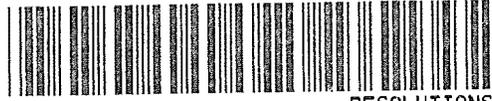


Return to:  
City of Pullman  
P.O. Box 249  
Pullman, WA 99163



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RESOLUTIONS WHITMAN COUNTY

Document Title: RESOLUTION NO. R-33-01 - A RESOLUTION AUTHORIZING THE EXECUTION OF AN INTERLOCAL GOVERNMENTAL AGREEMENT WITH WASHINGTON STATE UNIVERSITY REGARDING THE CAPITAL AND OPERATING COSTS OF THE PULLMAN WASTEWATER TREATMENT PLANT.

Reference Number(s) of Related Documents: None

Grantors: Washington State University, an institute of higher education and an agency of the state of Washington

Grantee: City of Pullman, a municipal corporation of the state of Washington

Legal Description: N/A

1. N/A

SUBDIVISION	SECTION	TOWNSHIP	RANGE	MERIDIAN

2. Additional legal description: N/A

Assessor's Property Tax Parcel Numbers:

N/A



RESOLUTION NO. R- 33 -01

A RESOLUTION AUTHORIZING THE EXECUTION OF AN INTERLOCAL GOVERNMENTAL AGREEMENT WITH WASHINGTON STATE UNIVERSITY REGARDING THE CAPITAL AND OPERATING COSTS OF THE PULLMAN WASTEWATER TREATMENT PLANT.

WHEREAS, the City Council for the city of Pullman has before it an instrument entitled, "Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant"; and,

WHEREAS, Washington State University has approved said interlocal governmental agreement; and

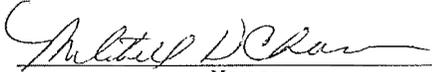
WHEREAS, the City Council of the City of Pullman deems it to be in the best interests of the City of Pullman to enter into said interlocal governmental agreement; now, therefore,

IT IS HEREBY RESOLVED by the City Council of the City of Pullman that the Mayor and the finance director be and they are hereby authorized and directed to execute said interlocal governmental agreement; and, having executed the same, to submit one executed original to Washington State University and to file one executed original in the manner authorized by law.

IT IS FURTHER RESOLVED that the Mayor and finance director are each hereby authorized and directed to take such further action as may be appropriate in order to effect the purpose of this Resolution and the Agreement authorized thereby.

ADOPTED by the City Council of the city of Pullman at a regular meeting held on the 24th day of April, 2001.

DATED this 25th day of April, 2001.

  
\_\_\_\_\_  
Mayor

ATTEST:

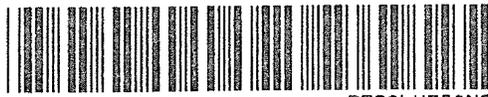
  
\_\_\_\_\_  
Finance Director

**AGREEMENT RELATING TO PRORATION  
OF CAPITAL AND OPERATING COSTS  
OF THE PULLMAN WASTEWATER TREATMENT PLANT**

This agreement is by and between the city of Pullman, a municipal corporation of the state of Washington (CITY), and Washington State University, an institution of higher education and an agency of the state of Washington (UNIVERSITY).

**RECITALS:**

1. This Agreement is entered into pursuant to the Interlocal Cooperation Act (RCW 39.34).
2. The City Council of the CITY by resolution has approved and authorized the terms of this Agreement and has authorized the Mayor and Finance Director to sign the Agreement.
3. The Board of Regents of the UNIVERSITY by resolution has approved and authorized the terms of this Agreement and has authorized the Vice President for Business Affairs to sign the Agreement.
4. The CITY has provided wastewater sewer lines and wastewater treatment at the Pullman wastewater treatment plant for the UNIVERSITY for approximately seventy-five (75) years on a cost-sharing basis.
5. The UNIVERSITY, by a cooperative agreement dated February 16, 1979, has provided forty-five point four percent (45.4%) of the local costs for capital improvements and forty-three point five percent (43.5%) of the local costs for maintenance and operation costs of the wastewater treatment plant. Prior to February 16, 1979, the UNIVERSITY similarly shared proportionately in the costs of maintenance and operation of and capital improvements to the wastewater treatment plant and to certain sewer lines serving the UNIVERSITY.
6. In 1997, the CITY, in cooperation with the UNIVERSITY, entered into an agreement with Parametrix, Inc., to provide a General Sewer Plan for the CITY. Included in the General Sewer Plan was an analysis of the percent of total wastewater flow and load that was contributed by the UNIVERSITY. This study (1998 General Sewer Plan) was completed and approved by the Washington State Department of Ecology on January 20, 1999, and by the Pullman City Council on March 9, 1999. The UNIVERSITY by its approval and execution of this Agreement also approves the City's 1998 General Sewer Plan.



7. The February 16, 1979, agreement provides for the negotiation of a new, revised cooperative agreement as required. Considering the results of the 1998 General Sewer Plan, it is hereby mutually agreed between the CITY and the UNIVERSITY that it is appropriate to negotiate a new revised cooperative agreement for allocation of capital improvement costs and operation and maintenance costs.

#### **TERMS OF AGREEMENT:**

Now, therefore, in consideration of mutual benefits derived from the cooperative funding of a single wastewater treatment plant and system, it is agreed as follows:

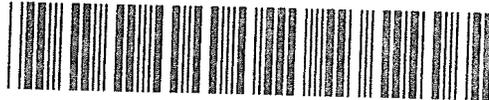
#### **I. PURPOSE**

This Agreement is entered into for the purpose of:

- A. Prorating between the CITY and the UNIVERSITY the costs of maintenance and operation related to the CITY's wastewater treatment plant;
- B. Prorating between the CITY and the UNIVERSITY the cost of future capital improvements and additions to the wastewater treatment plant and certain sewer lines serving the UNIVERSITY;
- C. Determining the responsibilities of and relationship between each party during the construction of improvements and the continued operation of the wastewater treatment plant; and
- D. Allocating the assets and liabilities of the system in the event of termination.

#### **II. DURATION AND TERMINATION**

The duration of this Agreement shall be from the effective date hereof to June 30, 2020. Prior to the termination of this Agreement, the CITY and the UNIVERSITY will meet to examine then existing conditions affecting the operation of the wastewater treatment plant and system and negotiate a new, revised cooperative agreement in the event the parties desire to continue their agreement.



### III. RESPONSIBILITIES OF THE CITY

- A. The CITY has full responsibility for undertaking any analysis or study, design of improvements and additions, coordination with consulting firms, and the supervision, inspection, and administration of construction of improvements to the wastewater treatment plant and the sewer collection system. The CITY may, at its option, consult with the UNIVERSITY regarding any of the above matters.
- B. The CITY has full responsibility for the operation of the wastewater treatment plant, including the retention of competent operating staff and any necessary materials, equipment, and supplies. The CITY may, at its option, consult with the UNIVERSITY regarding such operations.
- C. The CITY will hold the UNIVERSITY harmless from claims or liability for damages to property or persons incurred during the construction of improvements and additions to said plant. The CITY also will hold the UNIVERSITY harmless from claims or liability for damages to property or persons incurred during operation of said plant except for claims arising out of the UNIVERSITY's negligent or willful acts or omissions, including violations of any federal, state, or local law, rule, regulation, or permit for the discharge of waste water that is or is considered to be harmful, detrimental, or injurious to the public health, safety, and welfare caused by the disposal of industrial wastes by the UNIVERSITY.
- D. The wastewater treatment plant and sewer collection system together with all additions and improvements, except for the sewer collection system located within the campus boundary of the UNIVERSITY, shall be the property of the CITY.
- E. The CITY may bill the UNIVERSITY not more often than once per month for the costs of capital improvements and operations and maintenance costs incurred by the CITY. Notwithstanding, the CITY agrees to bill all costs so incurred not later than twelve (12) days following the UNIVERSITY's fiscal year on June 30 for the twelve-month (12-month) fiscal year period preceding the billing.

### IV. RESPONSIBILITIES OF THE UNIVERSITY

- A. The UNIVERSITY shall within sixty (60) days of billing by the CITY remit its share of the costs to meet obligations incurred for the costs of approved construction and operation and maintenance costs incurred in the management of



the wastewater treatment plant and sewer collection system in accordance with the terms of this Agreement. Any billing not paid within sixty (60) days shall be considered delinquent and accrue interest at the rate of twelve percent (12%) per annum from the date of the CITY's billing.

- B. In the event the CITY has obtained financing to make any improvements or pay any cost authorized by law, the UNIVERSITY agrees that its payment with respect to its share of the cost of the financing shall not be reduced below the prorated sum in effect at the time the financing occurred.
- C. The UNIVERSITY agrees to consult with the CITY in good faith when requested regarding improvements and maintenance and operation of the wastewater treatment plant.

**V. CAPITAL IMPROVEMENTS**

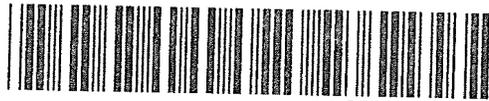
- A. The 1998 General Sewer Plan determined that the cost of capital improvements at the wastewater treatment plant should be based mainly on peak design flow but also should include a load factor component, and further estimated that the peak flow and load contribution from the UNIVERSITY amounted to thirty-six point four percent (36.4%) of the peak flow and total load treated at the wastewater treatment plant. Therefore, the UNIVERSITY agrees to provide thirty-six point four percent (36.4%) and the CITY agrees to provide sixty-three point six percent (63.6%) of the costs for capital improvements and additions to the wastewater treatment plant. Costs for capital improvements may include costs incurred for design and construction engineering and architectural services, property acquisition, contract work, force account work, CITY personnel salaries and benefits, and related incidental items as deemed by the CITY to be reasonably necessary for the capital improvement.
- B. Since the UNIVERSITY is on a biennial budget system for capital improvements, the CITY will endeavor to inform the UNIVERSITY of planned capital improvements prior to July 1 of even numbered years to facilitate the UNIVERSITY's capital budget planning. It is acknowledged that emergency conditions may arise which may prevent the CITY from giving the UNIVERSITY such prior notification.
- C. It is agreed that any improvements to sewer lines serving the UNIVERSITY shall have the costs prorated in accordance with the estimated percentage of flows that the UNIVERSITY contributes, or may contribute in the future, to the sewer line relative to the respective non-UNIVERSITY flows and any other



factors deemed appropriate by the CITY and the UNIVERSITY. The CITY and the UNIVERSITY will meet to establish proration of such costs for each particular sewer line improvement proposed. In the event the CITY and UNIVERSITY are unable to agree on said proration by direct negotiation, they agree to participate, in good faith, in a mediation. The mediator shall be chosen by agreement of the parties. The parties agree that mediation shall precede any action in a judicial or quasi-judicial tribunal. If the parties fail to resolve the dispute in mediation, they agree to submit to binding arbitration pursuant to RCW 7.04.

## VI. OPERATION AND MAINTENANCE

- A. It is mutually agreed that the average flow and average load estimated for 1992 through 1996 using the year-round load, as established in the 1998 General Sewer Plan, are the appropriate basis for the apportionment of maintenance and operation costs. The noted analysis estimated the related UNIVERSITY contribution to be thirty-six point four percent (36.4%) and the related CITY contribution to be sixty-three point six percent (63.6%). Therefore, the UNIVERSITY agrees to provide thirty-six point four percent (36.4%) of the maintenance and operation costs of the wastewater treatment plant and the CITY agrees to provide sixty-three point six percent (63.6%) of such costs.
- B. A review of the maintenance and operation fee proration between the UNIVERSITY and the CITY shall be made at any time either one of the parties makes written demand on the other, although no more than once in any twelve-month (12-month) period. Such review will consider relative growth of the parties, special operation and maintenance problems that may have developed, and any other factors or considerations that affect the apportionment of the costs. At the written request of either party, review may be made by an independent engineer or engineering firm acceptable to both the CITY and the UNIVERSITY. In the event such a review does proceed, the charge will be borne by the parties according to the existing apportionment prior to the review. In the event a modification to the proportional shares is deemed appropriate, recommendations will be made to the governing bodies of the parties. In the event the parties are unable to agree on the modification to the proportional shares by direct negotiation, they agree to participate, in good faith, in mediation. The mediator shall be chosen by agreement of the parties. The parties agree that mediation shall precede any action in a judicial or quasi-judicial tribunal. If the parties fail to resolve the dispute in mediation, they agree to submit to binding arbitration pursuant to RCW 7.04.



**VII. ADMINISTRATION**

- A. No new separate legal or administrative entity is created to administer this Agreement.
- B. This Agreement supercedes all previous agreements between the CITY and the UNIVERSITY regarding the wastewater treatment plant, its operation, capital improvements, engineering studies, or any other items related thereto. This Agreement does not alter, modify, or supersede any conduct regulated by federal, state, or local law, rule, regulation, or permit.
- C. All real and personal property and all modifications, improvements, additions, or repairs made to the system, except for the sewer collection system located within the campus boundary of the UNIVERSITY, shall remain the property of the CITY upon termination of the Agreement. The CITY agrees to assume and pay all liabilities of the system upon termination except for claims arising out of the UNIVERSITY's negligent or willful acts or omissions as described in Paragraph III.C and any UNIVERSITY portion of any financial liability existing at termination that initially was financed for a period of more than one year.

**VIII. NOTICES**

- A. All notices, requests, approvals, consents, or communications which may be required under this Agreement shall be given as follows:

Notice to the UNIVERSITY: Vice President for Business Affairs  
 Washington State University  
 P.O. Box 641045  
 Pullman, WA 99164-1045

Notice to the CITY: City Supervisor  
 City of Pullman  
 P.O. Box 249  
 Pullman, WA 99163

**IX. EFFECTIVE DATE AND FILING REQUIREMENTS**

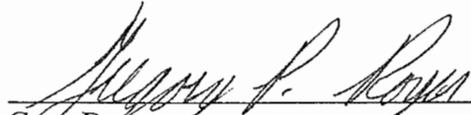
- A. This Agreement shall be effective upon the filing of the fully executed agreement with the Whitman County Auditor.



B. Interpretation. As a further condition of this Agreement, the CITY and the UNIVERSITY acknowledge that this Agreement shall be deemed and construed to have been prepared mutually by each party and it shall be expressly agreed that any uncertainty or ambiguity existing therein shall not be construed against any party. In the event that any party shall take an action, whether judicial or otherwise, to enforce or interpret any of the terms of the Agreement, the prevailing party shall be entitled to recover from the other party all expenses which it may reasonably incur in taking such action, including attorneys' fees and costs, whether incurred in a court of law or otherwise.

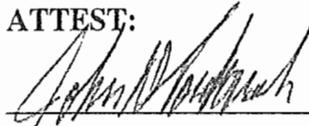
WASHINGTON STATE UNIVERSITY

CITY OF PULLMAN

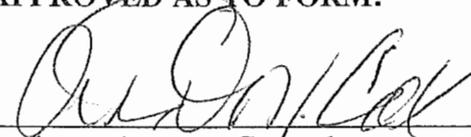
  
\_\_\_\_\_  
Greg Royer  
Vice President for Business Affairs  
Date: 3/15/01

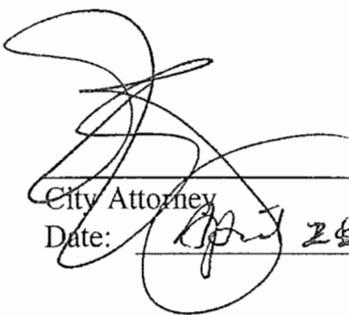
  
\_\_\_\_\_  
Mitchell D. Chandler  
Mayor  
Date: April 25, 2001

ATTEST:

  
\_\_\_\_\_  
Name: John D. Tonkovich  
Finance Director  
Date: April 25, 2001

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Assistant Attorney General  
Date: 3/12/01

  
\_\_\_\_\_  
City Attorney  
Date: April 25, 2001

**AMENDMENT NO. 1  
TO  
AGREEMENT RELATING TO PRORATION OF CAPITAL AND OPERATING COSTS  
OF THE PULLMAN WASTEWATER TREATMENT PLANT  
BETWEEN  
WASHINGTON STATE UNIVERSITY  
AND  
CITY OF PULLMAN**

This Amendment No. 1 to Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (“Amendment No. 1”) is made and deemed effective this 15<sup>th</sup> day of March, 2020 by and between Washington State University, an institution of higher education and agency of the State of Washington (“University”) and the City of Pullman, a municipal corporation and non-charter code city operating under the laws of the State of Washington (the “City”). University and City may be individually referred to herein as a “Party” or jointly referred to herein as the “Parties”.

**RECITALS**

**WHEREAS**, the Parties entered into that certain Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (the “Agreement”) with an effective date of May 2, 2001 for the purpose of formalizing the Parties’ agreement for allocation of capital improvement costs and operation and maintenance costs pertaining to the City’s wastewater treatment plant; and

**WHEREAS**, the Agreement is set to expire on June 30, 2020; and

**WHEREAS**, the Parties intend to execute a new cooperative agreement pursuant to Section II. of the Agreement, but first must complete an updated study to determine the appropriate amount and allocation of costs to be shared between the City and the University under the new agreement, which study will not be complete until December 2020 or a later date; and

**WHEREAS**, pending completion of the above referenced study, and execution of a new agreement, the Parties now desire to extend the term of the existing Agreement, as set forth herein below.

**NOW, THEREFORE**, for good and valuable consideration, the receipt of which is hereby acknowledged, the Parties agree to amend the Agreement as follows:

1. Duration and Termination. Section II. of the Agreement is hereby amended and replaced in its entirety as follows:

The duration of this Agreement shall be from the effective date hereof to June 30, 2021. Prior to the termination of this Agreement, the CITY and the UNIVERSITY will meet to examine then existing conditions affecting the operation of the wastewater treatment plant

and system and negotiate a new, revised cooperative agreement utilizing the updated study currently in progress as of the date of execution of this Amendment No. 1.

2. New Agreement. Upon mutual execution of this Amendment No. 1, the Parties shall work together in good faith to finalize the above referenced study and finalize their negotiations in order to execute a new, revised cooperative agreement between the Parties.

3. Other Terms and Conditions Unchanged. Apart from the modifications and amendments set forth above, the Agreement shall remain unchanged and in full force and effect. In the event of any conflict between the terms of the Agreement and this Amendment No. 1, the terms of this Amendment No. 1 shall control.

4. Capitalized Terms. All capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Agreement.

5. Rescission. All prior amendments or versions of this Amendment No. 1 shall be rescinded and shall have no force and effect.

**IN WITNESS WHEREOF**, the Parties have executed this Amendment No. 1 as of the date and year first written above.

**UNIVERSITY:**

**WASHINGTON STATE UNIVERSITY,  
an institution of higher education and agency  
of the State of Washington**

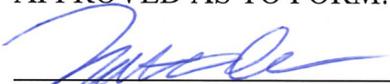
APPROVED BY:

Signature:   
Name: Ryan H. Goodell  
Title: AVP, Real Estate and Business ops.

RECOMMENDED BY:

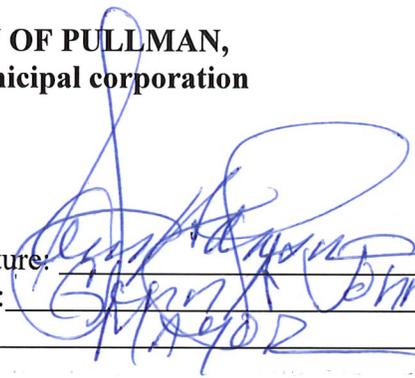
Signature:   
Name: Jason T. Sampson  
Title: Assistant Director Environmental Health  
and Safety

APPROVED AS TO FORM:

  
Assistant Attorney General

**CITY:**

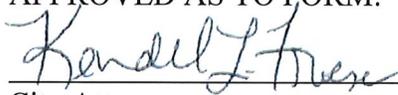
**CITY OF PULLMAN,  
a municipal corporation**

Signature:   
Name: Dee Stiles-Elliott  
Title: City Clerk

ATTEST:

Signature:   
Name: Dee Stiles-Elliott  
Title: City Clerk

APPROVED AS TO FORM:

  
City Attorney

**AMENDMENT NO. 2  
TO  
AGREEMENT RELATING TO PRORATION OF CAPITAL AND OPERATING COSTS  
OF THE PULLMAN WASTEWATER TREATMENT PLANT  
BETWEEN  
WASHINGTON STATE UNIVERSITY  
AND  
CITY OF PULLMAN**

This Amendment No. 2 to Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (“Amendment No. 2”) is made and deemed effective this 30 day of December, 2020 by and between Washington State University, an institution of higher education and agency of the State of Washington (“University”) and the City of Pullman, a municipal corporation and non-charter code city operating under the laws of the State of Washington (the “City”). University and City may be individually referred to herein as a “Party” or jointly referred to herein as the “Parties”.

**RECITALS**

**WHEREAS**, the Parties entered into that certain Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (the “Agreement”) with an effective date of May 2, 2001 for the purpose of formalizing the Parties’ agreement for allocation of capital improvement costs and operation and maintenance costs pertaining to the City’s wastewater treatment plant, which Agreement was scheduled to expire on June 30, 2020; and

**WHEREAS**, the Parties entered into that certain Amendment No. 1 to Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (“Amendment No. 1”) dated March 15, 2020 in which the Parties agreed to extend the term of the Agreement through June 30, 2021; and

**WHEREAS**, the Agreement and Amendment No. 1 shall collectively be referred to herein as the “Agreement”; and

**WHEREAS**, the Parties have initiated the updated study to determine the appropriate amount and allocation of costs to be shared between the City and the University under the new agreement, as contemplated in Amendment No. 1, and the Parties do not believe such updated study will be complete by December 2021 or a later date; and

**WHEREAS**, pending completion of the above referenced study, and execution of a new agreement, the Parties now desire to extend the term of the existing Agreement again, as set forth herein below.

**NOW, THEREFORE**, for good and valuable consideration, the receipt of which is hereby acknowledged, the Parties agree to amend the Agreement as follows:

1. Duration and Termination. Section II. of the Agreement is hereby amended as follows (deleted language ~~stricken~~, added language double-underlined):

The duration of this Agreement shall be from the effective date hereof to June 30, 2021 ~~2022~~. Prior to the termination of this Agreement, the CITY and the UNIVERSITY will meet to examine then existing conditions affecting the operation of the wastewater treatment plant and system and negotiate a new, revised cooperative agreement utilizing the updated study currently in progress as of the date of execution of Amendment No. 2 to this Agreement.

2. New Agreement. Upon mutual execution of this Amendment No. 2, the Parties shall work together in good faith to finalize the above referenced study and finalize their negotiations in order to execute a new, revised cooperative agreement between the Parties.

3. Other Terms and Conditions Unchanged. Apart from the modifications and amendments set forth above, the Agreement shall remain unchanged and in full force and effect. In the event of any conflict between the terms of the Agreement and/or Amendment No. 1 and the terms of this Amendment No. 2, the terms of this Amendment No. 2 shall control.

4. Capitalized Terms. All capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Agreement.

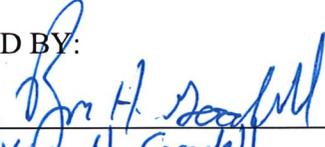
5. Counterparts. This Amendment No. 2 may be executed in any number of counterparts, each of which, when so executed and delivered shall be an original, but such counterparts shall together constitute but one and the same.

**IN WITNESS WHEREOF**, the Parties have executed this Amendment No. 2 as of the date and year first written above.

**UNIVERSITY:**

**WASHINGTON STATE UNIVERSITY,  
an institution of higher education and agency  
of the State of Washington**

APPROVED BY:

Signature:   
Name: Ryan H. Goodell  
Title: AVP, Real Estate and Business ops

RECOMMENDED BY:

Signature:   
Name: Jason T. Sampson  
Title: Asst Dir EHS

**CITY:**

**CITY OF PULLMAN,  
a municipal corporation**

Signature:   
Name: Glenn A. Johnson  
Title: MAYOR

ATTEST:

Signature:   
Name: DEE STILES-ELLIOTT  
Title: CITY CLERK

APPROVED AS TO FORM:



Assistant Attorney General

APPROVED AS TO FORM:



City Attorney

RESOLUTION NO. R-34-22

A RESOLUTION AUTHORIZING THE EXECUTION OF A THIRD AMENDMENT TO AN AGREEMENT RELATING TO PRORATION OF CAPITAL AND OPERATING COSTS OF THE PULLMAN WASTEWATER TREATMENT PLANT BETWEEN THE CITY OF PULLMAN AND WASHINGTON STATE UNIVERSITY, EXTENDING THE TERM THROUGH JUNE 30, 2023.

WHEREAS, on April 24, 2001, the City Council for the City of Pullman ("City Council") authorized by Resolution No. R-33-01 the execution of the Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (the "Agreement"), effective through June 30, 2020; and,

WHEREAS, on March 12, 2020, the Mayor of the city of Pullman issued an Emergency Order for the city of Pullman, Washington recognizing a public health and fiscal emergency and activating the utilization of emergency powers (the "Declaration of Emergency"); and,

WHEREAS, under the authority of the Declaration of Emergency, the Mayor and City Clerk executed the First Amendment to the Agreement on March 23, 2020, extending the term of the Agreement to June 30, 2021; and,

WHEREAS, on April 28, 2020, the City Council ratified the Declaration of Emergency dated March 12, 2020; and,

WHEREAS, on December 15, 2020, the City Council adopted Resolution No. R-83-20 authorizing the execution of the Second Amendment to the Agreement, extending the term of the Agreement to June 30, 2022; and,

WHEREAS, the intent of the prior amendments was to provide adequate time for the City and Washington State University ("WSU") to complete a valid study of the wastewater treatment plant's flow and loads attributable to WSU in order to develop an updated cost-sharing formula for the operating and capital costs of the City's wastewater treatment plant; and

WHEREAS, the study has now been completed, but data from the study was significantly impacted by COVID-19, including from WSU's decreased dorm occupancy rate in recent years due to students attending classes virtually, and it does not provide adequate data on which to determine the appropriate amount and allocation of costs to be shared between the City and WSU under a new cost-sharing agreement; and

WHEREAS, the City and WSU agree an additional study is necessary, which will not be complete until December 2022 or a later date; and,

WHEREAS, the City Council has determined it is in the best interests of the City to authorize the execution of a Third Amendment to the Agreement, attached hereto and incorporated herein as Exhibit "A", extending the term of the Agreement to June 30, 2023; now, therefore,

IT IS HEREBY RESOLVED that the Mayor and City Clerk are hereby authorized and directed to execute a Third Amendment to the Agreement, in the form attached hereto as Exhibit "A", and to take all steps necessary for the effectiveness and enforceability of said amendment.

IT IS FURTHER RESOLVED that the Mayor and City Administrator, and their designees, are each hereby authorized and directed to take such further action as may be appropriate in order to effect the purposes of this Resolution and the Third Amendment to the Agreement authorized thereby.

ADOPTED by the City Council of the city of Pullman at a regular meeting held on the 14<sup>th</sup> day of June, 2022.

DATED this 15<sup>th</sup> day of June, 2022.



*[Handwritten signature of Glenn A. Johnson]*

Mayor Glenn A. Johnson

ATTEST:

*[Handwritten signature of Dee Stiles-Elliott]*

City Clerk Dee Stiles-Elliott

Approved as to Form,

*[Handwritten signature of Laura D. McAloon]*  
City Attorney Laura D. McAloon

**FILED**

**JUN 15 2022**

CITY CLERK'S OFFICE  
PULLMAN WASHINGTON

**AMENDMENT NO. 3  
TO  
AGREEMENT RELATING TO PRORATION OF CAPITAL AND OPERATING COSTS OF  
THE PULLMAN WASTEWATER TREATMENT PLANT  
BETWEEN  
WASHINGTON STATE UNIVERSITY  
AND  
CITY OF PULLMAN**

This Amendment No. 3 to Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant ("Amendment No. 3") is made and deemed effective this 6<sup>th</sup> day of May, 2022 by and between Washington State University, an institution of higher education and agency of the State of Washington ("University") and the City of Pullman, a municipal corporation and non-charter code city operating under the laws of the State of Washington (the "City"). University and City may be individually referred to herein as a "Party" or jointly referred to herein as the "Parties".

**RECITALS**

**WHEREAS**, the Parties entered into that certain Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (the "Agreement") with an effective date of May 2, 2001, for the purpose of formalizing the Parties' agreement for allocation of capital improvement costs and operation and maintenance costs pertaining to the City's wastewater treatment plant; and

**WHEREAS**, in accordance with Amendment No. 1 and Amendment No. 2 to the Agreement, both of which extended the term of the Agreement, the Agreement is currently set to expire on June 30, 2022; and

**WHEREAS**, the Parties intend to execute a new cooperative agreement pursuant to Section II of the Agreement, but first must complete an updated flow and load study to determine the appropriate amount and allocation of costs to be shared between the City and the University under the new agreement; and

**WHEREAS**, the Parties undertook an updated study titled "City of Pullman Analysis of WSU Flow and Loads" ("Study") attached as Exhibit 1 for reference, the data from which was significantly impacted by COVID-19, including from the University's decreased dorm occupancy rate in recent years due to students attending classes virtually; and

**WHEREAS**, the Parties agree that the Study is not an accurate study on which to determine the appropriate amount and allocation of costs to be shared between the City and the University under the new agreement due to the reasons set forth above; and

**WHEREAS**, the Parties agree an additional study is necessary, which will not be complete until December 2022 or a later date; and

**WHEREAS**, pending completion of the above referenced study, and execution of a new agreement, the Parties now desire to extend the term of the existing Agreement, as set forth herein below.

**NOW, THEREFORE**, for good and valuable consideration, the receipt of which is hereby acknowledged, the Parties agree to amend the Agreement as follows:

1. Duration and Termination. Section II. of the Agreement is hereby amended as follows (deleted language ~~stricken~~, added language double-underlined):

The duration of this Agreement shall be from the effective date hereof to June 30, ~~2022~~ 2023. Prior to the termination of this Agreement, the CITY and the UNIVERSITY will meet to examine then existing conditions affecting the operation of the wastewater treatment plant and system and negotiate a new, revised cooperative agreement utilizing the updated study currently in progress as of the date of execution of Amendment No. 3 to this Agreement.

2. New Agreement. Upon mutual execution of this Amendment No. 3, the Parties shall work together in good faith to finalize the above referenced study and finalize their negotiations in order to execute a new, revised cooperative agreement between the Parties.

3. Other Terms and Conditions Unchanged. Apart from the modifications and amendments set forth above, the Agreement shall remain unchanged and in full force and effect. In the event of any conflict between the terms of the Agreement and/or Amendment No. 1 or Amendment No. 2 and the terms of this Amendment No. 3, the terms of this Amendment No. 3 shall control.

4. Capitalized Terms. All capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Agreement.

5. Counterparts. This Amendment No. 3 may be executed in any number of counterparts, each of which, when so executed and delivered shall be an original, but such counterparts shall together constitute but one and the same.

IN WITNESS WHEREOF, the Parties have executed this Amendment No. 3 as of the date and year first written above.

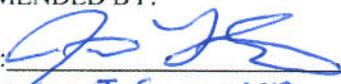
**UNIVERSITY:**

**WASHINGTON STATE UNIVERSITY,  
an institution of higher education and agency  
of the State of Washington**

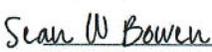
APPROVED BY:

Signature:   
Name: Amanda N. Owen  
Title: Assoc. Dir., RE and Bus Ops

RECOMMENDED BY:

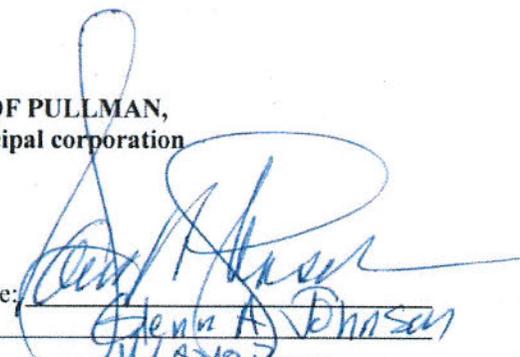
Signature:   
Name: Jason T. Sampson  
Title: Director EHS

APPROVED AS TO FORM:

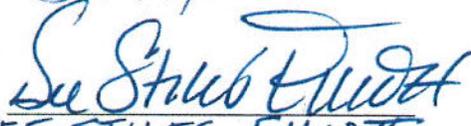
DocuSigned by:  
  
234 Assistant Attorney General

**CITY:**

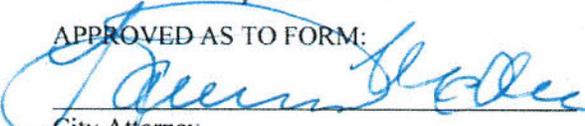
**CITY OF PULLMAN,  
a municipal corporation**

Signature:   
Name: Henry A. Phason  
Title: MAYOR

ATTEST:

Signature:   
Name: DEE STILES-ELLIOTT  
Title: CITY CLERK

APPROVED AS TO FORM:

  
City Attorney

**Exhibit 1**

City of Pullman Analysis of WSU Flow and Loads Study

(To Be Attached)



J-U-B COMPANIES

THE  
LANGDON  
GROUPGATEWAY  
MAPPING  
INC.

## Technical Memorandum

**DATE:** March 10, 2022

**TO:** Shawn Kohtz, P.E., Public Works Director, City of Pullman  
Clayton Forsmann, P.E., Deputy Director of Public Works, City of Pullman

**FROM:** Colt Shelton, P.E.  
David Watkins, P.E.

**SUBJECT:** City of Pullman Analysis of WSU Flow and Loads



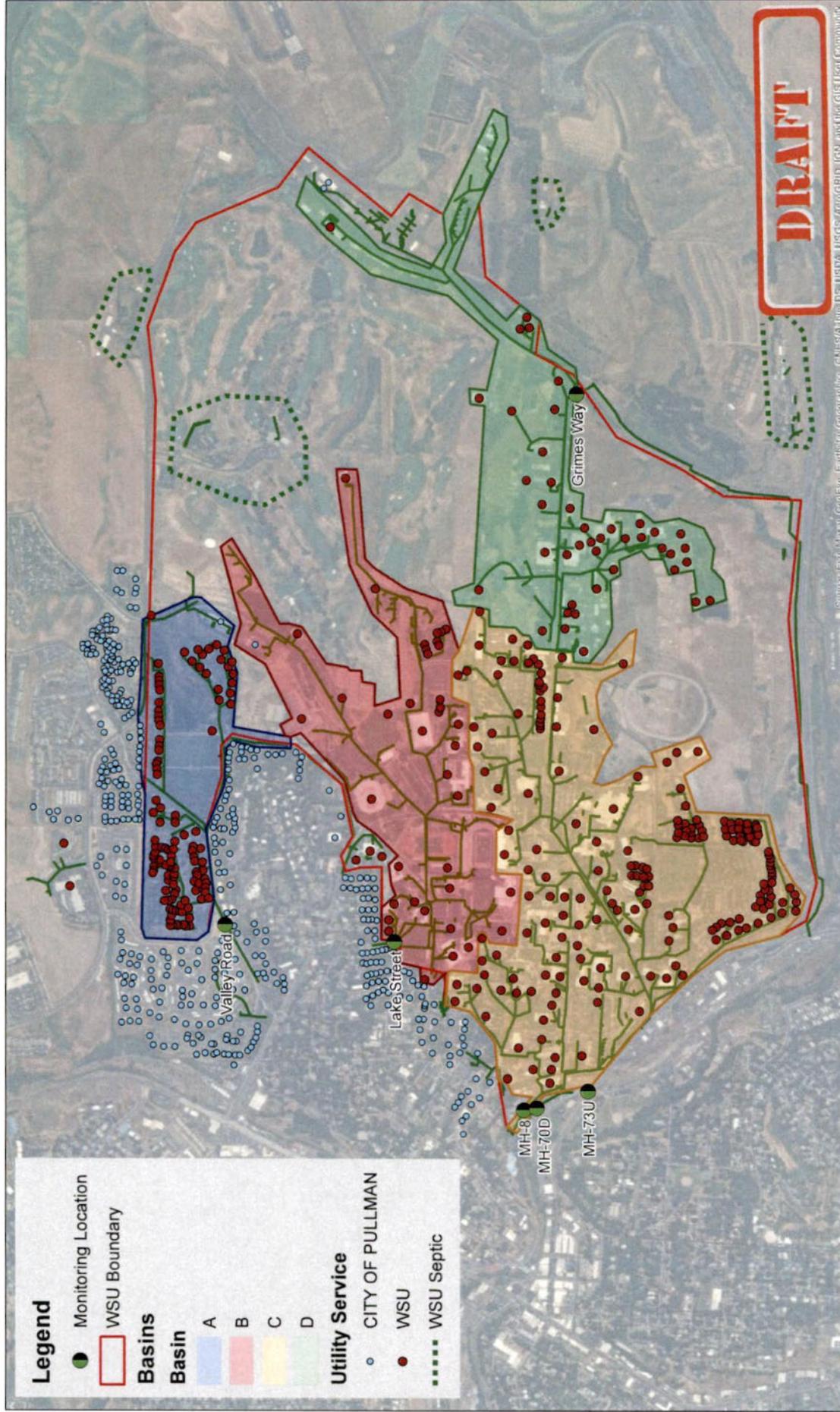
### I. INTRODUCTION

This technical memorandum summarizes the results of a flow and loading study at the point of connection between the Washington State University (WSU) system and the City of Pullman (City) system. The purpose of this study is to determine the contribution of flow and loads from WSU to the City. Flows were measured by J-U-B Engineers, Inc. (JUB) during the "wet" period and the "dry" period of the year for Basin C. In addition, the City and WSU provided flow data for Basins A, B, and D, as well as constituent loading data from all basins. **Figure 1** delineates the four WSU flow basins (A, B, C, and D).

### II. SOCIETAL EVENTS

During the wet weather flow monitoring period, unprecedented events occurred that could, and likely did, affect the results of the study. The following events occurred during the wet weather monitoring period:

- February 24, 2020 – Flow Monitors installed.
- February 28, 2020 – Recleaning of WSU line complete.
- February 29, 2020 – Washington State Governor Jay Inslee issues state of emergency for all counties in Washington for COVID-19 pandemic.
- March 11, 2020 – WSU announces transition to online classes after spring break.
- March 14, 2020 – WSU spring break starts March 16, 2020 – Flow Monitors removed after discussion with City about WSU transition to online classes.
- March 22, 2020 – WSU spring break ends.
- March 23, 2020 – WSU transitions fully to online classes.
- March 25, 2020 – Washington State Governor Jay Inslee issues mandatory stay-at-home order for the entire state to help slow the spread of COVID-19.



The wet weather flow monitoring period was initially selected to capture WSU's spring break, in attempt to observe the students' contribution to wastewater flow and loads. As nearly 20,000 students attend WSU on the Pullman campus, this was expected to be significant. Unfortunately, due to the COVID-19 events outlined above, the effect of students leaving campus was not apparent in the study results. Additionally, because COVID-19 events coincide with the majority of the wet weather period, it was assumed that the entire wet weather flow and loading analysis period reflects suspect data and was not used in the final analysis for the flow splits. Students did not return to campus until the 2021-2022 school year and the dry weather period was paused until July of 2021 to capture the new normal conditions.

### III. WET WEATHER MONITORING

The wet weather monitoring period was February 24, 2020 to March 16, 2020. JUB selected the dates in attempt to capture higher, more dilute flow that typically occurs during late winter and early spring months, as a result of greater precipitation and increased infiltration and inflow. Unfortunately, no significant precipitation events occurred during the monitoring period.

Due to the occurrence of COVID-19, fewer constituent sampling events were reported during the wet weather period than anticipated. Consequently, in the absence of available wet weather data and upheaval of typical flow and loading patterns, the data was not used in the analysis. Wet weather analytical sampling was completed for Basins B, C, and D and was reviewed and confirmed to contain data representing abnormal characteristics and patterns. Loading samples were collected for the following items:

- pH
- Biochemical oxygen demand (BOD)
- Total suspended solids (TSS)
- Total phosphorus (Total P)
- Total Kjeldahl nitrogen (TKN)

A description of the flow monitoring events for each basin is provided below even though the wet weather data was not used. Graphs showing flows from the wet weather monitoring period for each basin are shown in the **Appendix A**. The loading summary is shown on **Figure 1**.

#### BASIN A

Flow data for Basin A was provided from 2019 water meter readings from the City and total count of dwelling units for WSU owned apartments. This data includes flows from January to December of 2019 (pre-COVID). Data for Basin A was provided to JUB from WSU in the middle of April 2020. The data provided was the total count of dwelling units and the typical percent occupied. To determine the flows for Basin A, JUB used literature values for the specific dwelling units WSU provided and the historical flows from the City

water meter readings. Loading in Basin A was estimated using dry weather period data because loading samples were not collected in that basin due to early termination of the sampling program from COVID.

#### **BASIN B**

Data for Basin B was calculated using the flow data from the Lake Street permanent meter station, the WSU Streit Perham dorms, and the Marriot Residence Inn. Flow data for Lake Street was provided on a monthly usage rate for each month from 2017 to 2020. Flow data for the Marriot Residence Inn was provided on a monthly basis from 2015 to 2020. Flow data for the dorms was determined using bed counts and literature values. The total flow for Basin B was calculated by adding the flows from Lake Street with the flows from the dorms and subtracting the flows from the Marriot Residence Inn.

#### **BASIN C**

Wet weather monitoring was completed for a three-week period from February 24, 2020 to March 16, 2020. Flow monitors were installed in three (3) manholes to determine the contribution from WSU to the City system, referred to as Basin C. To do this, one monitor was installed upstream of the connection point between the WSU and City system in MH-73U, one monitor was installed downstream of the connection point between the WSU and City System in MH-70D, and one monitor was installed in a manhole collecting flows directly from WSU in MH-8. WSU flow contribution to the City system was calculated by subtracting the flow measured from MH-73U from MH-70D, then adding MH-8. Loading rates for each manhole were calculated using the sample data provided from the City sample monitors that were installed during the same time period as the JUB flow monitors. Sample locations were in MH-8 and the WSU outfall manhole on College Ave before it joins flows from the City.

During data collection, the flow monitor in MH-8 had to be reinstalled due to gravel buildup in the pipe that caused inaccurate readings. The pipe was cleaned out by the City and WSU. The reinstallation of the monitor occurred on February 28, 2020. Data for the time period from February 24 to February 28 is considered inaccurate.

#### **BASIN D**

Basin D data consists solely of the flows measured from Grimes Way permanent meter station. Data for Grimes Way was provided from May 2019 to March 2020.

#### **IV. DRY WEATHER MONITORING**

JUB defined a dry weather monitoring period from July 15, 2021 to September 2, 2021. Wastewater systems generally experience lower, more concentrated flow during late summer. Only minor precipitation events occurred during this period which did not appear to cause measurable infiltration or inflow.

The dry weather period captured the conclusion of summer break and the beginning of WSU's 2021-2022 school year, allowing the monitoring period to be broken into observations with students and without students. WSU's Week of Welcome occurred the week of August 14, 2021, and the school year officially began the following Monday, August 23, 2021. Based on the assumption many students arrived two weeks prior to the first day of instruction, the dry weather period was divided into "without students" and "with students" periods before and after August 9, 2021, respectively. The average flowrates and shape of the flowrate versus time curve obtained from the continuous flow monitors in Basin C support this assumption.

The return to school in August of 2021 appears to begin a return to normal for flows and loading at the WSU campus. The impacts of COVID on student preferences to live on and/or off campus and typical wastewater generation patterns still are being felt. Graphs showing flows from the dry weather monitoring period for each basin are shown in the **Appendix B**.

#### **BASIN A**

Basin A used water meter records from the 2019 data for July through September. Flows for Basin A were estimated using a combination of the 2019 water meter readings and literature values from Metcalf and Eddy (2014) as was done in the wet weather monitoring period. During the flow monitoring period, the City sampled the Basin A effluent three separate times from the same downstream manhole and provided results including pH, BOD, TSS, TKN, and total P.

#### **BASIN B**

Similar to the wet weather flow period, total flow in Basin B was calculated by adding the flows from Lake Street with the flows from the Streit Perham dormitory and subtracting the flows from the Marriot Residence Inn. Average daily flowrates in Lake Street were calculated from daily total volume, provided from July through September 2021. Dorm flowrate corresponded to a provided occupancy and a typical flowrate per bed given by Metcalf and Eddy (2014). The Marriott average daily flowrate was estimated from monthly total volumes, July through September 2021. During the monitoring period, 19 loading samples were collected for the same constituents listed in Basin A, above.

#### **BASIN C**

Dry weather monitoring occurred in MH-73U, MH-70D, and MH-8 from July 15, 2021 to September 2, 2021. As with wet weather monitoring, the total Basin C flowrate corresponded to MH-73U subtracted from MH-70D and added to MH-8. Unfortunately, the flow monitors recorded "flashy" data throughout the monitoring period, likely the result of regular, rapid flushing of large wastewater volumes upstream (such as from a car

wash, brewery washdowns, etc.). To mitigate error introduced, data was cleaned by removing any negatives from the individual MH datasets, as well as the total basin dataset, and removing any outlier points.

Several other events occurred that required data adjustments. During data collection, solids built up in MH-70D, requiring cleaning of the flowmeter to achieve accurate readings. Additionally, missing data was filled during a brief gap in recording in MH-8 at the end of the monitoring period. Finally, a few days of abnormally low flow, which may have resulted from monitor error or unusual events, were removed from analysis.

During the monitoring period, 13 samples were collected for the same constituents listed under Basin A above.

## BASIN D

The WSU provided average hourly flowrates observed in Grimes Way meter station. Again, this represented the entirety of Basin D. During the dry weather period, the City sampled and provided results for 16 loading samples.

## V. WASTEWATER TREATMENT PLANT

The City also provided wastewater treatment plant (WWTP) influent BOD, TSS, and flow data from January 2020 to October 2021. TKN and Total P data was not available at the WWTP. WWTP data represents all flow collected in the City's system, including the contributions by WSU. Graphs showing flows from the wet and dry weather monitoring periods are shown in **Appendix A** and **Appendix B**, respectively.

## VI. Flow Analysis

**Table 1** summarizes flows experienced in the City's system, as recorded at the WWTP and at the WSU outfalls. WSU total flowrates represent the summation of the average daily flows observed in Basins A, B, C, and D. Note that the City flowrate (in gallons per minute, gpm) captures wastewater generated by WSU *in addition* to all other sources in the City. However, the percentage reported represents the portion of the wastewater produced by City sources *other than* WSU.

**Table 1 – Average Flowrate**

Period	All City		WSU	
	gpm	% Flow (City only)	gpm	% Flow
WW <sup>1</sup> with students	2,150	55.6%	955	44.4%
DW <sup>2</sup> without students	1,415	58.2%	591	41.8%
DW <sup>2</sup> with students	1,676	59.4%	681	40.6%
<b>Weighted Average<sup>3</sup></b>	<b>1,747</b>	<b>59.1%</b>	<b>742</b>	<b>40.9%</b>

<sup>1</sup> Wet weather monitoring period – not used to determine weighted average

<sup>2</sup> Dry weather monitoring period

<sup>3</sup> Weighted Average based on 9 months of with student population and 3 months of without student population

Although the flowrates varied during the different periods, the proportion of the City flow supplied by WSU remained relatively constant. During recorded periods, WSU produced approximately 41% - 44% of the total City flow. However, as noted above, wet weather data was considered unrepresentative because of COVID-19 and was not used in the analysis. Therefore, the dry weather with students and the without students were combined with a weighted average based on the number of months students were present at the WSU Pullman campus.

## VII. BOD and TSS Analysis

**Table 2** summarizes loads in pounds per day (lb/day) observed in the City's entire system, as recorded at the WWTP and at WSU. Again, note that City's lb/day value captures WSU contributions, while the City percentage does not. The wet weather sample data did not follow typical trends and confirmed the data did not represent normal characteristics. Dry weather data appears to continue to have some abnormalities making the data set suspect.

**Table 2 – Average BOD and TSS Loading**

Period	BOD				TSS			
	All City		WSU		All City		WSU	
	lb/d	% BOD (City only)	lb/d	% BOD	lb/d	% TSS (City only)	lb/d	% TSS
WW <sup>1</sup> with students	7,315	65.5%	2,521	34.5%	6,373	72.8%	1,732	27.2%
DW <sup>2</sup> without students	4,308	75.2%	1,069	24.8%	4,016	81.4%	748	18.6%
DW <sup>2</sup> with students	6,195	74.5%	1,579	25.5%	5,102	77.7%	1,139	22.3%
<b>Average</b>	<b>5,939</b>	<b>71.7%</b>	<b>1,723</b>	<b>28.3%</b>	<b>5,164</b>	<b>77.3%</b>	<b>1,206</b>	<b>22.7%</b>

<sup>1</sup> Wet weather monitoring period

<sup>2</sup> Dry weather monitoring period

BOD concentrations during the wet weather and dry weather did not follow typical trends for influences from infiltration and inflow (I/I) on domestic waste. Typically, wet weather concentrations should be lower (more dilute) than dry weather concentrations due to the presence of I/I in the system. However, only Basin D followed this trend. Lack of wet weather samples in Basin A did not allow comparison of the different monitoring periods and may skew the data. Basins B maintained about equal concentrations during both monitoring periods, with slightly higher concentrations during wet weather. Basin C has wet weather concentrations about double the dry weather concentrations and dry weather concentrations are very low for domestic strength waste. Basin C is the largest flow producing basin and generally has more flow than the other basins combined. Therefore, the low dry weather concentrations cause the data set to be lower than expected and trend opposite normal patterns. This is also observed in **Figure 1** and **Figure 2**. All four basins maintain BOD and TSS concentrations (in milligrams per liter, mg/L) near

or below the WWTP influent, with Basins A and B exhibiting consistently higher BOD and TSS concentrations than Basins C and D.

**Table 2** summarizes the quantities of BOD and TSS during the monitoring periods. The data shows lower quantities of BOD and TSS during “dry weather without students” than the other periods, which is expected. However, when students returned, BOD quantities remain far below the wet weather quantities. During dry weather, WSU contributed 25% of BOD and approximately 20% of TSS. However, as previously discussed, WSU supplies over 40% of the City’s total flow, implying that WSU’s wastewater was sampled as consistently more dilute than wastewater from other sources in the City and typical domestic waste.

Figure 1 – BOD Concentration

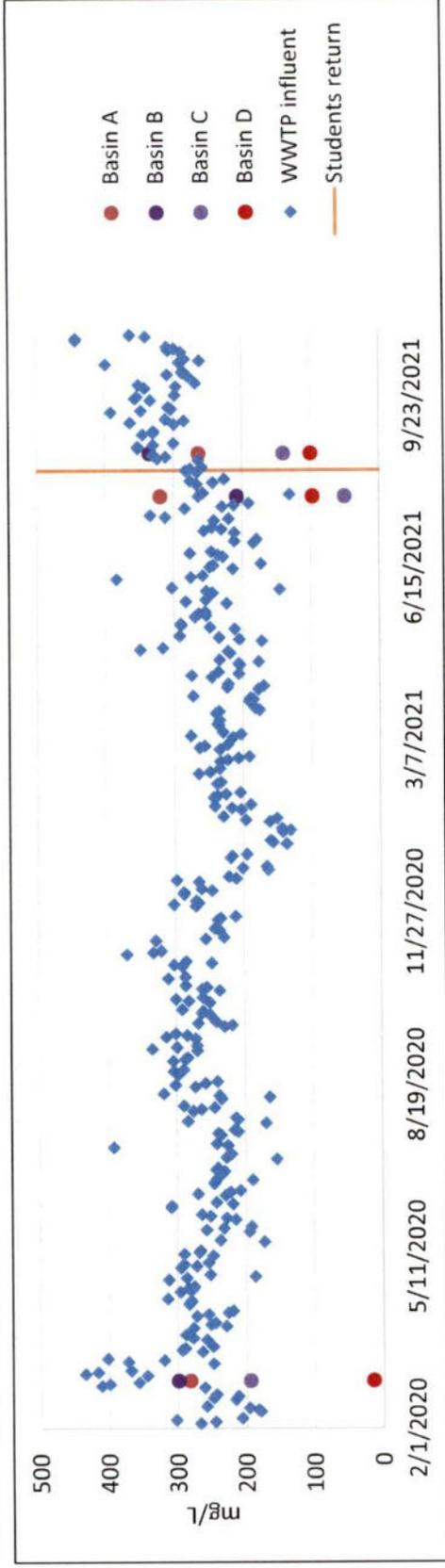
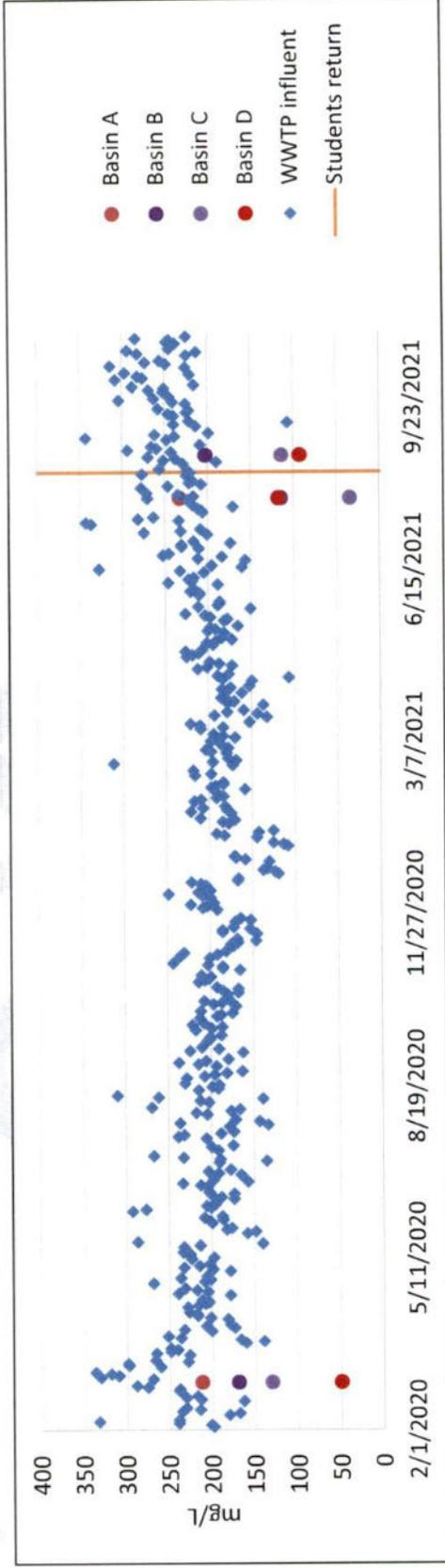


Figure 2 – TSS Concentration



## VIII. Other Constituents

In addition to BOD and TSS, the City also provided nitrogen (in the form of TKN) and phosphorus (total P) sample results for Basins A, B, C, and D. Because these values were not reported for the WWTP, literature values served as a basis of comparison for 'typical' wastewater loading. Loads correspond to average concentrations obtained from Metcalf and Eddy (2014) and observed WWTP flowrates. **Table 3** summarizes TKN and total P.

**Table 3 – WSU Loading of Other Constituents**

Period	TKN (lb/d)		Tot. P (lb/d)	
	Literature value <sup>1</sup>	WSU	Literature value <sup>1</sup>	WSU
WW <sup>2</sup> with students	516	387	91.8	54.0
DW <sup>3</sup> without students	319	83	56.8	23.4
DW <sup>3</sup> with students	368	253	65.4	33.7

<sup>1</sup> Calculated with observed flowrates and typical municipal wastewater concentrations of 45 mg/L TKN and 8 mg/L total P, as reported in Metcalf and Eddy (2014).  
<sup>2</sup> Wet weather monitoring period – suspect data.  
<sup>3</sup> Dry weather monitoring period.

Similar to BOD and TSS, WSU appears to produce relatively more dilute wastewater than a typical domestic source. This is most significant during the “dry weather without students” period, when WSU generated approximately 26% of expected TKN loading and 41% of expected total P. The results indicate wastewater characteristics are likely still being influenced by COVID and may not be representative of a return to more normal conditions in the coming years.

## IX. Recommendations

J-U-B met with the City and WSU to review the data gathered from the monitoring periods and developed an approach for WSU to compensate the City for treatment of the wastewater generated. The current agreement between the City and WSU divides the cost between the following two categories based on past flow and loading:

**Table 4 - Previous Agreement Between City and WSU**

Current Agreement	CITY %	WSU %
Capital Improvements	63.6%	36.4%
Maintenance & Operation	63.6%	36.4%

During discussions between the City and WSU, they agreed the best approach going forward was to keep the same structure of the agreement and updated the values based

on the dry weather flow splits. Upon recovery from COVID, additional loading samples and/or flow monitoring could be completed to help determine if BOD loading should be included in the splits. (or .....).

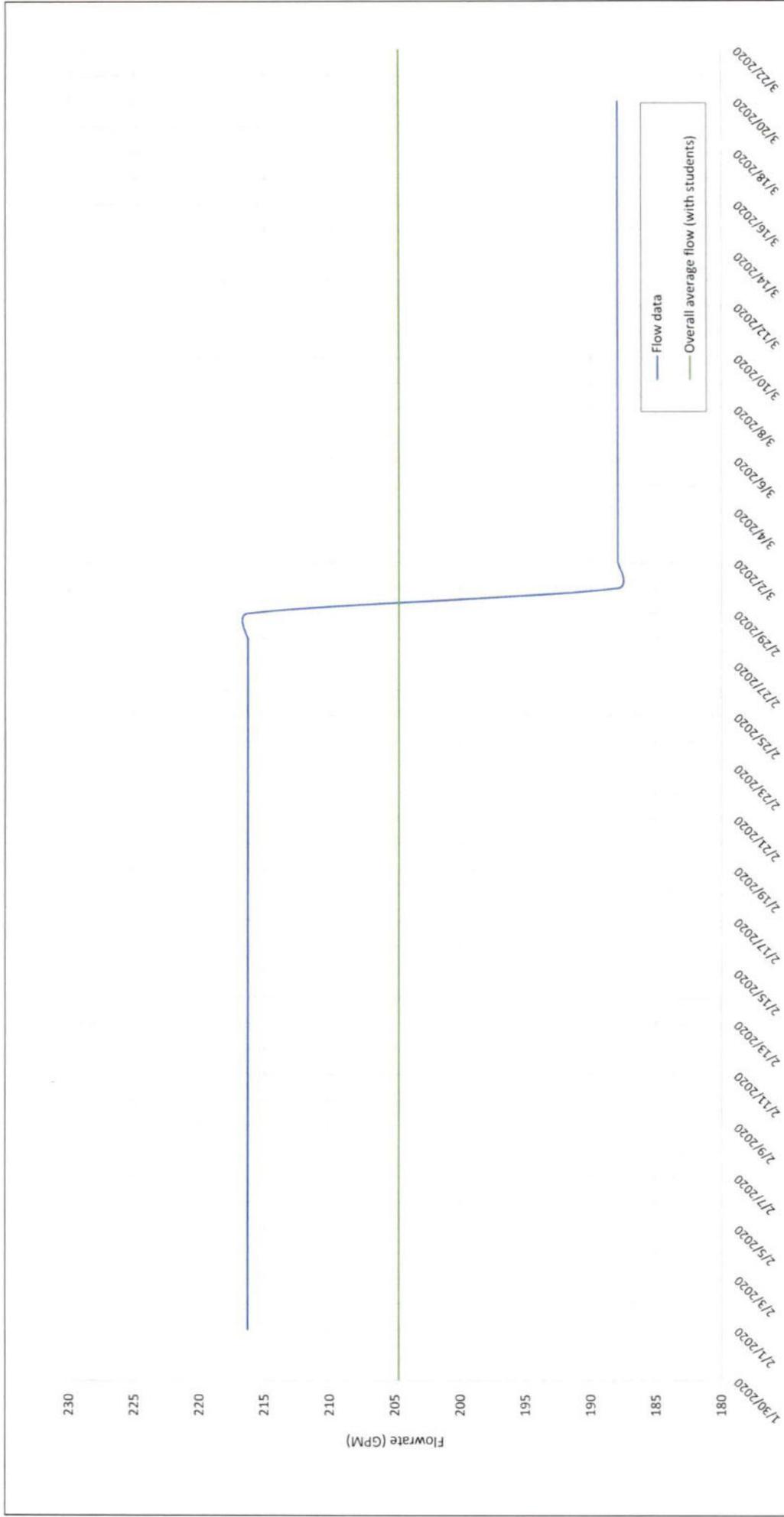
The outcome of the meeting is a new agreement between the City and WSU that the City will pass as Resolution XYZ. The agreement allows for WSU to be billed on 40.9 percentage of the City's flow meter at the WWTP year round, with an additional 40.9% contribution to capital improvement projects.

**Table 5. Proposed Agreement Between City and WUS**

Proposed Agreement	CITY %	WSU %
Capital Improvements	59.1%	40.9%
Maintenance & Operation	59.1%	40.9%

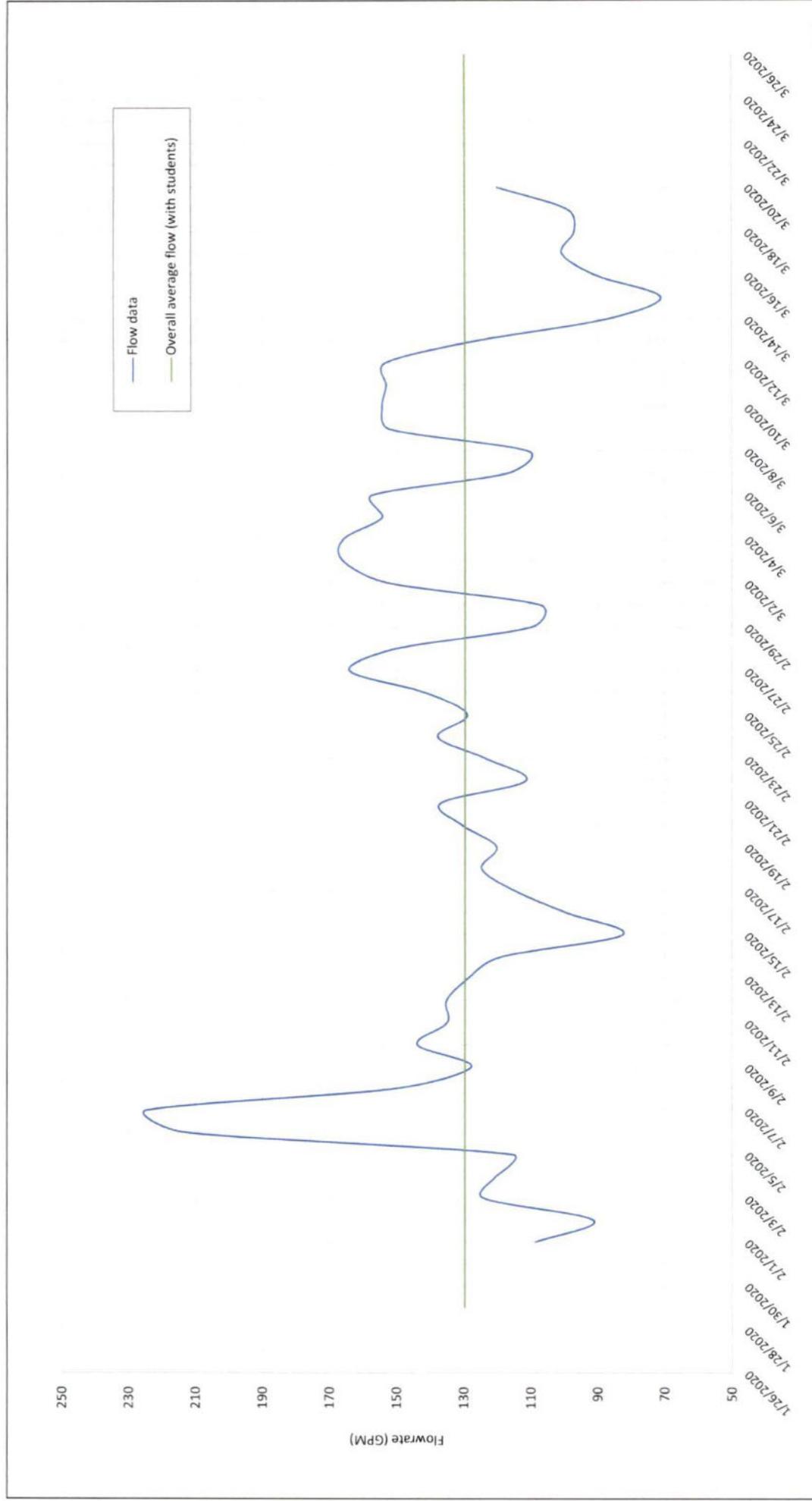
**APPENDIX A – Wet Weather Flow Monitoring Graphs**

DRAFT

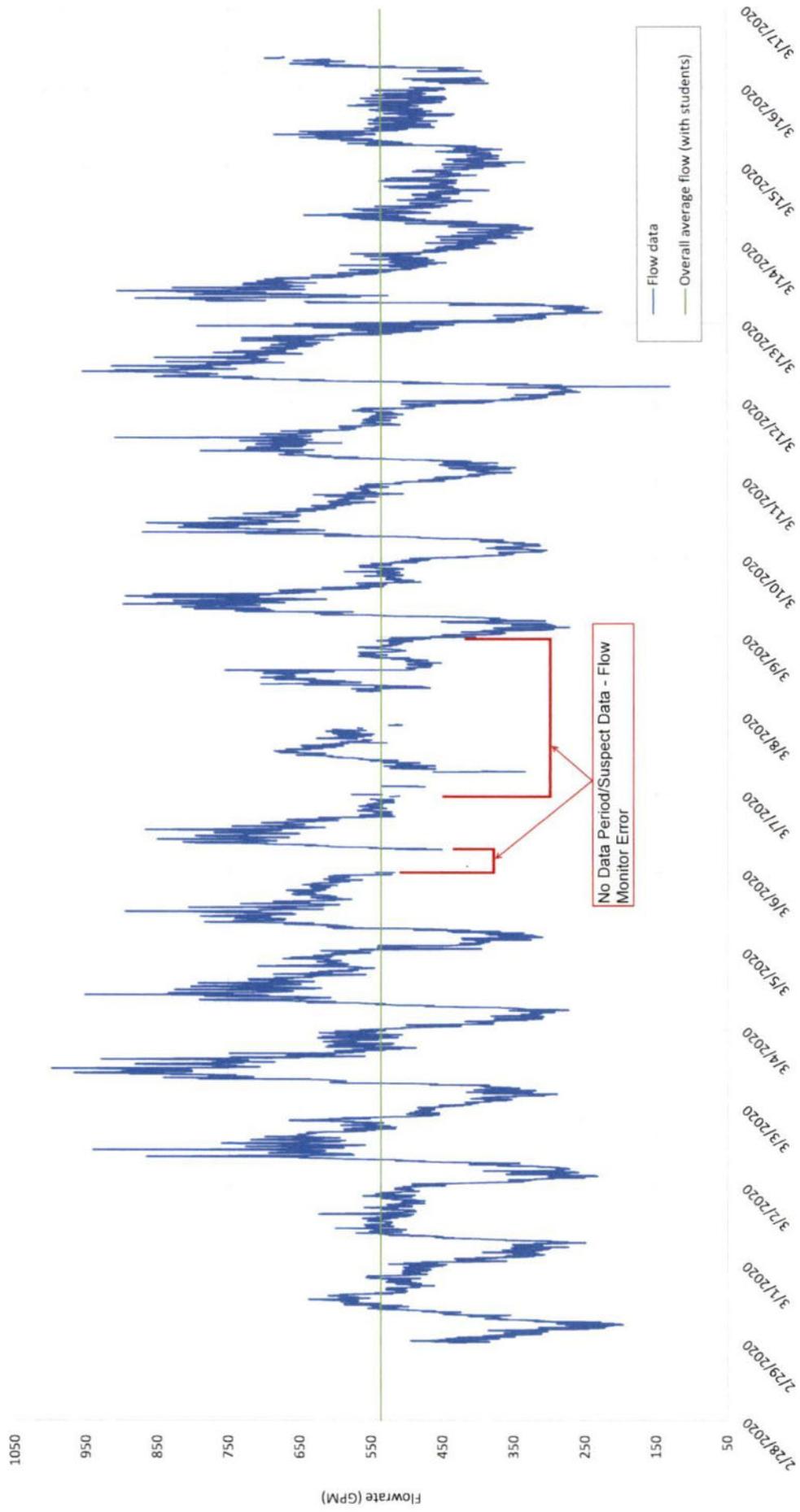


# BASIN A WET WEATHER FLOW WSU FLOW & LOADS

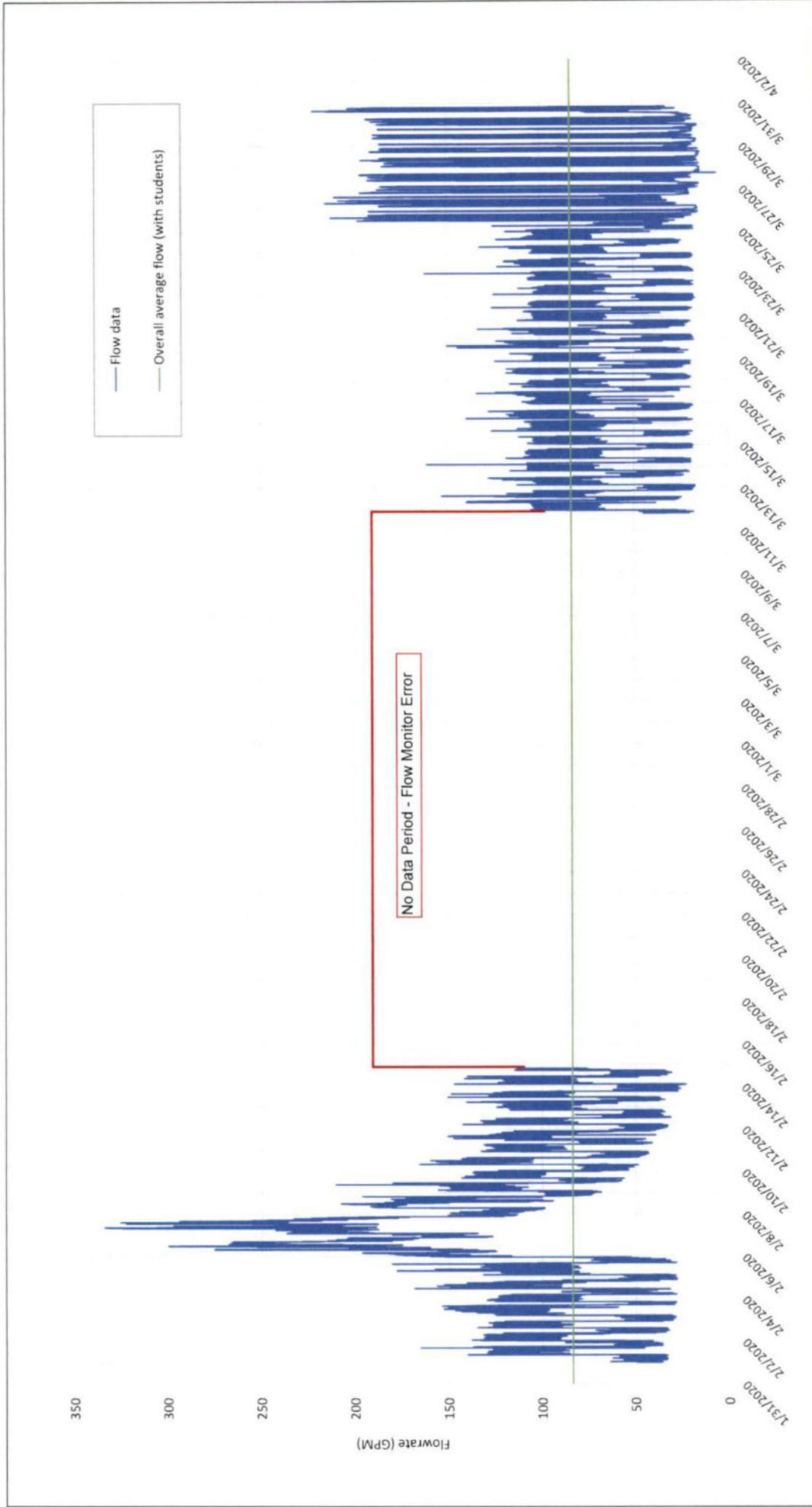




# BASIN B WET WEATHER FLOW WSU FLOW & LOADS



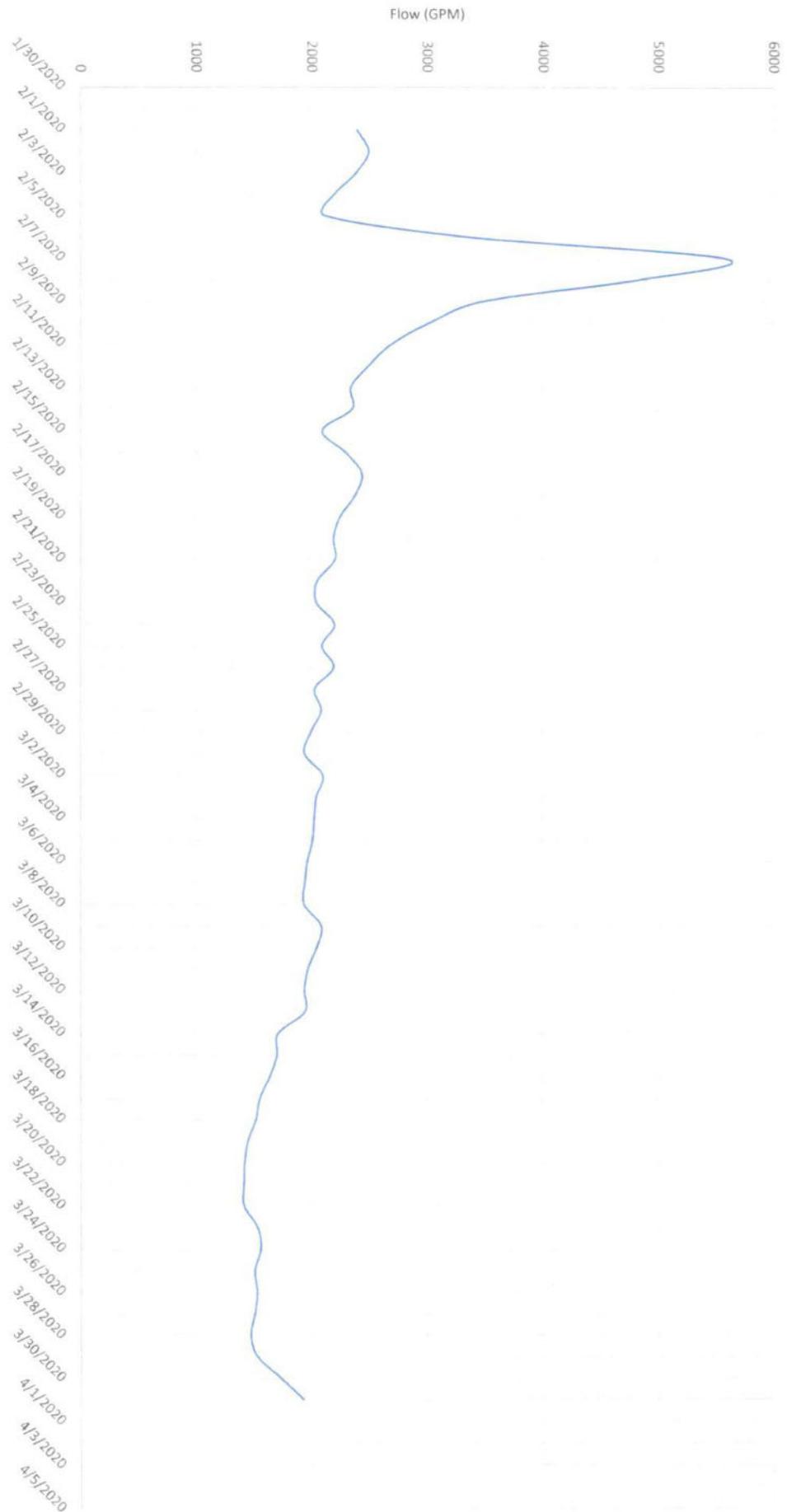
# BASIN C WET WEATHER FLOW WSU FLOW & LOADS



**DRAFT**

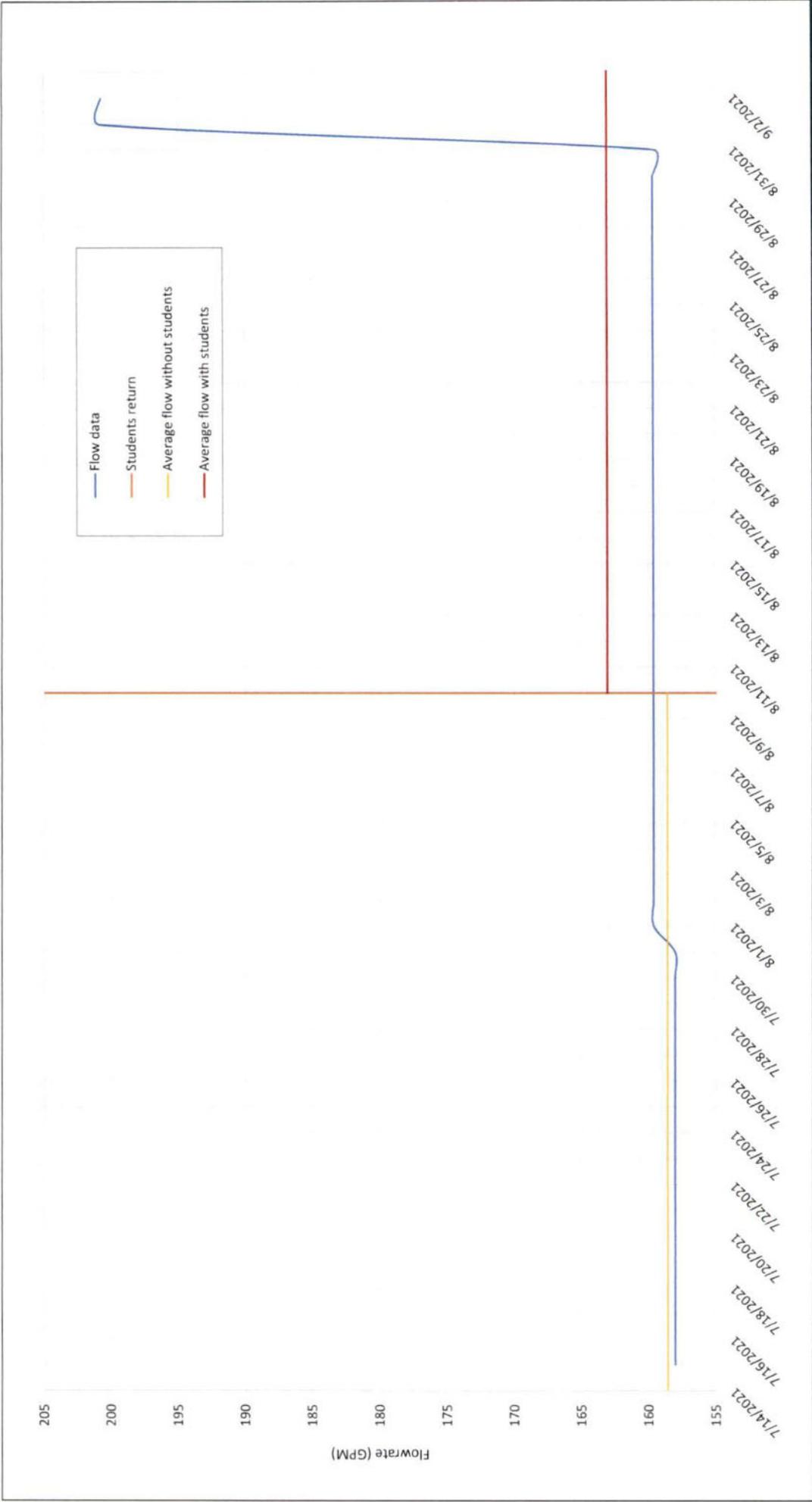
# BASIN D WET WEATHER FLOW WSU FLOW & LOADS

# CITY WWTP WET WEATHER WSU FLOW & LOADS



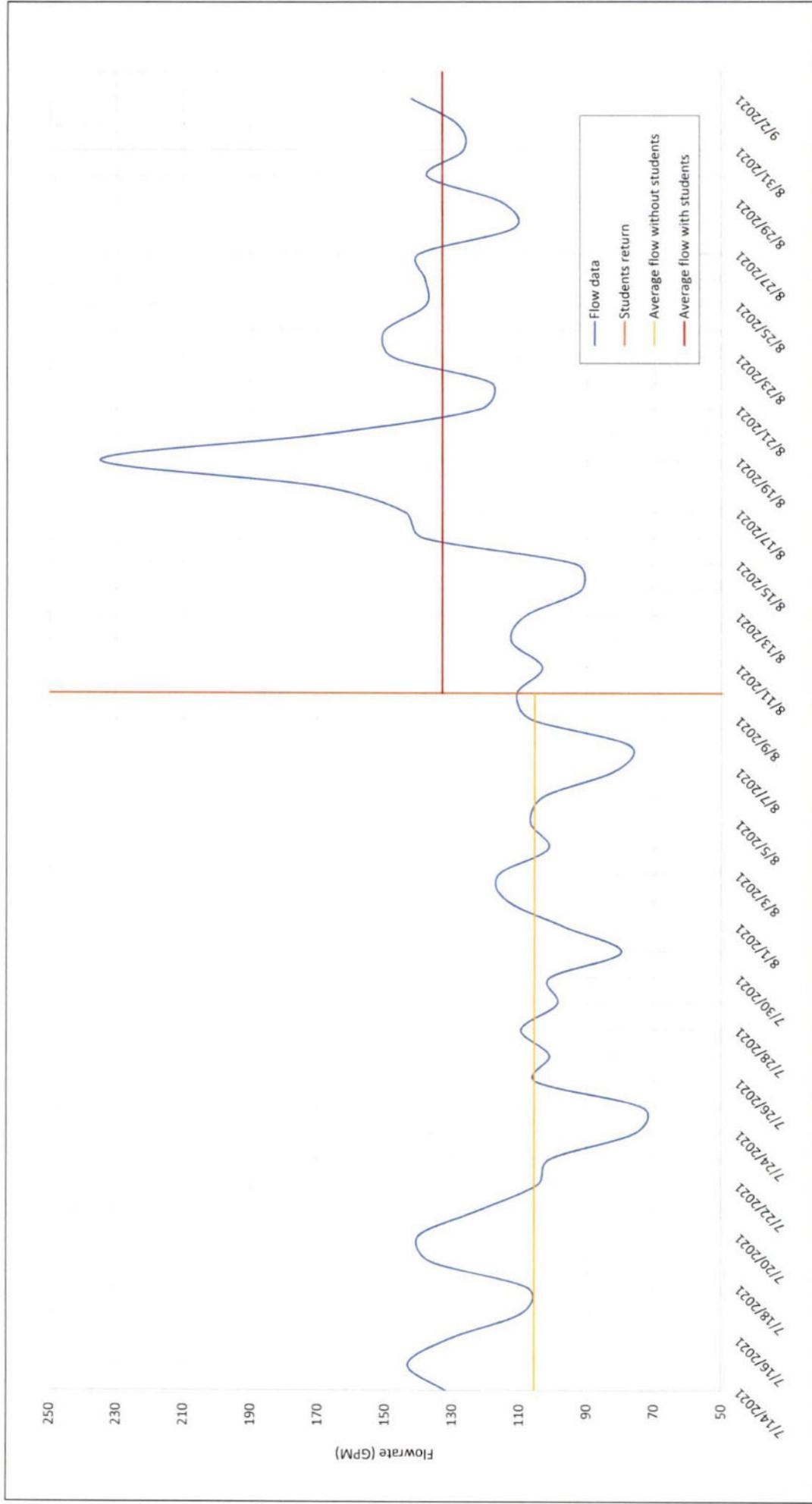
**APPENDIX B - Dry Weather Flow Monitoring Graphs**

DRAFT



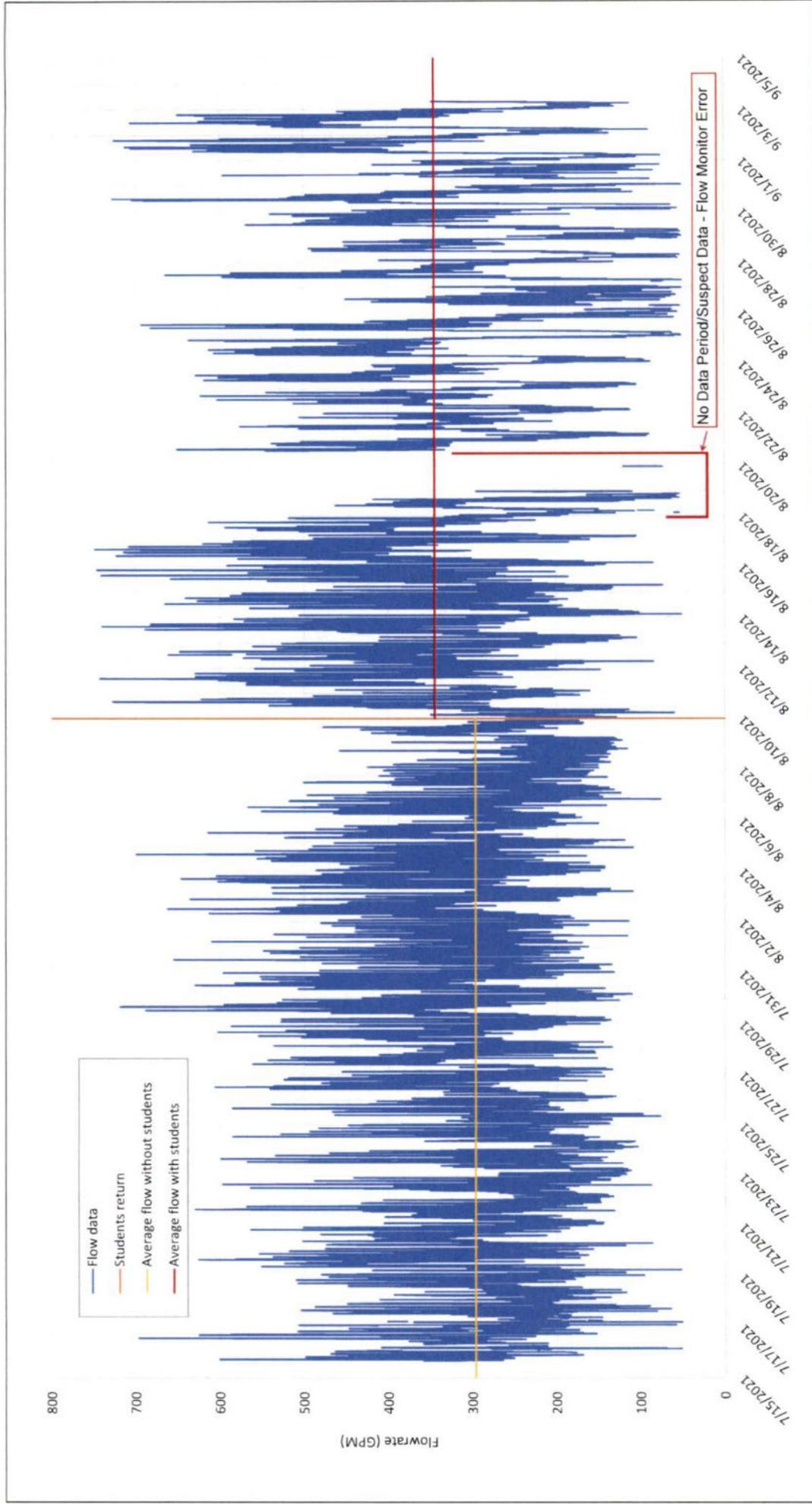
**DRAFT**

# BASIN A DRY WEATHER FLOW WSU FLOW & LOADS



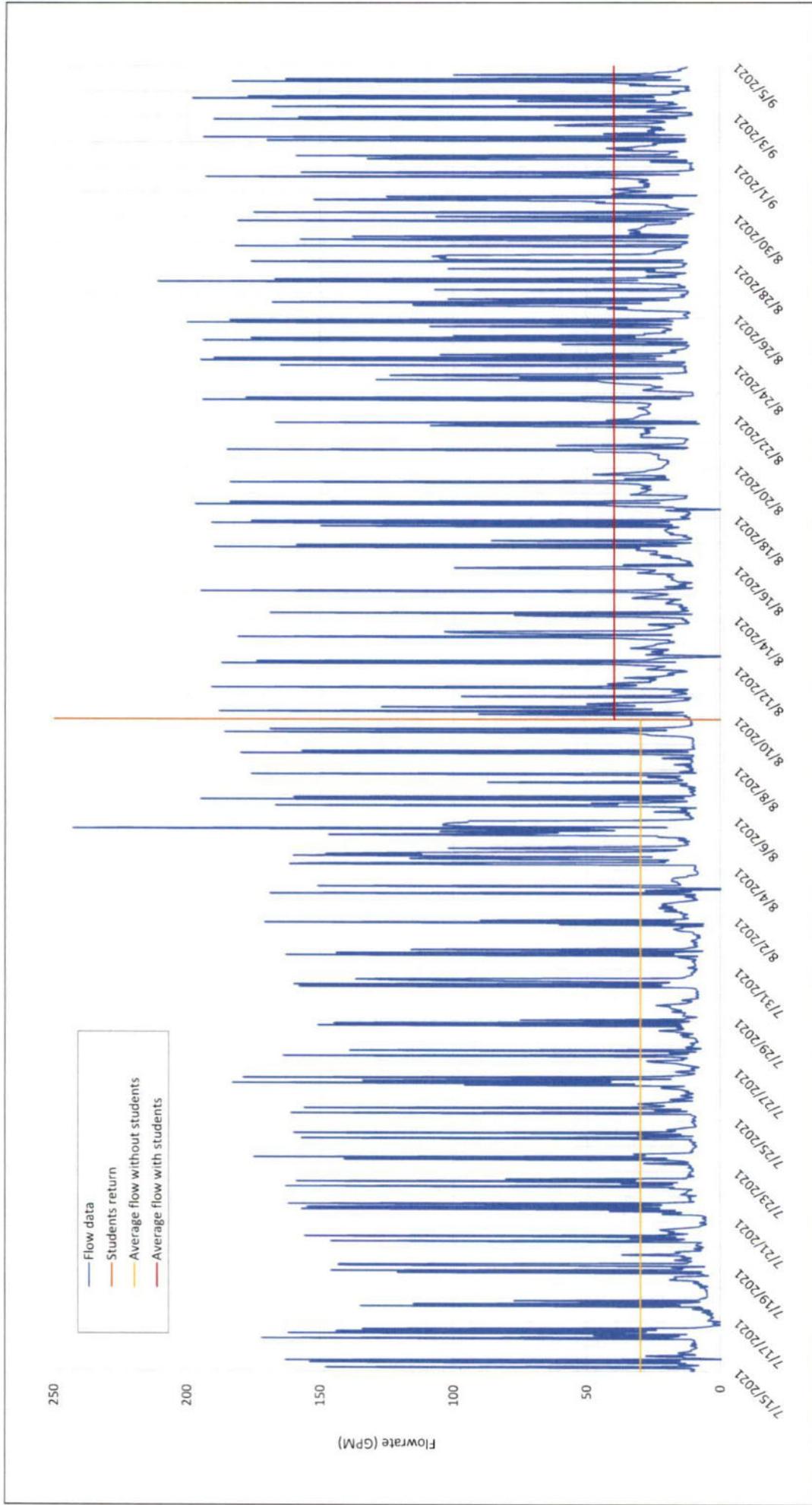
# BASIN B DRY WEATHER FLOW WSU FLOW & LOADS

**DRAFT**



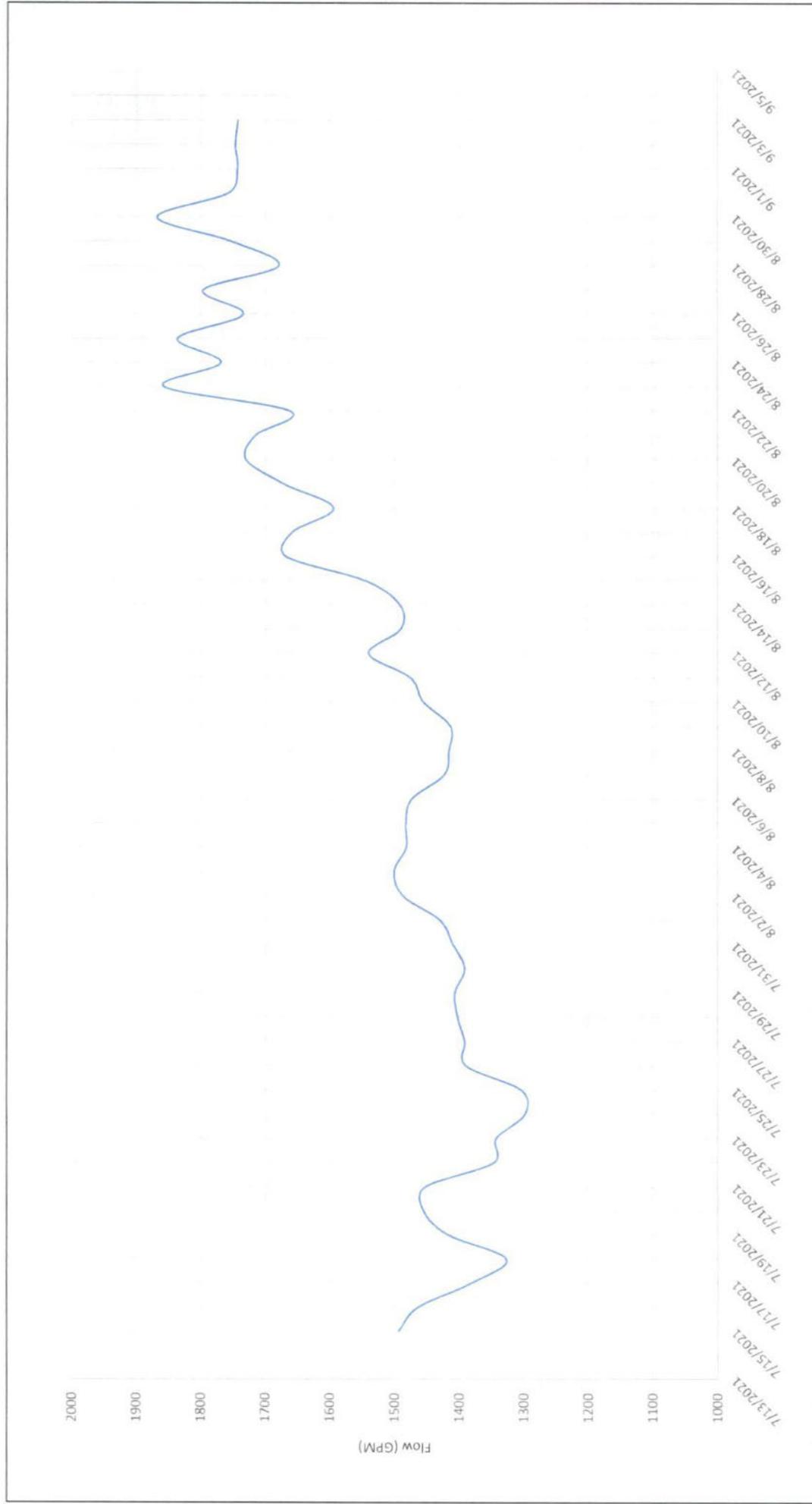
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# BASIN C DRY WEATHER FLOW WSU FLOW & LOADS



**DRAFT**

# BASIN D DRY WEATHER FLOW WSU FLOW & LOADS



**DRAFT**

# CITY WWTP DRY WEATHER WSU FLOW & LOADS

RESOLUTION NO. R-26-23

A RESOLUTION AUTHORIZING THE EXECUTION OF A FOURTH AMENDMENT TO AN AGREEMENT RELATING TO THE PRORATION OF CAPITAL AND OPERATING COSTS OF THE PULLMAN WASTEWATER TREATMENT PLANT BETWEEN THE CITY OF PULLMAN AND WASHINGTON STATE UNIVERSITY, EXTENDING THE TERM THROUGH JUNE 30, 2024.

WHEREAS, on April 24, 2001, the City Council for the City of Pullman ("City Council") authorized by Resolution No. R-33-01 the execution of the Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (the "Agreement"), effective through June 30, 2020; and,

WHEREAS, on March 12, 2020, the Mayor of the City of Pullman issued an Emergency Order for the City of Pullman, Washington, recognizing a public health and fiscal emergency and activating the utilization of emergency powers (the "Declaration of Emergency"); and,

WHEREAS, under the authority of the Declaration of Emergency, the Mayor and City Clerk executed the First Amendment to the Agreement on March 23, 2020, extending the term of the Agreement to June 30, 2021; and,

WHEREAS, on April 28, 2020, the City Council ratified the Declaration of Emergency dated March 12, 2020; and,

WHEREAS, on December 15, 2020, the City Council adopted Resolution No. R-83-20 authorizing the execution of the Second Amendment to the Agreement, extending the term of the Agreement to June 30, 2022; and,

WHEREAS, on June 14, 2022, the City Council adopted Resolution No. R-34-22 authorizing the execution of the Third Amendment to the Agreement, extending the term of the Agreement to June 30, 2023; and,

WHEREAS, the intent of the prior amendments was to provide adequate time for the City and Washington State University ("WSU") to complete a valid study of the wastewater treatment plant's flow and loads attributable to WSU in order to develop an updated cost-sharing formula for the operating and capital costs of the City's wastewater treatment plant; and

WHEREAS, the study was completed in 2022, but data from the study was significantly impacted by COVID-19, including WSU's decreased dorm occupancy rate in recent years due to students

attending classes virtually, and it does not provide adequate data on which to determine the appropriate amount and allocation of costs to be shared between the City and WSU under a new cost-sharing agreement; and

WHEREAS, the City and WSU agree an additional study is necessary, which will not be complete until December 2023 or a later date; and,

WHEREAS, the City Council has determined it is in the best interests of the City to authorize the execution of a Fourth Amendment to the Agreement, attached hereto and incorporated herein as Exhibit "A", extending the term of the Agreement to June 30, 2024; now, therefore,

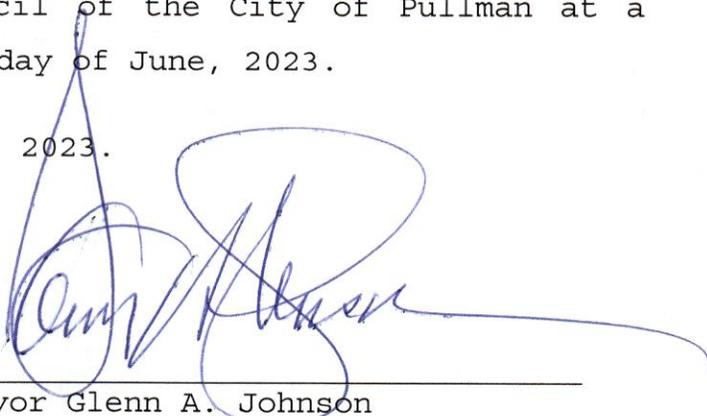
IT IS HEREBY RESOLVED that the Mayor and City Clerk are hereby authorized and directed to execute a Fourth Amendment to the Agreement, in the form attached hereto as Exhibit "A", and to take all steps necessary for the effectiveness and enforceability of said amendment.

IT IS FURTHER RESOLVED that the Mayor and City Administrator, and their designees, are each hereby authorized and directed to take such further action as may be appropriate in order to effect the purposes of this Resolution and the Fourth Amendment to the Agreement authorized thereby.

ADOPTED by the City Council of the City of Pullman at a regular meeting held on the 6<sup>th</sup> day of June, 2023.

DATED this 7<sup>th</sup> day of June, 2023.

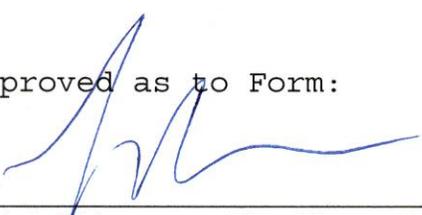


  
\_\_\_\_\_  
Mayor Glenn A. Johnson

ATTEST:

  
\_\_\_\_\_  
City Clerk Dee Stiles-Elliott

Approved as to Form:

  
\_\_\_\_\_  
City Attorney Thaddeus O'Sullivan

**FILED**

**JUN 07 2023**

CITY CLERK'S OFFICE  
PULLMAN WASHINGTON

**AMENDMENT NO. 4  
TO  
AGREEMENT RELATING TO PRORATION OF CAPITAL AND OPERATING COSTS OF  
THE PULLMAN WASTEWATER TREATMENT PLANT  
BETWEEN  
WASHINGTON STATE UNIVERSITY  
AND  
CITY OF PULLMAN**

This Amendment No. 4 to Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant ("Amendment No. 4") is made and deemed effective this 7 day of ~~May~~<sup>JUNE</sup>, 2023 by and between Washington State University, an institution of higher education and agency of the State of Washington ("University") and the City of Pullman, a municipal corporation and non-charter code city operating under the laws of the State of Washington (the "City"). University and City may be individually referred to herein as a "Party" or jointly referred to herein as the "Parties".

**RECITALS**

**WHEREAS**, the Parties entered into that certain Agreement Relating to Proration of Capital and Operating Costs of the Pullman Wastewater Treatment Plant (the "Agreement") with an effective date of May 2, 2001 for the purpose of formalizing the Parties' agreement for allocation of capital improvement costs and operation and maintenance costs pertaining to the City's wastewater treatment plant; and

**WHEREAS**, in accordance with Amendment No. 1 and Amendment No. 2 and Amendment No. 3, all of which extended the term of the Agreement, the Agreement is currently set to expire on June 30, 2023; and

**WHEREAS**, the Parties intend to execute a new cooperative agreement pursuant to Section II of the Agreement, but first must complete an updated flow and load study to determine the appropriate amount and allocation of costs to be shared between the City and the University under the new agreement; and

**WHEREAS**, the Parties undertook an updated study titled, City of Pullman Analysis of WSU Flow and Loads (Study) attached as Exhibit 1 for reference, the data from which was significantly impacted by COVID-19, including from the University's decreased dorm occupancy rate in recent years due to students attending classes virtually; and

**WHEREAS**, the Parties agree that the Study is not an accurate study on which to determine the appropriate amount and allocation of costs to be shared between the City and the University under the new agreement due to the reasons set forth above; and

**WHEREAS**, the Parties agree an additional study is necessary, which will not be complete until December 2023 or a later date; and

**WHEREAS**, pending completion of the above referenced study, and execution of a new agreement, the Parties now desire to extend the term of the existing Agreement, as set forth herein below.

**NOW, THEREFORE**, for good and valuable consideration, the receipt of which is hereby acknowledged, the Parties agree to amend the Agreement as follows:

1. Duration and Termination. Section II. of the Agreement is hereby amended as follows (deleted language ~~stricken~~, added language double-underlined):

The duration of this Agreement shall be from the effective date hereof to June 30, ~~2023~~ 2024. Prior to the termination of this Agreement, the CITY and the UNIVERSITY will meet to examine then existing conditions affecting the operation of the wastewater treatment plant and system and negotiate a new, revised cooperative agreement utilizing the updated study ~~currently in progress~~ as of the date of execution of Amendment No. 4 to this Agreement.

2. New Agreement. Upon mutual execution of this Amendment No. 4, the Parties shall work together in good faith to finalize the above referenced study and finalize their negotiations in order to execute a new, revised cooperative agreement between the Parties.

3. Other Terms and Conditions Unchanged. Apart from the modifications and amendments set forth above, the Agreement shall remain unchanged and in full force and effect. In the event of any conflict between the terms of the Agreement and/or Amendment No. 1 or Amendment No. 2 or Amendment No. 3 and the terms of this Amendment No. 4, the terms of this Amendment No. 4 shall control.

4. Capitalized Terms. All capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Agreement.

5. Counterparts. This Amendment No. 4 may be executed in any number of counterparts, each of which, when so executed and delivered shall be an original, but such counterparts shall together constitute but one and the same.

**IN WITNESS WHEREOF**, the Parties have executed this Amendment No. 4 as of the date and year first written above.

**UNIVERSITY:**

**WASHINGTON STATE UNIVERSITY,  
an institution of higher education and agency  
of the State of Washington**

APPROVED BY: DocuSigned by:

Signature: Shawna Thompson  
Name: Shawna Thompson  
Title: Manager, WSU Real Estate & Bus Ops

RECOMMENDED BY: DocuSigned by:

Signature: Jason T. Sampson  
Name: Jason T. Sampson  
Title: Director EH&S

APPROVED AS TO FORM: DocuSigned by:

Sean W Bowen  
Sean W. Bowen  
Assistant Attorney General

**CITY:**

**CITY OF PULLMAN,  
a municipal corporation**

Signature: Steen A Johnson  
Name: Steen A Johnson  
Title: Mayor

ATTEST:

Signature: Dee Stiles-Elliott  
Name: DEE STILES-ELLIOTT  
Title: CITY CLERK

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

**Exhibit 1**

**Draft City of Pullman Analysis of WSU Flow and Loads Study**



J-U-B ENGINEERS, INC.

J-U-B COMPANIES



THE LANGDON GROUP



GATEWAY MAPPING INC.

## Technical Memorandum

**DATE:** March 10, 2022

**TO:** Shawn Kohtz, P.E., Public Works Director, City of Pullman  
Clayton Forsmann, P.E., Deputy Director of Public Works, City of Pullman

**FROM:** Colt Shelton, P.E.  
David Watkins, P.E.

**SUBJECT:** City of Pullman Analysis of WSU Flow and Loads



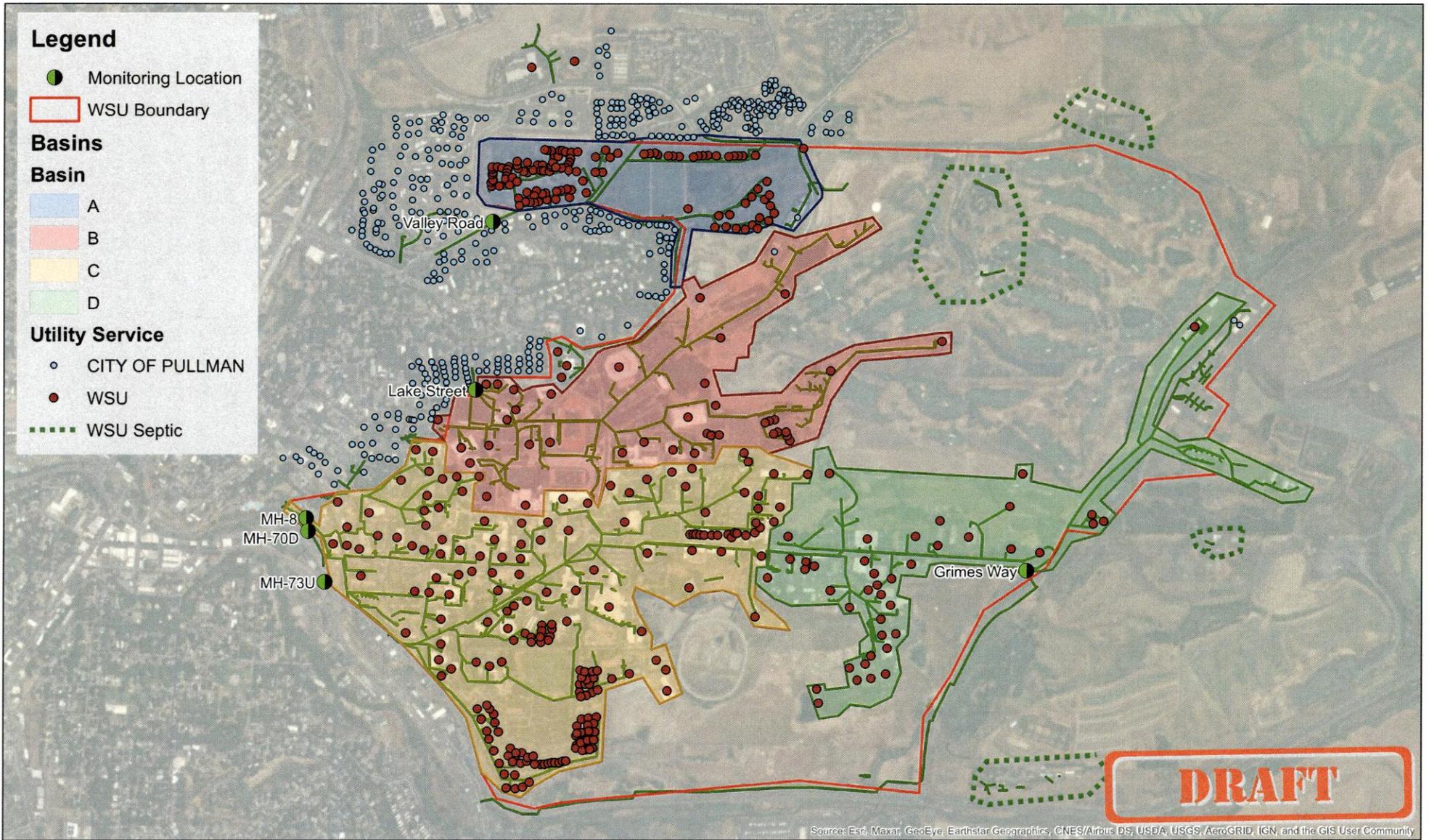
### I. INTRODUCTION

This technical memorandum summarizes the results of a flow and loading study at the point of connection between the Washington State University (WSU) system and the City of Pullman (City) system. The purpose of this study is to determine the contribution of flow and loads from WSU to the City. Flows were measured by J-U-B Engineers, Inc. (JUB) during the “wet” period and the “dry” period of the year for Basin C. In addition, the City and WSU provided flow data for Basins A, B, and D, as well as constituent loading data from all basins. **Figure 1** delineates the four WSU flow basins (A, B, C, and D).

### II. SOCIETAL EVENTS

During the wet weather flow monitoring period, unprecedented events occurred that could, and likely did, affect the results of the study. The following events occurred during the wet weather monitoring period:

- February 24, 2020 – Flow Monitors installed.
- February 28, 2020 – Recleaning of WSU line complete.
- February 29, 2020 – Washington State Governor Jay Inslee issues state of emergency for all counties in Washington for COVID-19 pandemic.
- March 11, 2020 – WSU announces transition to online classes after spring break.
- March 14, 2020 – WSU spring break starts March 16, 2020 – Flow Monitors removed after discussion with City about WSU transition to online classes.
- March 22, 2020 – WSU spring break ends.
- March 23, 2020 – WSU transitions fully to online classes.
- March 25, 2020 – Washington State Governor Jay Inslee issues mandatory stay-at-home order for the entire state to help slow the spread of COVID-19.

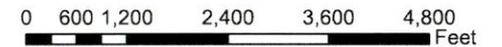


# PULLMAN WSU FLOW AND LOADS

## FIGURE 1 - BASIN OVERVIEW



Print Date: 3/4/2022



The wet weather flow monitoring period was initially selected to capture WSU's spring break, in attempt to observe the students' contribution to wastewater flow and loads. As nearly 20,000 students attend WSU on the Pullman campus, this was expected to be significant. Unfortunately, due to the COVID-19 events outlined above, the effect of students leaving campus was not apparent in the study results. Additionally, because COVID-19 events coincide with the majority of the wet weather period, it was assumed that the entire wet weather flow and loading analysis period reflects suspect data and was not used in the final analysis for the flow splits. Students did not return to campus until the 2021-2022 school year and the dry weather period was paused until July of 2021 to capture the new normal conditions.

### III. WET WEATHER MONITORING

The wet weather monitoring period was February 24, 2020 to March 16, 2020. JUB selected the dates in attempt to capture higher, more dilute flow that typically occurs during late winter and early spring months, as a result of greater precipitation and increased infiltration and inflow. Unfortunately, no significant precipitation events occurred during the monitoring period.

Due to the occurrence of COVID-19, fewer constituent sampling events were reported during the wet weather period than anticipated. Consequently, in the absence of available wet weather data and upheaval of typical flow and loading patterns, the data was not used in the analysis. Wet weather analytical sampling was completed for Basins B, C, and D and was reviewed and confirmed to contain data representing abnormal characteristics and patterns. Loading samples were collected for the following items:

- pH
- Biochemical oxygen demand (BOD)
- Total suspended solids (TSS)
- Total phosphorus (Total P)
- Total Kjeldahl nitrogen (TKN)

A description of the flow monitoring events for each basin is provided below even though the wet weather data was not used. Graphs showing flows from the wet weather monitoring period for each basin are shown in the **Appendix A**. The loading summary is shown on **Figure 1**.

#### BASIN A

Flow data for Basin A was provided from 2019 water meter readings from the City and total count of dwelling units for WSU owned apartments. This data includes flows from January to December of 2019 (pre-COVID). Data for Basin A was provided to JUB from WSU in the middle of April 2020. The data provided was the total count of dwelling units and the typical percent occupied. To determine the flows for Basin A, JUB used literature values for the specific dwelling units WSU provided and the historical flows from the City

water meter readings. Loading in Basin A was estimated using dry weather period data because loading samples were not collected in that basin due to early termination of the sampling program from COVID.

**BASIN B**

Data for Basin B was calculated using the flow data from the Lake Street permanent meter station, the WSU Streit Perham dorms, and the Marriot Residence Inn. Flow data for Lake Street was provided on a monthly usage rate for each month from 2017 to 2020. Flow data for the Marriot Residence Inn was provided on a monthly basis from 2015 to 2020. Flow data for the dorms was determined using bed counts and literature values. The total flow for Basin B was calculated by adding the flows from Lake Street with the flows from the dorms and subtracting the flows from the Marriot Residence Inn.

**BASIN C**

Wet weather monitoring was completed for a three-week period from February 24, 2020 to March 16, 2020. Flow monitors were installed in three (3) manholes to determine the contribution from WSU to the City system, referred to as Basin C. To do this, one monitor was installed upstream of the connection point between the WSU and City system in MH-73U, one monitor was installed downstream of the connection point between the WSU and City System in MH-70D, and one monitor was installed in a manhole collecting flows directly from WSU in MH-8. WSU flow contribution to the City system was calculated by subtracting the flow measured from MH-73U from MH-70D, then adding MH-8. Loading rates for each manhole were calculated using the sample data provided from the City sample monitors that were installed during the same time period as the JUB flow monitors. Sample locations were in MH-8 and the WSU outfall manhole on College Ave before it joins flows from the City.

During data collection, the flow monitor in MH-8 had to be reinstalled due to gravel buildup in the pipe that caused inaccurate readings. The pipe was cleaned out by the City and WSU. The reinstallation of the monitor occurred on February 28, 2020. Data for the time period from February 24 to February 28 is considered inaccurate.

**BASIN D**

Basin D data consists solely of the flows measured from Grimes Way permanent meter station. Data for Grimes Way was provided from May 2019 to March 2020.

**IV. DRY WEATHER MONITORING**

JUB defined a dry weather monitoring period from July 15, 2021 to September 2, 2021. Wastewater systems generally experience lower, more concentrated flow during late summer. Only minor precipitation events occurred during this period which did not appear to cause measurable infiltration or inflow.

The dry weather period captured the conclusion of summer break and the beginning of WSU's 2021-2022 school year, allowing the monitoring period to be broken into observations with students and without students. WSU's Week of Welcome occurred the week of August 14, 2021, and the school year officially began the following Monday, August 23, 2021. Based on the assumption many students arrived two weeks prior to the first day of instruction, the dry weather period was divided into "without students" and "with students" periods before and after August 9, 2021, respectively. The average flowrates and shape of the flowrate versus time curve obtained from the continuous flow monitors in Basin C support this assumption.

The return to school in August of 2021 appears to begin a return to normal for flows and loading at the WSU campus. The impacts of COVID on student preferences to live on and/or off campus and typical wastewater generation patterns still are being felt. Graphs showing flows from the dry weather monitoring period for each basin are shown in the **Appendix B**.

#### **BASIN A**

Basin A used water meter records from the 2019 data for July through September. Flows for Basin A were estimated using a combination of the 2019 water meter readings and literature values from Metcalf and Eddy (2014) as was done in the wet weather monitoring period. During the flow monitoring period, the City sampled the Basin A effluent three separate times from the same downstream manhole and provided results including pH, BOD, TSS, TKN, and total P.

#### **BASIN B**

Similar to the wet weather flow period, total flow in Basin B was calculated by adding the flows from Lake Street with the flows from the Streit Perham dormitory and subtracting the flows from the Marriot Residence Inn. Average daily flowrates in Lake Street were calculated from daily total volume, provided from July through September 2021. Dorm flowrate corresponded to a provided occupancy and a typical flowrate per bed given by Metcalf and Eddy (2014). The Marriott average daily flowrate was estimated from monthly total volumes, July through September 2021. During the monitoring period, 19 loading samples were collected for the same constituents listed in Basin A, above.

#### **BASIN C**

Dry weather monitoring occurred in MH-73U, MH-70D, and MH-8 from July 15, 2021 to September 2, 2021. As with wet weather monitoring, the total Basin C flowrate corresponded to MH-73U subtracted from MH-70D and added to MH-8. Unfortunately, the flow monitors recorded "flashy" data throughout the monitoring period, likely the result of regular, rapid flushing of large wastewater volumes upstream (such as from a car

wash, brewery washdowns, etc.). To mitigate error introduced, data was cleaned by removing any negatives from the individual MH datasets, as well as the total basin dataset, and removing any outlier points.

Several other events occurred that required data adjustments. During data collection, solids built up in MH-70D, requiring cleaning of the flowmeter to achieve accurate readings. Additionally, missing data was filled during a brief gap in recording in MH-8 at the end of the monitoring period. Finally, a few days of abnormally low flow, which may have resulted from monitor error or unusual events, were removed from analysis.

During the monitoring period, 13 samples were collected for the same constituents listed under Basin A above.

**BASIN D**

The WSU provided average hourly flowrates observed in Grimes Way meter station. Again, this represented the entirety of Basin D. During the dry weather period, the City sampled and provided results for 16 loading samples.

**V. WASTEWATER TREATMENT PLANT**

The City also provided wastewater treatment plant (WWTP) influent BOD, TSS, and flow data from January 2020 to October 2021. TKN and Total P data was not available at the WWTP. WWTP data represents all flow collected in the City's system, including the contributions by WSU. Graphs showing flows from the wet and dry weather monitoring periods are shown in **Appendix A** and **Appendix B**, respectively.

**VI. Flow Analysis**

**Table 1** summarizes flows experienced in the City's system, as recorded at the WWTP and at the WSU outfalls. WSU total flowrates represent the summation of the average daily flows observed in Basins A, B, C, and D. Note that the City flowrate (in gallons per minute, gpm) captures wastewater generated by WSU *in addition* to all other sources in the City. However, the percentage reported represents the portion of the wastewater produced by City sources *other than WSU*.

**Table 1 – Average Flowrate**

Period	All City		WSU	
	gpm	% Flow (City only)	gpm	% Flow
WW <sup>1</sup> with students	2,150	55.6%	955	44.4%
DW <sup>2</sup> without students	1,415	58.2%	591	41.8%
DW <sup>2</sup> with students	1,676	59.4%	681	40.6%
<b>Weighted Average<sup>3</sup></b>	<b>1,747</b>	<b>59.1%</b>	<b>742</b>	<b>40.9%</b>

<sup>1</sup> Wet weather monitoring period – not used to determine weighted average

<sup>2</sup> Dry weather monitoring period

<sup>3</sup> Weighted Average based on 9 months of with student population and 3 months of without student population

Although the flowrates varied during the different periods, the proportion of the City flow supplied by WSU remained relatively constant. During recorded periods, WSU produced approximately 41% - 44% of the total City flow. However, as noted above, wet weather data was considered unrepresentative because of COVID-19 and was not used in the analysis. Therefore, the dry weather with students and the without students were combined with a weighted average based on the number of months students were present at the WSU Pullman campus.

**VII. BOD and TSS Analysis**

**Table 2** summarizes loads in pounds per day (lb/day) observed in the City's entire system, as recorded at the WWTP and at WSU. Again, note that City's lb/day value captures WSU contributions, while the City percentage does not. The wet weather sample data did not follow typical trends and confirmed the data did not represent normal characteristics. Dry weather data appears to continue to have some abnormalities making the data set suspect.

**Table 2 – Average BOD and TSS Loading**

Period	BOD				TSS			
	All City		WSU		All City		WSU	
	lb/d	% BOD (City only)	lb/d	% BOD	lb/d	% TSS (City only)	lb/d	% TSS
WW <sup>1</sup> with students	7,315	65.5%	2,521	34.5%	6,373	72.8%	1,732	27.2%
DW <sup>2</sup> without students	4,308	75.2%	1,069	24.8%	4,016	81.4%	748	18.6%
DW <sup>2</sup> with students	6,195	74.5%	1,579	25.5%	5,102	77.7%	1,139	22.3%
<b>Average</b>	<b>5,939</b>	<b>71.7%</b>	<b>1,723</b>	<b>28.3%</b>	<b>5,164</b>	<b>77.3%</b>	<b>1,206</b>	<b>22.7%</b>

<sup>1</sup> Wet weather monitoring period

<sup>2</sup> Dry weather monitoring period

BOD concentrations during the wet weather and dry weather did not follow typical trends for influences from infiltration and inflow (I/I) on domestic waste. Typically, wet weather concentrations should be lower (more dilute) than dry weather concentrations due to the presence of I/I in the system. However, only Basin D followed this trend. Lack of wet weather samples in Basin A did not allow comparison of the different monitoring periods and may skew the data. Basins B maintained about equal concentrations during both monitoring periods, with slightly higher concentrations during wet weather. Basin C has wet weather concentrations about double the dry weather concentrations and dry weather concentrations are very low for domestic strength waste. Basin C is the largest flow producing basin and generally has more flow than the other basins combined. Therefore, the low dry weather concentrations cause the data set to be lower than expected and trend opposite normal patterns. This is also observed in **Figure 1** and **Figure 2**. All four basins maintain BOD and TSS concentrations (in milligrams per liter, mg/L) near

or below the WWTP influent, with Basins A and B exhibiting consistently higher BOD and TSS concentrations than Basins C and D.

**Table 2** summarizes the quantities of BOD and TSS during the monitoring periods. The data shows lower quantities of BOD and TSS during “dry weather without students” than the other periods, which is expected. However, when students returned, BOD quantities remain far below the wet weather quantities. During dry weather, WSU contributed 25% of BOD and approximately 20% of TSS. However, as previously discussed, WSU supplies over 40% of the City’s total flow, implying that WSU’s wastewater was sampled as consistently more dilute than wastewater from other sources in the City and typical domestic waste.

DRAFT

Figure 1 – BOD Concentration

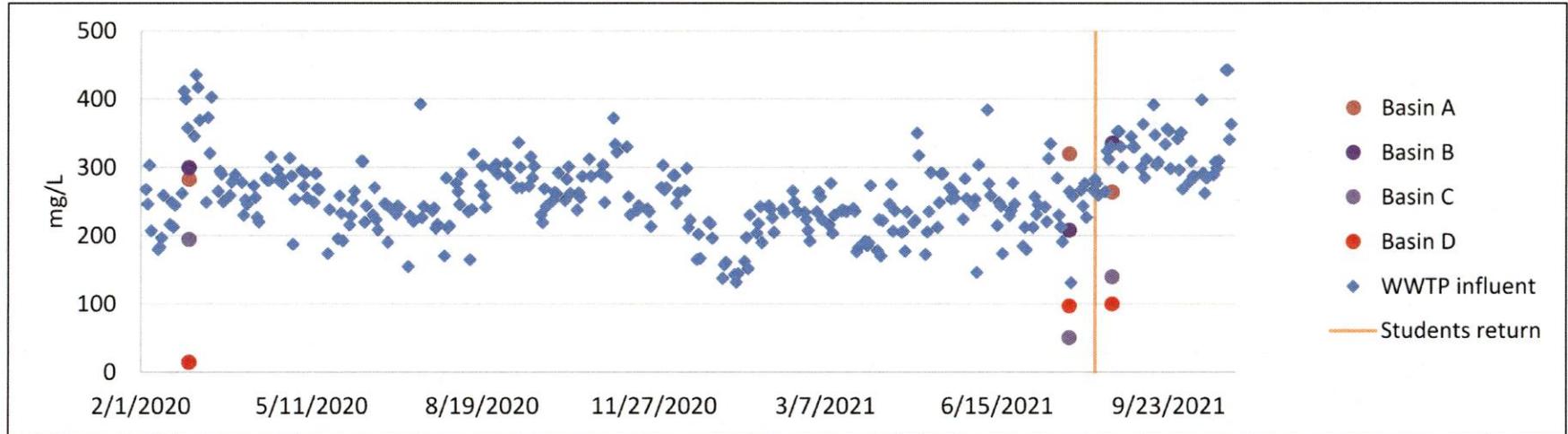
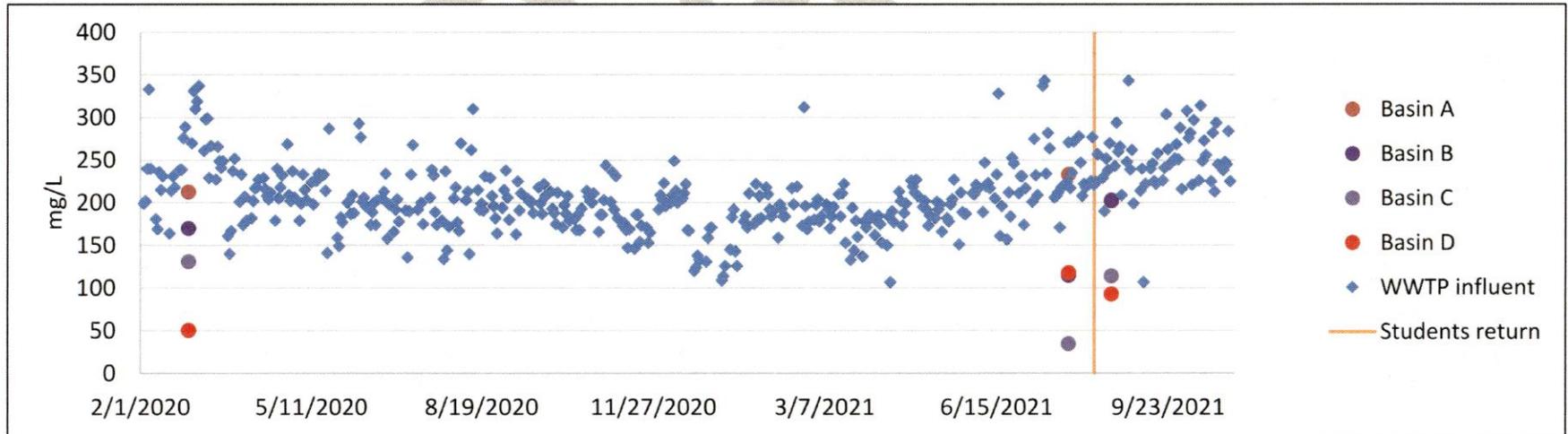


Figure 2 – TSS Concentration





on the dry weather flow splits. Upon recovery from COVID, additional loading samples and/or flow monitoring could be completed to help determine if BOD loading should be included in the splits. (or .....).

The outcome of the meeting is a new agreement between the City and WSU that the City will pass as Resolution XYZ. The agreement allows for WSU to be billed on 40.9 percentage of the City's flow meter at the WWTP year round, with an additional 40.9% contribution to capital improvement projects.

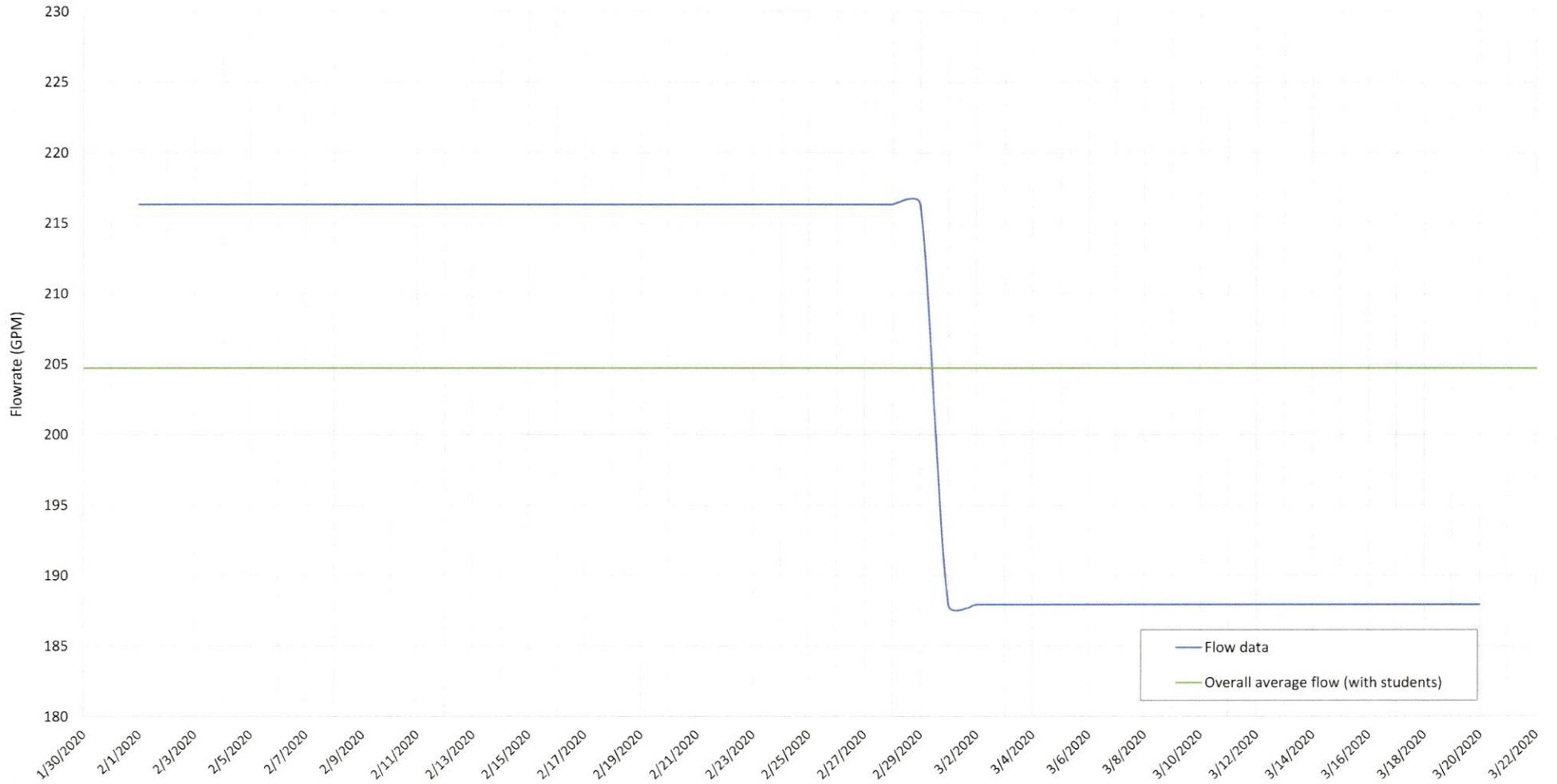
**Table 5. Proposed Agreement Between City and WUS**

Proposed Agreement	CITY %	WSU %
Capital Improvements	59.1%	40.9%
Maintenance & Operation	59.1%	40.9%

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**APPENDIX A - Wet Weather Flow Monitoring Graphs**

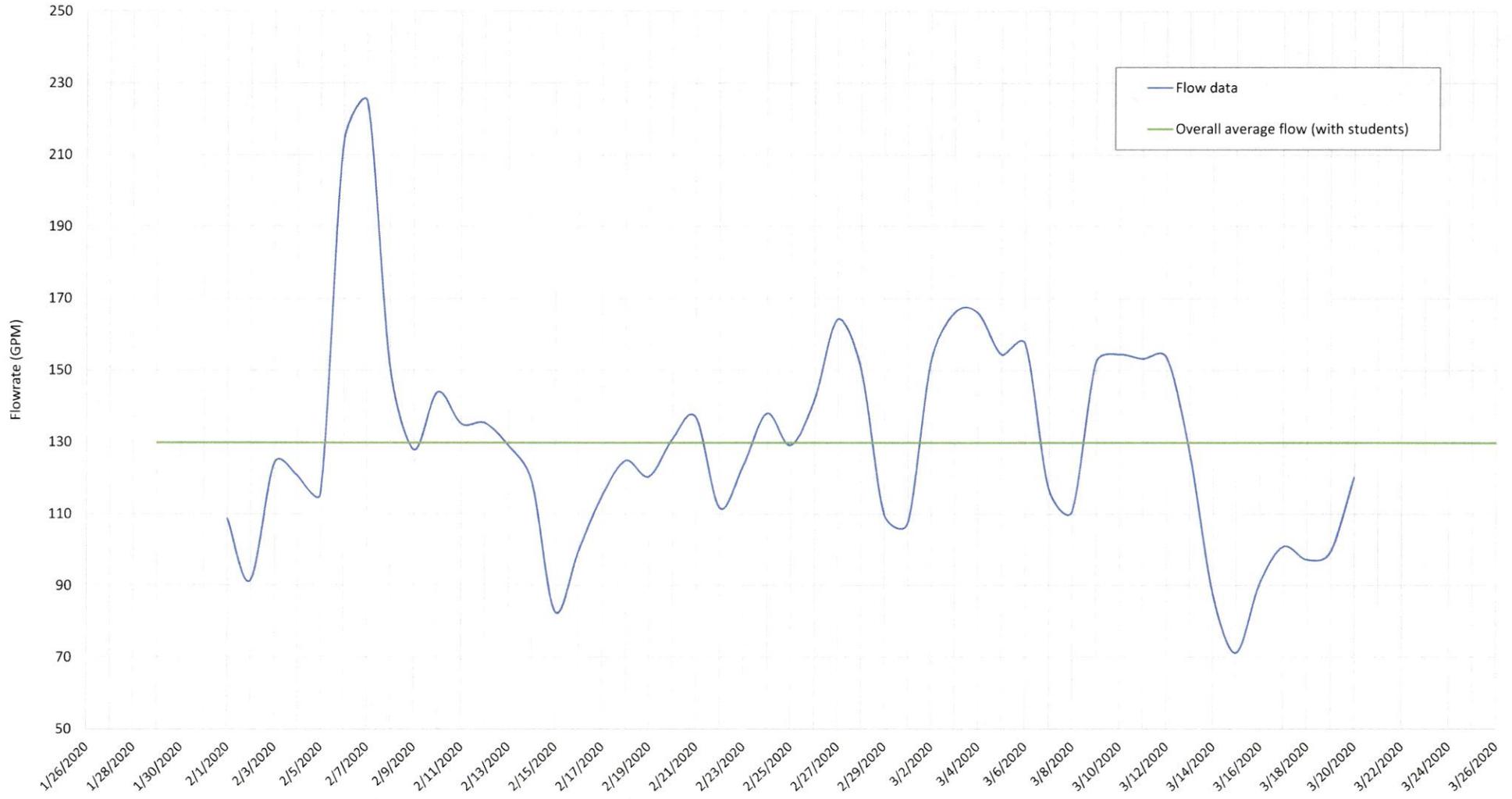
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# BASIN A WET WEATHER FLOW

## WSU FLOW & LOADS

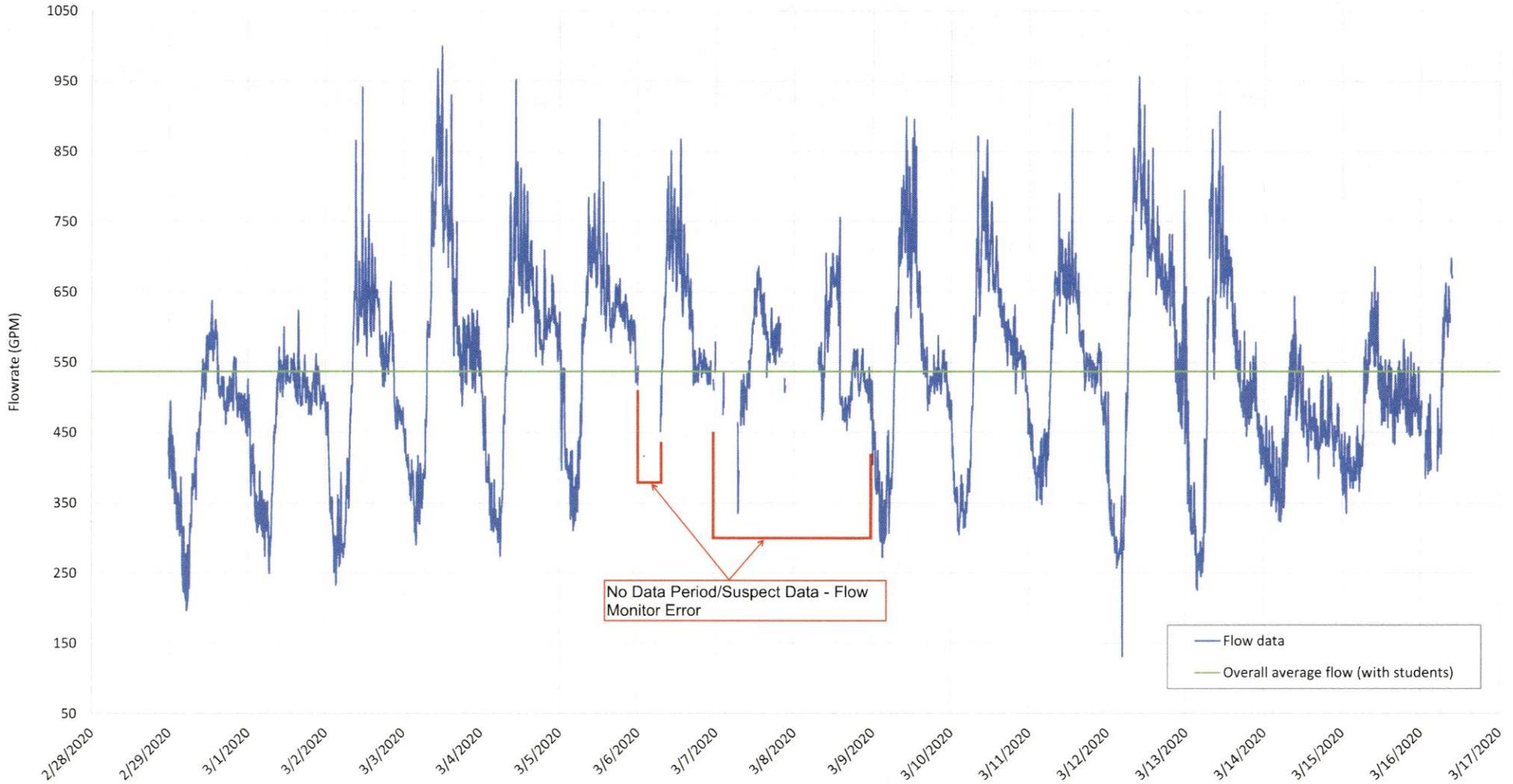
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# BASIN B WET WEATHER FLOW

## WSU FLOW & LOADS

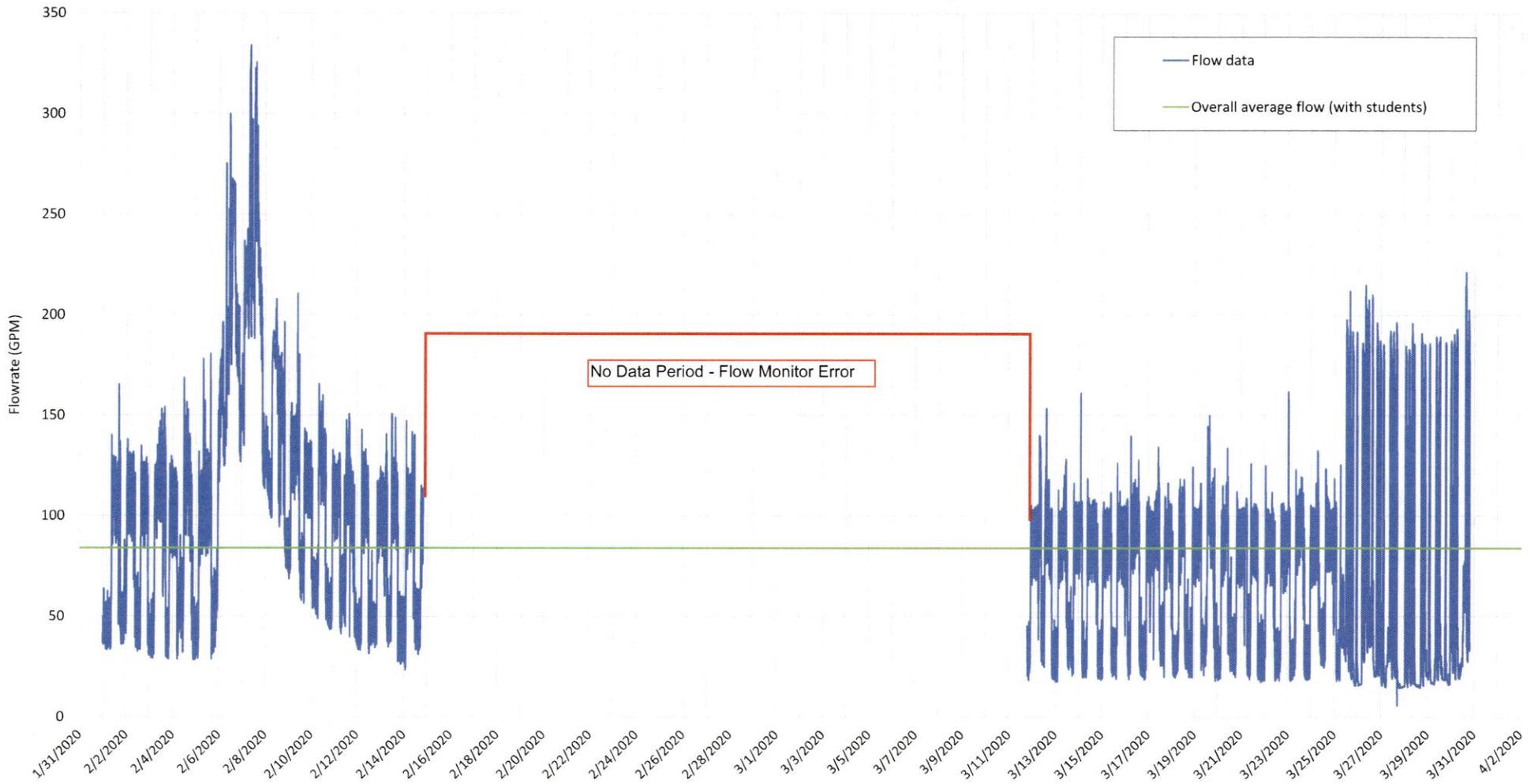
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# BASIN C WET WEATHER FLOW

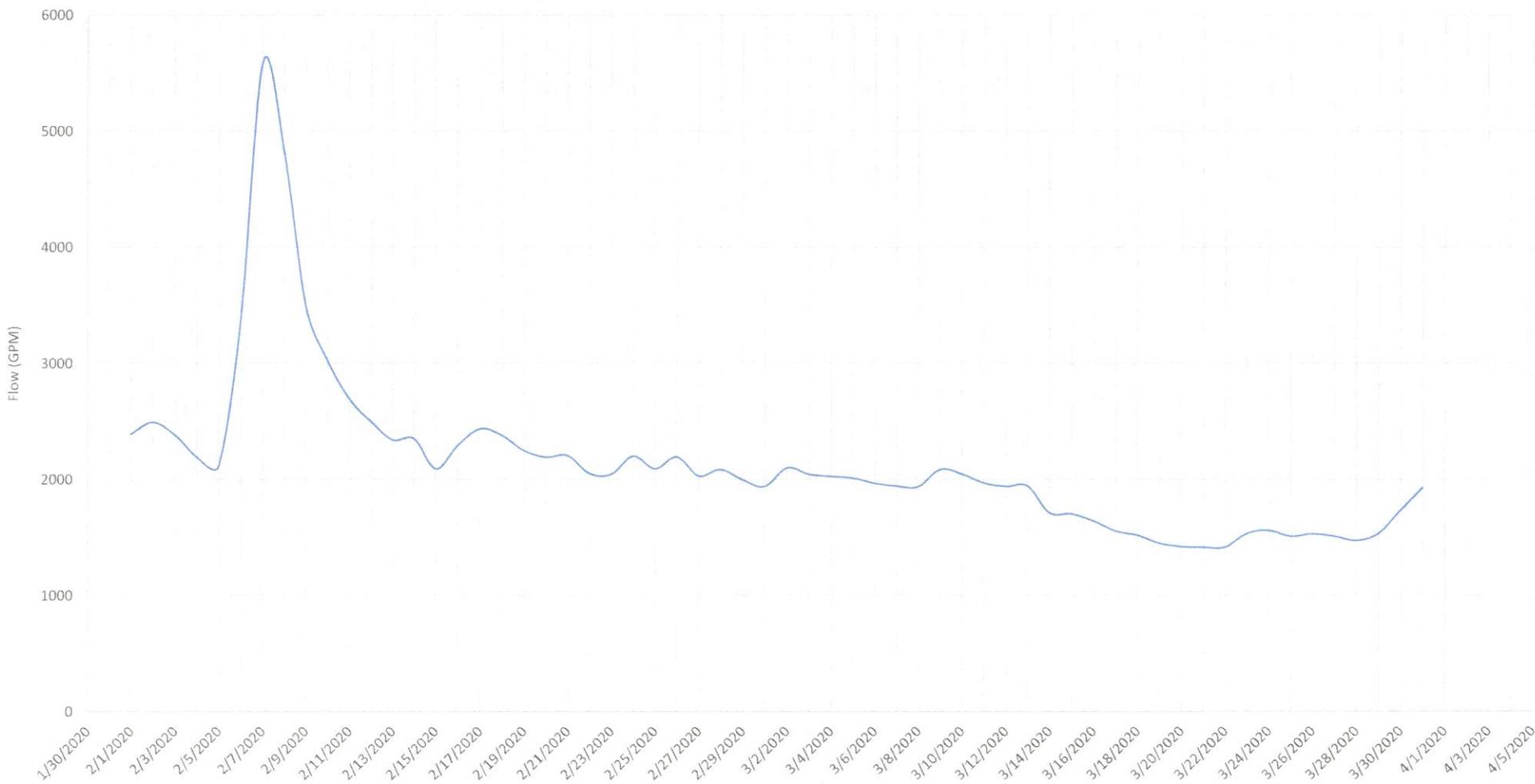
## WSU FLOW & LOADS

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# BASIN D WET WEATHER FLOW WSU FLOW & LOADS

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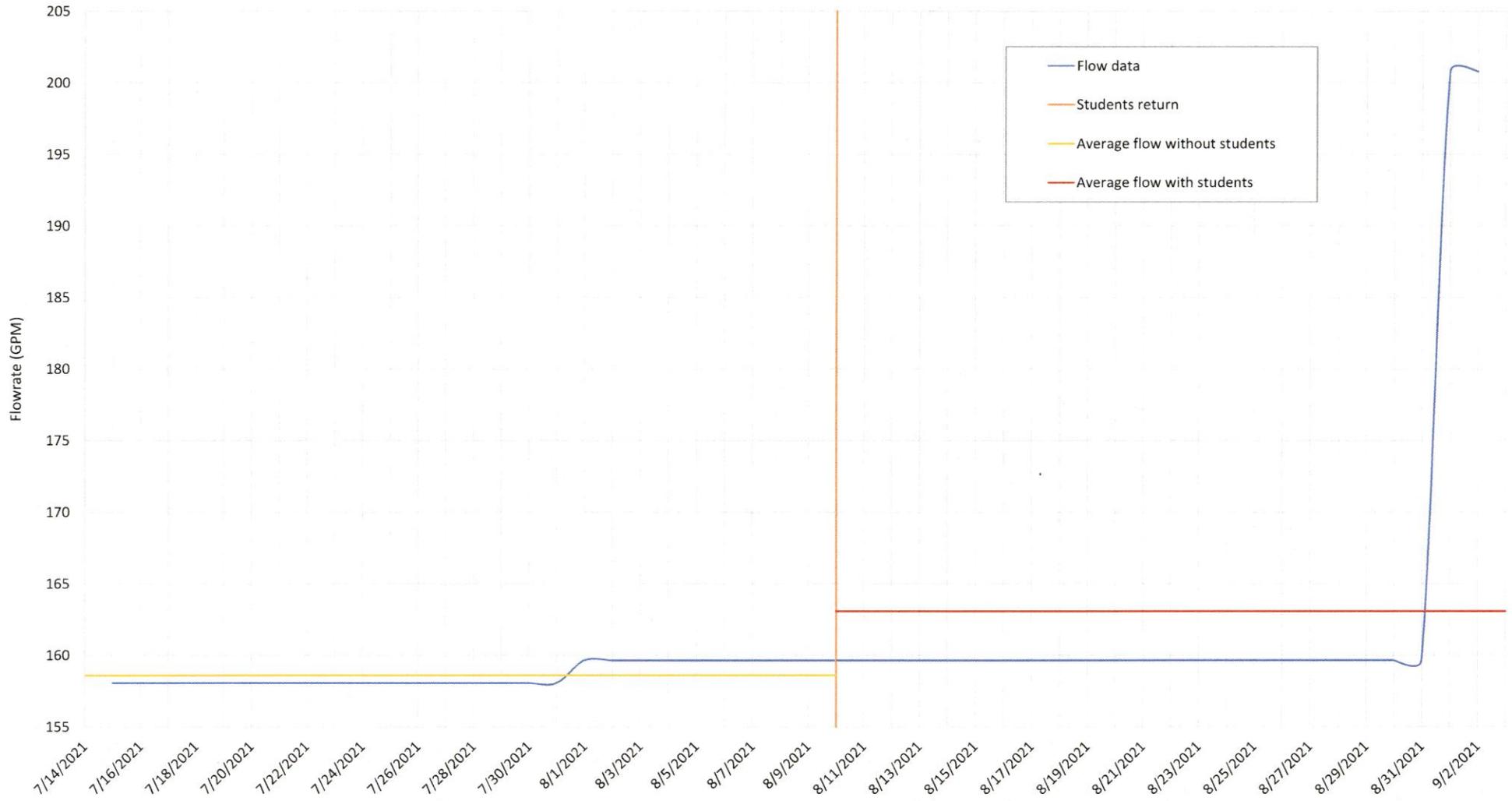


# CITY WWTP WET WEATHER WSU FLOW & LOADS

**DRAFT**

**APPENDIX B - Dry Weather Flow Monitoring Graphs**

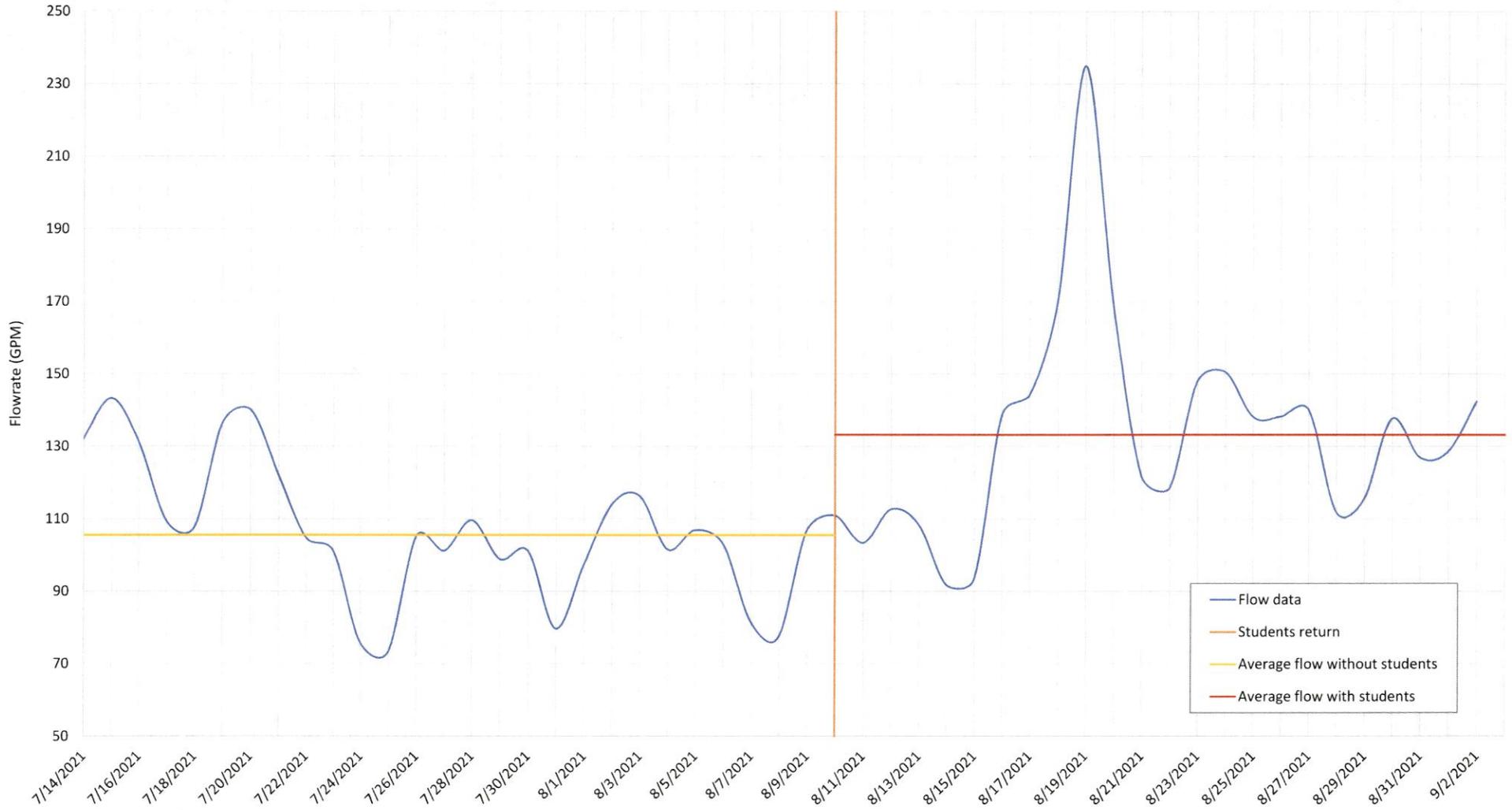
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# BASIN A DRY WEATHER FLOW

## WSU FLOW & LOADS

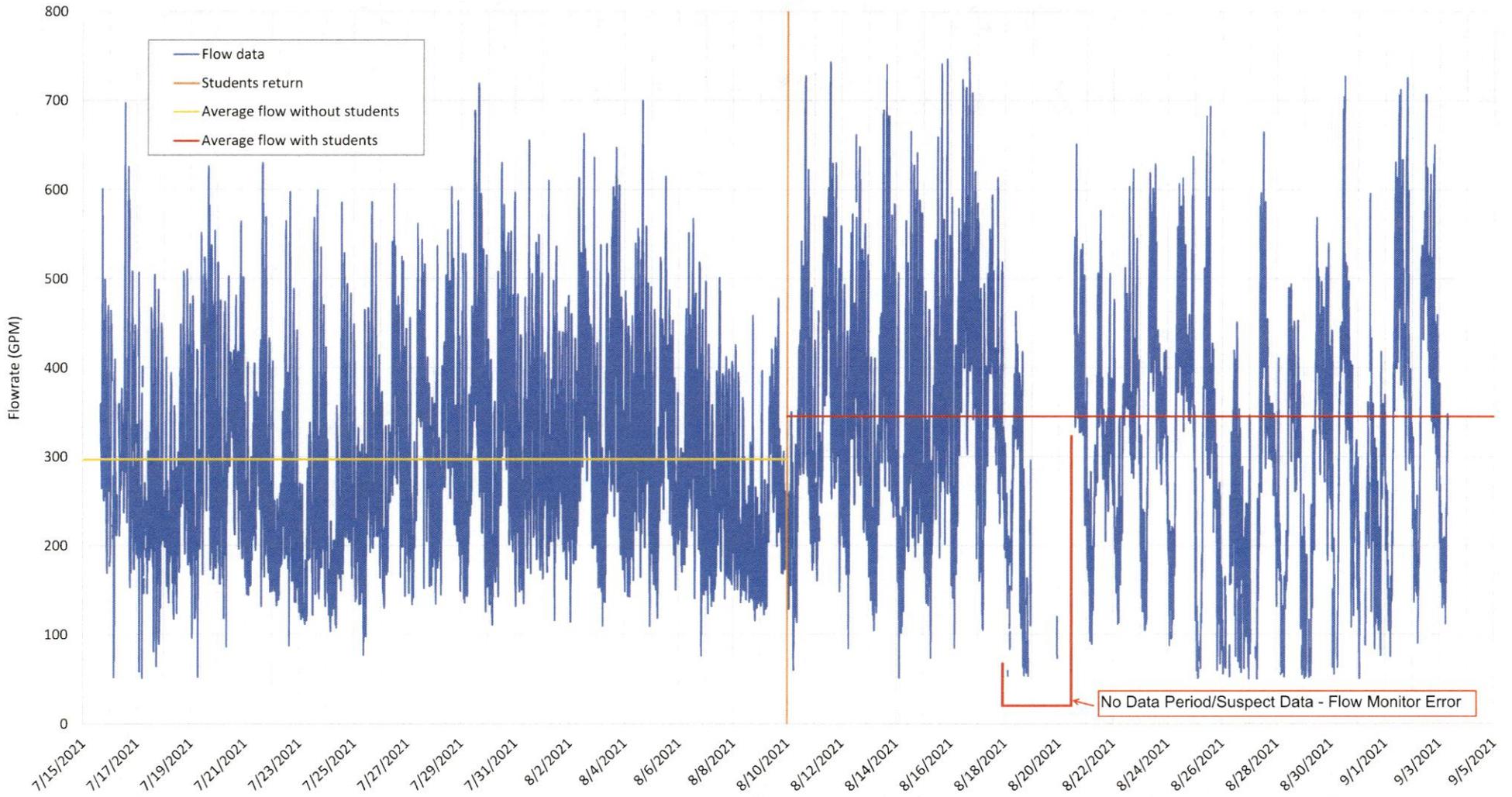
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# BASIN B DRY WEATHER FLOW

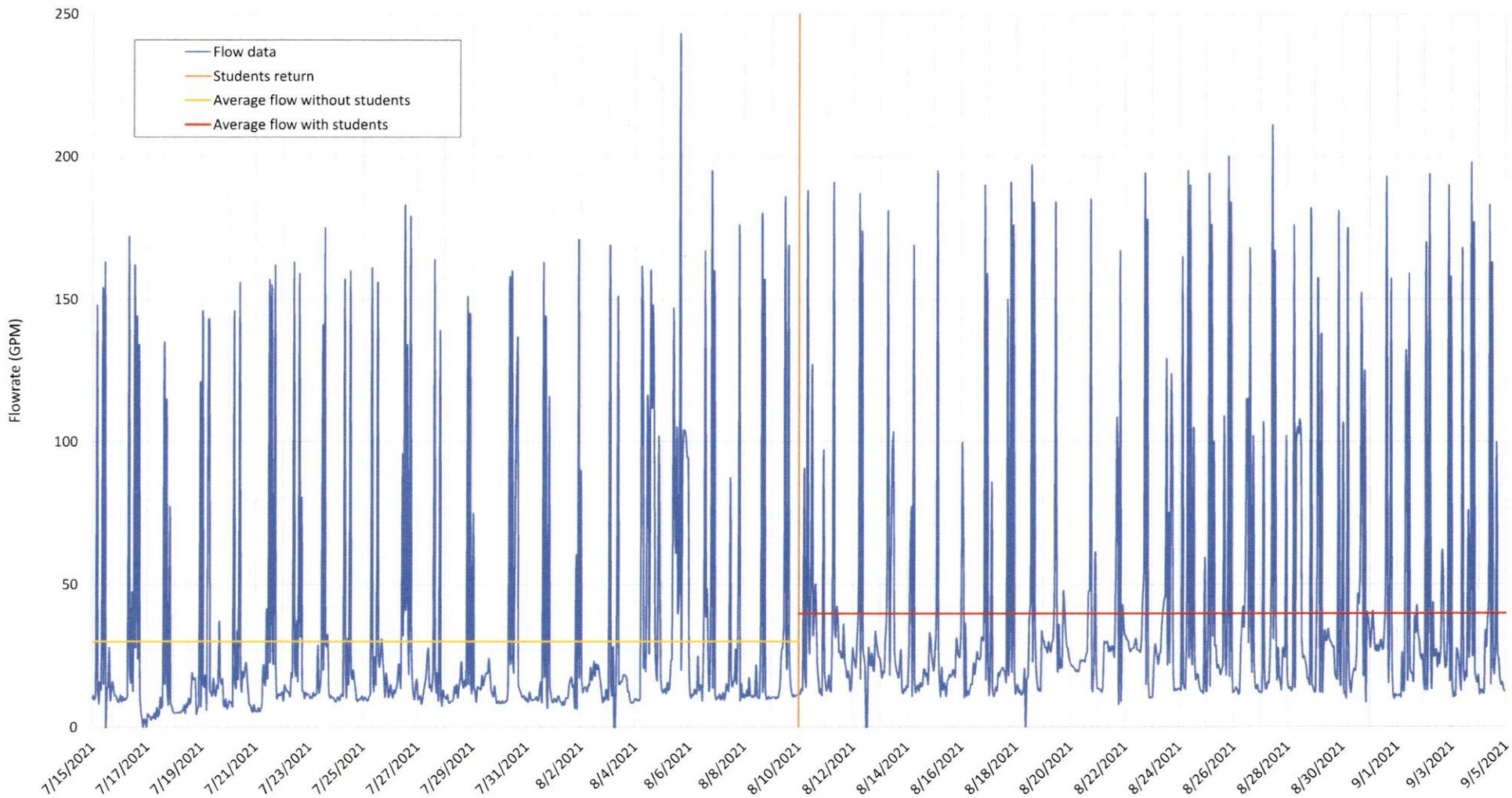
## WSU FLOW & LOADS

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# BASIN C DRY WEATHER FLOW WSU FLOW & LOADS

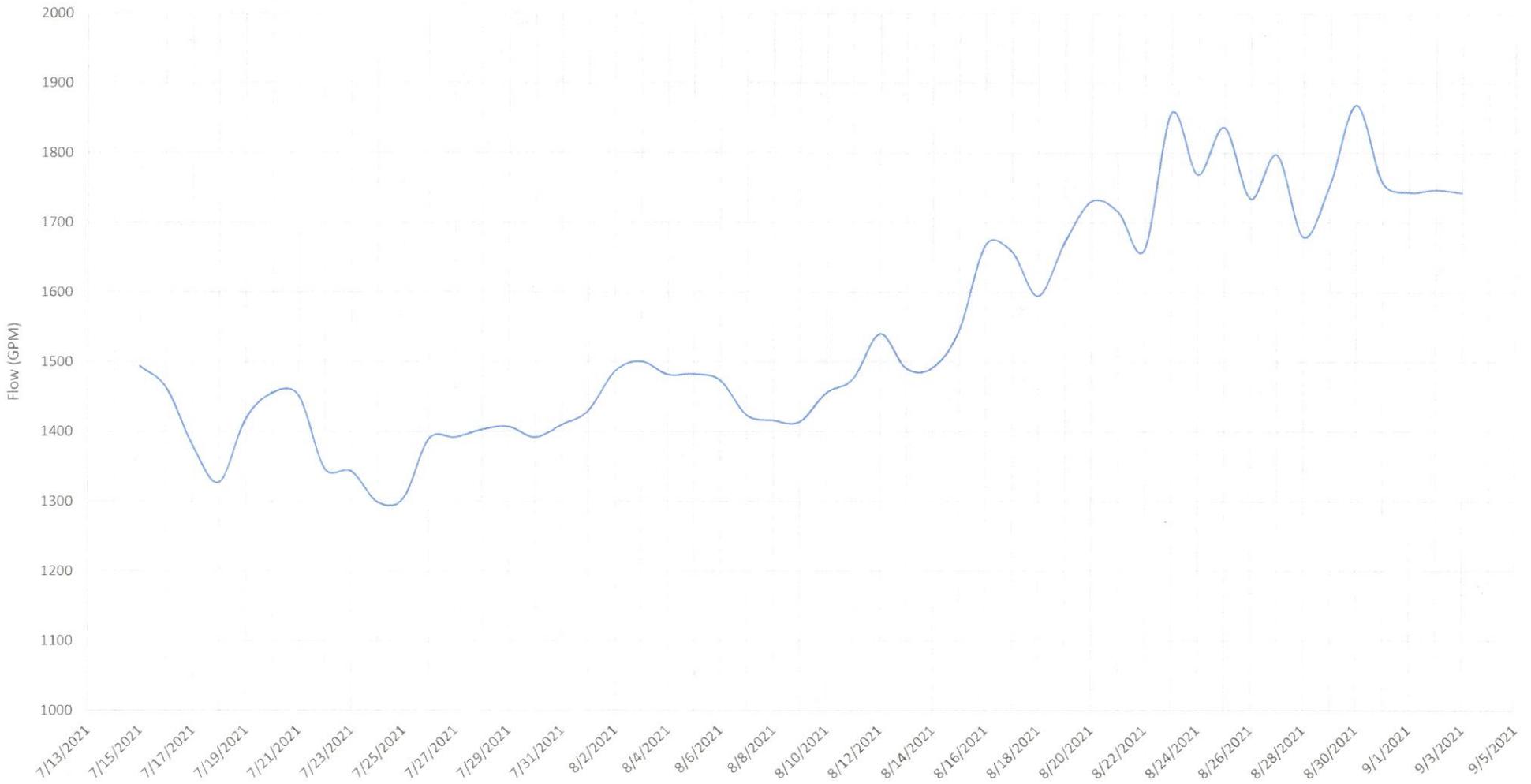
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# BASIN D DRY WEATHER FLOW

## WSU FLOW & LOADS

**DRAFT**



# CITY WWTP DRY WEATHER WSU FLOW & LOADS

**DRAFT**