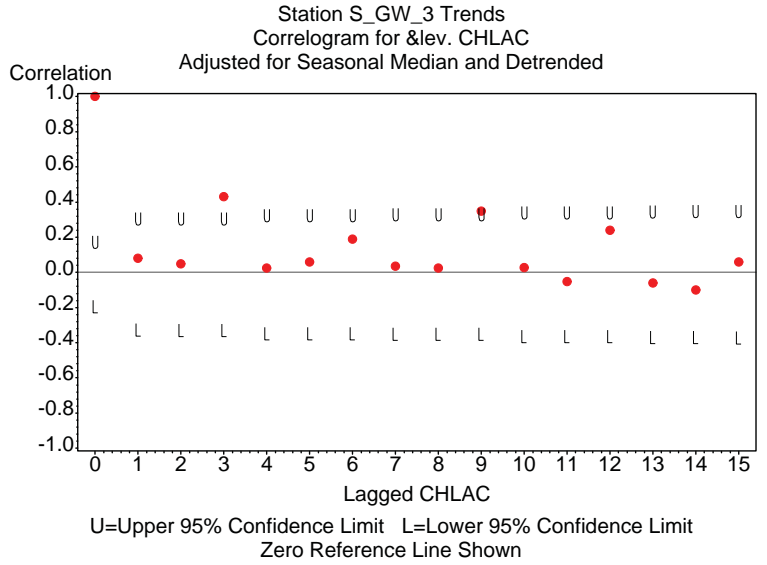
Station S_GW_3 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

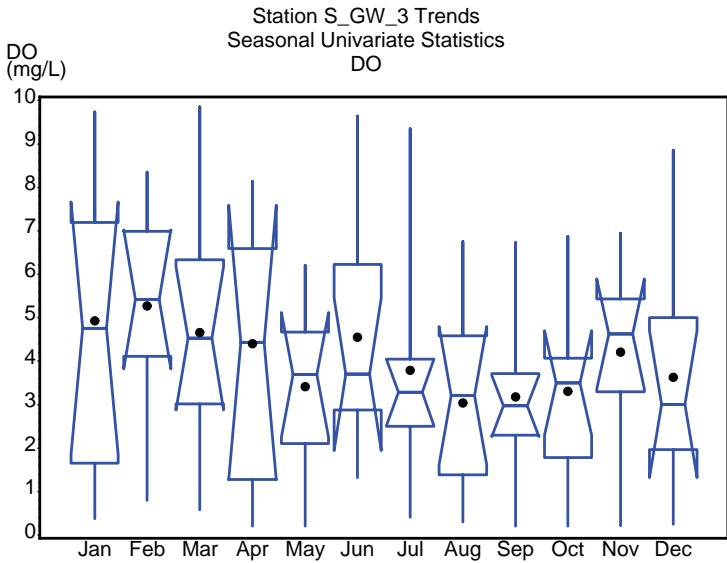
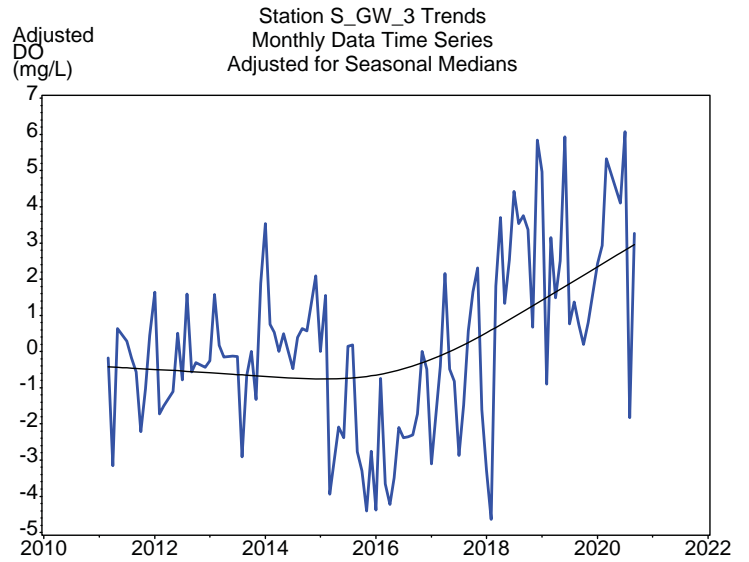
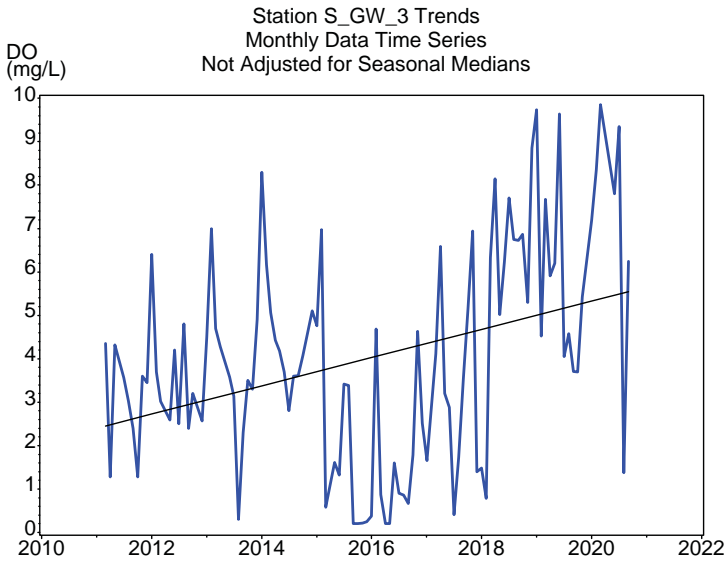
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.156	0.092	0.373	0.24



Station S_GW_3 Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

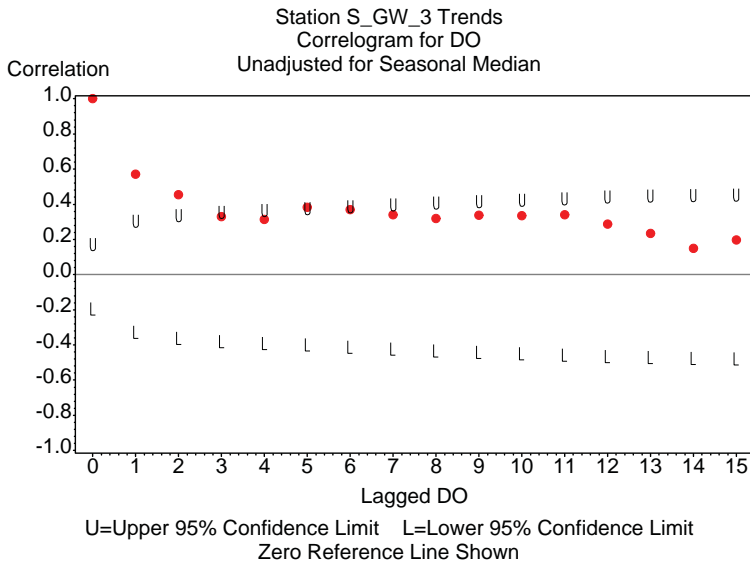
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.081	0.158	0.316	-0.316
2	0.049	0.158	0.317	-0.317
3	0.430	0.159	0.317	-0.317
4	0.024	0.168	0.336	-0.336
5	0.058	0.168	0.336	-0.336
6	0.189	0.168	0.336	-0.336
7	0.034	0.170	0.340	-0.340
8	0.025	0.170	0.340	-0.340
9	0.348	0.170	0.340	-0.340
10	0.027	0.176	0.352	-0.352
11	-0.052	0.176	0.352	-0.352
12	0.239	0.176	0.352	-0.352
13	-0.061	0.179	0.357	-0.357
14	-0.100	0.179	0.358	-0.358
15	0.059	0.179	0.359	-0.359





Station S_GW_3 Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.572	0.158	0.316	-0.316
2	0.455	0.175	0.349	-0.349
3	0.330	0.184	0.368	-0.368
4	0.313	0.189	0.378	-0.378
5	0.384	0.193	0.387	-0.387
6	0.370	0.200	0.399	-0.399
7	0.341	0.205	0.410	-0.410
8	0.320	0.210	0.420	-0.420
9	0.337	0.214	0.428	-0.428
10	0.336	0.218	0.436	-0.436
11	0.339	0.223	0.445	-0.445
12	0.286	0.227	0.454	-0.454
13	0.233	0.230	0.459	-0.459
14	0.149	0.232	0.463	-0.463
15	0.197	0.232	0.465	-0.465



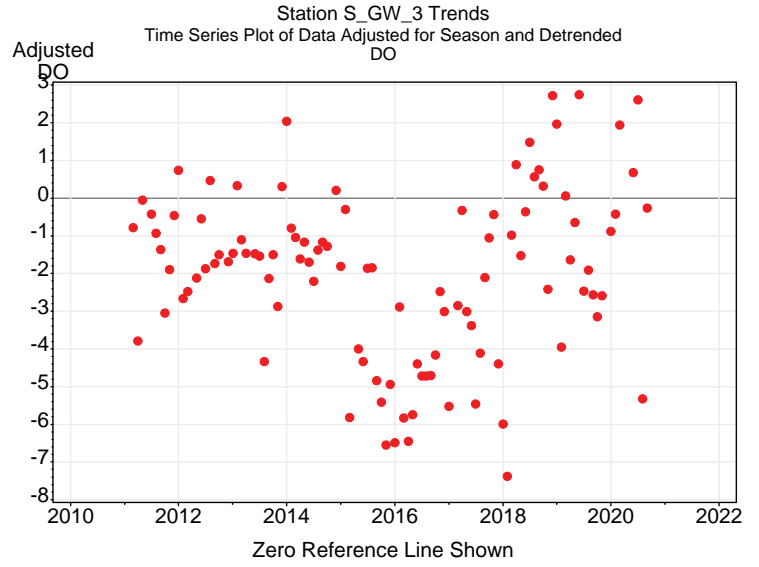
Station S_GW_3 Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.258	.001	0.152	0.301

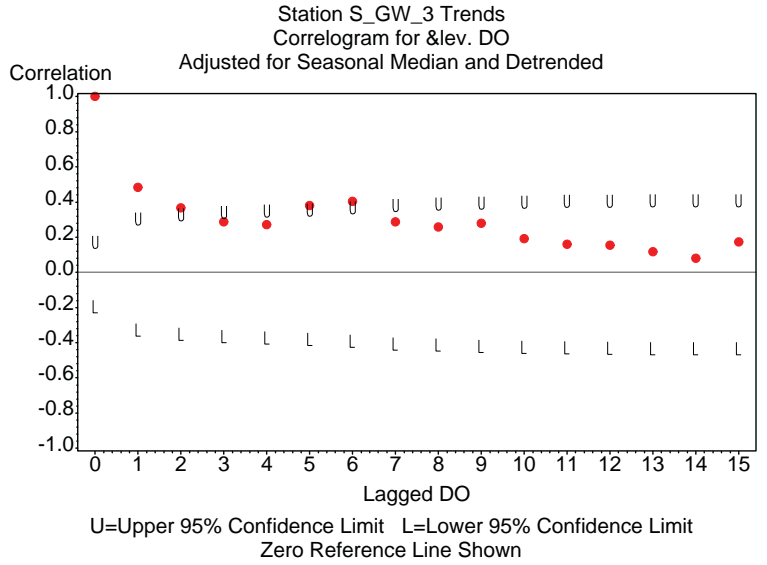
Station S_GW_3 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

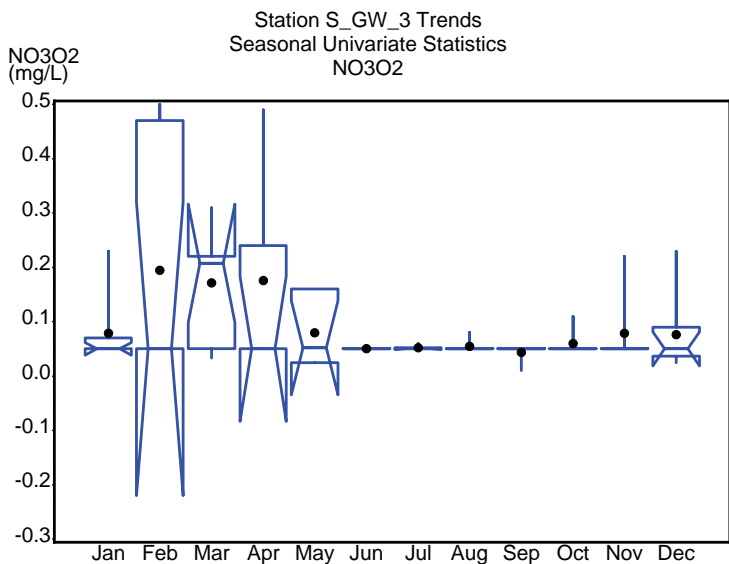
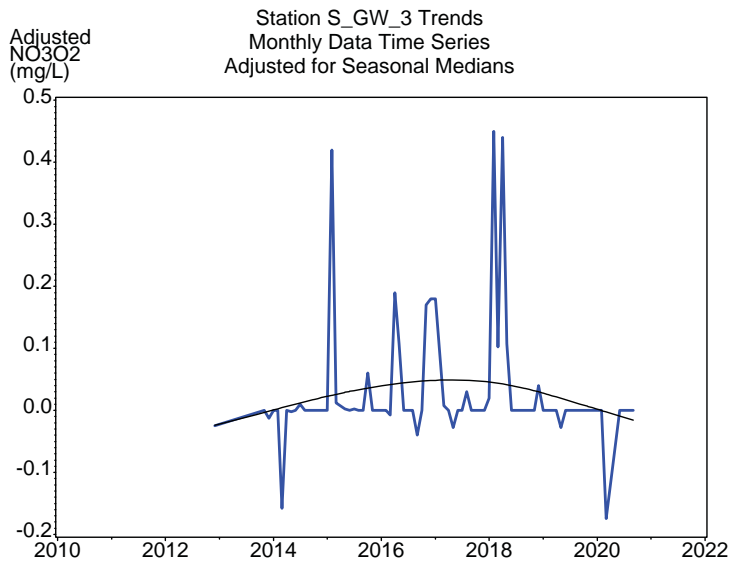
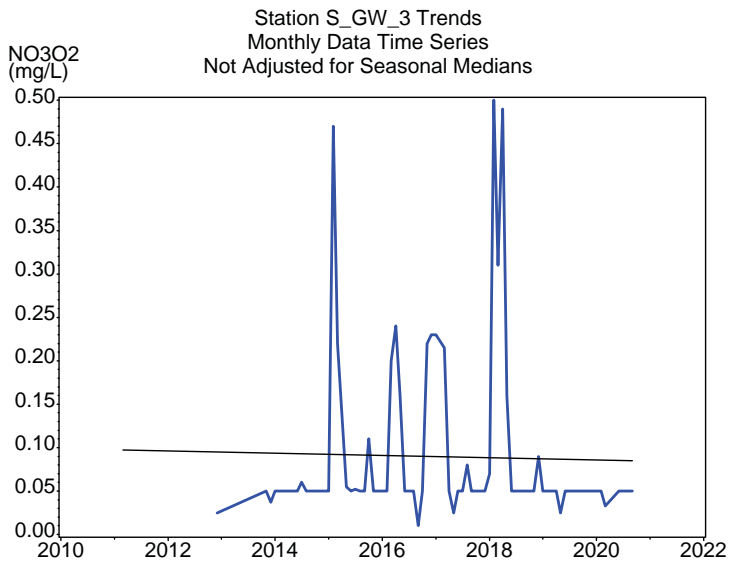
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.258	.001	0.152	0.301



Station S_GW_3 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

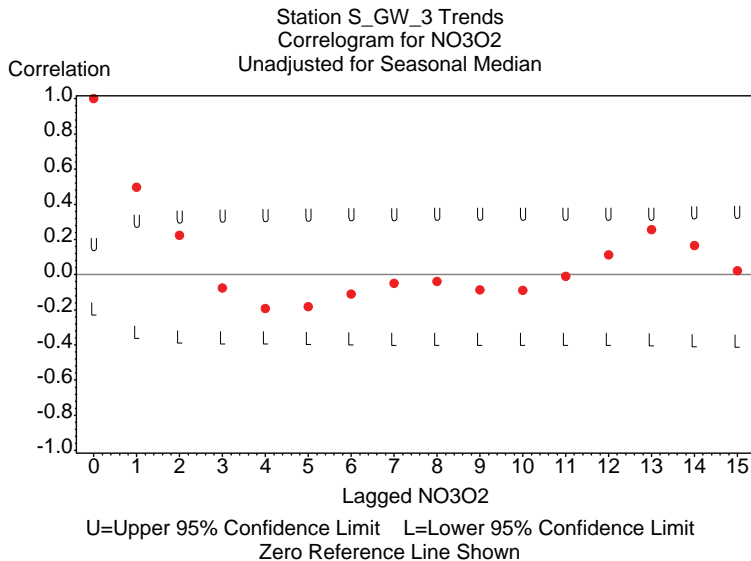
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.483	0.158	0.316	-0.316
2	0.368	0.170	0.340	-0.340
3	0.288	0.176	0.353	-0.353
4	0.272	0.180	0.361	-0.361
5	0.381	0.184	0.368	-0.368
6	0.403	0.190	0.380	-0.380
7	0.286	0.197	0.394	-0.394
8	0.257	0.201	0.401	-0.401
9	0.278	0.203	0.407	-0.407
10	0.192	0.206	0.413	-0.413
11	0.160	0.208	0.416	-0.416
12	0.154	0.209	0.418	-0.418
13	0.118	0.210	0.420	-0.420
14	0.079	0.210	0.421	-0.421
15	0.174	0.211	0.421	-0.421





Station S_GW_3 Trends Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.497	0.158	0.316	-0.316
2	0.224	0.171	0.341	-0.341
3	-0.075	0.173	0.346	-0.346
4	-0.192	0.173	0.347	-0.347
5	-0.182	0.175	0.350	-0.350
6	-0.110	0.177	0.353	-0.353
7	-0.051	0.177	0.354	-0.354
8	-0.038	0.177	0.355	-0.355
9	-0.086	0.177	0.355	-0.355
10	-0.090	0.178	0.356	-0.356
11	-0.011	0.178	0.356	-0.356
12	0.111	0.178	0.356	-0.356
13	0.256	0.179	0.357	-0.357
14	0.164	0.182	0.364	-0.364
15	0.021	0.183	0.366	-0.366

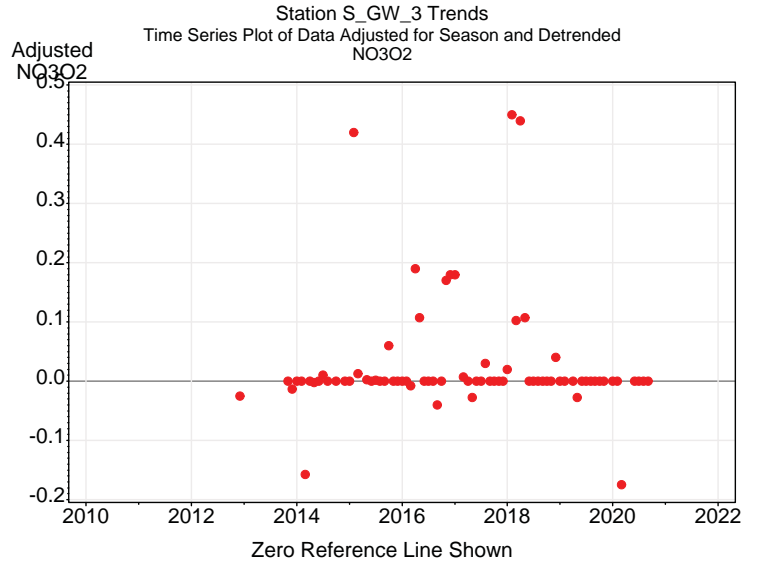


Station S_GW_3 Trends Appendix Seasonal Kendall Tau Trend Test Statistics NO3O2 Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.015	0.896	0.921	0

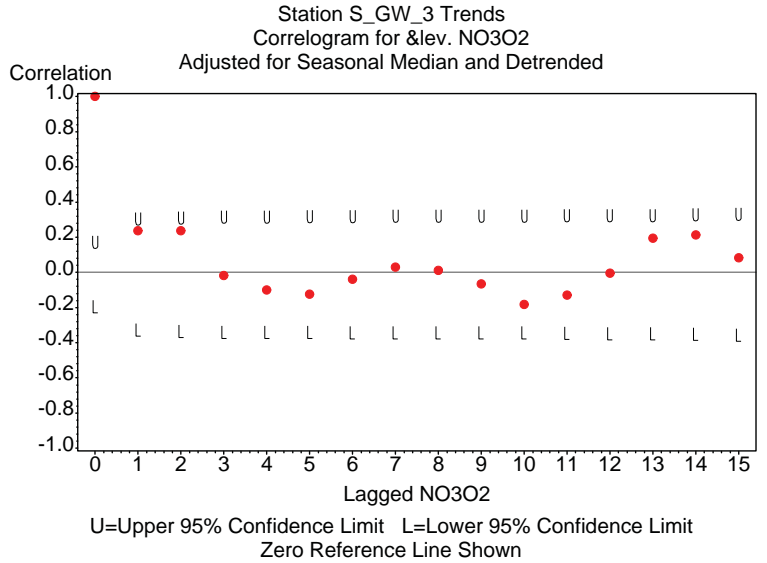
Station S_GW_3 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

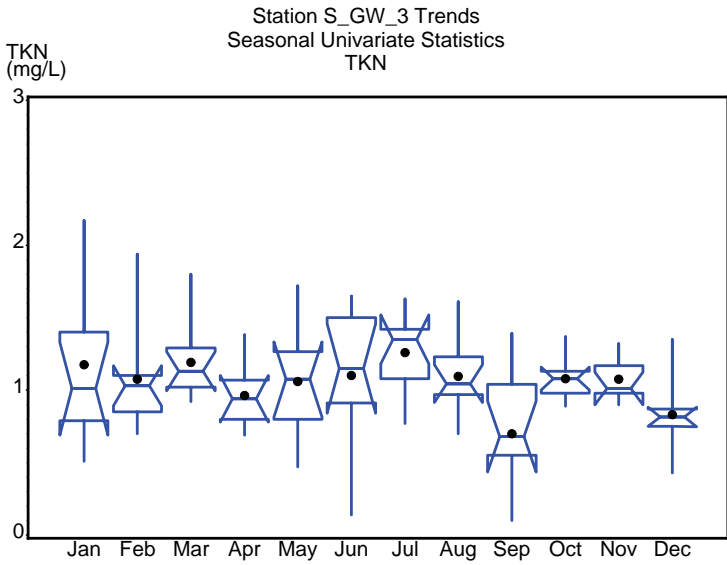
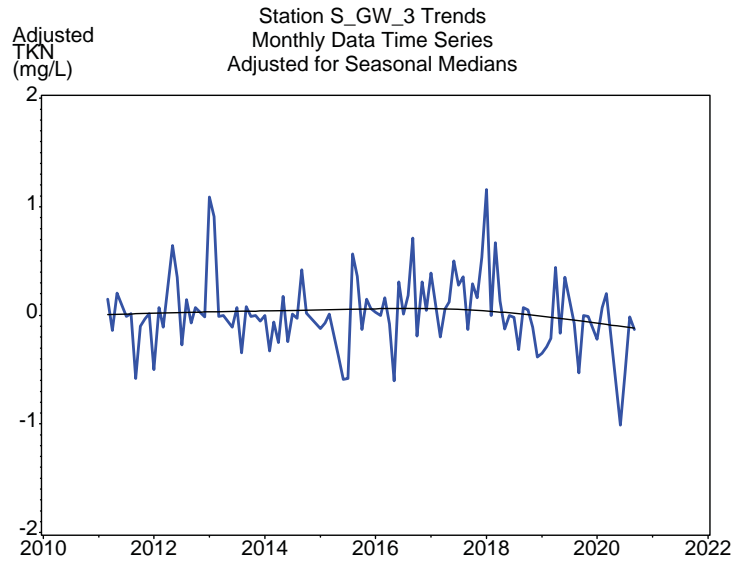
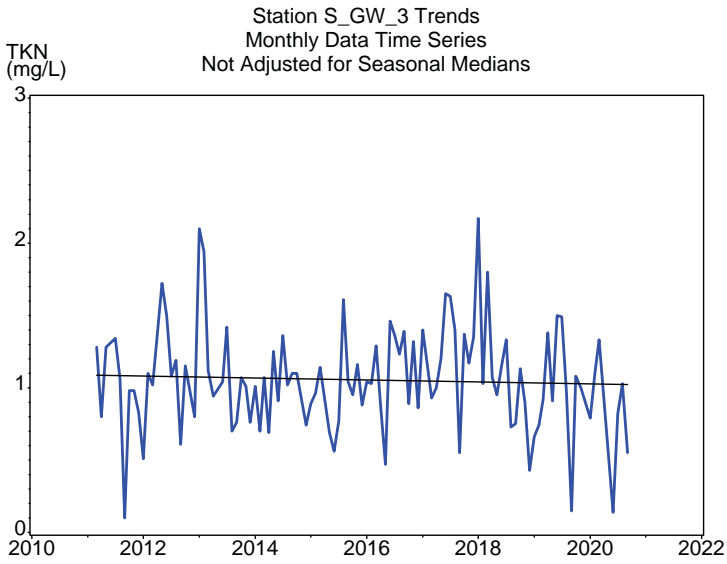
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.015	0.896	0.921	0



Station S_GW_3 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

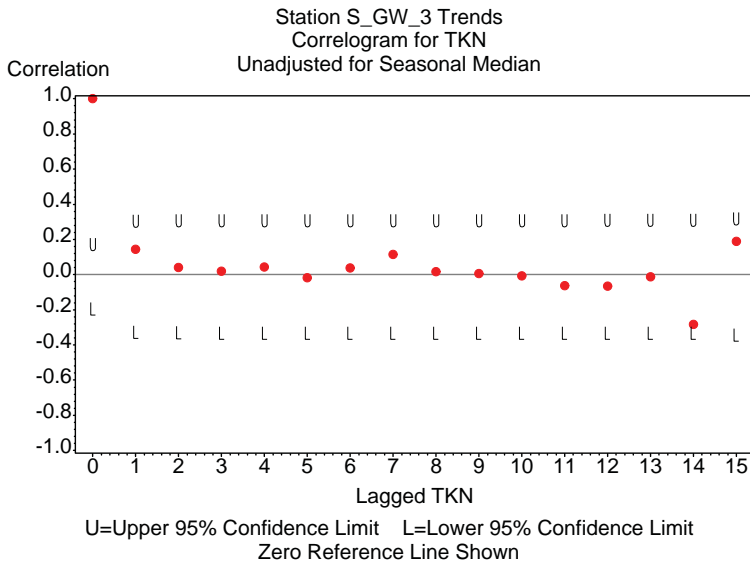
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.237	0.158	0.316	-0.316
2	0.236	0.161	0.322	-0.322
3	-0.018	0.164	0.328	-0.328
4	-0.100	0.164	0.328	-0.328
5	-0.125	0.164	0.329	-0.329
6	-0.040	0.165	0.330	-0.330
7	0.029	0.165	0.331	-0.331
8	0.012	0.165	0.331	-0.331
9	-0.066	0.165	0.331	-0.331
10	-0.182	0.166	0.331	-0.331
11	-0.130	0.167	0.334	-0.334
12	-0.004	0.168	0.336	-0.336
13	0.194	0.168	0.336	-0.336
14	0.213	0.170	0.340	-0.340
15	0.083	0.172	0.344	-0.344





Station S_GW_3 Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.145	0.158	0.316	-0.316
2	0.040	0.159	0.318	-0.318
3	0.020	0.159	0.319	-0.319
4	0.042	0.159	0.319	-0.319
5	-0.018	0.159	0.319	-0.319
6	0.038	0.159	0.319	-0.319
7	0.114	0.160	0.319	-0.319
8	0.017	0.160	0.320	-0.320
9	0.006	0.160	0.320	-0.320
10	-0.008	0.160	0.320	-0.320
11	-0.063	0.160	0.320	-0.320
12	-0.066	0.160	0.321	-0.321
13	-0.013	0.161	0.321	-0.321
14	-0.284	0.161	0.321	-0.321
15	0.188	0.165	0.330	-0.330

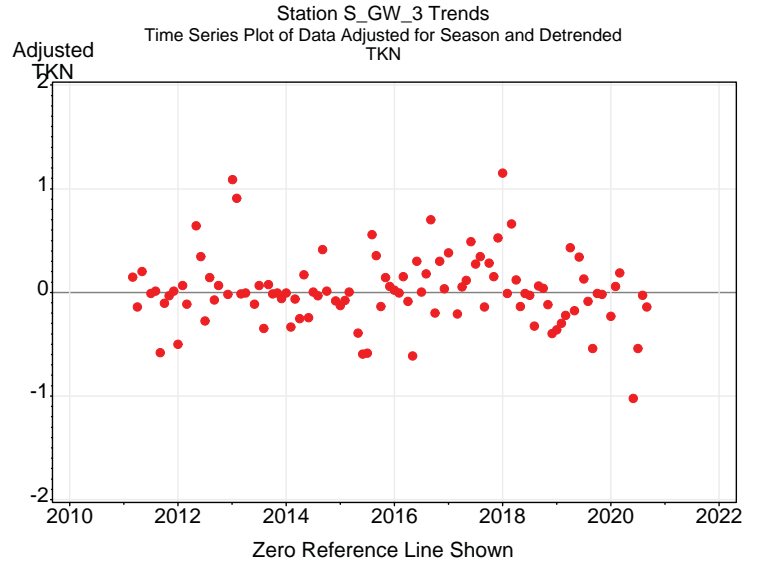


Station S_GW_3 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.012	0.902	0.909	.001

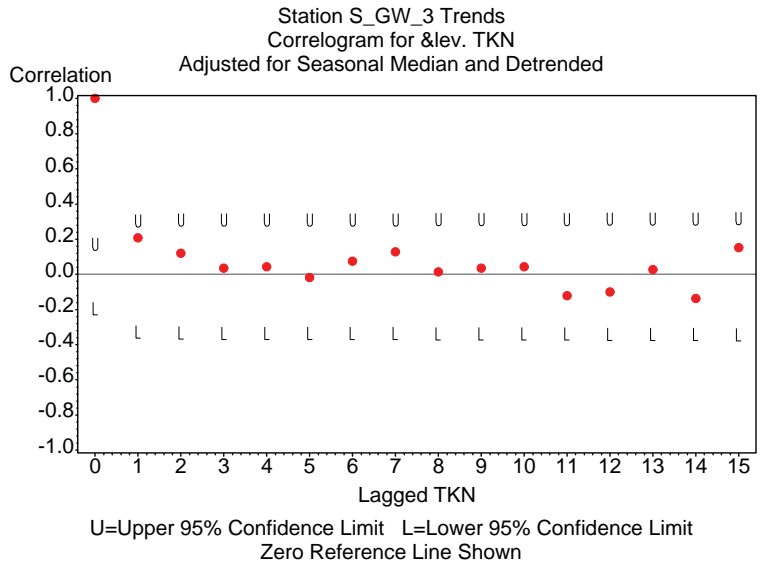
Station S_GW_3 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN
 Adjusted for Seasonal Medians

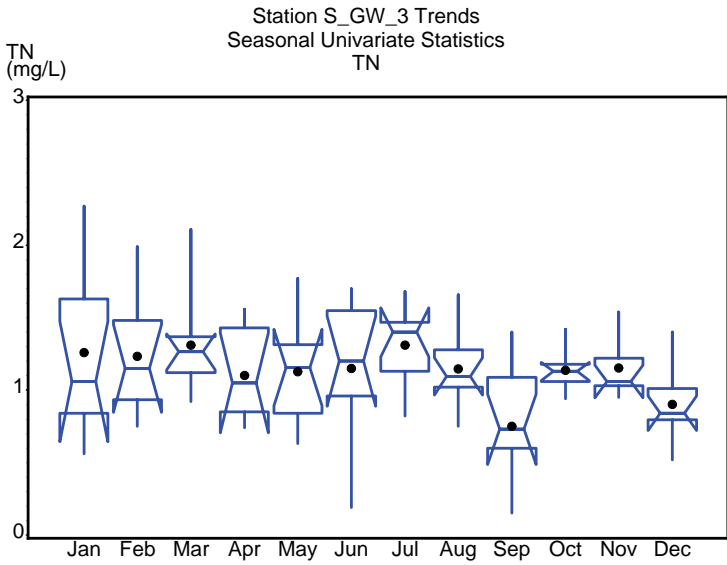
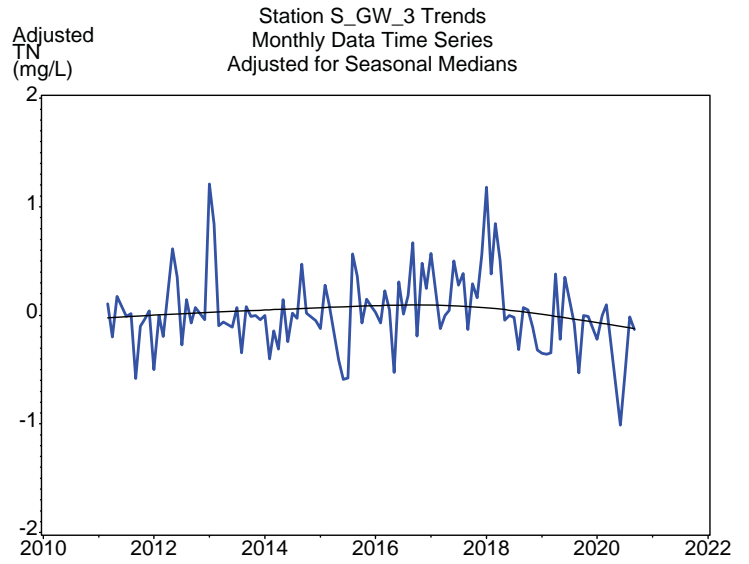
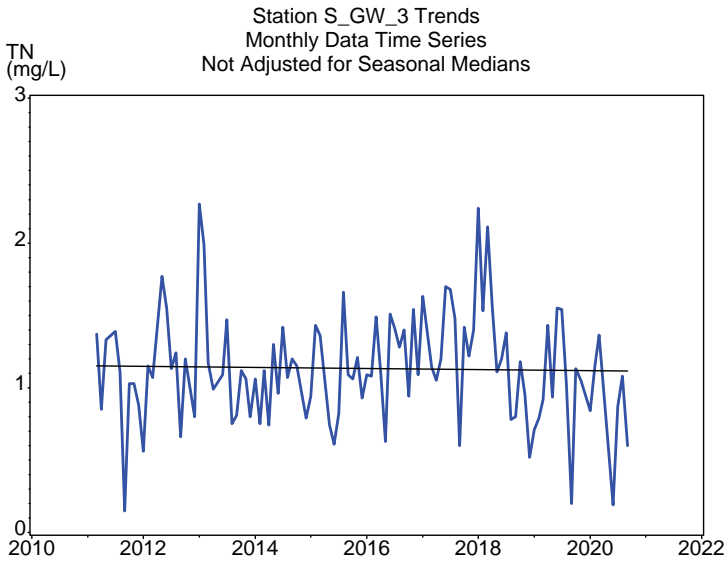
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.012	0.902	0.909	.001



Station S_GW_3 Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

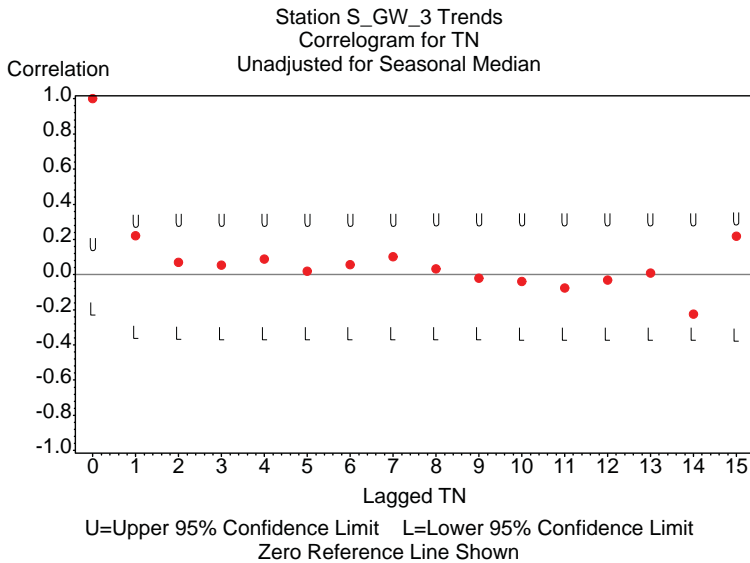
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.207	0.158	0.316	-0.316
2	0.121	0.160	0.321	-0.321
3	0.034	0.161	0.322	-0.322
4	0.043	0.161	0.322	-0.322
5	-0.018	0.161	0.323	-0.323
6	0.076	0.161	0.323	-0.323
7	0.129	0.162	0.323	-0.323
8	0.015	0.162	0.325	-0.325
9	0.036	0.162	0.325	-0.325
10	0.044	0.163	0.325	-0.325
11	-0.122	0.163	0.325	-0.325
12	-0.099	0.163	0.327	-0.327
13	0.026	0.164	0.328	-0.328
14	-0.138	0.164	0.328	-0.328
15	0.152	0.165	0.330	-0.330





Station S_GW_3 Trends Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.221	0.158	0.316	-0.316
2	0.071	0.161	0.321	-0.321
3	0.054	0.161	0.322	-0.322
4	0.088	0.161	0.322	-0.322
5	0.020	0.161	0.323	-0.323
6	0.056	0.161	0.323	-0.323
7	0.102	0.162	0.323	-0.323
8	0.032	0.162	0.324	-0.324
9	-0.020	0.162	0.324	-0.324
10	-0.039	0.162	0.325	-0.325
11	-0.075	0.162	0.325	-0.325
12	-0.030	0.163	0.325	-0.325
13	0.009	0.163	0.325	-0.325
14	-0.224	0.163	0.325	-0.325
15	0.219	0.165	0.330	-0.330

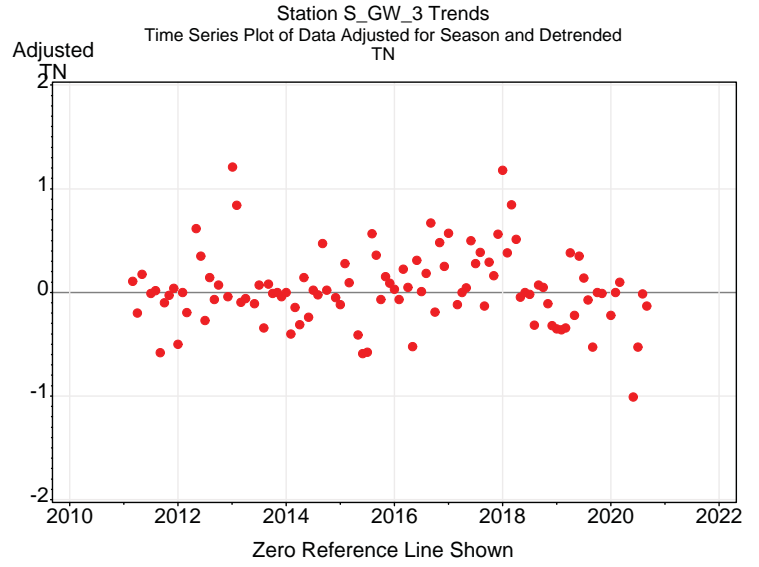


Station S_GW_3 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.01	0.927	0.94	0

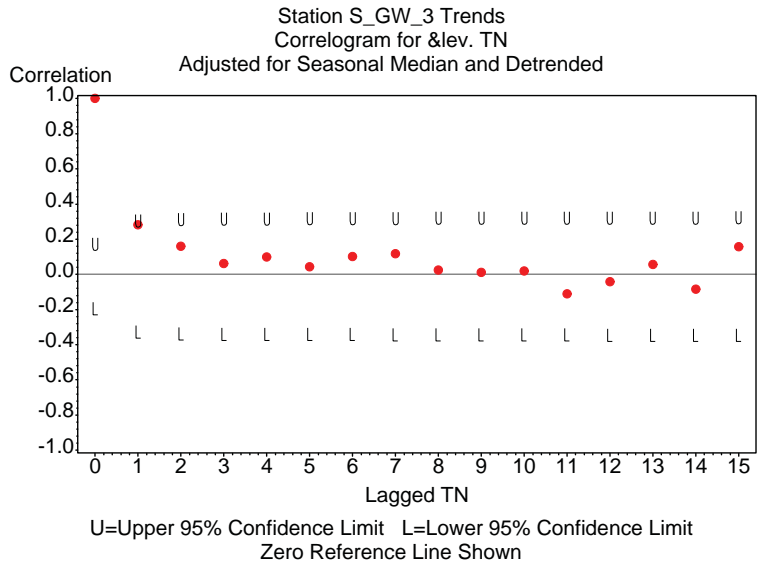
Station S_GW_3 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN
 Adjusted for Seasonal Medians

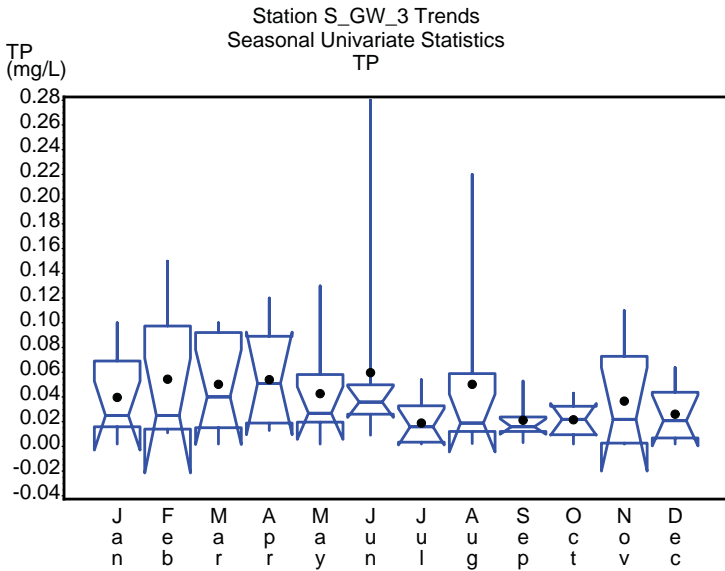
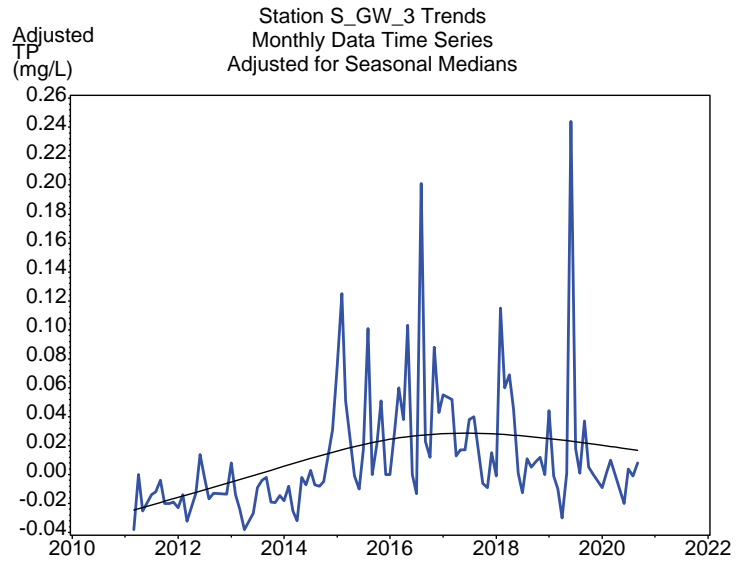
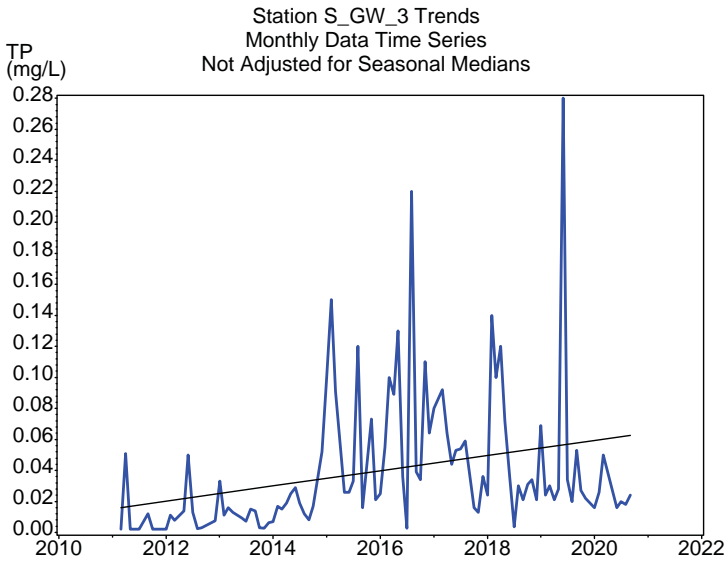
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.01	0.927	0.94	0



Station S_GW_3 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

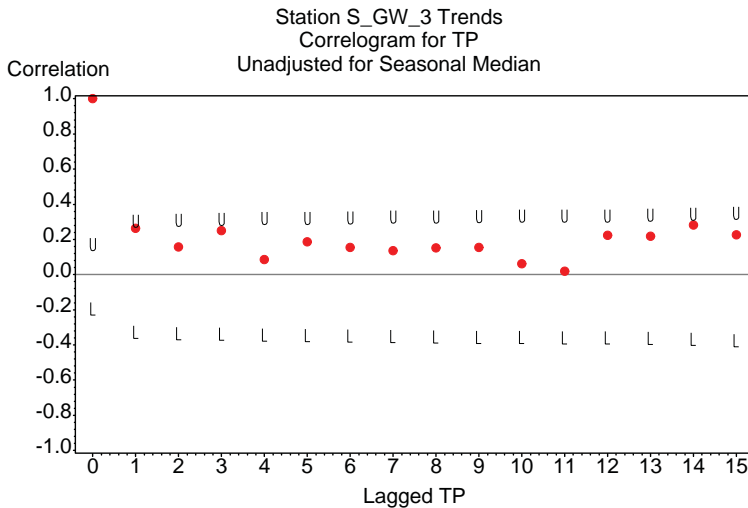
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.283	0.158	0.316	-0.316
2	0.160	0.162	0.325	-0.325
3	0.062	0.164	0.327	-0.327
4	0.100	0.164	0.328	-0.328
5	0.042	0.164	0.329	-0.329
6	0.101	0.164	0.329	-0.329
7	0.118	0.165	0.330	-0.330
8	0.025	0.166	0.331	-0.331
9	0.011	0.166	0.331	-0.331
10	0.019	0.166	0.331	-0.331
11	-0.111	0.166	0.331	-0.331
12	-0.042	0.166	0.333	-0.333
13	0.056	0.166	0.333	-0.333
14	-0.085	0.167	0.333	-0.333
15	0.158	0.167	0.334	-0.334





Station S_GW_3 Trends Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.263	0.158	0.316	-0.316
2	0.156	0.162	0.323	-0.323
3	0.250	0.163	0.326	-0.326
4	0.086	0.166	0.332	-0.332
5	0.186	0.167	0.333	-0.333
6	0.155	0.168	0.336	-0.336
7	0.135	0.169	0.339	-0.339
8	0.153	0.170	0.341	-0.341
9	0.155	0.171	0.343	-0.343
10	0.063	0.173	0.345	-0.345
11	0.020	0.173	0.346	-0.346
12	0.224	0.173	0.346	-0.346
13	0.217	0.175	0.350	-0.350
14	0.281	0.177	0.355	-0.355
15	0.227	0.181	0.362	-0.362



Station S_GW_3 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TP

Unadjusted for Seasonal Medians

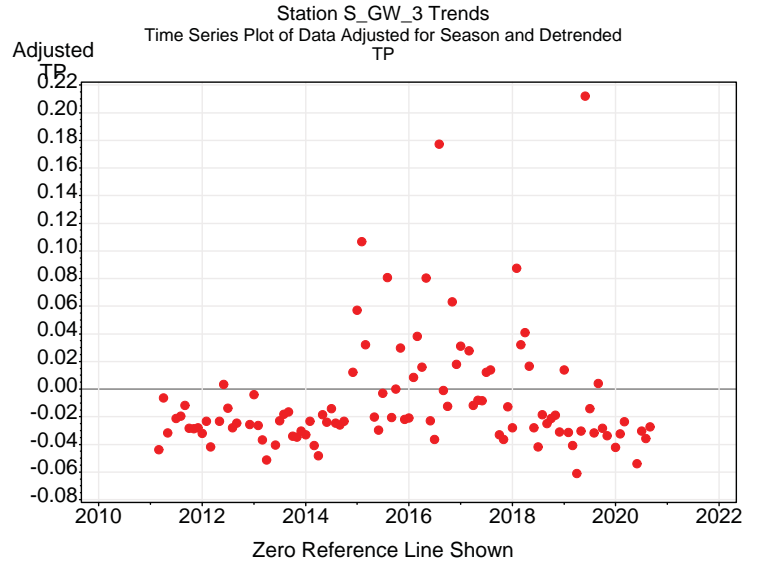
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.393	0	0.038	.003

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Station S_GW_3 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP

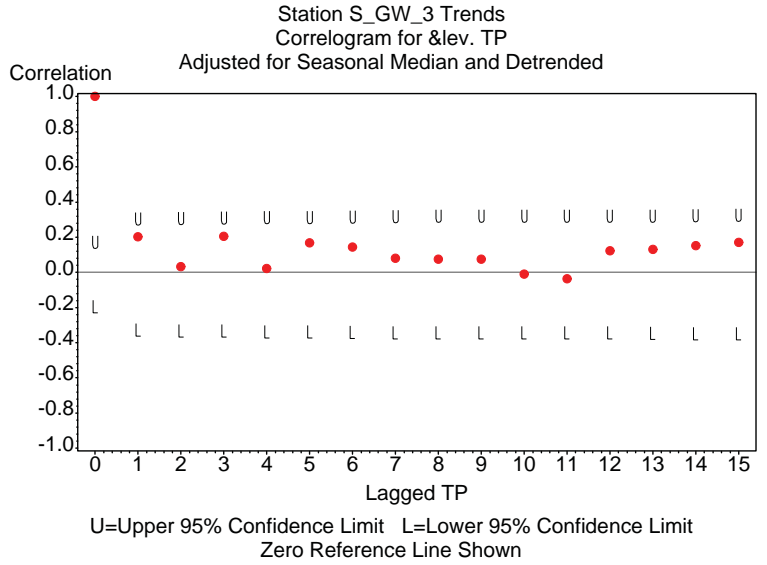
Adjusted for Seasonal Medians

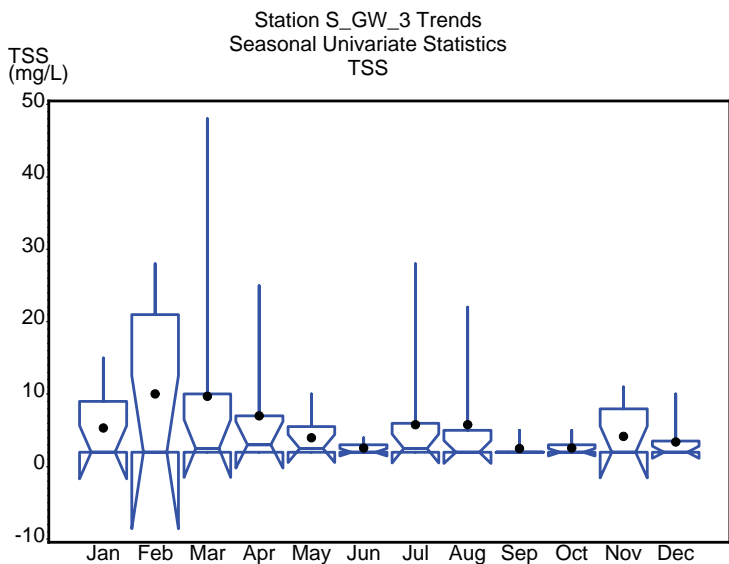
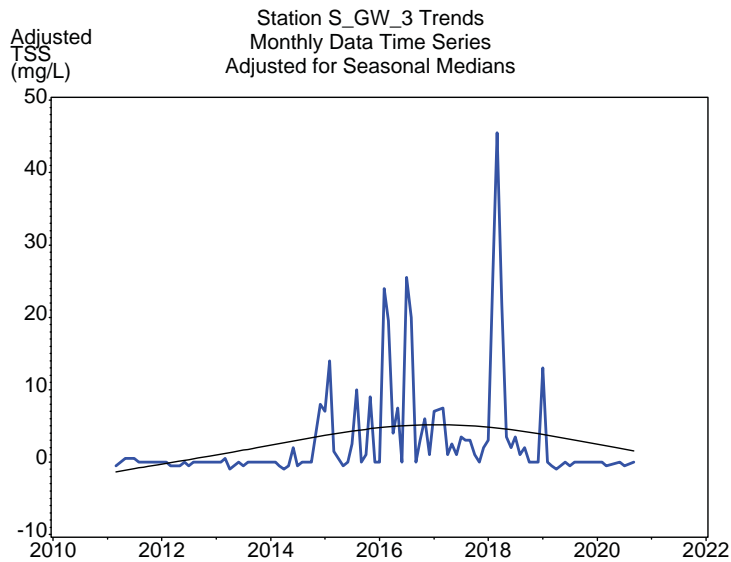
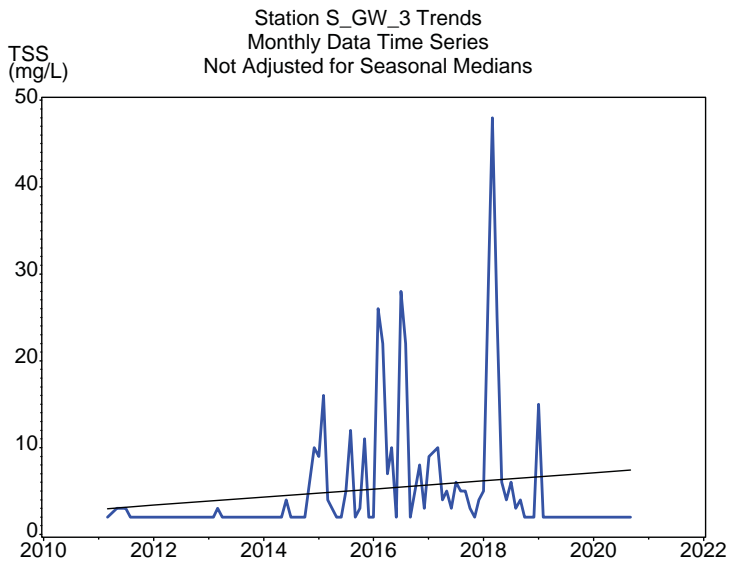
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.393	0	0.038	.003



Station S_GW_3 Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

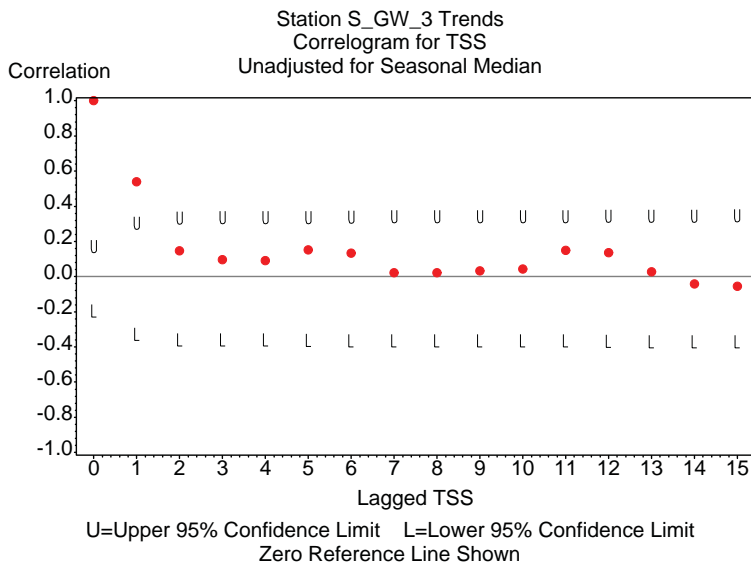
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.202	0.158	0.316	-0.316
2	0.032	0.160	0.320	-0.320
3	0.204	0.160	0.321	-0.321
4	0.023	0.162	0.325	-0.325
5	0.169	0.162	0.325	-0.325
6	0.143	0.164	0.328	-0.328
7	0.081	0.165	0.330	-0.330
8	0.074	0.165	0.331	-0.331
9	0.076	0.166	0.331	-0.331
10	-0.009	0.166	0.332	-0.332
11	-0.036	0.166	0.332	-0.332
12	0.124	0.166	0.332	-0.332
13	0.132	0.167	0.333	-0.333
14	0.153	0.168	0.335	-0.335
15	0.170	0.169	0.337	-0.337





Station S_GW_3 Trends Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.539	0.158	0.316	-0.316
2	0.146	0.173	0.346	-0.346
3	0.097	0.174	0.348	-0.348
4	0.091	0.174	0.348	-0.348
5	0.151	0.175	0.349	-0.349
6	0.133	0.176	0.351	-0.351
7	0.021	0.177	0.353	-0.353
8	0.021	0.177	0.353	-0.353
9	0.033	0.177	0.353	-0.353
10	0.043	0.177	0.353	-0.353
11	0.149	0.177	0.353	-0.353
12	0.135	0.178	0.356	-0.356
13	0.028	0.179	0.357	-0.357
14	-0.042	0.179	0.357	-0.357
15	-0.055	0.179	0.358	-0.358

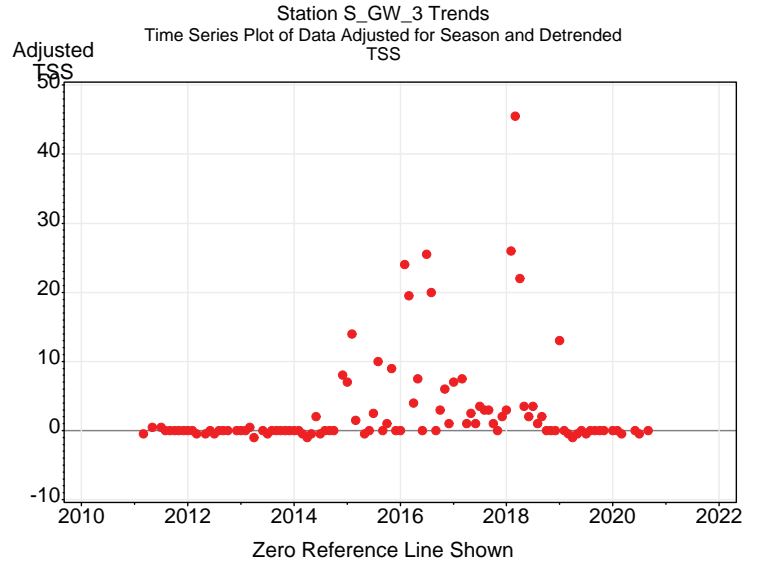


Station S_GW_3 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TSS Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.165	0.018	0.34	0

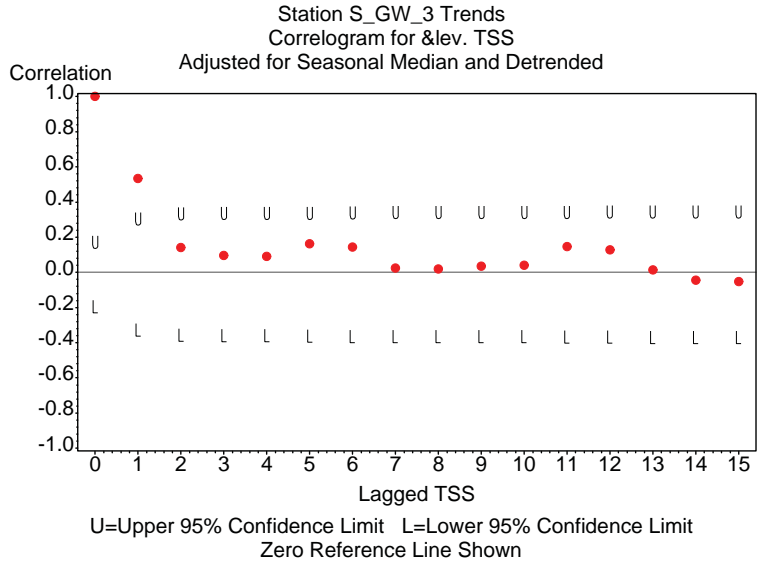
Station S_GW_3 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

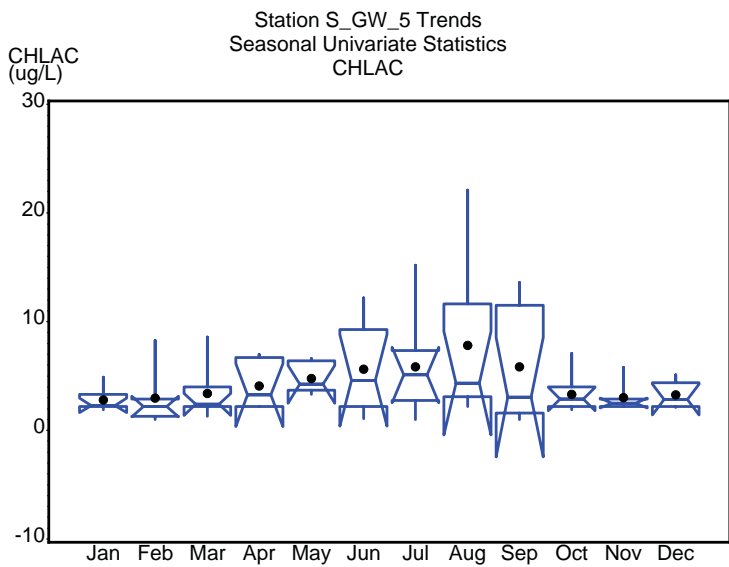
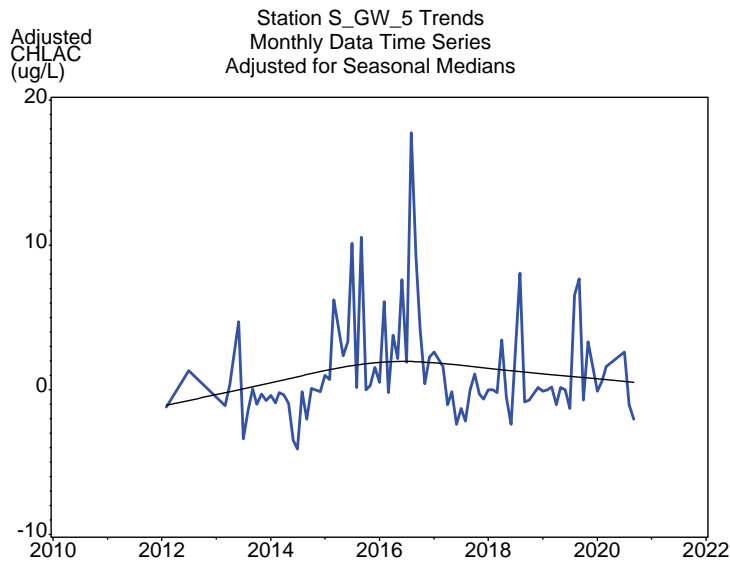
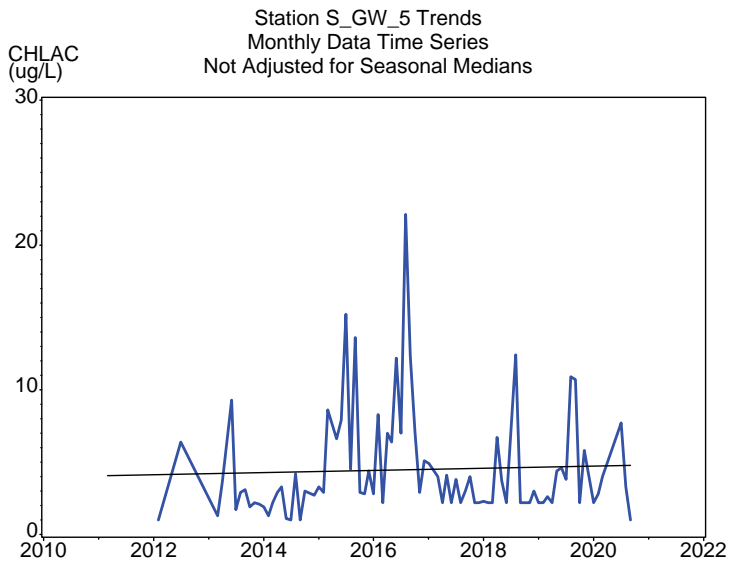
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.165	0.018	0.34	0



Station S_GW_3 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

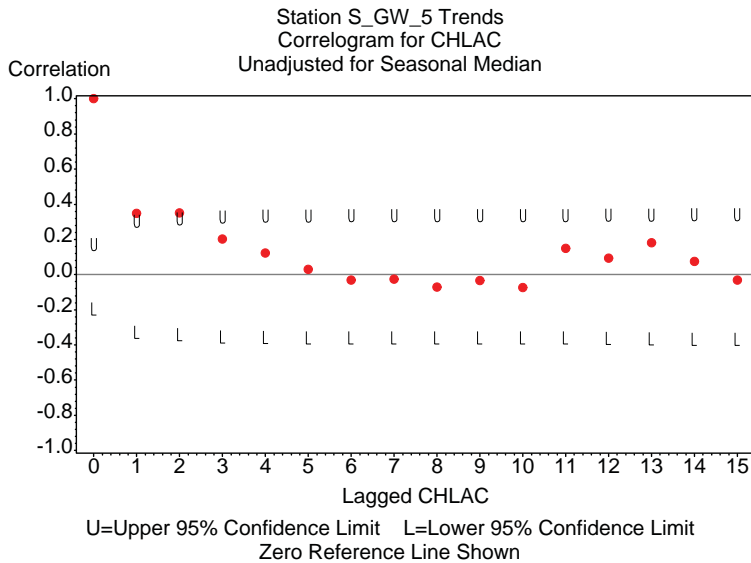
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.535	0.158	0.316	-0.316
2	0.142	0.173	0.345	-0.345
3	0.097	0.174	0.347	-0.347
4	0.090	0.174	0.348	-0.348
5	0.162	0.174	0.349	-0.349
6	0.144	0.176	0.351	-0.351
7	0.025	0.177	0.353	-0.353
8	0.020	0.177	0.353	-0.353
9	0.034	0.177	0.353	-0.353
10	0.041	0.177	0.353	-0.353
11	0.146	0.177	0.354	-0.354
12	0.127	0.178	0.356	-0.356
13	0.015	0.179	0.357	-0.357
14	-0.045	0.179	0.357	-0.357
15	-0.053	0.179	0.357	-0.357





Station S_GW_5 Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.349	0.158	0.316	-0.316
2	0.351	0.164	0.329	-0.329
3	0.202	0.171	0.341	-0.341
4	0.122	0.173	0.345	-0.345
5	0.030	0.173	0.346	-0.346
6	-0.032	0.173	0.347	-0.347
7	-0.026	0.173	0.347	-0.347
8	-0.071	0.173	0.347	-0.347
9	-0.034	0.174	0.347	-0.347
10	-0.074	0.174	0.347	-0.347
11	0.149	0.174	0.348	-0.348
12	0.094	0.175	0.350	-0.350
13	0.180	0.175	0.351	-0.351
14	0.076	0.177	0.354	-0.354
15	-0.030	0.177	0.354	-0.354



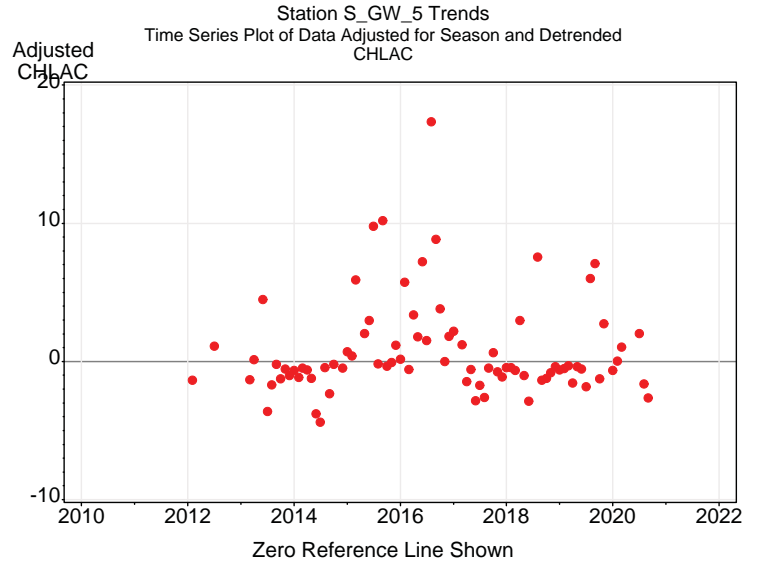
Station S_GW_5 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.07	0.463	0.722	0.05

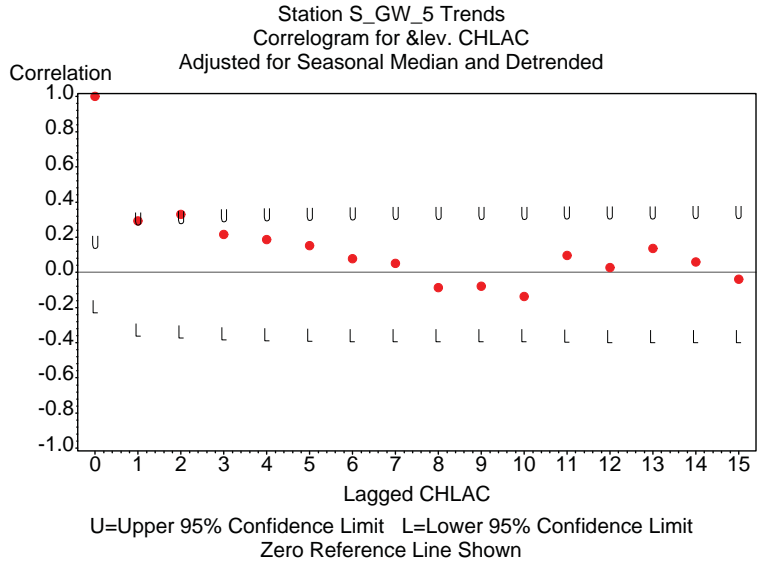
Station S_GW_5 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

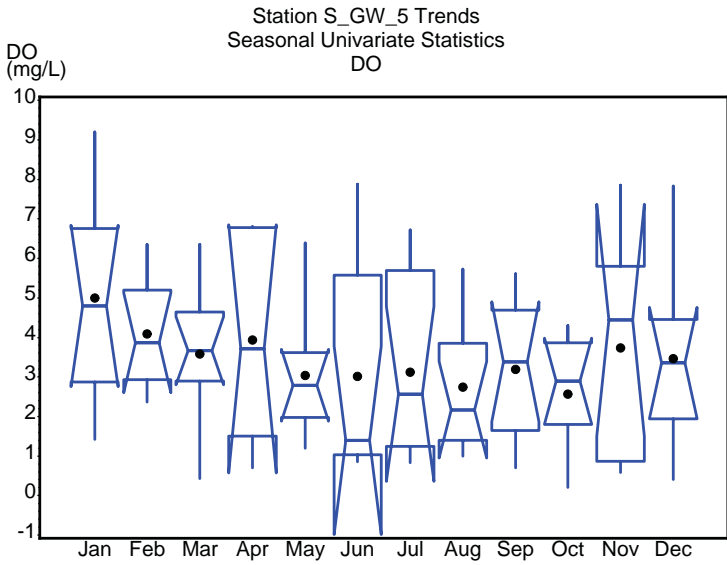
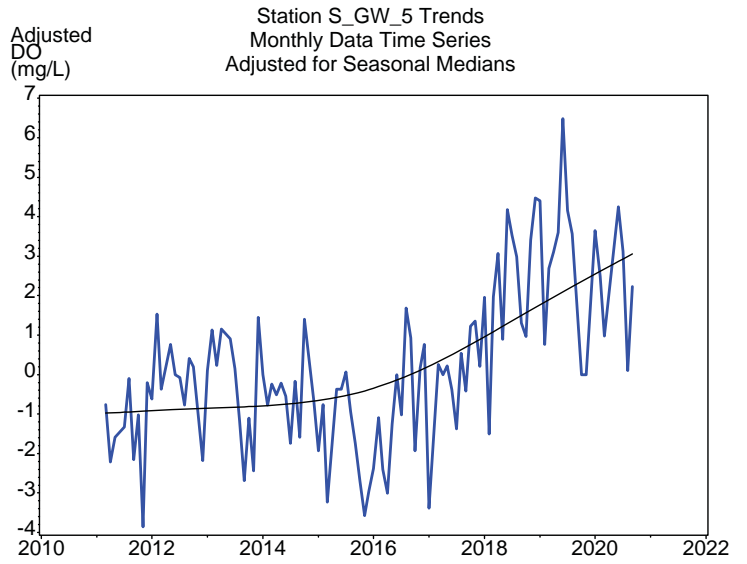
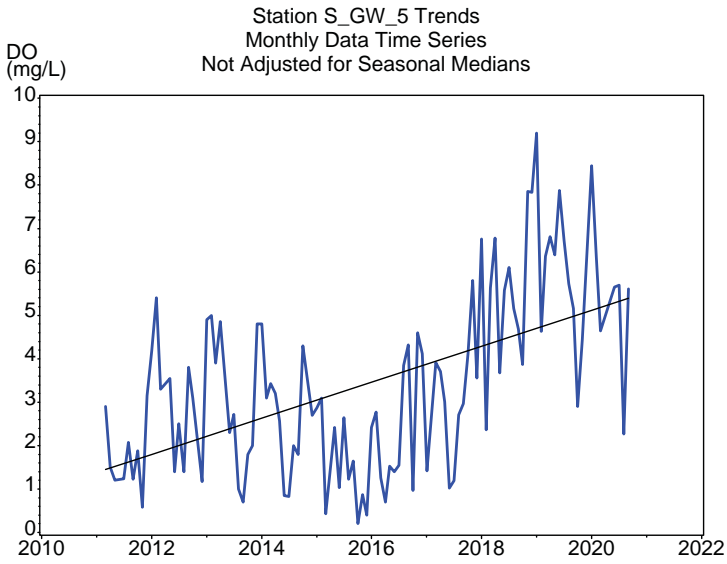
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.07	0.463	0.722	0.05



Station S_GW_5 Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

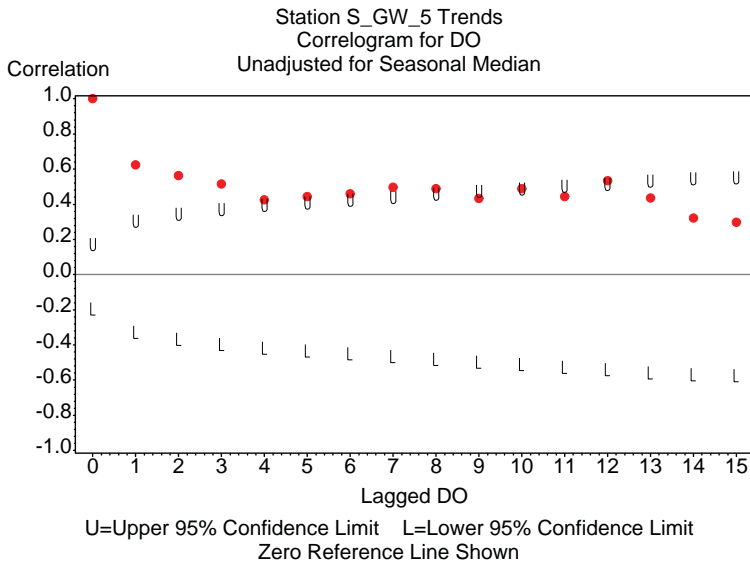
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.292	0.158	0.316	-0.316
2	0.329	0.163	0.325	-0.325
3	0.216	0.168	0.336	-0.336
4	0.186	0.170	0.341	-0.341
5	0.152	0.172	0.344	-0.344
6	0.078	0.173	0.346	-0.346
7	0.050	0.173	0.347	-0.347
8	-0.087	0.174	0.347	-0.347
9	-0.080	0.174	0.348	-0.348
10	-0.138	0.174	0.348	-0.348
11	0.095	0.175	0.350	-0.350
12	0.026	0.176	0.351	-0.351
13	0.137	0.176	0.351	-0.351
14	0.059	0.176	0.353	-0.353
15	-0.038	0.177	0.353	-0.353





Station S_GW_5 Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.624	0.158	0.316	-0.316
2	0.563	0.177	0.355	-0.355
3	0.516	0.192	0.383	-0.383
4	0.426	0.203	0.406	-0.406
5	0.444	0.210	0.421	-0.421
6	0.461	0.218	0.436	-0.436
7	0.496	0.226	0.452	-0.452
8	0.489	0.235	0.470	-0.470
9	0.432	0.243	0.486	-0.486
10	0.490	0.249	0.499	-0.499
11	0.444	0.257	0.515	-0.515
12	0.533	0.264	0.527	-0.527
13	0.436	0.273	0.545	-0.545
14	0.323	0.278	0.557	-0.557
15	0.297	0.281	0.563	-0.563

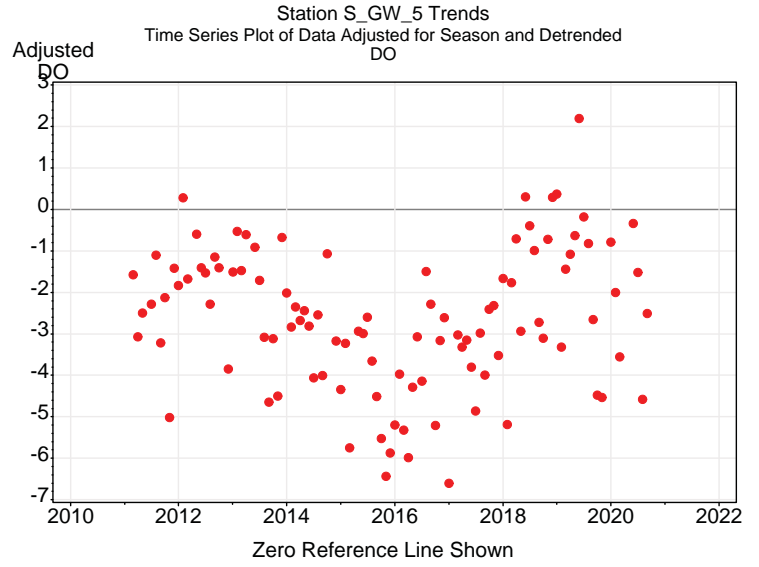


Station S_GW_5 Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.384	0	0.036	0.403

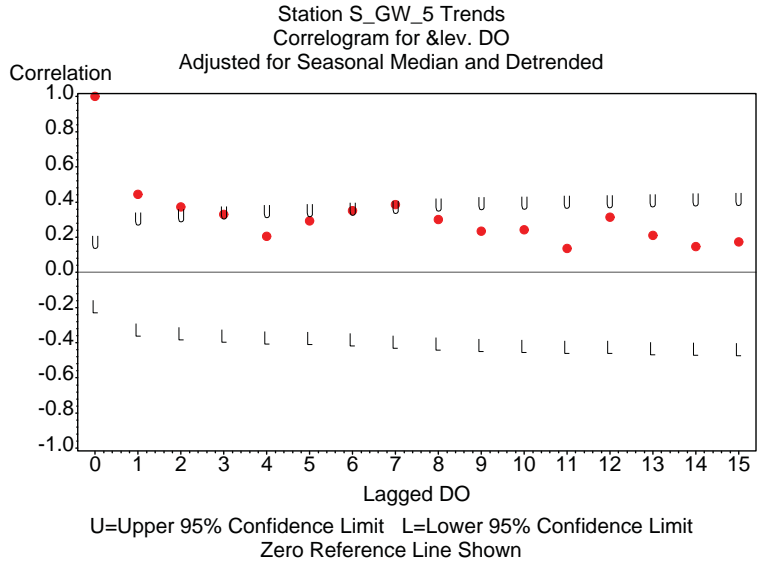
Station S_GW_5 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

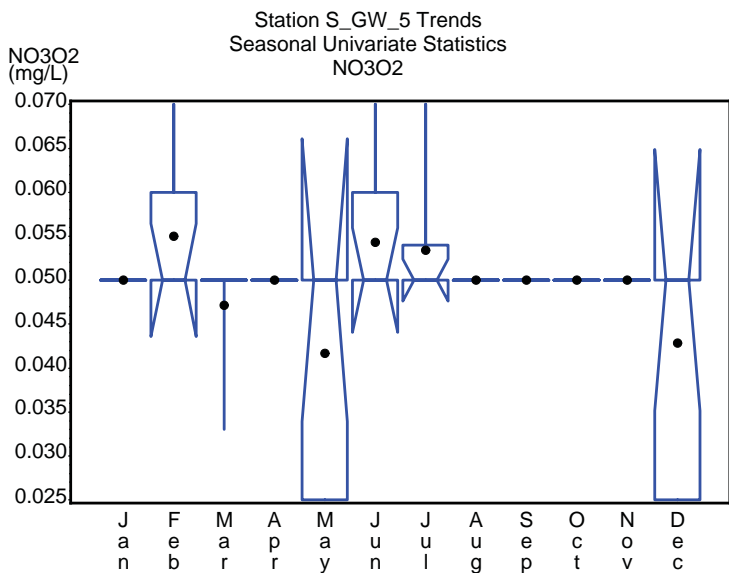
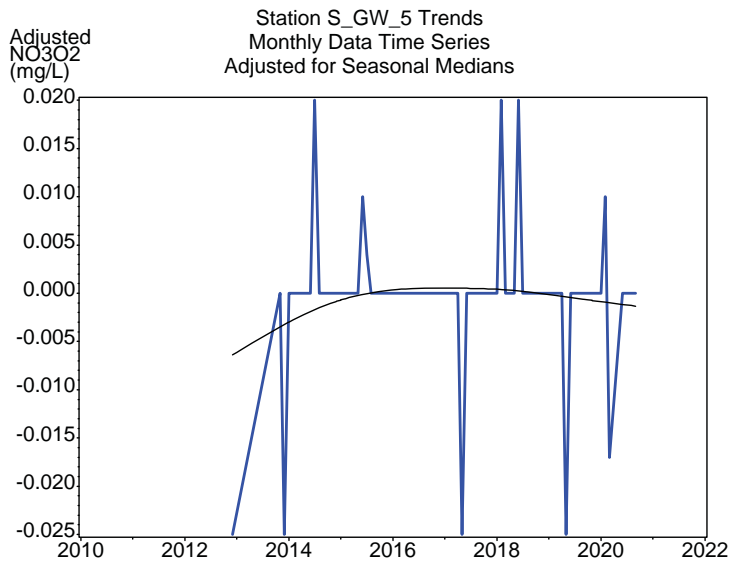
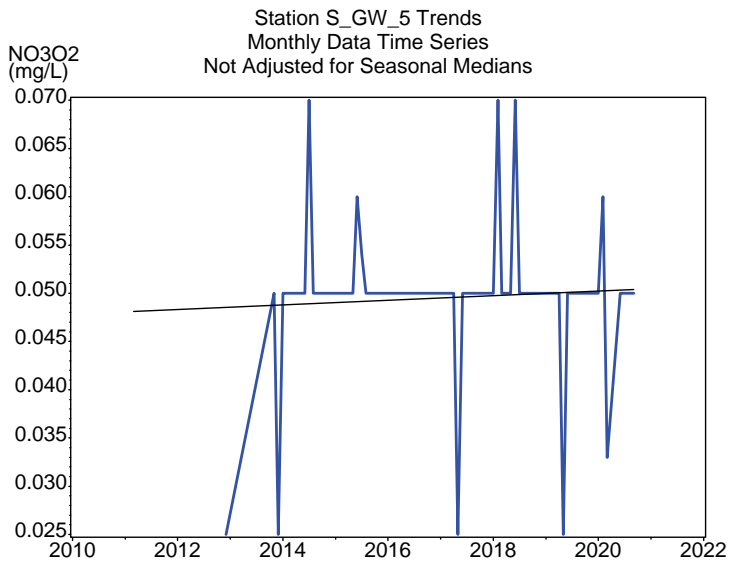
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.384	0	0.036	0.403



Station S_GW_5 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

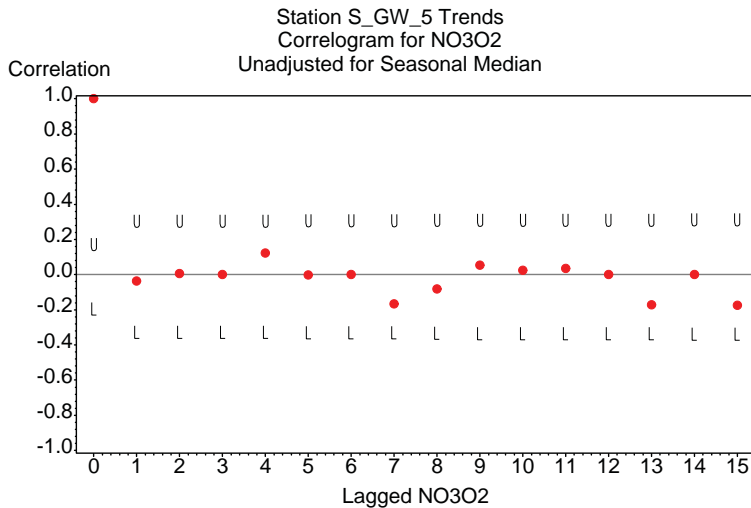
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.445	0.158	0.316	-0.316
2	0.373	0.168	0.336	-0.336
3	0.330	0.175	0.350	-0.350
4	0.205	0.180	0.360	-0.360
5	0.292	0.182	0.364	-0.364
6	0.350	0.186	0.372	-0.372
7	0.386	0.191	0.383	-0.383
8	0.301	0.198	0.395	-0.395
9	0.233	0.201	0.403	-0.403
10	0.243	0.204	0.407	-0.407
11	0.135	0.206	0.412	-0.412
12	0.313	0.207	0.414	-0.414
13	0.209	0.211	0.421	-0.421
14	0.146	0.212	0.425	-0.425
15	0.174	0.213	0.427	-0.427





Station S_GW_5 Trends Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.037	0.158	0.316	-0.316
2	0.006	0.158	0.316	-0.316
3	0.001	0.158	0.316	-0.316
4	0.124	0.158	0.316	-0.316
5	-0.001	0.159	0.318	-0.318
6	0.000	0.159	0.318	-0.318
7	-0.166	0.159	0.318	-0.318
8	-0.082	0.160	0.321	-0.321
9	0.053	0.161	0.322	-0.322
10	0.024	0.161	0.322	-0.322
11	0.036	0.161	0.322	-0.322
12	0.000	0.161	0.322	-0.322
13	-0.171	0.161	0.322	-0.322
14	0.000	0.163	0.325	-0.325
15	-0.175	0.163	0.325	-0.325



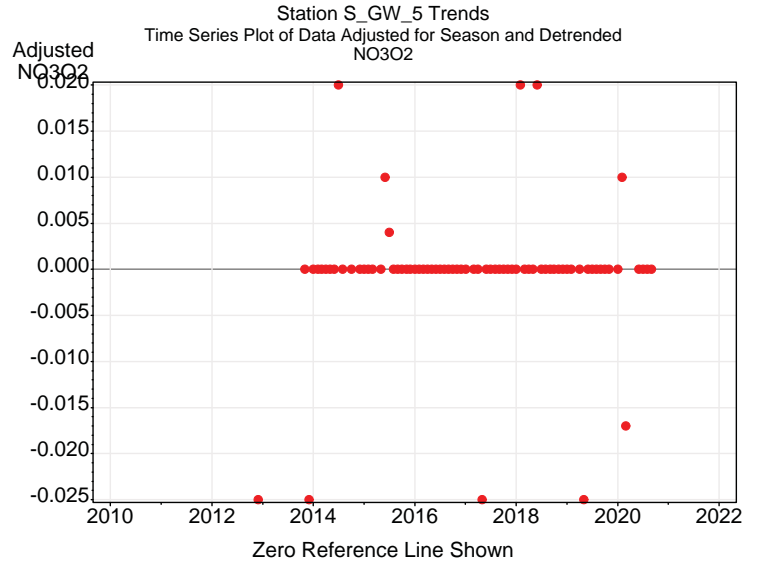
Station S_GW_5 Trends Appendix Seasonal Kendall Tau Trend Test Statistics NO3O2 Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.039	0.542	0.601	0

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

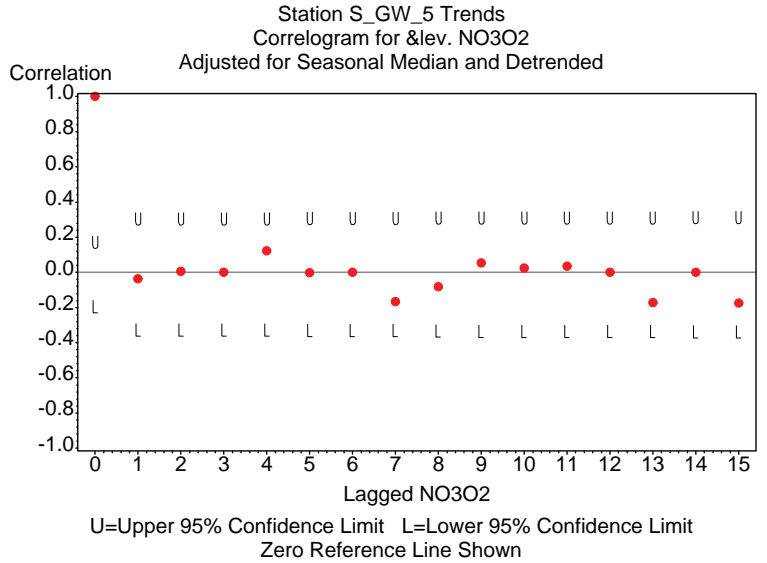
Station S_GW_5 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

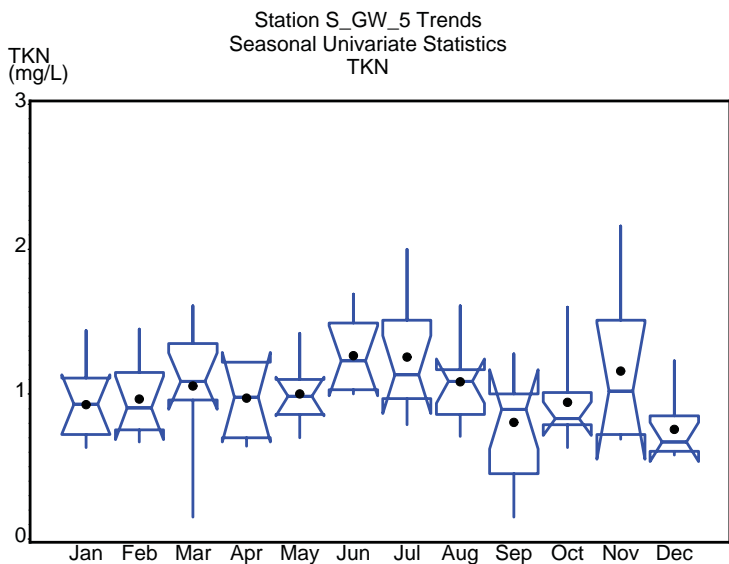
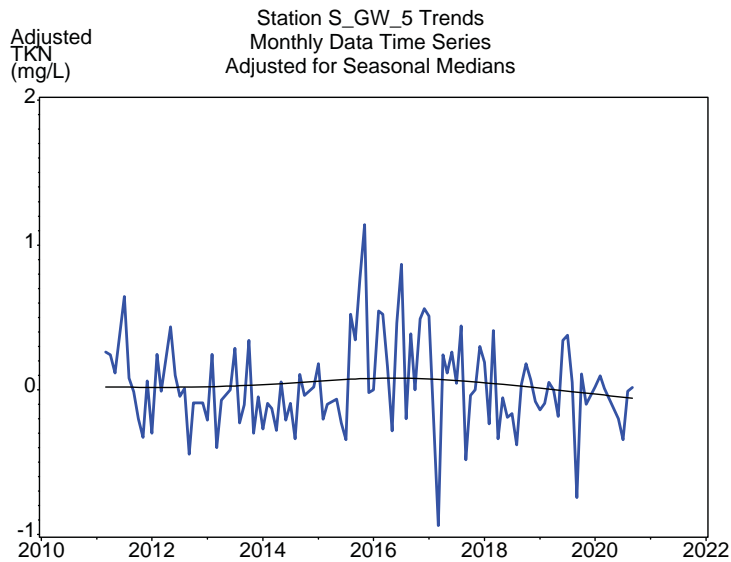
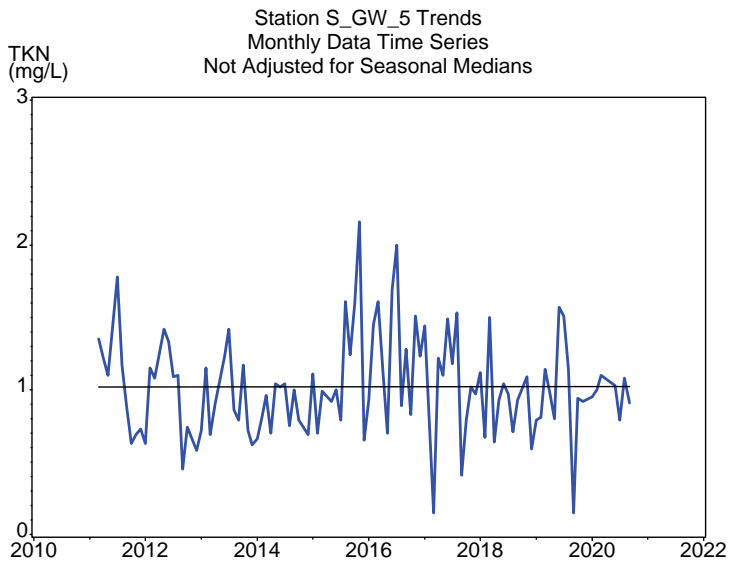
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.039	0.542	0.601	0



Station S_GW_5 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

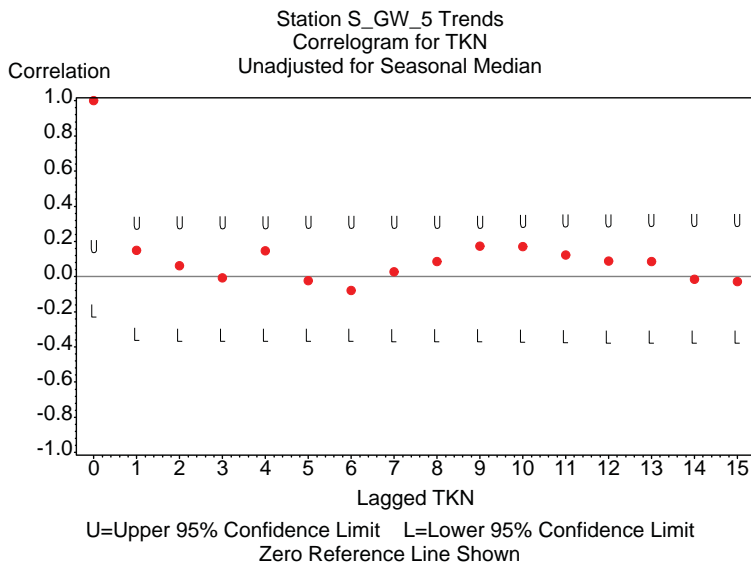
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.037	0.158	0.316	-0.316
2	0.006	0.158	0.316	-0.316
3	0.001	0.158	0.316	-0.316
4	0.124	0.158	0.316	-0.316
5	-0.001	0.159	0.318	-0.318
6	0.000	0.159	0.318	-0.318
7	-0.166	0.159	0.318	-0.318
8	-0.082	0.160	0.321	-0.321
9	0.053	0.161	0.322	-0.322
10	0.024	0.161	0.322	-0.322
11	0.036	0.161	0.322	-0.322
12	0.000	0.161	0.322	-0.322
13	-0.171	0.161	0.322	-0.322
14	0.000	0.163	0.325	-0.325
15	-0.175	0.163	0.325	-0.325





Station S_GW_5 Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.149	0.158	0.316	-0.316
2	0.062	0.159	0.319	-0.319
3	-0.006	0.159	0.319	-0.319
4	0.146	0.159	0.319	-0.319
5	-0.022	0.161	0.321	-0.321
6	-0.078	0.161	0.321	-0.321
7	0.027	0.161	0.322	-0.322
8	0.086	0.161	0.322	-0.322
9	0.174	0.161	0.323	-0.323
10	0.171	0.163	0.326	-0.326
11	0.122	0.164	0.329	-0.329
12	0.089	0.165	0.330	-0.330
13	0.086	0.166	0.331	-0.331
14	-0.016	0.166	0.332	-0.332
15	-0.028	0.166	0.332	-0.332

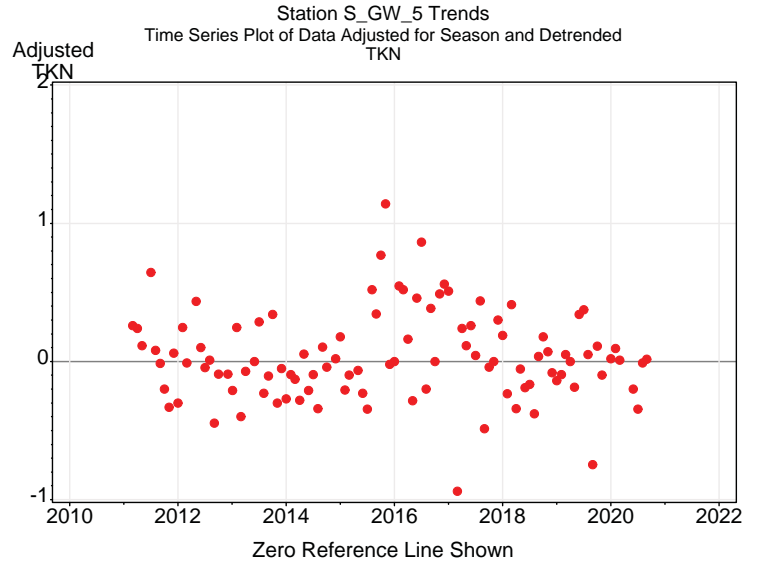


Station S_GW_5 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.005	0.975	0.982	0

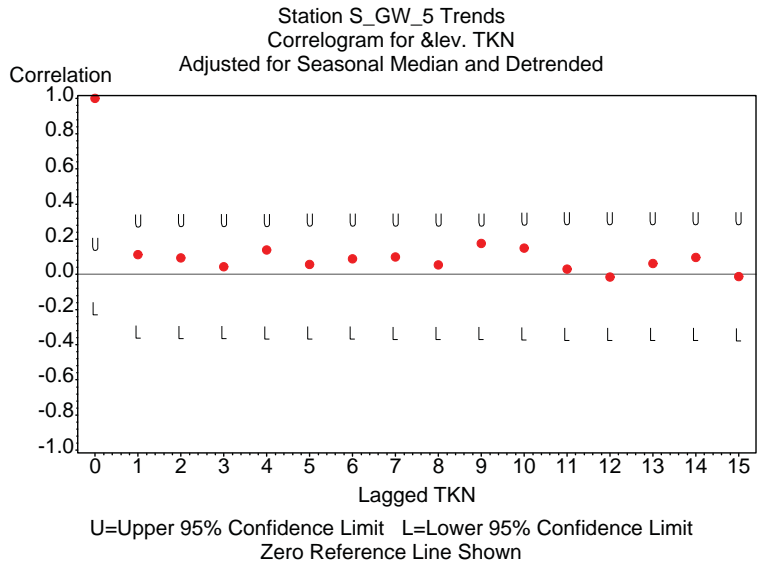
Station S_GW_5 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN
 Adjusted for Seasonal Medians

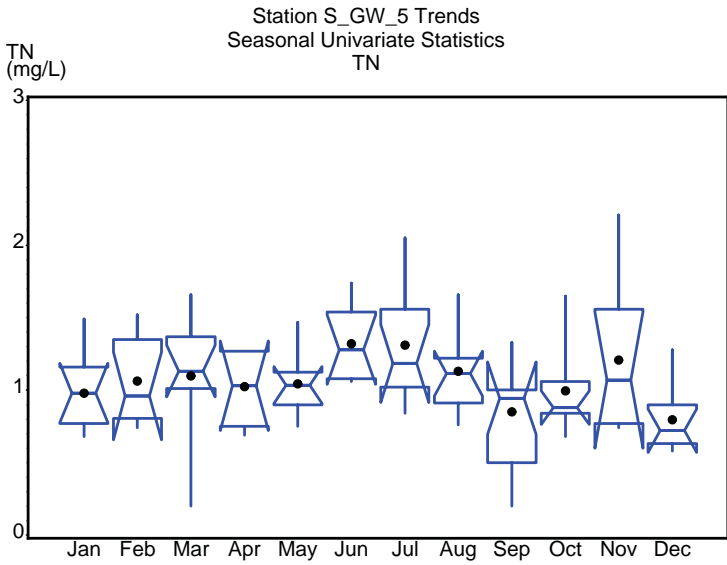
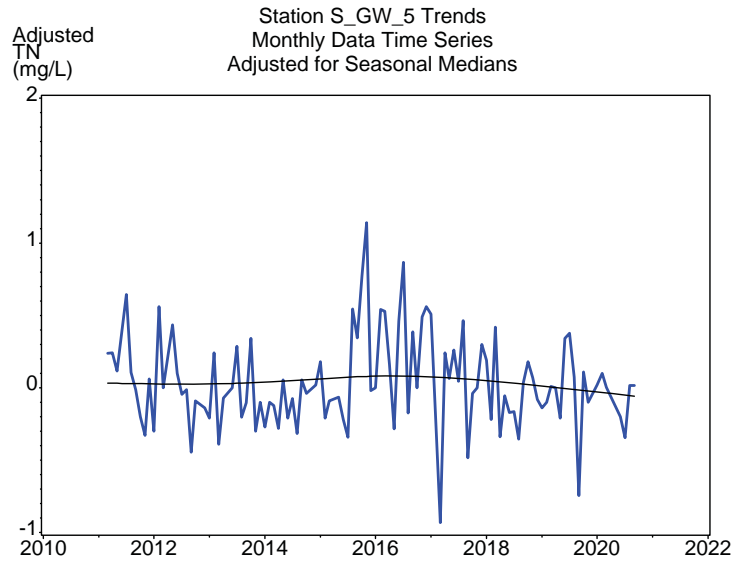
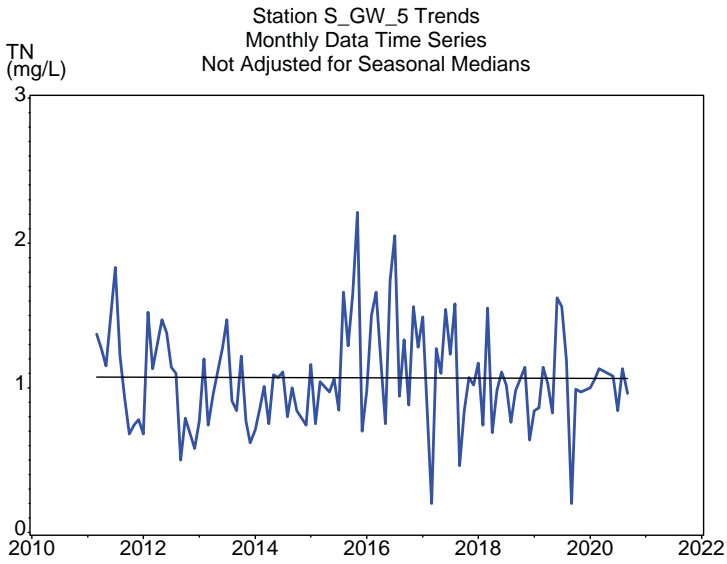
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.005	0.975	0.982	0



Station S_GW_5 Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

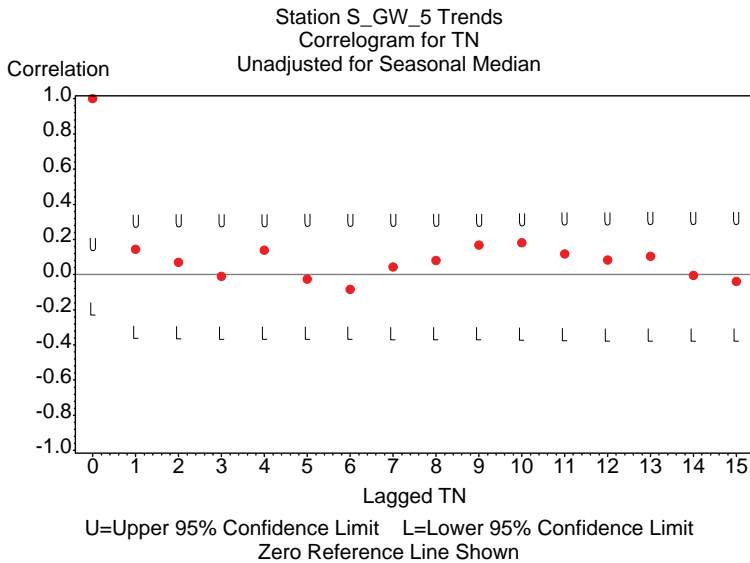
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.112	0.158	0.316	-0.316
2	0.094	0.159	0.318	-0.318
3	0.044	0.159	0.318	-0.318
4	0.139	0.159	0.319	-0.319
5	0.056	0.160	0.321	-0.321
6	0.087	0.161	0.321	-0.321
7	0.099	0.161	0.322	-0.322
8	0.053	0.161	0.323	-0.323
9	0.176	0.162	0.323	-0.323
10	0.149	0.163	0.326	-0.326
11	0.030	0.164	0.329	-0.329
12	-0.016	0.164	0.329	-0.329
13	0.062	0.164	0.329	-0.329
14	0.095	0.165	0.329	-0.329
15	-0.013	0.165	0.330	-0.330





Station S_GW_5 Trends Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.144	0.158	0.316	-0.316
2	0.069	0.159	0.318	-0.318
3	-0.010	0.159	0.319	-0.319
4	0.139	0.159	0.319	-0.319
5	-0.027	0.160	0.321	-0.321
6	-0.084	0.160	0.321	-0.321
7	0.043	0.161	0.322	-0.322
8	0.079	0.161	0.322	-0.322
9	0.167	0.161	0.323	-0.323
10	0.180	0.163	0.325	-0.325
11	0.118	0.164	0.329	-0.329
12	0.082	0.165	0.330	-0.330
13	0.103	0.165	0.331	-0.331
14	-0.005	0.166	0.332	-0.332
15	-0.039	0.166	0.332	-0.332

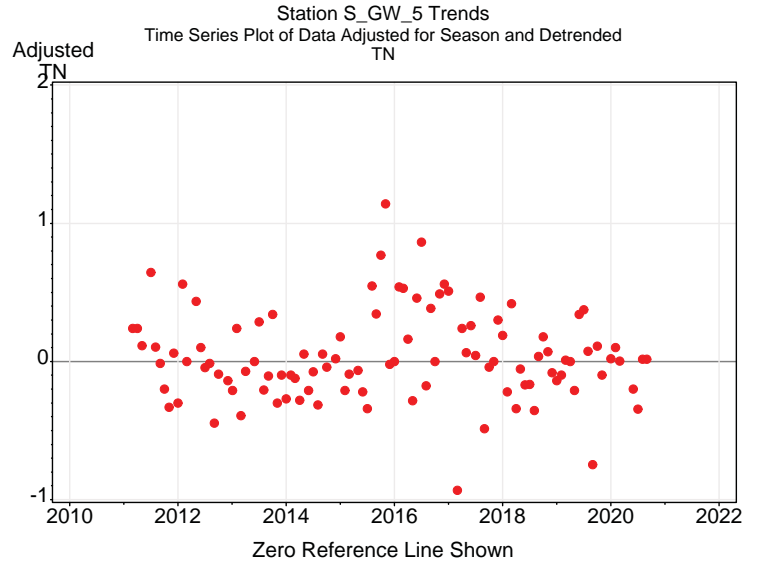


Station S_GW_5 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.007	0.951	0.964	0

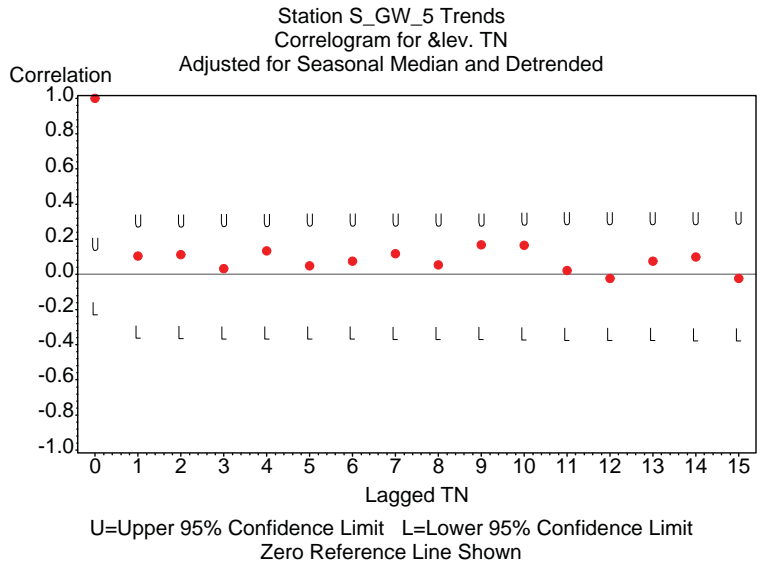
Station S_GW_5 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN
 Adjusted for Seasonal Medians

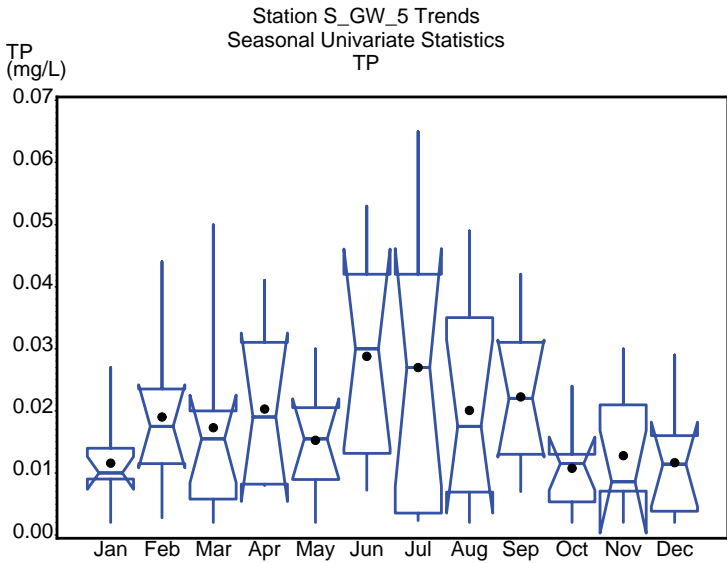
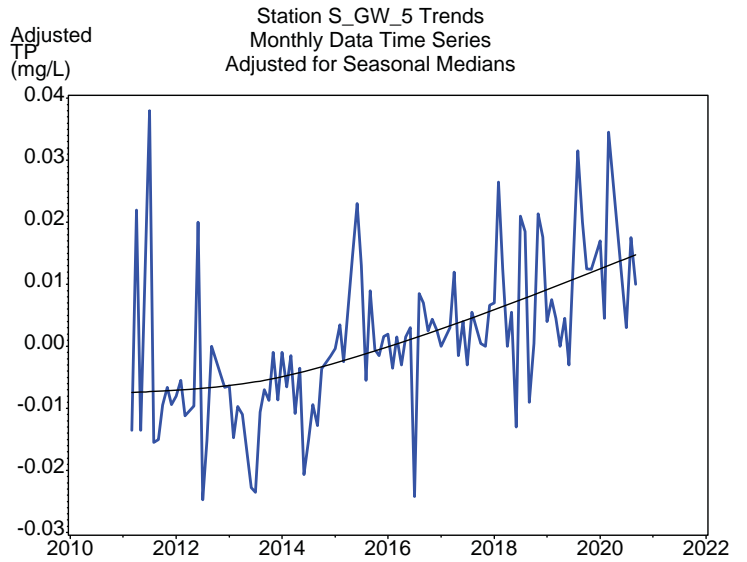
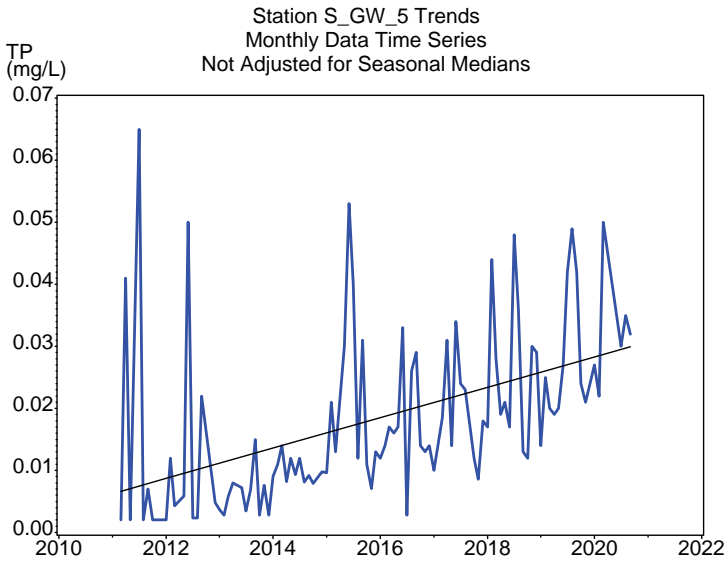
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.007	0.951	0.964	0



Station S_GW_5 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

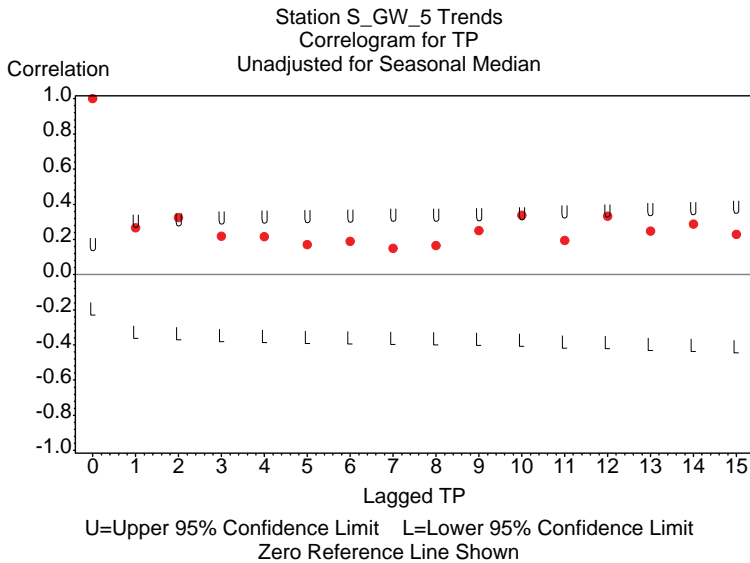
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.105	0.158	0.316	-0.316
2	0.112	0.159	0.317	-0.317
3	0.033	0.159	0.319	-0.319
4	0.133	0.159	0.319	-0.319
5	0.048	0.160	0.321	-0.321
6	0.076	0.160	0.321	-0.321
7	0.118	0.161	0.322	-0.322
8	0.055	0.161	0.323	-0.323
9	0.168	0.162	0.323	-0.323
10	0.164	0.163	0.326	-0.326
11	0.021	0.164	0.329	-0.329
12	-0.023	0.164	0.329	-0.329
13	0.076	0.164	0.329	-0.329
14	0.100	0.165	0.330	-0.330
15	-0.024	0.165	0.331	-0.331





Station S_GW_5 Trends Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.266	0.158	0.316	-0.316
2	0.324	0.162	0.324	-0.324
3	0.218	0.167	0.334	-0.334
4	0.216	0.169	0.339	-0.339
5	0.170	0.172	0.343	-0.343
6	0.188	0.173	0.346	-0.346
7	0.148	0.175	0.350	-0.350
8	0.165	0.176	0.352	-0.352
9	0.249	0.177	0.354	-0.354
10	0.337	0.180	0.360	-0.360
11	0.195	0.185	0.370	-0.370
12	0.333	0.187	0.374	-0.374
13	0.247	0.192	0.384	-0.384
14	0.288	0.194	0.389	-0.389
15	0.230	0.198	0.396	-0.396



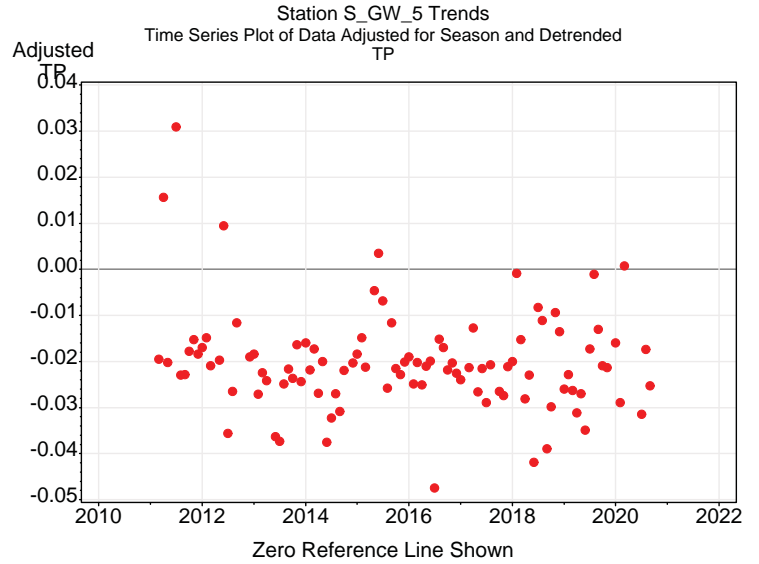
Station S_GW_5 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TP Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.612	0	.001	.003

Station S_GW_5 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
TP

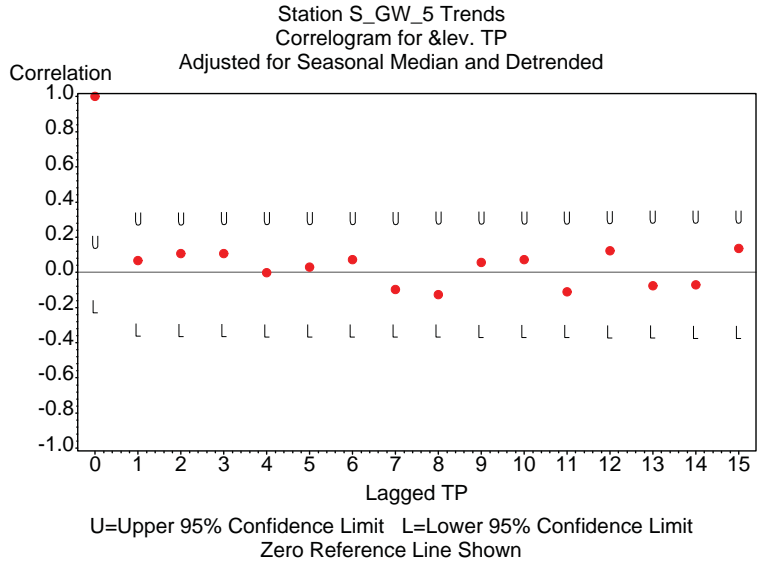
Adjusted for Seasonal Medians

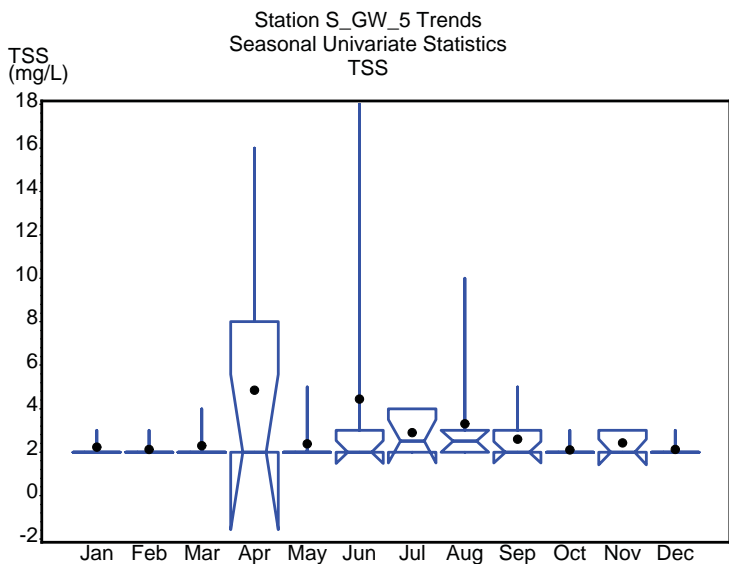
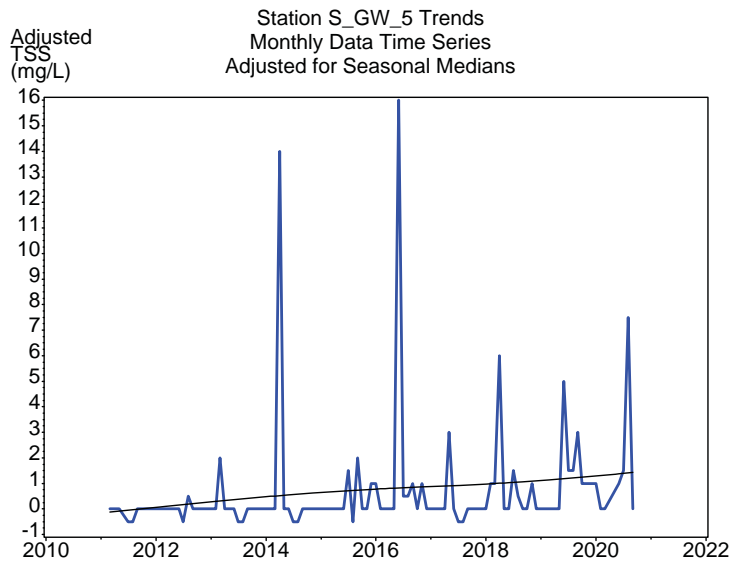
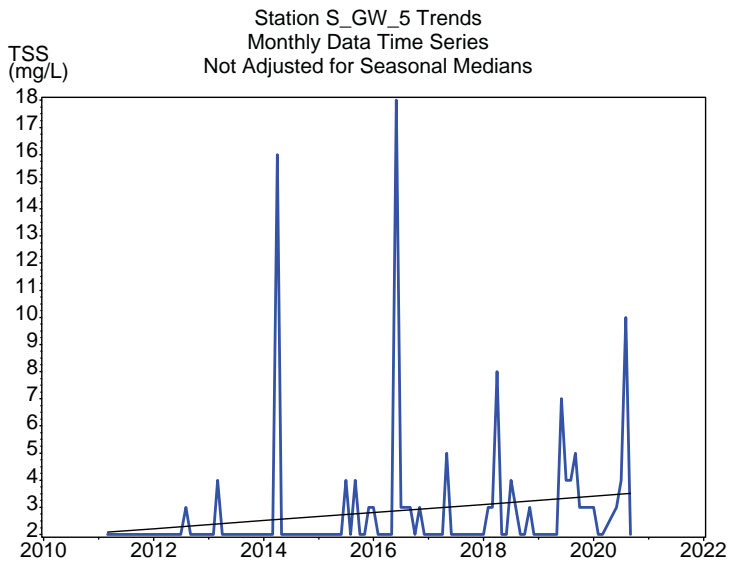
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.612	0	.001	.003



Station S_GW_5 Trends
Autocorrelation Statistics for TP
Adjusted for Seasonal Median and Detrended

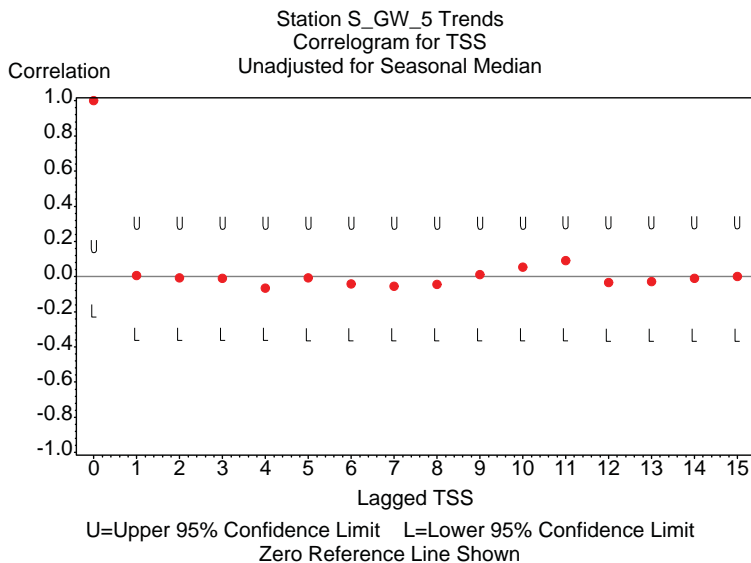
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.067	0.158	0.316	-0.316
2	0.108	0.158	0.317	-0.317
3	0.107	0.159	0.318	-0.318
4	-0.002	0.160	0.319	-0.319
5	0.031	0.160	0.319	-0.319
6	0.073	0.160	0.319	-0.319
7	-0.097	0.160	0.320	-0.320
8	-0.126	0.160	0.321	-0.321
9	0.056	0.161	0.322	-0.322
10	0.072	0.161	0.323	-0.323
11	-0.112	0.162	0.323	-0.323
12	0.122	0.162	0.325	-0.325
13	-0.075	0.163	0.326	-0.326
14	-0.072	0.163	0.327	-0.327
15	0.136	0.164	0.327	-0.327





Station S_GW_5 Trends Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.006	0.158	0.316	-0.316
2	-0.007	0.158	0.316	-0.316
3	-0.011	0.158	0.316	-0.316
4	-0.066	0.158	0.316	-0.316
5	-0.006	0.158	0.317	-0.317
6	-0.041	0.158	0.317	-0.317
7	-0.055	0.158	0.317	-0.317
8	-0.044	0.159	0.317	-0.317
9	0.011	0.159	0.317	-0.317
10	0.054	0.159	0.317	-0.317
11	0.090	0.159	0.318	-0.318
12	-0.034	0.159	0.319	-0.319
13	-0.029	0.159	0.319	-0.319
14	-0.011	0.159	0.319	-0.319
15	0.002	0.159	0.319	-0.319

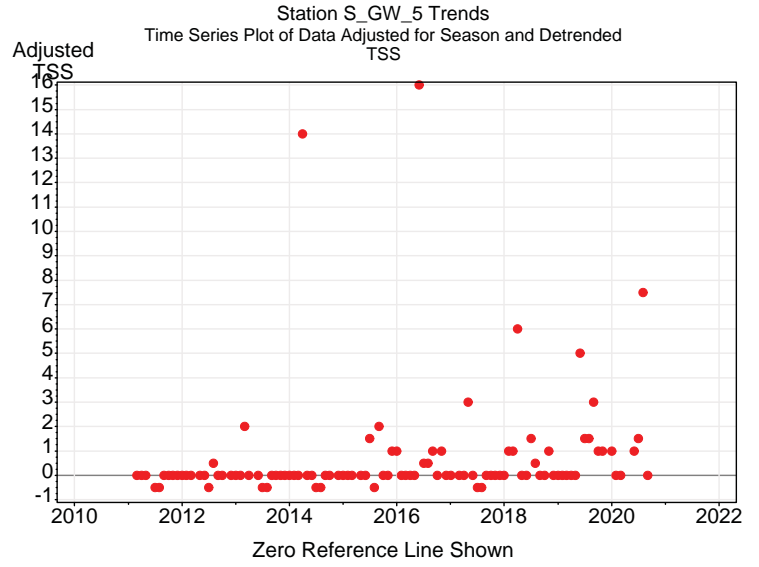


Station S_GW_5 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TSS Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.234	0	.009	0

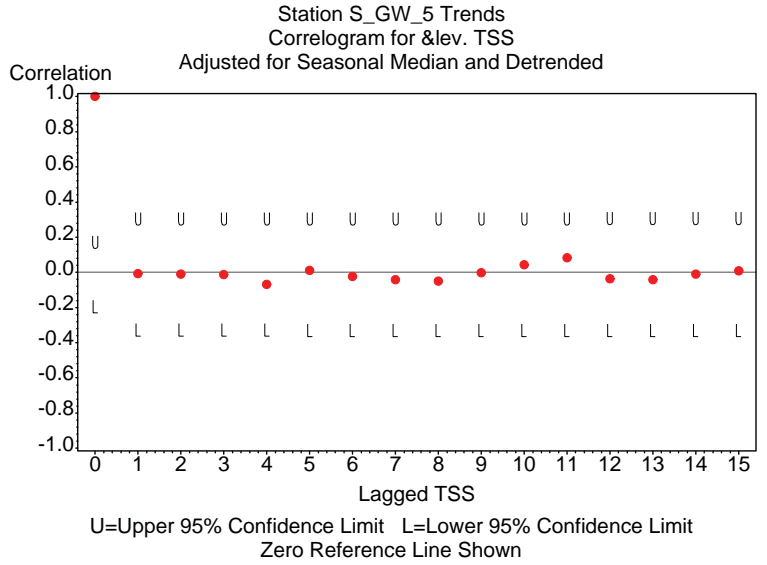
Station S_GW_5 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

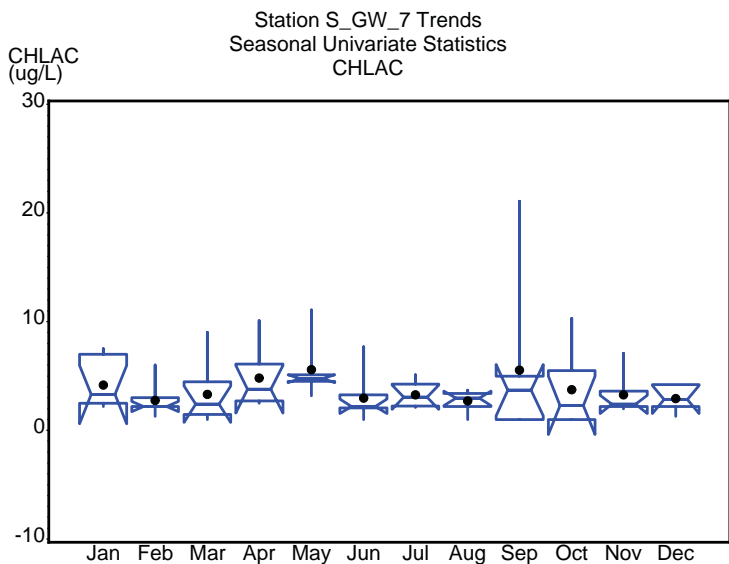
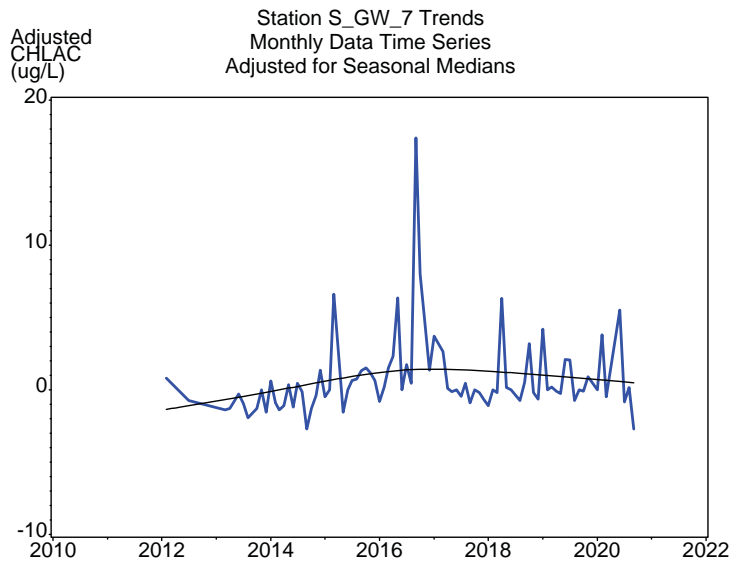
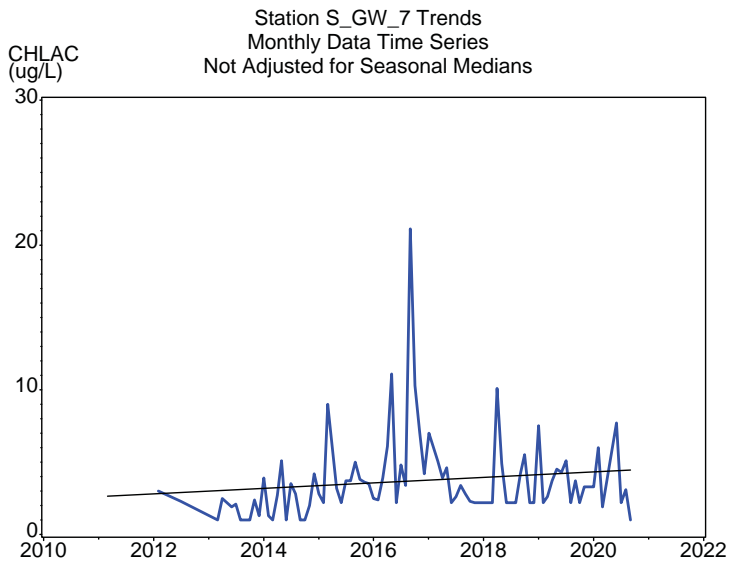
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.234	0	.009	0



Station S_GW_5 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

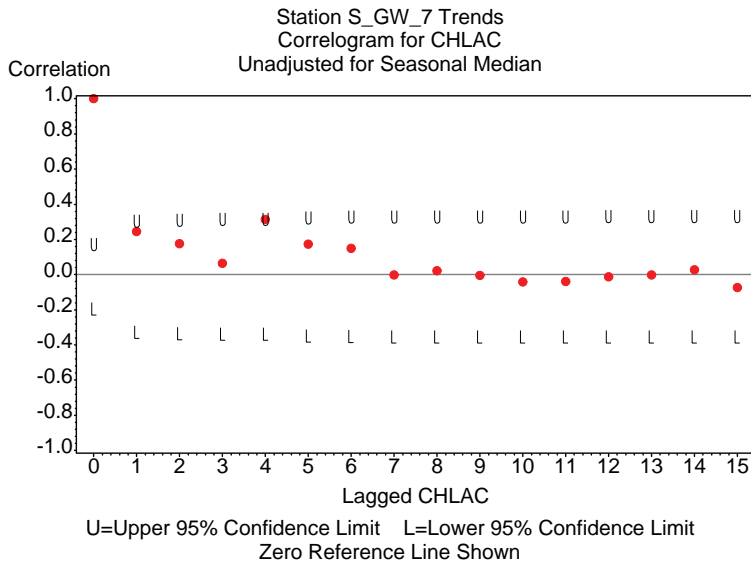
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.007	0.158	0.316	-0.316
2	-0.011	0.158	0.316	-0.316
3	-0.012	0.158	0.316	-0.316
4	-0.068	0.158	0.316	-0.316
5	0.012	0.158	0.317	-0.317
6	-0.023	0.158	0.317	-0.317
7	-0.041	0.158	0.317	-0.317
8	-0.050	0.158	0.317	-0.317
9	-0.001	0.159	0.317	-0.317
10	0.042	0.159	0.317	-0.317
11	0.082	0.159	0.317	-0.317
12	-0.037	0.159	0.318	-0.318
13	-0.043	0.159	0.318	-0.318
14	-0.009	0.159	0.318	-0.318
15	0.009	0.159	0.318	-0.318





Station S_GW_7 Trends
Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.245	0.158	0.316	-0.316
2	0.177	0.161	0.322	-0.322
3	0.064	0.163	0.326	-0.326
4	0.314	0.163	0.326	-0.326
5	0.174	0.168	0.336	-0.336
6	0.148	0.170	0.339	-0.339
7	-0.003	0.171	0.341	-0.341
8	0.021	0.171	0.341	-0.341
9	-0.004	0.171	0.341	-0.341
10	-0.043	0.171	0.341	-0.341
11	-0.040	0.171	0.341	-0.341
12	-0.013	0.171	0.342	-0.342
13	-0.002	0.171	0.342	-0.342
14	0.027	0.171	0.342	-0.342
15	-0.074	0.171	0.342	-0.342

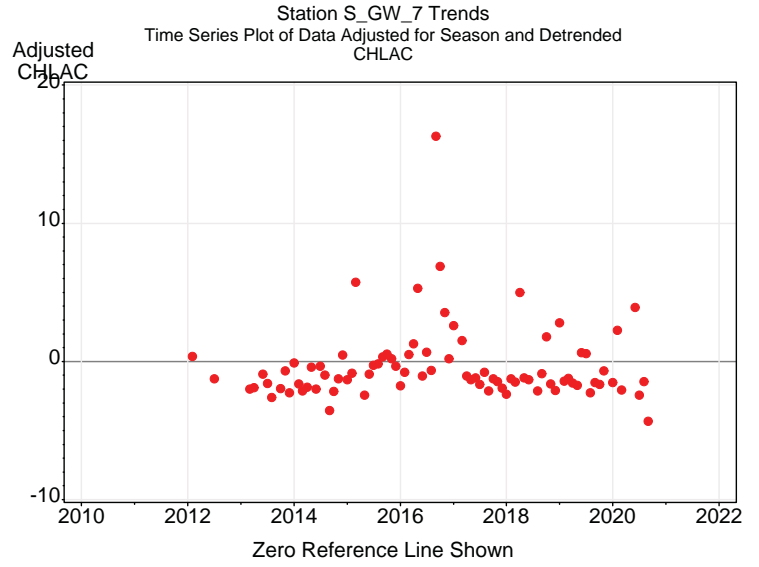


Station S_GW_7 Trends Appendix
Seasonal Kendall Tau Trend Test Statistics
CHLAC
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.156	0.087	0.289	0.139

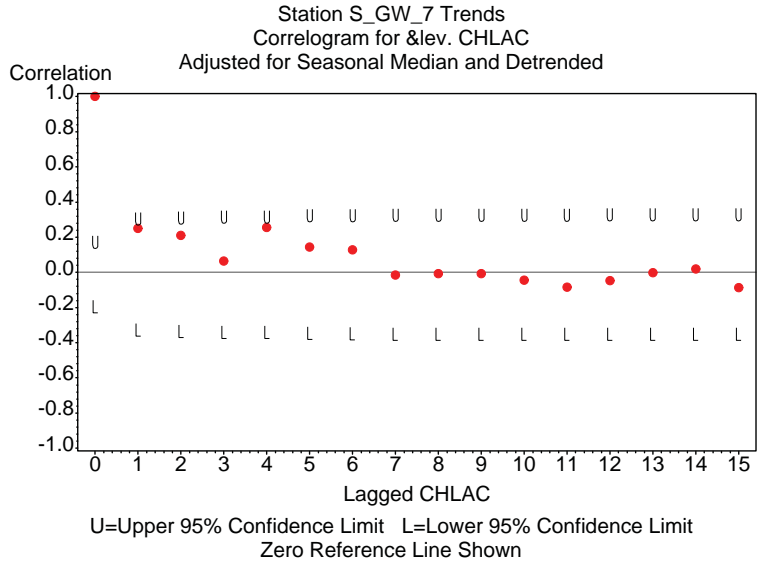
Station S_GW_7 Trends
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

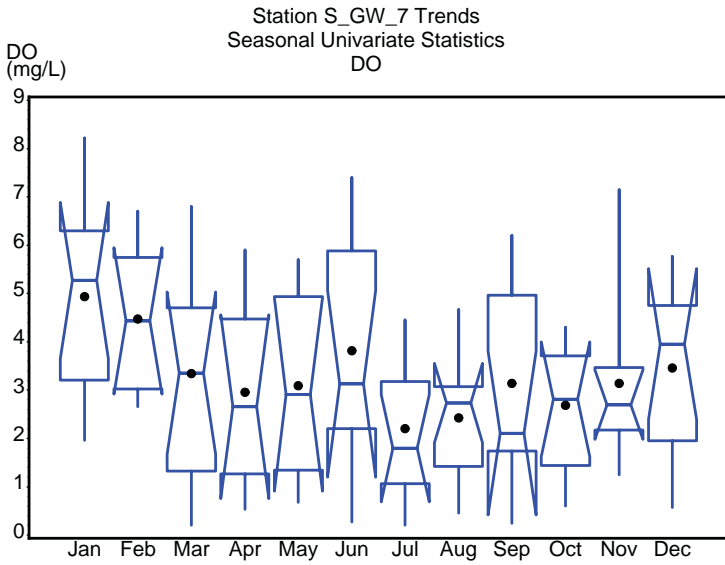
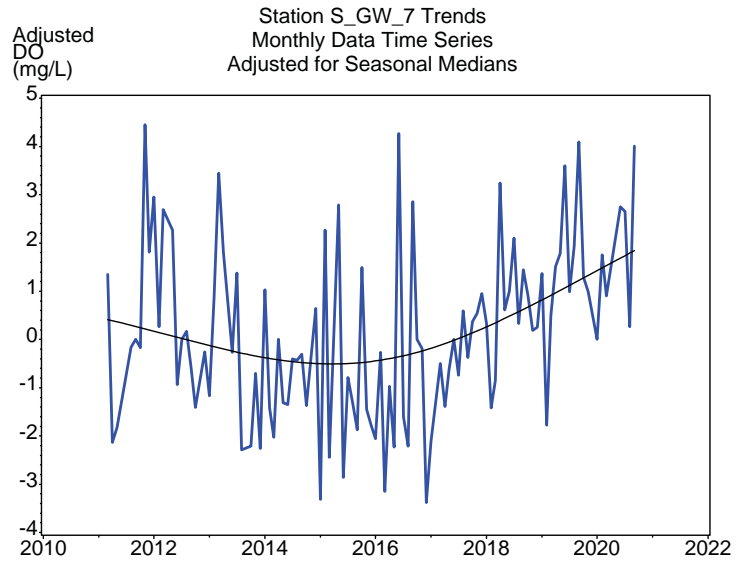
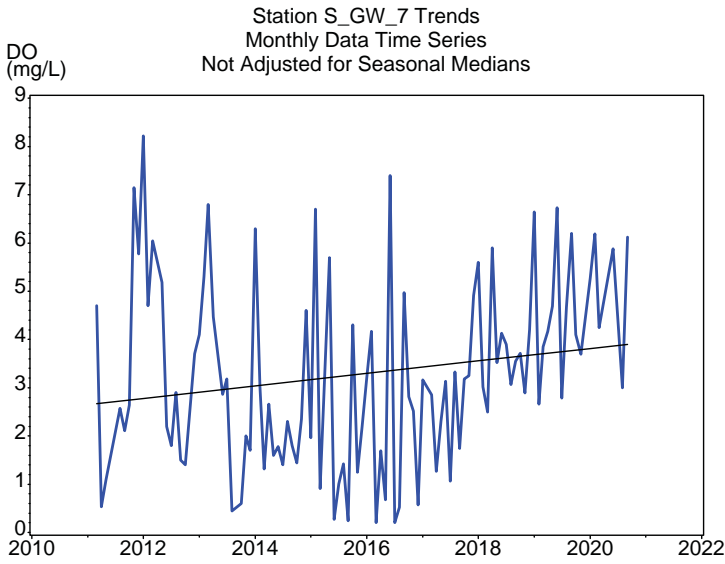
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.156	0.087	0.289	0.139



Station S_GW_7 Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

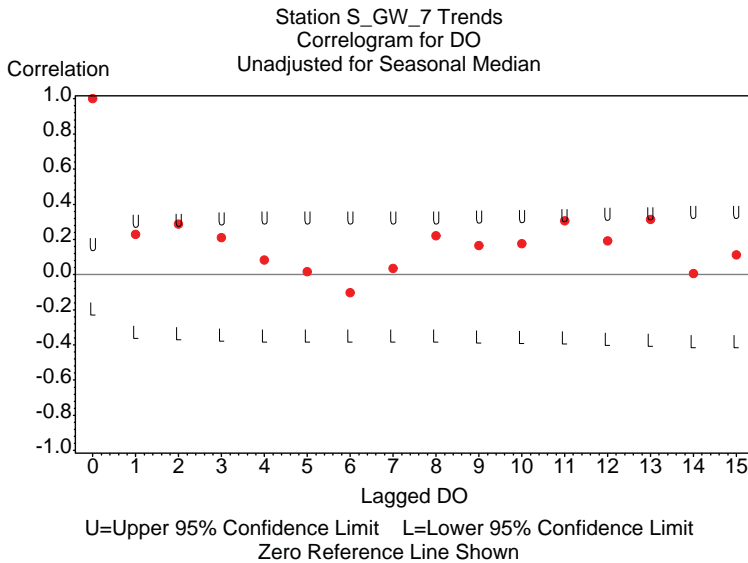
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.250	0.158	0.316	-0.316
2	0.210	0.161	0.323	-0.323
3	0.064	0.164	0.327	-0.327
4	0.256	0.164	0.328	-0.328
5	0.144	0.167	0.334	-0.334
6	0.129	0.168	0.336	-0.336
7	-0.014	0.169	0.338	-0.338
8	-0.006	0.169	0.338	-0.338
9	-0.006	0.169	0.338	-0.338
10	-0.044	0.169	0.338	-0.338
11	-0.083	0.169	0.338	-0.338
12	-0.048	0.169	0.339	-0.339
13	-0.001	0.170	0.339	-0.339
14	0.020	0.170	0.339	-0.339
15	-0.086	0.170	0.339	-0.339





Station S_GW_7 Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.230	0.158	0.316	-0.316
2	0.287	0.161	0.322	-0.322
3	0.210	0.165	0.330	-0.330
4	0.084	0.167	0.335	-0.335
5	0.017	0.168	0.335	-0.335
6	-0.102	0.168	0.335	-0.335
7	0.034	0.168	0.336	-0.336
8	0.220	0.168	0.336	-0.336
9	0.165	0.171	0.341	-0.341
10	0.176	0.172	0.344	-0.344
11	0.305	0.173	0.347	-0.347
12	0.192	0.178	0.356	-0.356
13	0.315	0.180	0.359	-0.359
14	0.007	0.184	0.368	-0.368
15	0.111	0.184	0.368	-0.368

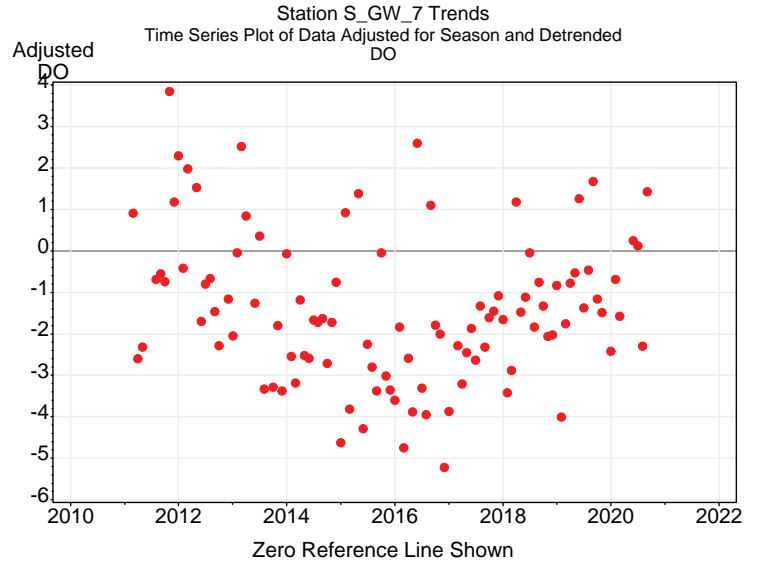


Station S_GW_7 Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.194	0.016	0.16	0.22

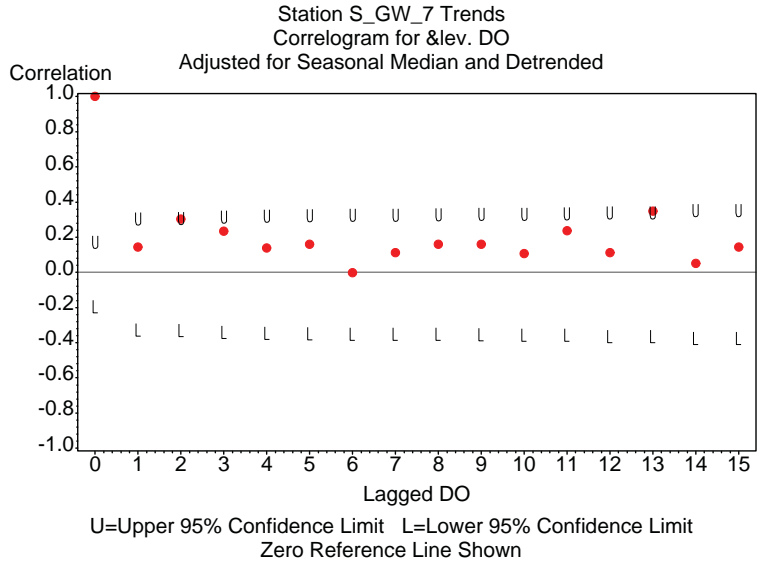
Station S_GW_7 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 DO
 Adjusted for Seasonal Medians

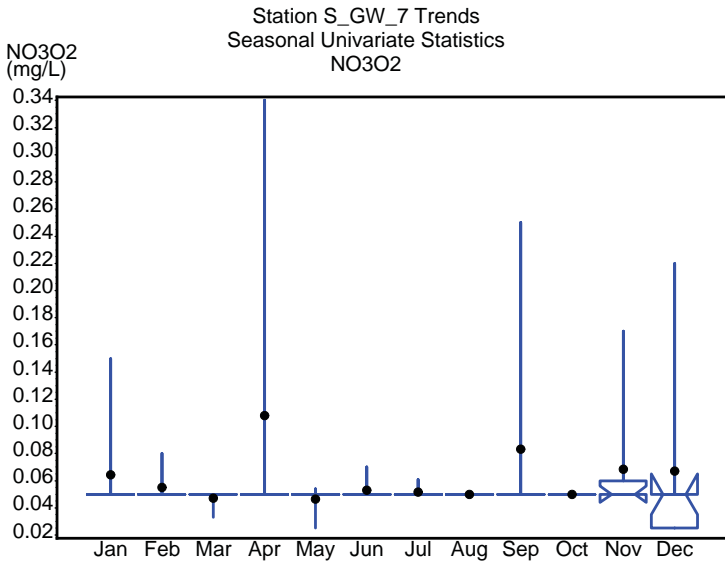
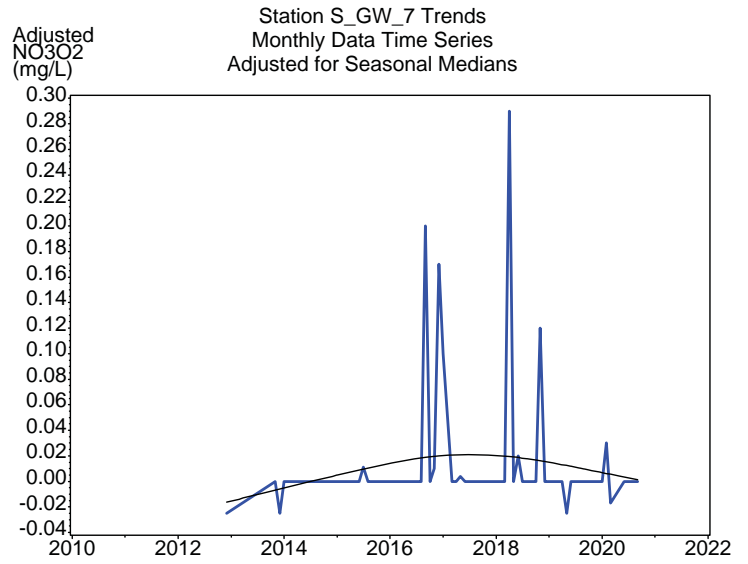
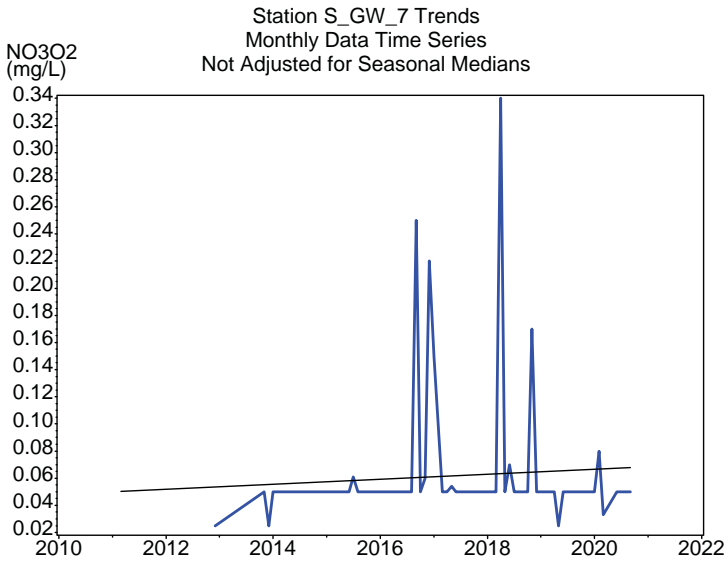
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.194	0.016	0.16	0.22



Station S_GW_7 Trends
 Autocorrelation Statistics for DO
 Adjusted for Seasonal Median and Detrended

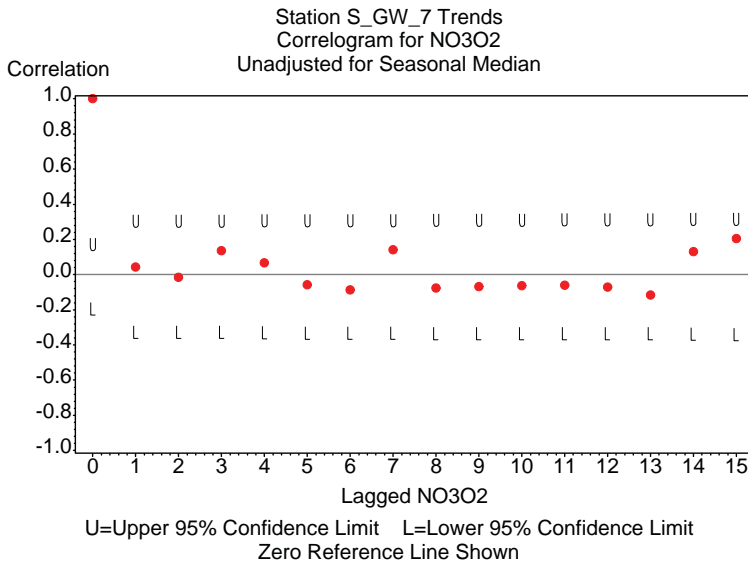
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.144	0.158	0.316	-0.316
2	0.304	0.159	0.318	-0.318
3	0.233	0.164	0.328	-0.328
4	0.140	0.167	0.333	-0.333
5	0.161	0.168	0.335	-0.335
6	-0.002	0.169	0.338	-0.338
7	0.111	0.169	0.338	-0.338
8	0.159	0.170	0.339	-0.339
9	0.159	0.171	0.342	-0.342
10	0.106	0.172	0.344	-0.344
11	0.237	0.173	0.345	-0.345
12	0.112	0.175	0.351	-0.351
13	0.347	0.176	0.352	-0.352
14	0.051	0.181	0.363	-0.363
15	0.143	0.182	0.363	-0.363





Station S_GW_7 Trends Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.044	0.158	0.316	-0.316
2	-0.016	0.158	0.316	-0.316
3	0.136	0.158	0.316	-0.316
4	0.066	0.159	0.318	-0.318
5	-0.057	0.159	0.319	-0.319
6	-0.088	0.160	0.319	-0.319
7	0.141	0.160	0.320	-0.320
8	-0.077	0.161	0.322	-0.322
9	-0.067	0.161	0.323	-0.323
10	-0.063	0.162	0.323	-0.323
11	-0.060	0.162	0.324	-0.324
12	-0.072	0.162	0.324	-0.324
13	-0.116	0.162	0.324	-0.324
14	0.131	0.163	0.326	-0.326
15	0.205	0.164	0.328	-0.328



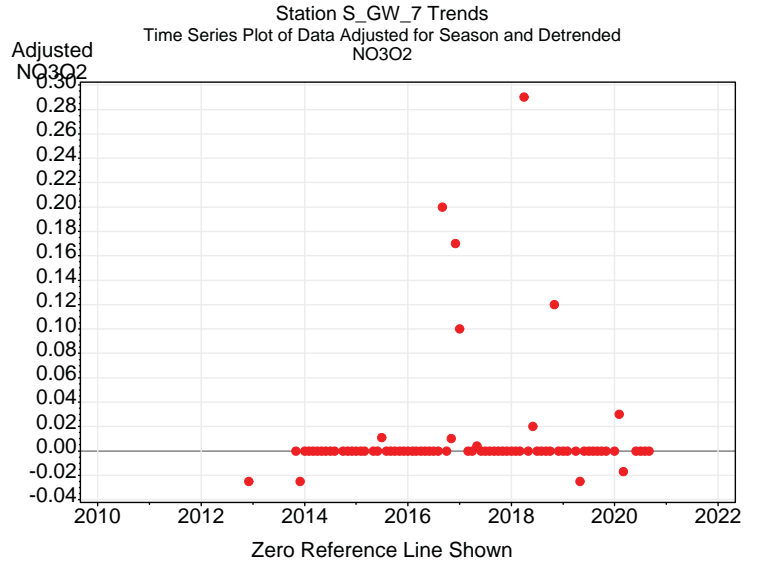
Station S_GW_7 Trends Appendix Seasonal Kendall Tau Trend Test Statistics NO3O2

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.043	0.543	0.585	0

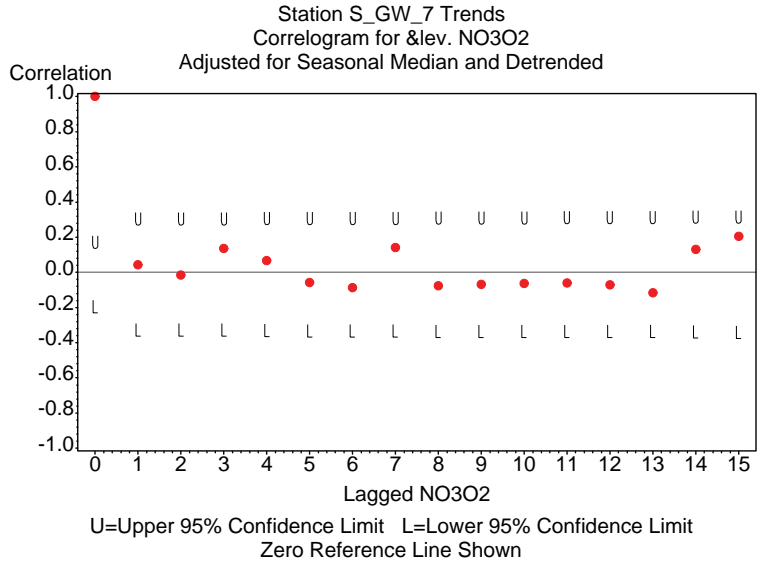
Station S_GW_7 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

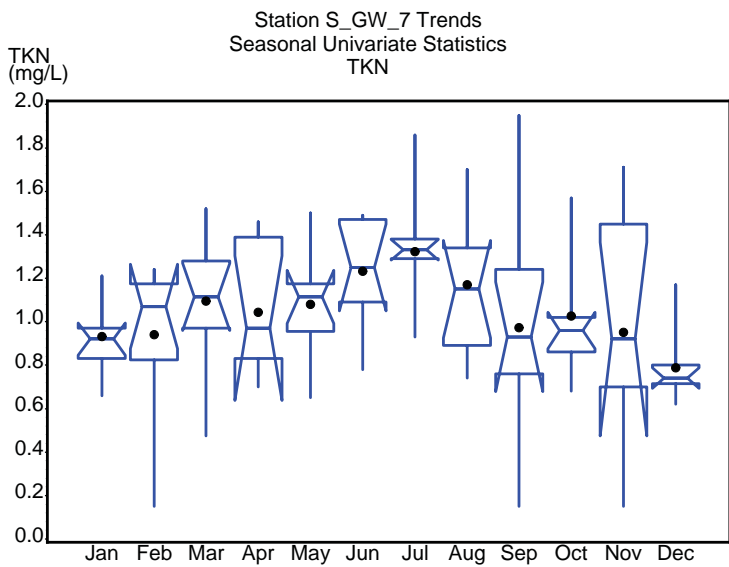
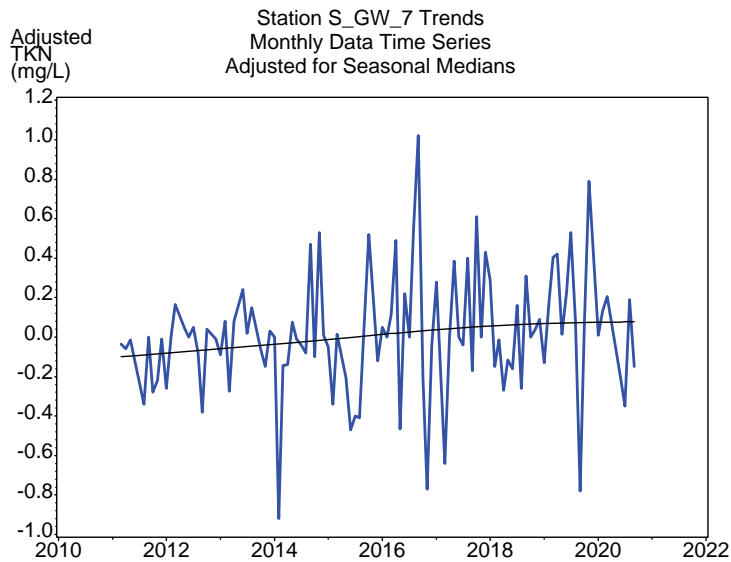
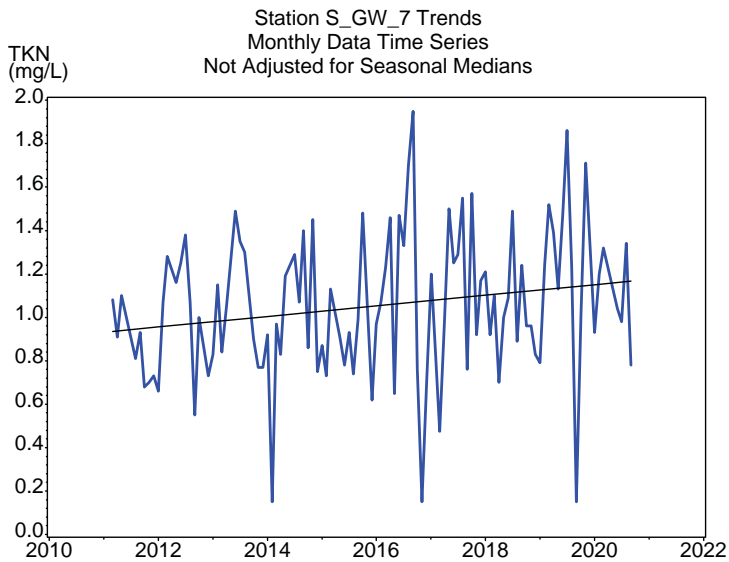
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.043	0.543	0.585	0



Station S_GW_7 Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

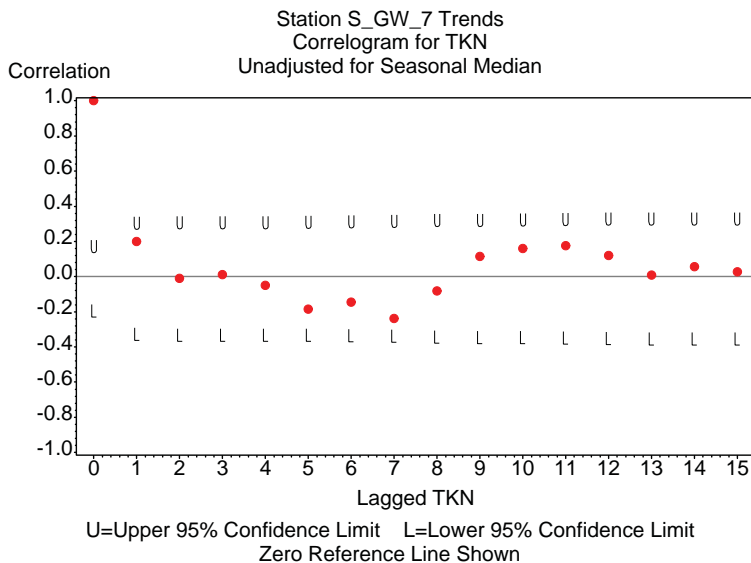
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.044	0.158	0.316	-0.316
2	-0.016	0.158	0.316	-0.316
3	0.136	0.158	0.316	-0.316
4	0.066	0.159	0.318	-0.318
5	-0.057	0.159	0.319	-0.319
6	-0.088	0.160	0.319	-0.319
7	0.141	0.160	0.320	-0.320
8	-0.077	0.161	0.322	-0.322
9	-0.067	0.161	0.323	-0.323
10	-0.063	0.162	0.323	-0.323
11	-0.060	0.162	0.324	-0.324
12	-0.072	0.162	0.324	-0.324
13	-0.116	0.162	0.324	-0.324
14	0.131	0.163	0.326	-0.326
15	0.205	0.164	0.328	-0.328





Station S_GW_7 Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.200	0.158	0.316	-0.316
2	-0.010	0.160	0.320	-0.320
3	0.012	0.160	0.320	-0.320
4	-0.051	0.160	0.320	-0.320
5	-0.186	0.160	0.321	-0.321
6	-0.145	0.162	0.324	-0.324
7	-0.238	0.163	0.326	-0.326
8	-0.082	0.166	0.332	-0.332
9	0.114	0.166	0.333	-0.333
10	0.159	0.167	0.334	-0.334
11	0.176	0.168	0.337	-0.337
12	0.119	0.170	0.340	-0.340
13	0.010	0.171	0.341	-0.341
14	0.056	0.171	0.341	-0.341
15	0.028	0.171	0.341	-0.341

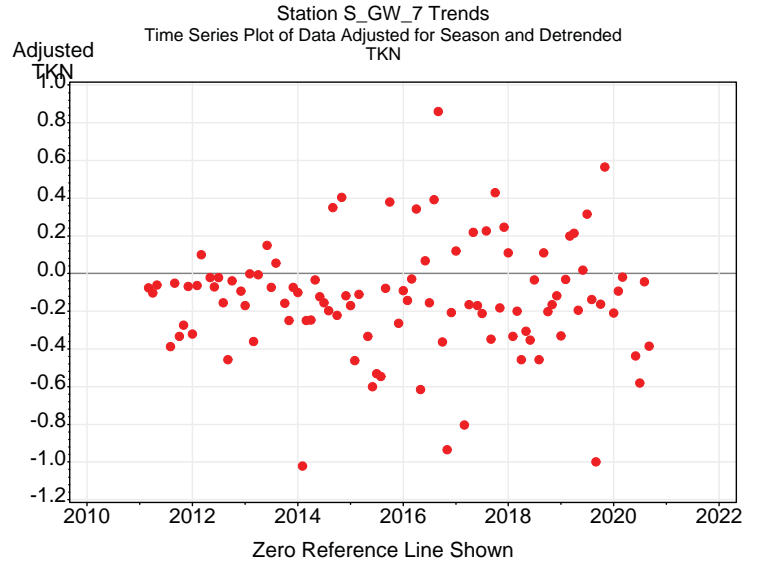


Station S_GW_7 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.174	0.031	0.072	0.02

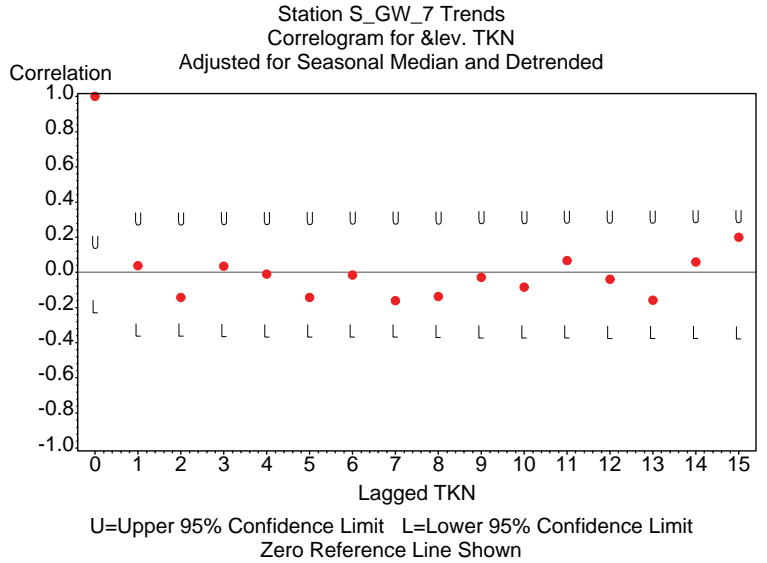
Station S_GW_7 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TKN
 Adjusted for Seasonal Medians

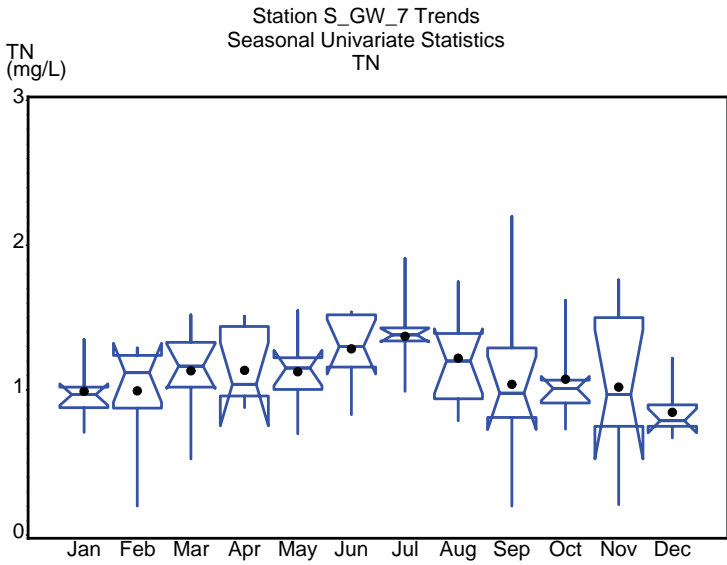
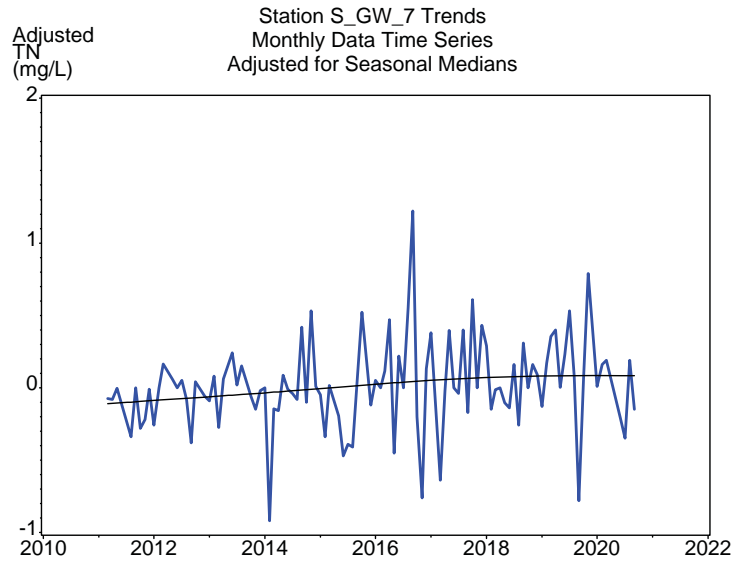
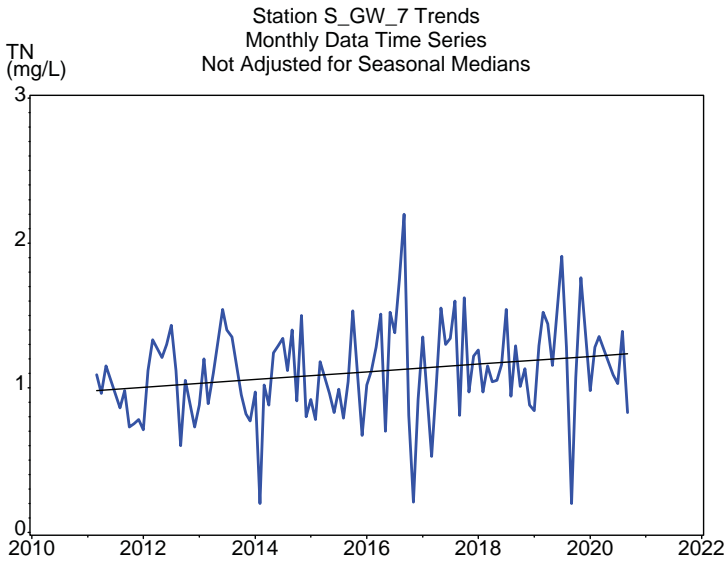
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.174	0.031	0.072	0.02



Station S_GW_7 Trends
 Autocorrelation Statistics for TKN
 Adjusted for Seasonal Median and Detrended

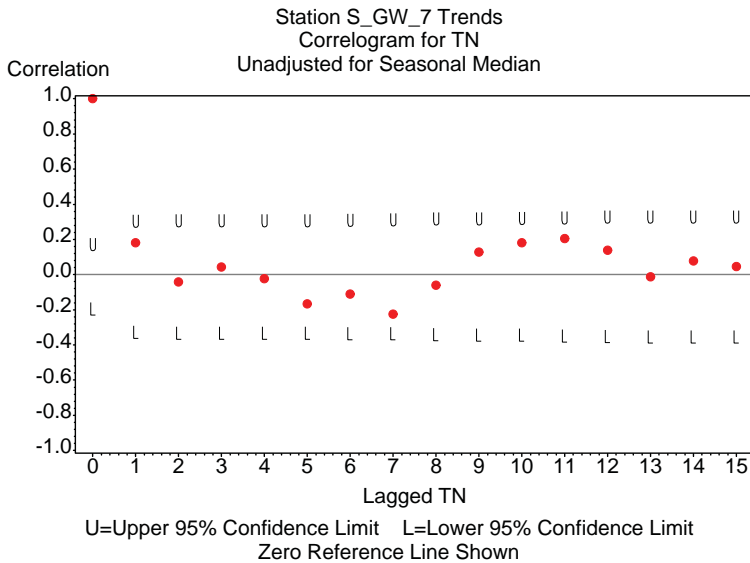
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.037	0.158	0.316	-0.316
2	-0.142	0.158	0.316	-0.316
3	0.034	0.159	0.318	-0.318
4	-0.011	0.159	0.319	-0.319
5	-0.143	0.159	0.319	-0.319
6	-0.014	0.160	0.321	-0.321
7	-0.161	0.160	0.321	-0.321
8	-0.137	0.162	0.323	-0.323
9	-0.028	0.163	0.325	-0.325
10	-0.084	0.163	0.325	-0.325
11	0.066	0.163	0.326	-0.326
12	-0.040	0.163	0.327	-0.327
13	-0.159	0.163	0.327	-0.327
14	0.058	0.165	0.329	-0.329
15	0.199	0.165	0.330	-0.330





Station S_GW_7 Trends Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.181	0.158	0.316	-0.316
2	-0.041	0.160	0.320	-0.320
3	0.043	0.160	0.320	-0.320
4	-0.024	0.160	0.320	-0.320
5	-0.166	0.160	0.320	-0.320
6	-0.112	0.161	0.323	-0.323
7	-0.225	0.162	0.324	-0.324
8	-0.061	0.165	0.329	-0.329
9	0.128	0.165	0.330	-0.330
10	0.180	0.166	0.331	-0.331
11	0.204	0.167	0.335	-0.335
12	0.138	0.169	0.339	-0.339
13	-0.012	0.170	0.341	-0.341
14	0.078	0.170	0.341	-0.341
15	0.047	0.171	0.341	-0.341

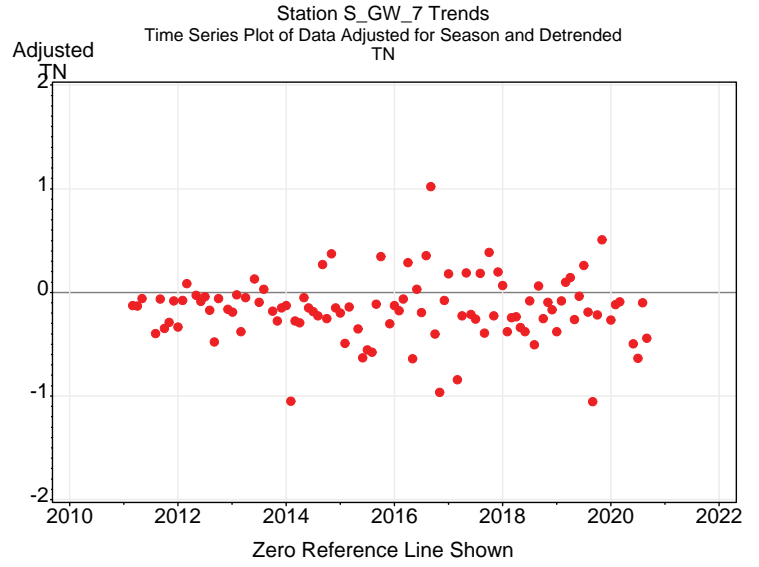


Station S_GW_7 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.197	0.014	0.044	0.025

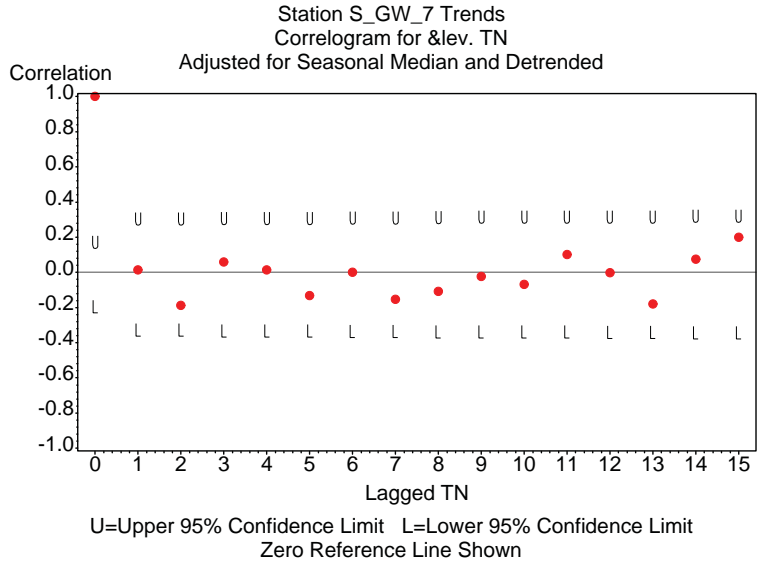
Station S_GW_7 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TN
 Adjusted for Seasonal Medians

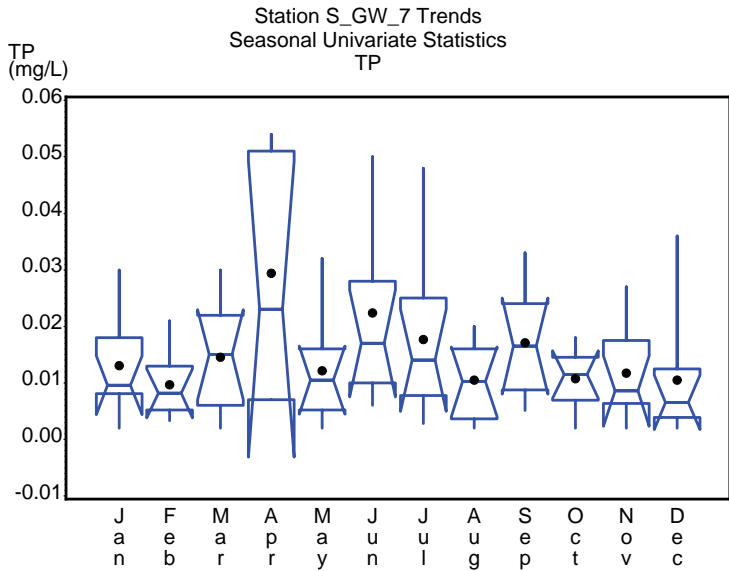
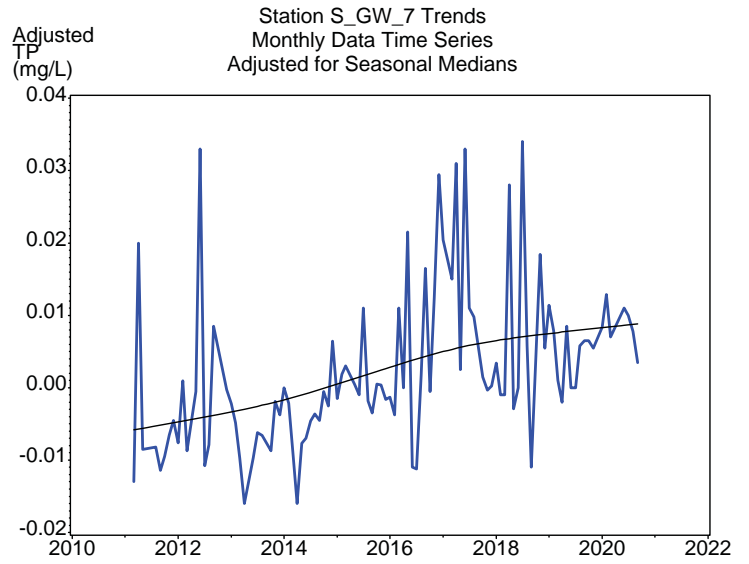
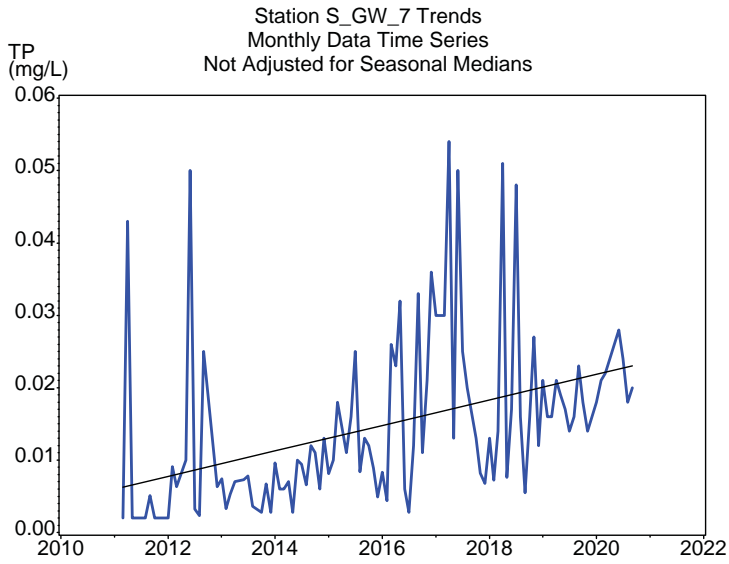
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.197	0.014	0.044	0.025



Station S_GW_7 Trends
 Autocorrelation Statistics for TN
 Adjusted for Seasonal Median and Detrended

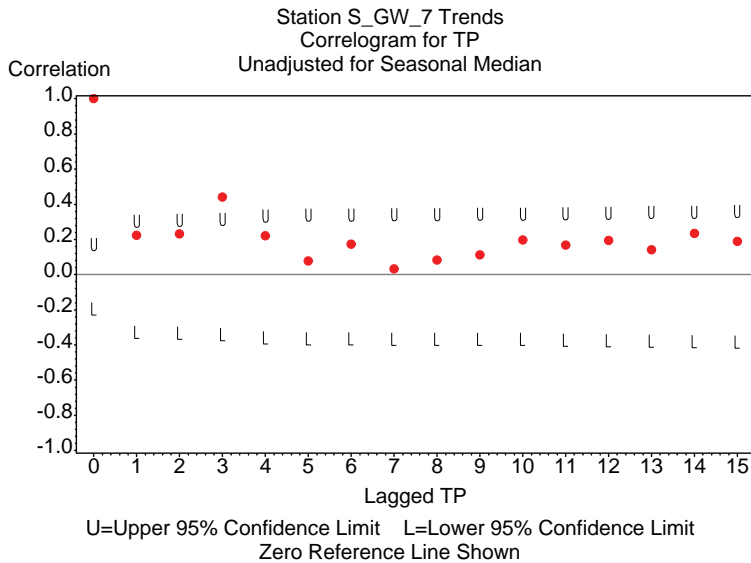
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.015	0.158	0.316	-0.316
2	-0.188	0.158	0.316	-0.316
3	0.058	0.160	0.320	-0.320
4	0.013	0.160	0.320	-0.320
5	-0.133	0.160	0.320	-0.320
6	0.001	0.161	0.322	-0.322
7	-0.152	0.161	0.322	-0.322
8	-0.108	0.162	0.325	-0.325
9	-0.024	0.163	0.326	-0.326
10	-0.069	0.163	0.326	-0.326
11	0.102	0.163	0.326	-0.326
12	-0.003	0.164	0.327	-0.327
13	-0.181	0.164	0.327	-0.327
14	0.076	0.165	0.331	-0.331
15	0.201	0.166	0.331	-0.331





Station S_GW_7 Trends Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.223	0.158	0.316	-0.316
2	0.232	0.161	0.321	-0.321
3	0.440	0.163	0.327	-0.327
4	0.220	0.173	0.346	-0.346
5	0.077	0.175	0.351	-0.351
6	0.173	0.176	0.351	-0.351
7	0.033	0.177	0.354	-0.354
8	0.082	0.177	0.354	-0.354
9	0.112	0.177	0.355	-0.355
10	0.197	0.178	0.356	-0.356
11	0.167	0.180	0.360	-0.360
12	0.194	0.181	0.362	-0.362
13	0.141	0.183	0.366	-0.366
14	0.233	0.184	0.367	-0.367
15	0.190	0.186	0.372	-0.372

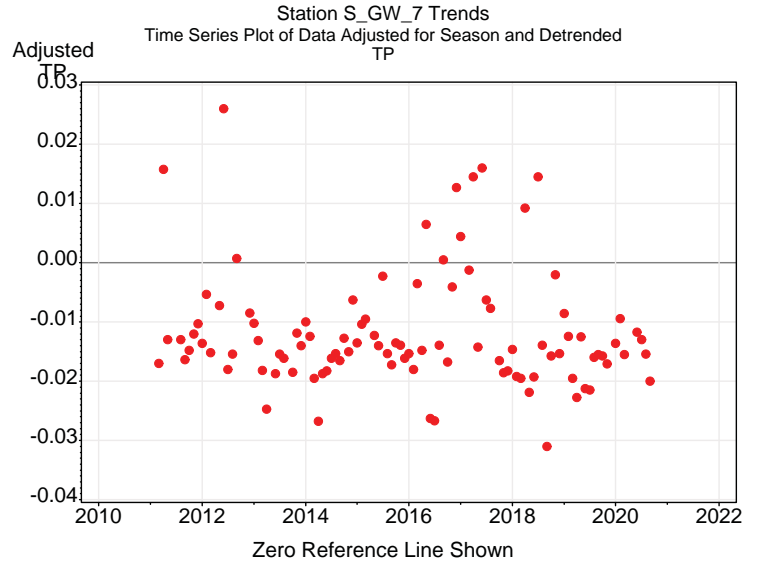


Station S_GW_7 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TP Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.53	0	.002	.002

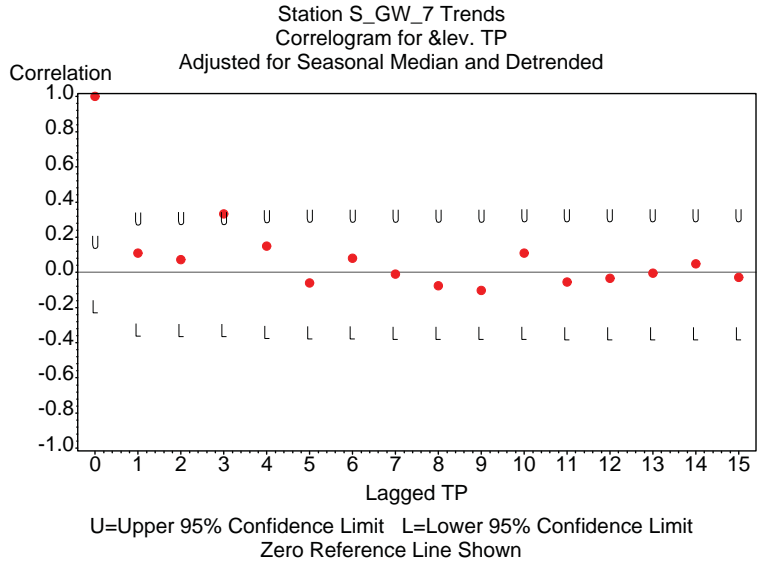
Station S_GW_7 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TP
 Adjusted for Seasonal Medians

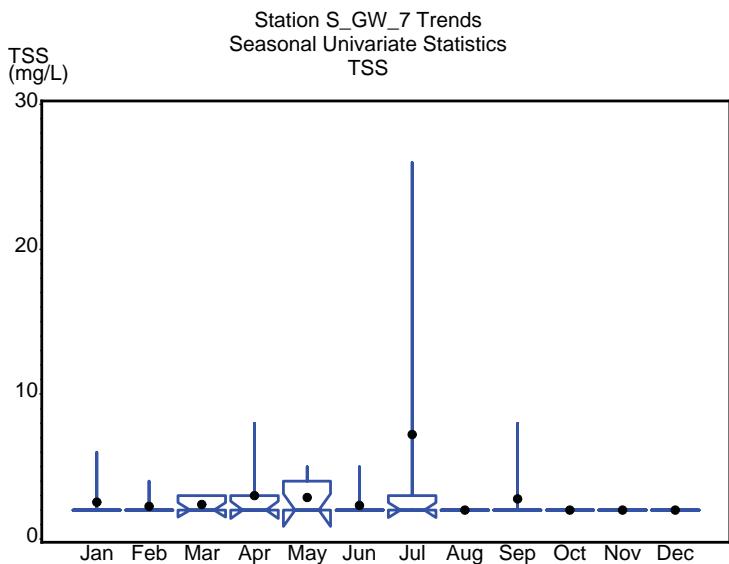
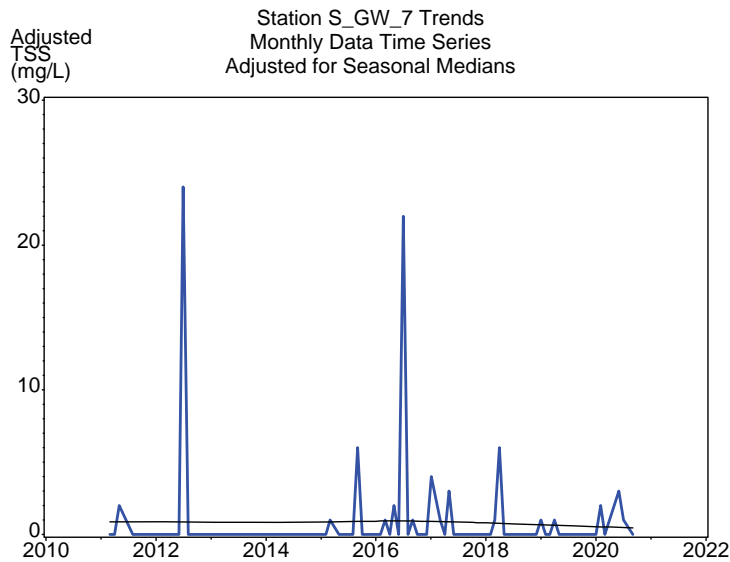
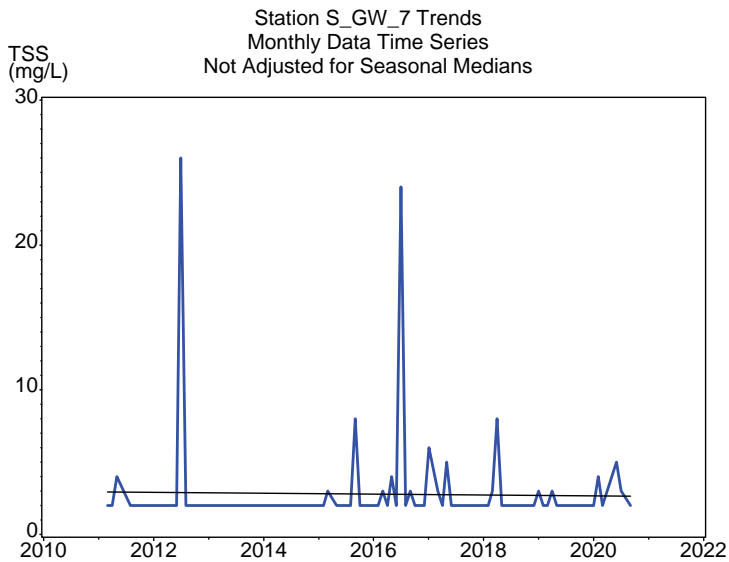
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.53	0	.002	.002



Station S_GW_7 Trends
 Autocorrelation Statistics for TP
 Adjusted for Seasonal Median and Detrended

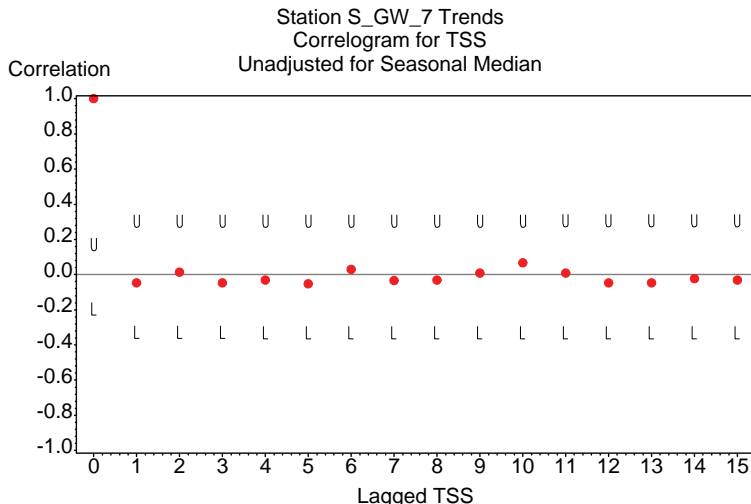
Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.110	0.158	0.316	-0.316
2	0.072	0.159	0.318	-0.318
3	0.332	0.159	0.318	-0.318
4	0.149	0.165	0.329	-0.329
5	-0.061	0.166	0.332	-0.332
6	0.081	0.166	0.332	-0.332
7	-0.010	0.166	0.333	-0.333
8	-0.076	0.166	0.333	-0.333
9	-0.104	0.167	0.333	-0.333
10	0.110	0.167	0.334	-0.334
11	-0.056	0.168	0.336	-0.336
12	-0.033	0.168	0.336	-0.336
13	-0.004	0.168	0.336	-0.336
14	0.049	0.168	0.336	-0.336
15	-0.028	0.168	0.336	-0.336





Station S_GW_7 Trends Autocorrelation Statistics for TSS

Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.048	0.158	0.316	-0.316
2	0.015	0.158	0.316	-0.316
3	-0.046	0.158	0.316	-0.316
4	-0.030	0.158	0.317	-0.317
5	-0.052	0.158	0.317	-0.317
6	0.029	0.159	0.317	-0.317
7	-0.035	0.159	0.317	-0.317
8	-0.032	0.159	0.317	-0.317
9	0.009	0.159	0.317	-0.317
10	0.067	0.159	0.317	-0.317
11	0.009	0.159	0.318	-0.318
12	-0.047	0.159	0.318	-0.318
13	-0.047	0.159	0.318	-0.318
14	-0.023	0.159	0.318	-0.318
15	-0.031	0.159	0.318	-0.318



Station S_GW_7 Trends Appendix Seasonal Kendall Tau Trend Test Statistics TSS

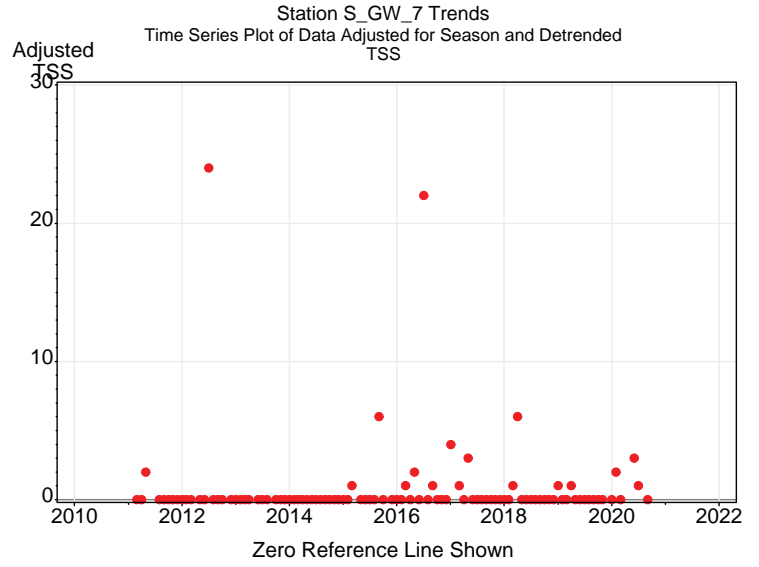
Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.083	0.107	0.127	0

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

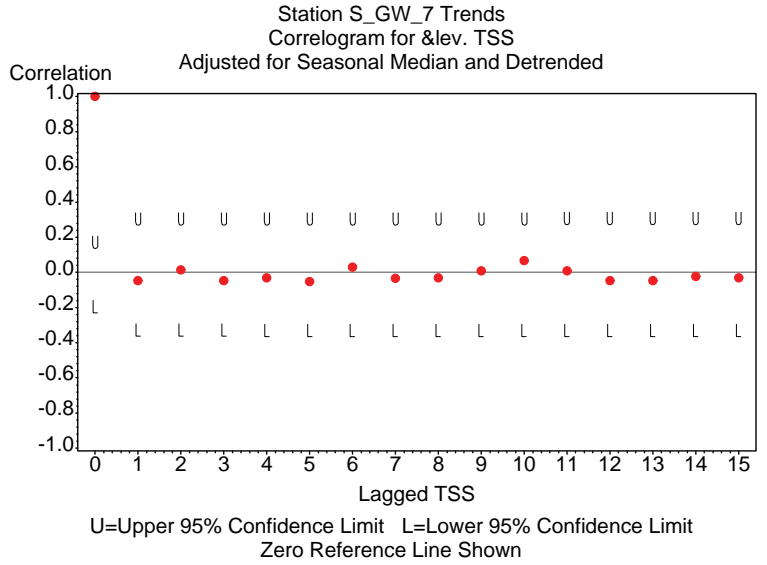
Station S_GW_7 Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 TSS
 Adjusted for Seasonal Medians

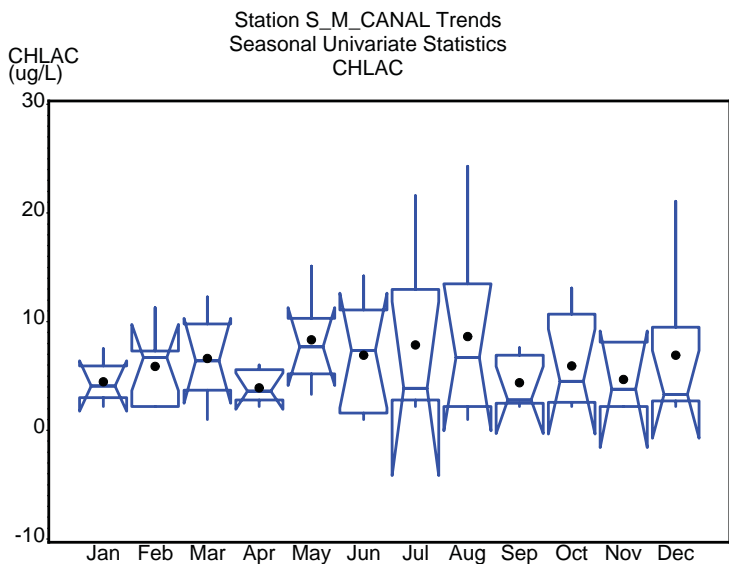
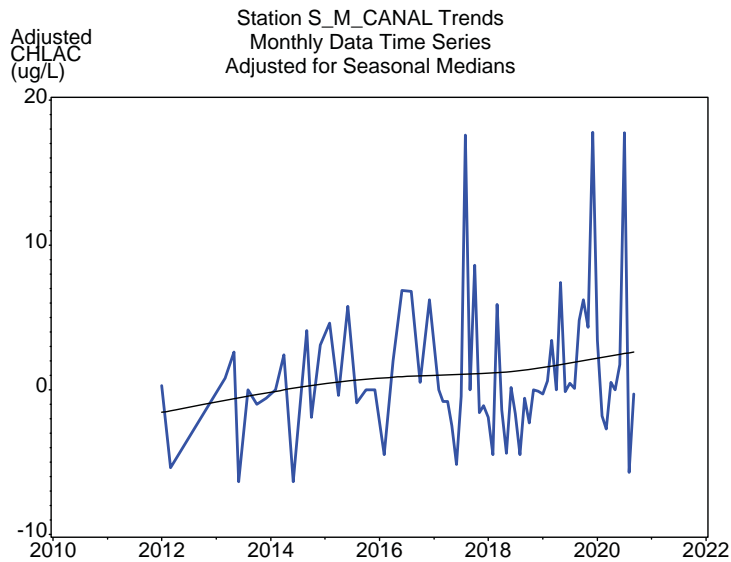
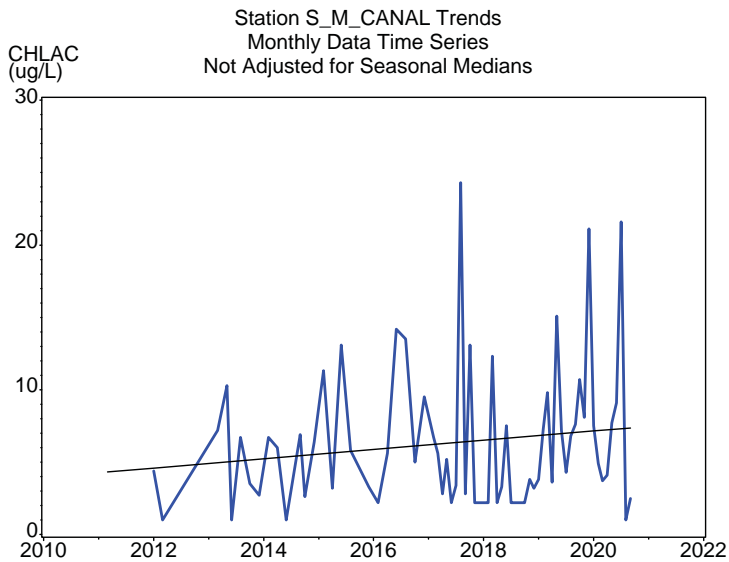
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.083	0.107	0.127	0



Station S_GW_7 Trends
 Autocorrelation Statistics for TSS
 Adjusted for Seasonal Median and Detrended

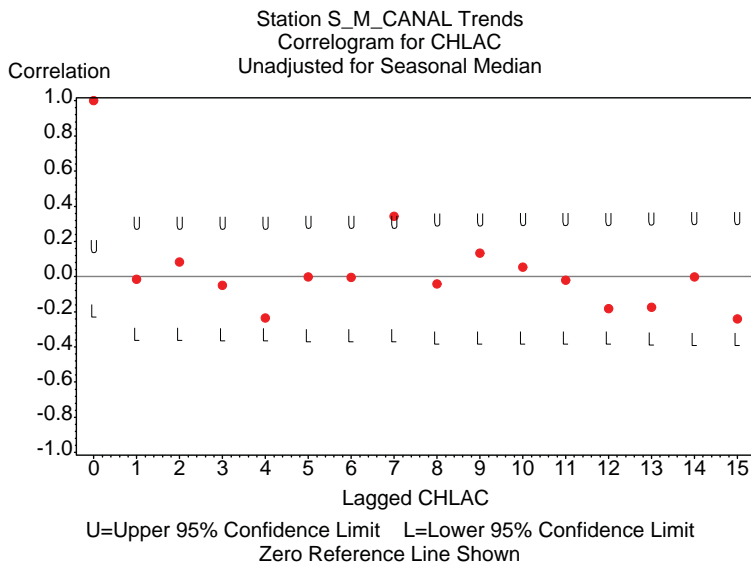
Lagged TSS	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.048	0.158	0.316	-0.316
2	0.015	0.158	0.316	-0.316
3	-0.046	0.158	0.316	-0.316
4	-0.030	0.158	0.317	-0.317
5	-0.052	0.158	0.317	-0.317
6	0.029	0.159	0.317	-0.317
7	-0.035	0.159	0.317	-0.317
8	-0.032	0.159	0.317	-0.317
9	0.009	0.159	0.317	-0.317
10	0.067	0.159	0.317	-0.317
11	0.009	0.159	0.318	-0.318
12	-0.047	0.159	0.318	-0.318
13	-0.047	0.159	0.318	-0.318
14	-0.023	0.159	0.318	-0.318
15	-0.031	0.159	0.318	-0.318





Station S_M_CANAL Trends Autocorrelation Statistics for CHLAC

Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.016	0.158	0.316	-0.316
2	0.084	0.158	0.316	-0.316
3	-0.050	0.158	0.317	-0.317
4	-0.235	0.159	0.317	-0.317
5	-0.003	0.162	0.323	-0.323
6	-0.005	0.162	0.323	-0.323
7	0.343	0.162	0.323	-0.323
8	-0.041	0.167	0.335	-0.335
9	0.134	0.168	0.335	-0.335
10	0.054	0.168	0.337	-0.337
11	-0.021	0.169	0.337	-0.337
12	-0.182	0.169	0.337	-0.337
13	-0.175	0.170	0.341	-0.341
14	-0.003	0.172	0.343	-0.343
15	-0.242	0.172	0.343	-0.343

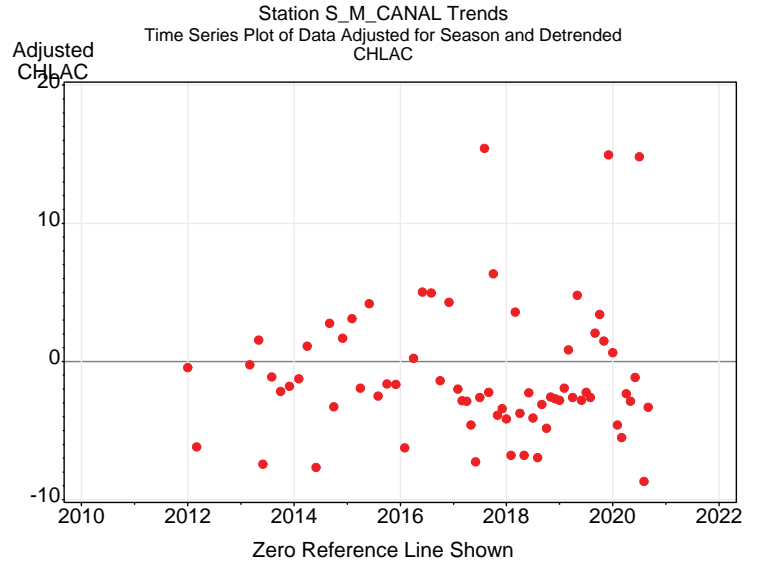


Station S_M_CANAL Trends Appendix Seasonal Kendall Tau Trend Test Statistics CHLAC Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.098	0.375	0.387	0.25

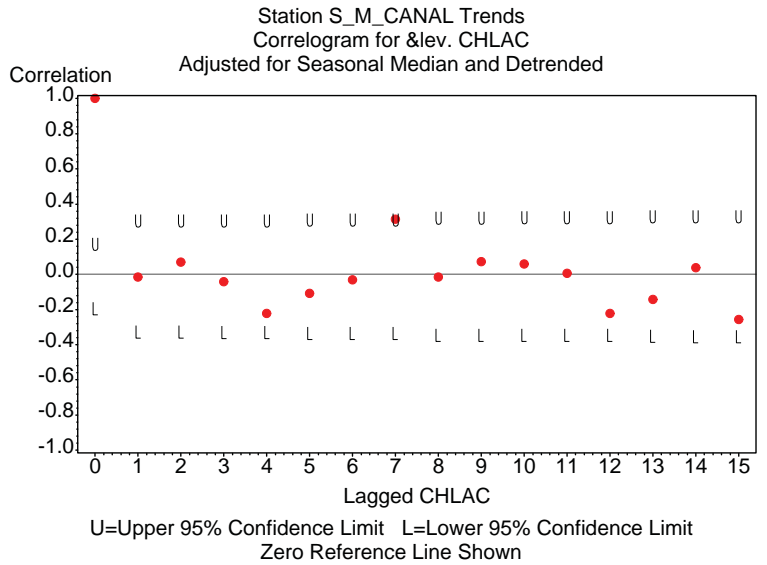
Station S_M_CANAL Trends
 Seasonal Kendall Tau Trend Test Statistics
 CHLAC
 Adjusted for Seasonal Medians

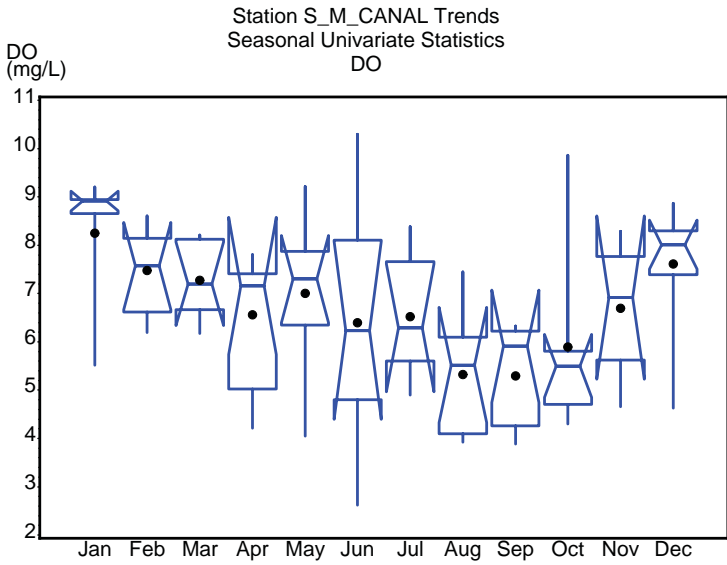
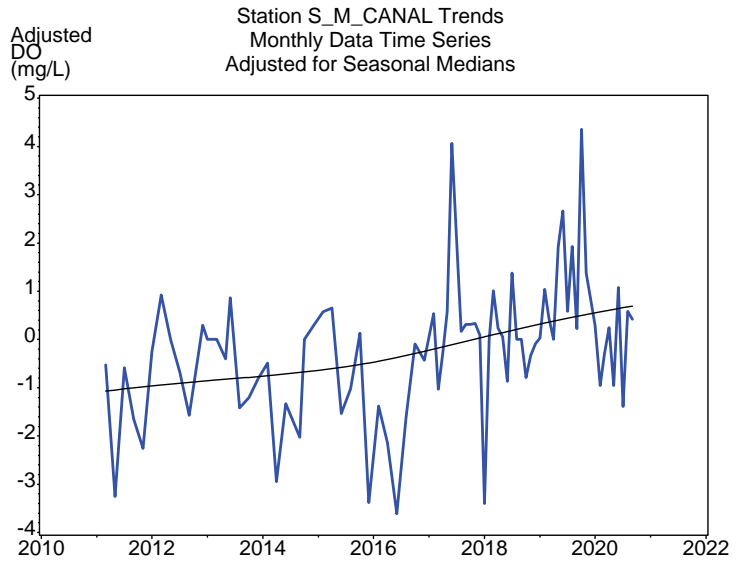
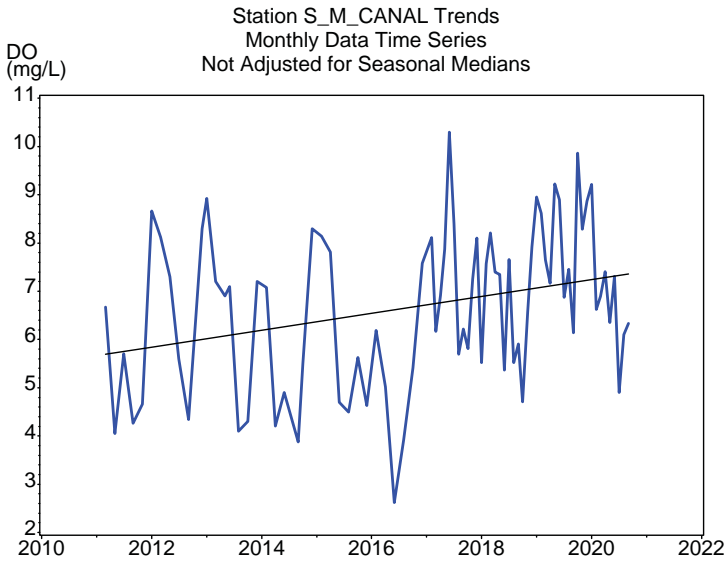
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.098	0.375	0.387	0.25



Station S_M_CANAL Trends
 Autocorrelation Statistics for CHLAC
 Adjusted for Seasonal Median and Detrended

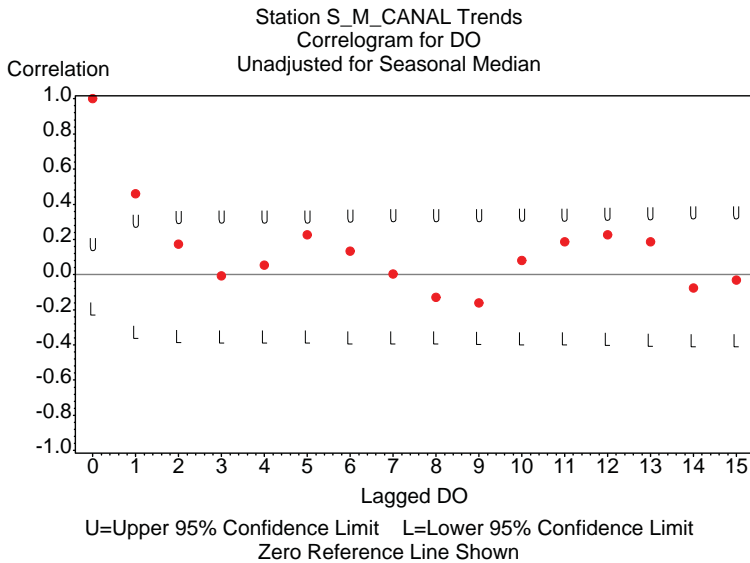
Lagged CHLAC	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.014	0.158	0.316	-0.316
2	0.069	0.158	0.316	-0.316
3	-0.041	0.158	0.317	-0.317
4	-0.223	0.158	0.317	-0.317
5	-0.107	0.161	0.322	-0.322
6	-0.031	0.162	0.323	-0.323
7	0.315	0.162	0.323	-0.323
8	-0.015	0.167	0.333	-0.333
9	0.073	0.167	0.333	-0.333
10	0.060	0.167	0.334	-0.334
11	0.007	0.167	0.334	-0.334
12	-0.222	0.167	0.334	-0.334
13	-0.143	0.170	0.339	-0.339
14	0.037	0.171	0.341	-0.341
15	-0.257	0.171	0.341	-0.341





Station S_M_CANAL Trends Autocorrelation Statistics for DO

Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.461	0.158	0.316	-0.316
2	0.172	0.169	0.338	-0.338
3	-0.007	0.170	0.341	-0.341
4	0.053	0.170	0.341	-0.341
5	0.227	0.171	0.341	-0.341
6	0.133	0.173	0.346	-0.346
7	0.003	0.174	0.348	-0.348
8	-0.128	0.174	0.348	-0.348
9	-0.162	0.175	0.349	-0.349
10	0.081	0.176	0.352	-0.352
11	0.186	0.176	0.352	-0.352
12	0.225	0.178	0.356	-0.356
13	0.186	0.180	0.360	-0.360
14	-0.077	0.182	0.364	-0.364
15	-0.031	0.182	0.364	-0.364



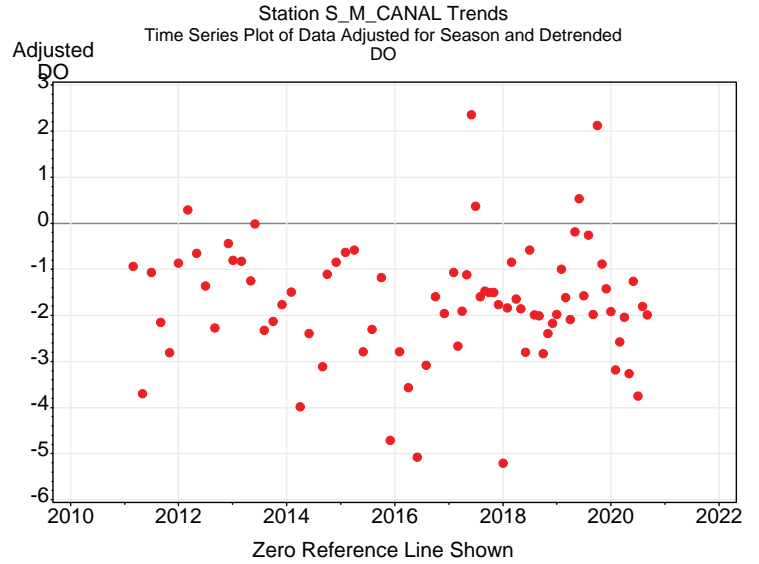
Station S_M_CANAL Trends Appendix Seasonal Kendall Tau Trend Test Statistics DO Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.303	.002	0.045	0.201

Station S_M_CANAL Trends
Seasonal Kendall Tau Trend Test Statistics
DO

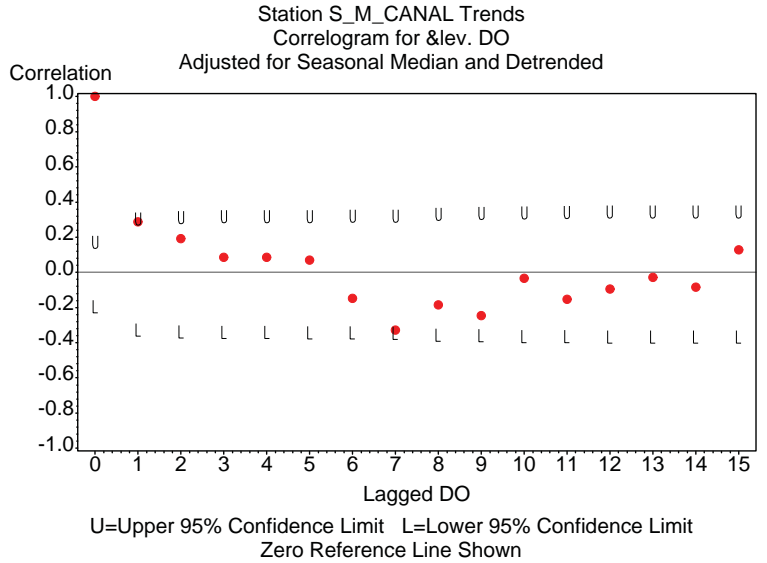
Adjusted for Seasonal Medians

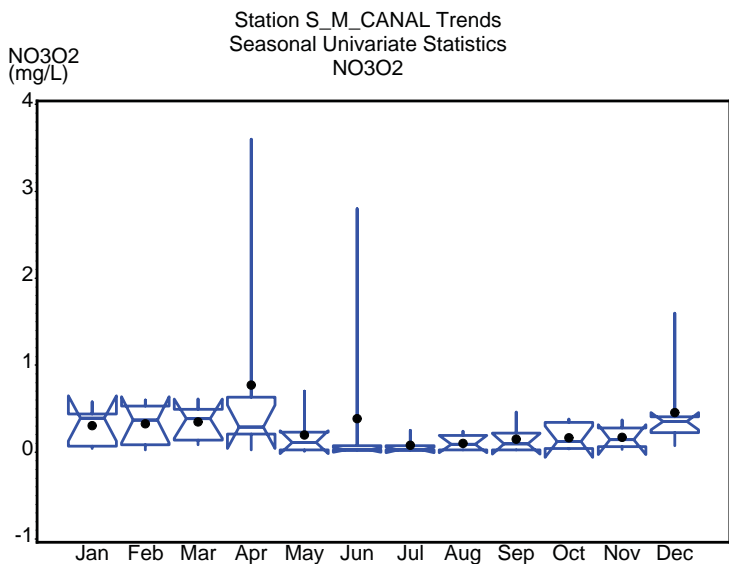
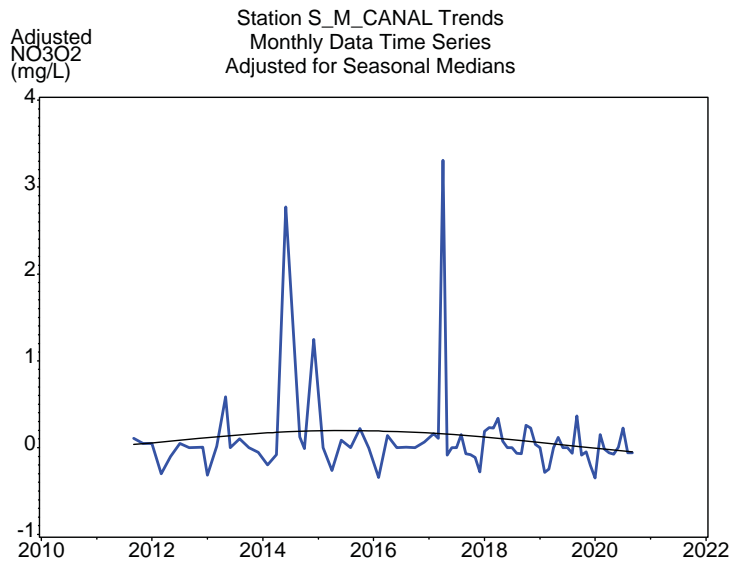
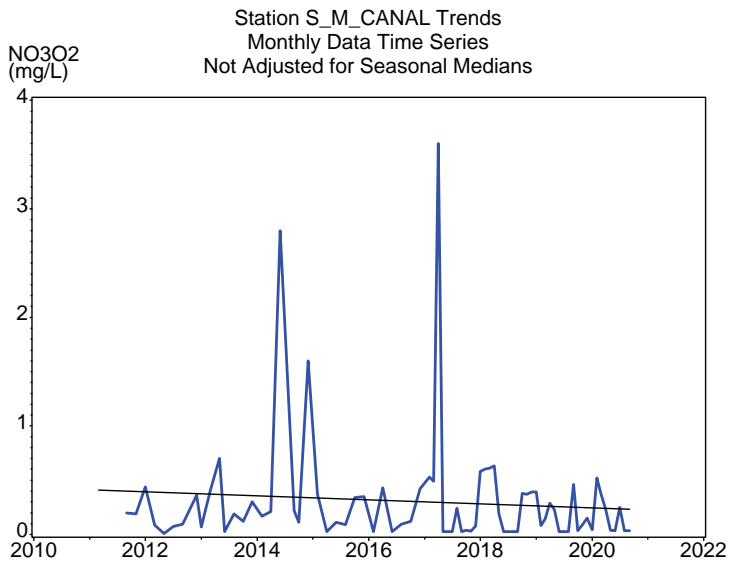
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.303	.002	0.045	0.201



Station S_M_CANAL Trends
Autocorrelation Statistics for DO
Adjusted for Seasonal Median and Detrended

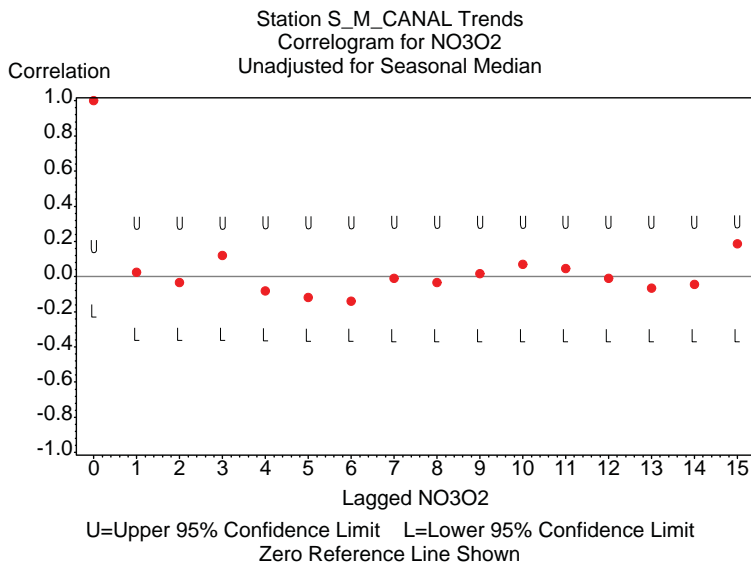
Lagged DO	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.287	0.158	0.316	-0.316
2	0.192	0.162	0.325	-0.325
3	0.085	0.164	0.329	-0.329
4	0.086	0.165	0.329	-0.329
5	0.070	0.165	0.330	-0.330
6	-0.149	0.165	0.331	-0.331
7	-0.327	0.166	0.333	-0.333
8	-0.184	0.172	0.343	-0.343
9	-0.247	0.173	0.347	-0.347
10	-0.035	0.176	0.352	-0.352
11	-0.154	0.176	0.353	-0.353
12	-0.096	0.177	0.355	-0.355
13	-0.028	0.178	0.356	-0.356
14	-0.085	0.178	0.356	-0.356
15	0.128	0.178	0.356	-0.356





Station S_M_CANAL Trends Autocorrelation Statistics for NO3O2

Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.024	0.158	0.316	-0.316
2	-0.034	0.158	0.316	-0.316
3	0.119	0.158	0.316	-0.316
4	-0.081	0.159	0.318	-0.318
5	-0.119	0.159	0.319	-0.319
6	-0.139	0.160	0.320	-0.320
7	-0.009	0.161	0.322	-0.322
8	-0.034	0.161	0.322	-0.322
9	0.017	0.161	0.322	-0.322
10	0.071	0.161	0.322	-0.322
11	0.047	0.161	0.323	-0.323
12	-0.009	0.161	0.323	-0.323
13	-0.065	0.161	0.323	-0.323
14	-0.044	0.162	0.323	-0.323
15	0.186	0.162	0.324	-0.324

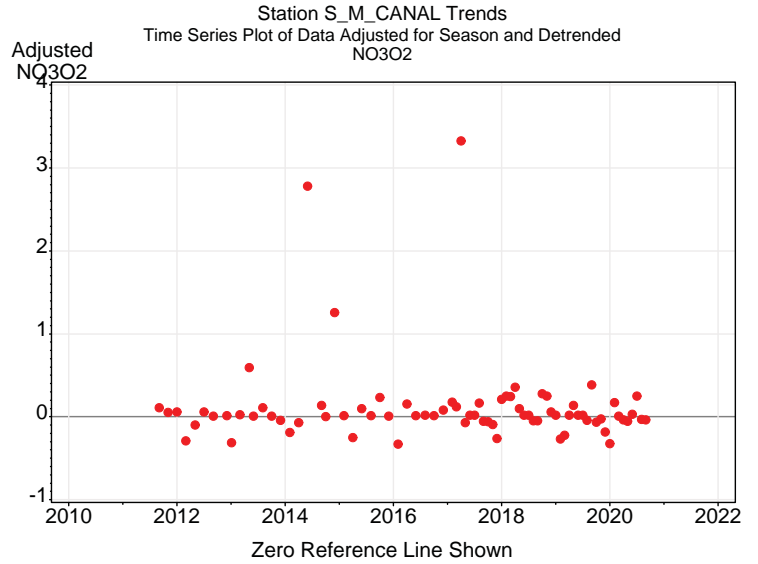


Station S_M_CANAL Trends Appendix Seasonal Kendall Tau Trend Test Statistics NO3O2 Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.06	0.565	0.462	-0.02

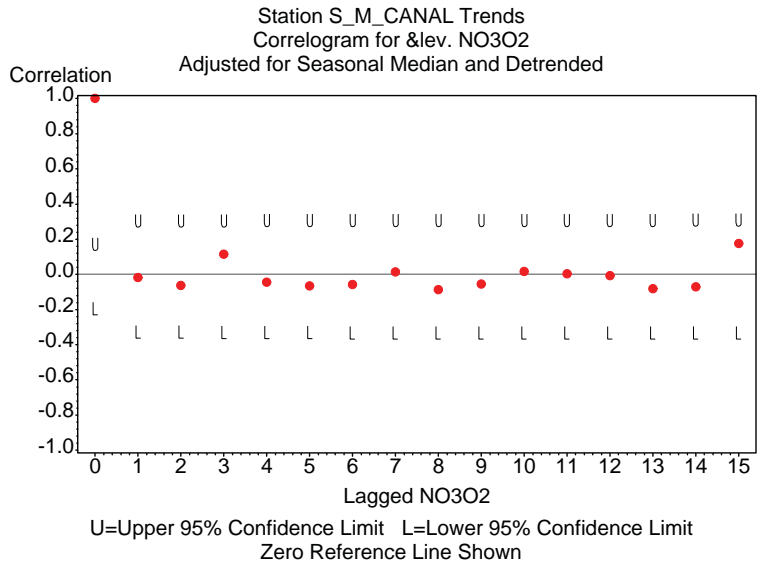
Station S_M_CANAL Trends Appendix
 Seasonal Kendall Tau Trend Test Statistics
 NO3O2
 Adjusted for Seasonal Medians

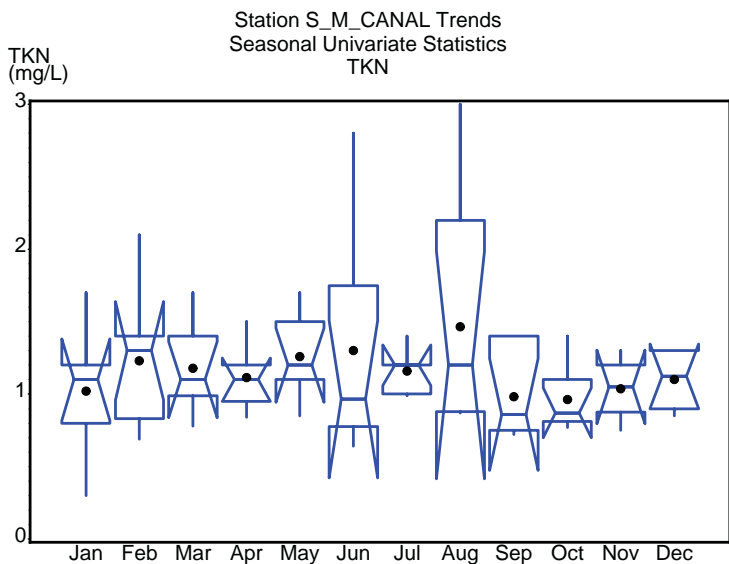
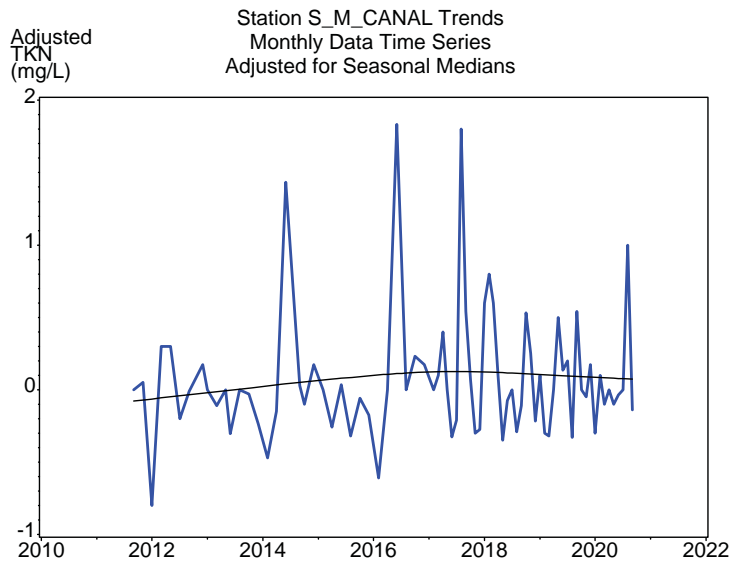
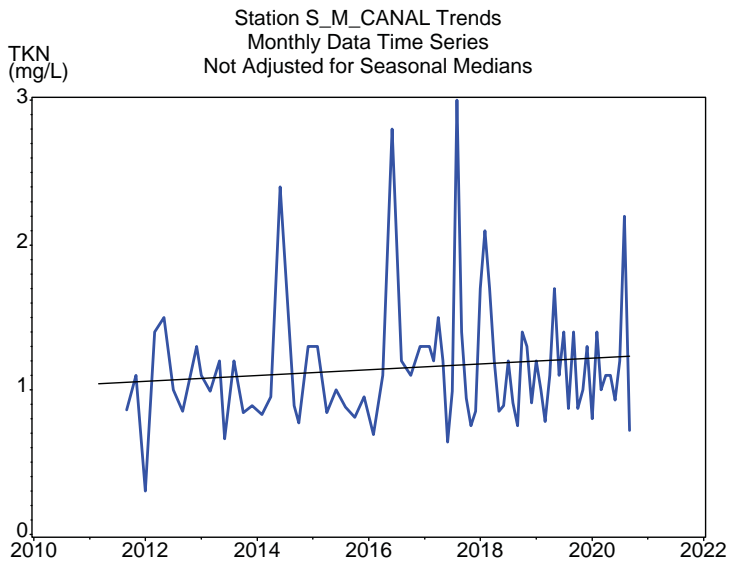
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.06	0.565	0.462	-.002



Station S_M_CANAL Trends
 Autocorrelation Statistics for NO3O2
 Adjusted for Seasonal Median and Detrended

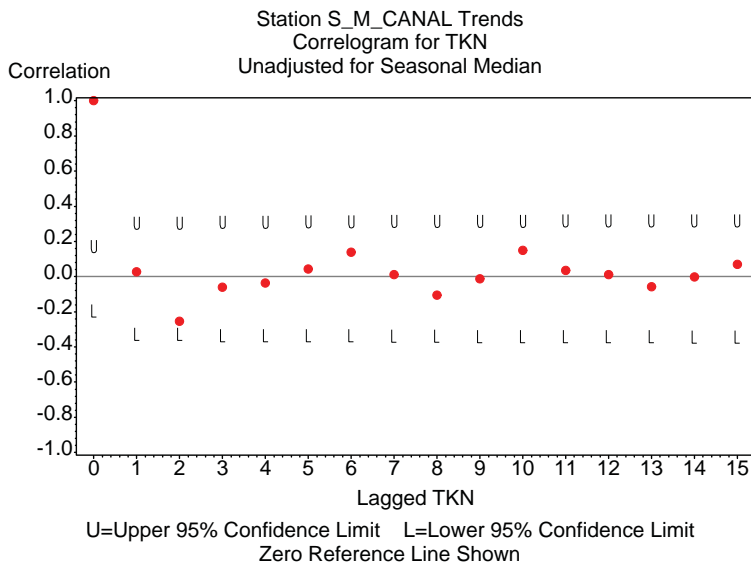
Lagged NO3O2	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	-0.018	0.158	0.316	-0.316
2	-0.062	0.158	0.316	-0.316
3	0.115	0.158	0.317	-0.317
4	-0.045	0.159	0.318	-0.318
5	-0.065	0.159	0.318	-0.318
6	-0.057	0.159	0.319	-0.319
7	0.014	0.160	0.319	-0.319
8	-0.086	0.160	0.319	-0.319
9	-0.056	0.160	0.320	-0.320
10	0.016	0.160	0.320	-0.320
11	0.003	0.160	0.320	-0.320
12	-0.007	0.160	0.320	-0.320
13	-0.082	0.160	0.320	-0.320
14	-0.072	0.160	0.321	-0.321
15	0.176	0.161	0.321	-0.321





Station S_M_CANAL Trends Autocorrelation Statistics for TKN

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.027	0.158	0.316	-0.316
2	-0.255	0.158	0.316	-0.316
3	-0.061	0.162	0.323	-0.323
4	-0.036	0.162	0.323	-0.323
5	0.044	0.162	0.324	-0.324
6	0.138	0.162	0.324	-0.324
7	0.011	0.163	0.326	-0.326
8	-0.106	0.163	0.326	-0.326
9	-0.012	0.163	0.327	-0.327
10	0.150	0.163	0.327	-0.327
11	0.035	0.165	0.329	-0.329
12	0.012	0.165	0.329	-0.329
13	-0.057	0.165	0.329	-0.329
14	-0.001	0.165	0.330	-0.330
15	0.070	0.165	0.330	-0.330



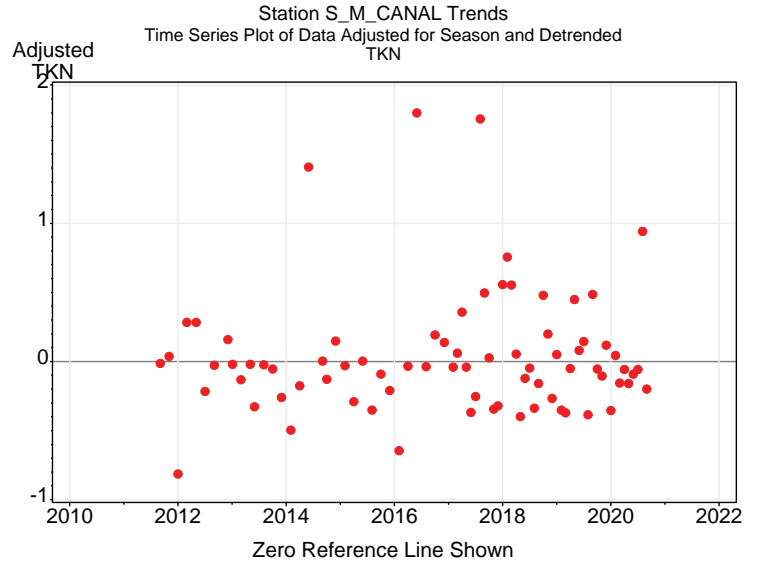
Station S_M_CANAL Trends Appendix Seasonal Kendall Tau Trend Test Statistics TKN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.088	0.387	0.25	.005

Station S_M_CANAL Trends
Seasonal Kendall Tau Trend Test Statistics
TKN

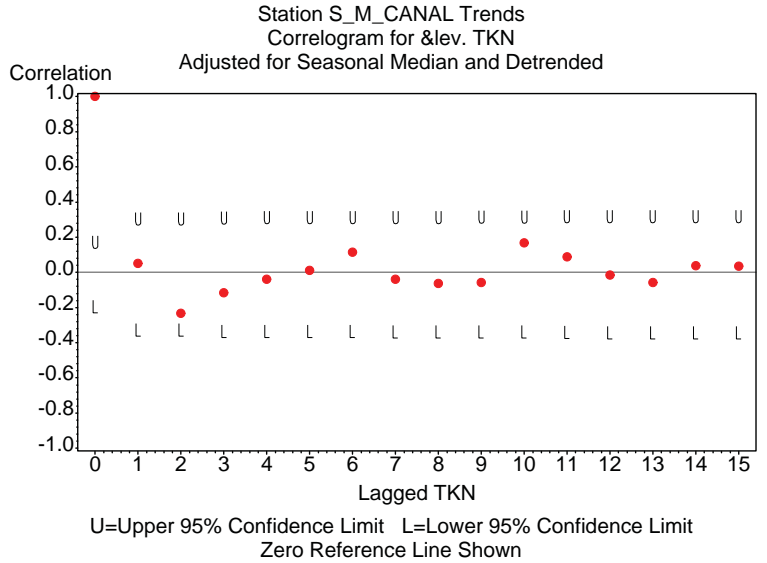
Adjusted for Seasonal Medians

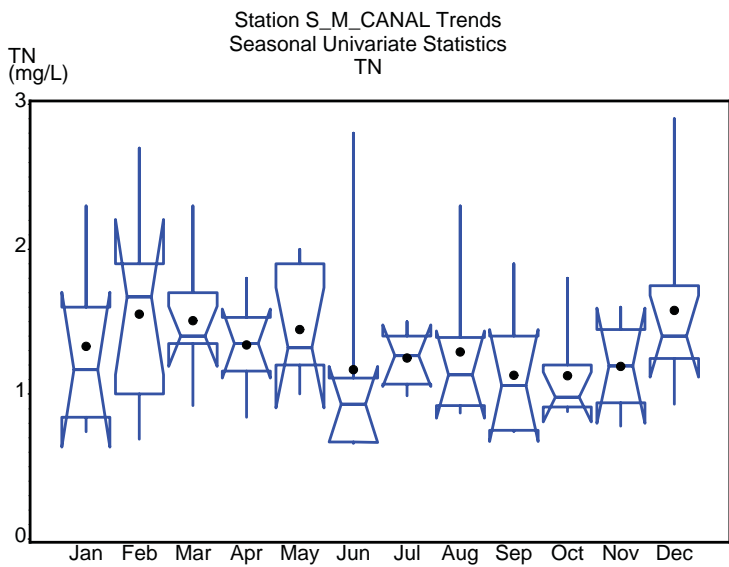
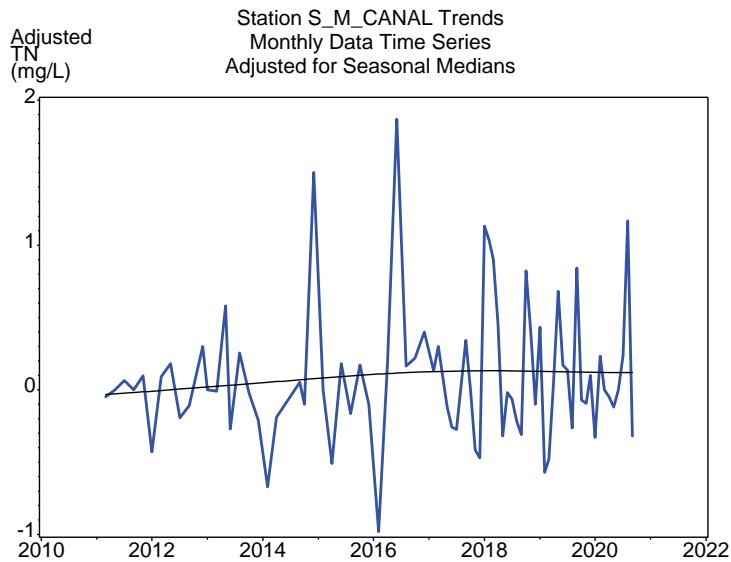
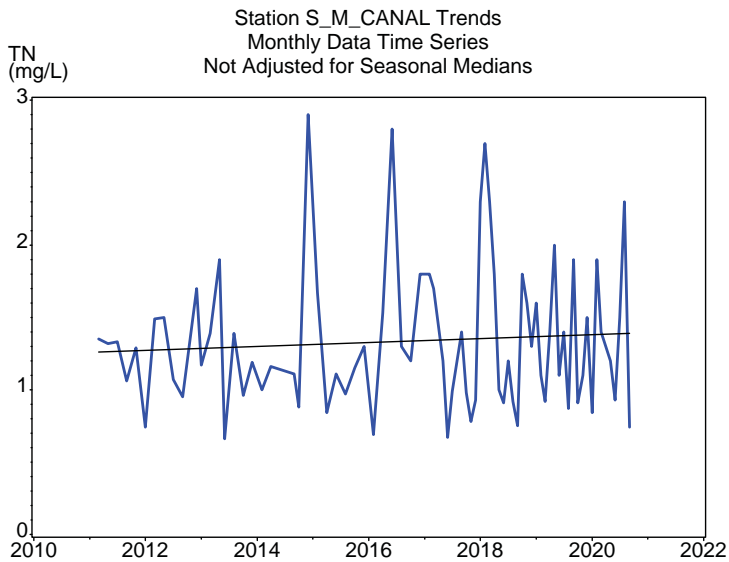
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.088	0.387	0.25	.005



Station S_M_CANAL Trends
Autocorrelation Statistics for TKN
Adjusted for Seasonal Median and Detrended

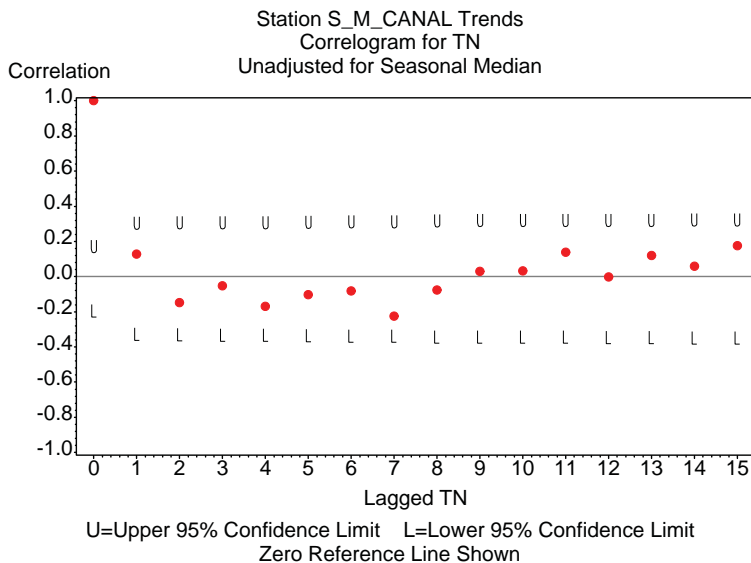
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.050	0.158	0.316	-0.316
2	-0.234	0.158	0.316	-0.316
3	-0.115	0.161	0.322	-0.322
4	-0.039	0.162	0.324	-0.324
5	0.012	0.162	0.324	-0.324
6	0.114	0.162	0.324	-0.324
7	-0.039	0.163	0.325	-0.325
8	-0.062	0.163	0.325	-0.325
9	-0.058	0.163	0.326	-0.326
10	0.169	0.163	0.326	-0.326
11	0.089	0.164	0.329	-0.329
12	-0.016	0.165	0.330	-0.330
13	-0.057	0.165	0.330	-0.330
14	0.039	0.165	0.330	-0.330
15	0.035	0.165	0.330	-0.330





Station S_M_CANAL Trends Autocorrelation Statistics for TN

Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.127	0.158	0.316	-0.316
2	-0.148	0.159	0.318	-0.318
3	-0.052	0.160	0.320	-0.320
4	-0.169	0.160	0.320	-0.320
5	-0.103	0.162	0.323	-0.323
6	-0.081	0.162	0.325	-0.325
7	-0.225	0.163	0.325	-0.325
8	-0.075	0.165	0.330	-0.330
9	0.031	0.165	0.331	-0.331
10	0.033	0.166	0.331	-0.331
11	0.139	0.166	0.331	-0.331
12	-0.002	0.167	0.333	-0.333
13	0.121	0.167	0.333	-0.333
14	0.058	0.167	0.335	-0.335
15	0.176	0.167	0.335	-0.335



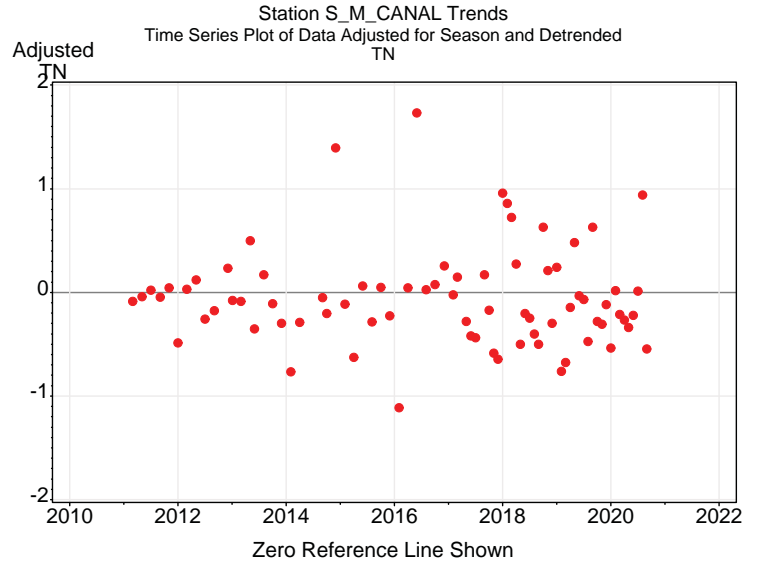
Station S_M_CANAL Trends Appendix Seasonal Kendall Tau Trend Test Statistics TN Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.107	0.294	0.116	0.019

Station S_M_CANAL Trends
Seasonal Kendall Tau Trend Test Statistics
TN

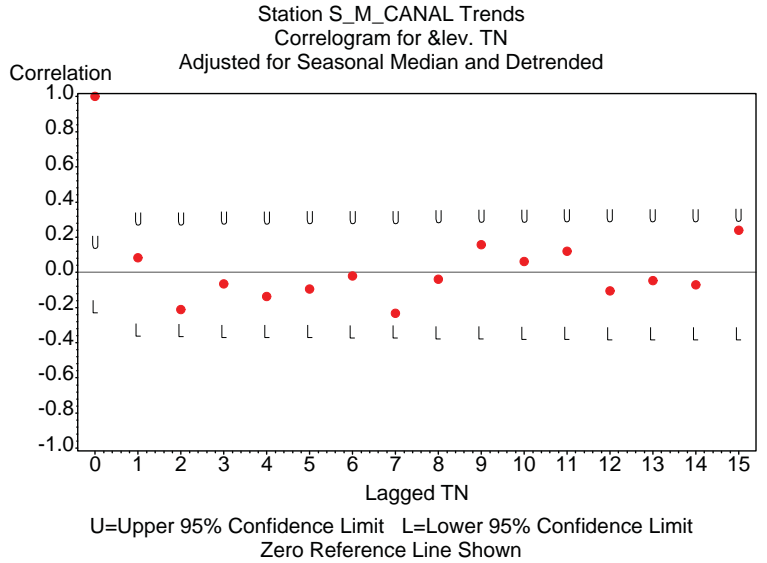
Adjusted for Seasonal Medians

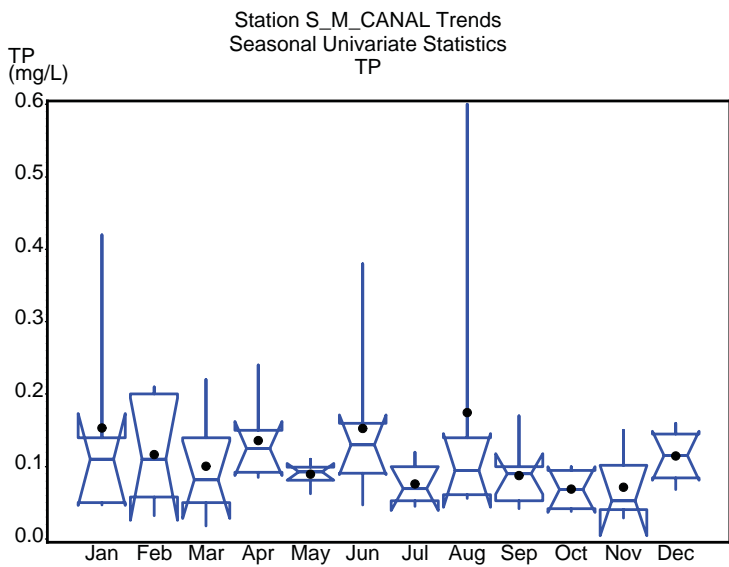
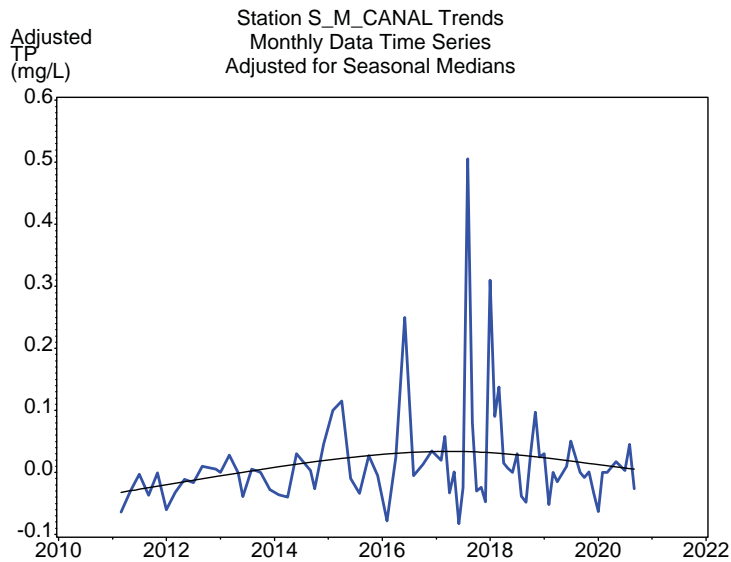
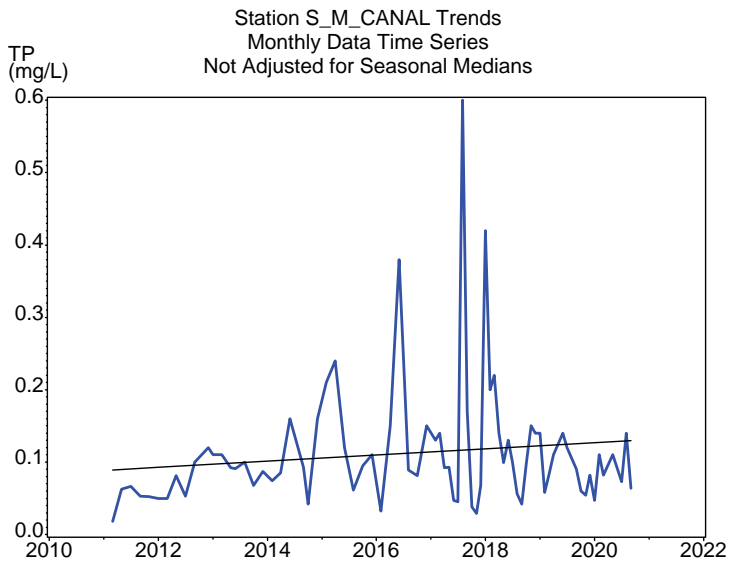
Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.107	0.294	0.116	0.019



Station S_M_CANAL Trends
Autocorrelation Statistics for TN
Adjusted for Seasonal Median and Detrended

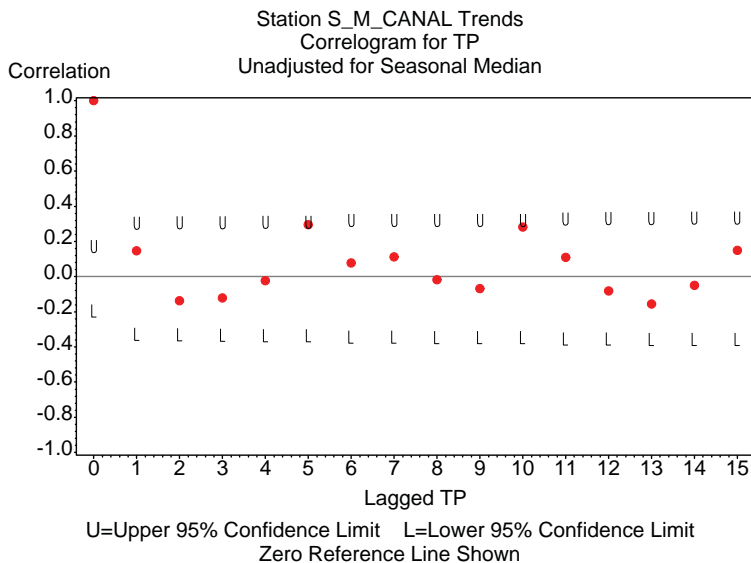
Lagged TN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.084	0.158	0.316	-0.316
2	-0.212	0.158	0.317	-0.317
3	-0.066	0.161	0.322	-0.322
4	-0.137	0.161	0.322	-0.322
5	-0.095	0.162	0.324	-0.324
6	-0.021	0.162	0.325	-0.325
7	-0.232	0.162	0.325	-0.325
8	-0.038	0.165	0.330	-0.330
9	0.157	0.165	0.331	-0.331
10	0.063	0.167	0.333	-0.333
11	0.119	0.167	0.334	-0.334
12	-0.106	0.167	0.335	-0.335
13	-0.047	0.168	0.336	-0.336
14	-0.070	0.168	0.336	-0.336
15	0.240	0.168	0.337	-0.337





Station S_M_CANAL Trends Autocorrelation Statistics for TP

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.146	0.158	0.316	-0.316
2	-0.137	0.159	0.318	-0.318
3	-0.120	0.160	0.320	-0.320
4	-0.024	0.161	0.322	-0.322
5	0.296	0.161	0.322	-0.322
6	0.077	0.165	0.331	-0.331
7	0.111	0.166	0.332	-0.332
8	-0.017	0.166	0.333	-0.333
9	-0.069	0.166	0.333	-0.333
10	0.281	0.167	0.333	-0.333
11	0.109	0.171	0.341	-0.341
12	-0.082	0.171	0.342	-0.342
13	-0.155	0.171	0.343	-0.343
14	-0.049	0.173	0.345	-0.345
15	0.149	0.173	0.345	-0.345



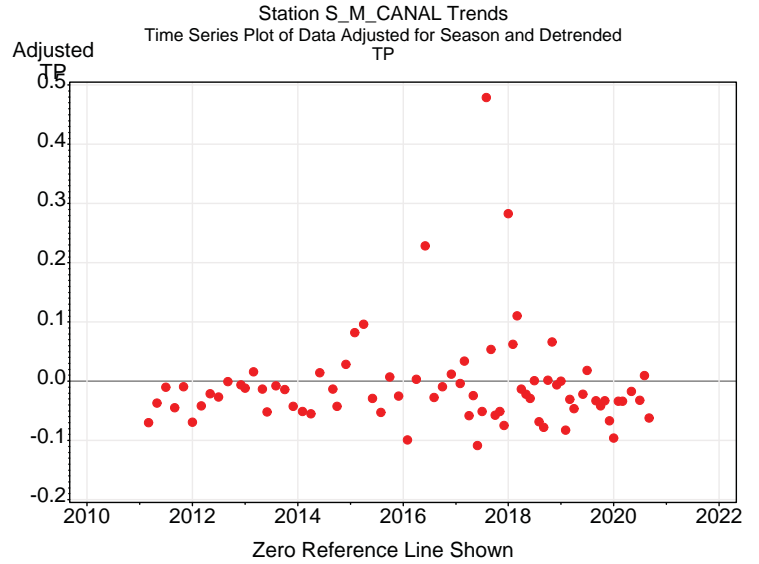
Station S_M_CANAL Trends Appendix Seasonal Kendall Tau Trend Test Statistics TP Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.115	0.264	0.225	.003

Station S_M_CANAL Trends
Seasonal Kendall Tau Trend Test Statistics
TP

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.115	0.264	0.225	.003



Station S_M_CANAL Trends
Autocorrelation Statistics for TP
Adjusted for Seasonal Median and Detrended

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.091	0.183	-0.183
1	0.103	0.158	0.316	-0.316
2	-0.141	0.159	0.317	-0.317
3	-0.134	0.160	0.319	-0.319
4	-0.067	0.161	0.321	-0.321
5	0.280	0.161	0.322	-0.322
6	0.020	0.165	0.330	-0.330
7	0.068	0.165	0.330	-0.330
8	-0.007	0.165	0.330	-0.330
9	-0.043	0.165	0.330	-0.330
10	0.277	0.165	0.330	-0.330
11	0.053	0.169	0.338	-0.338
12	-0.123	0.169	0.338	-0.338
13	-0.167	0.170	0.340	-0.340
14	-0.023	0.171	0.343	-0.343
15	0.135	0.171	0.343	-0.343

