

**CITY OF LOGAN  
RESOLUTION NO. 18-27**

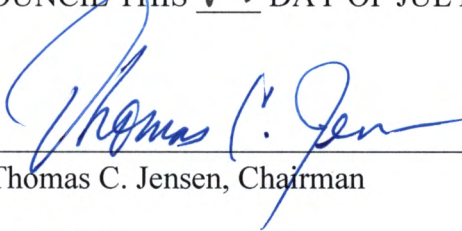
**A RESOLUTION APPROVING THE MUNICIPAL WASTEWATER  
PLANNING PROGRAM (MWPP) ANNUAL REPORT**

**WHEREAS**, each year the City of Logan completes a Municipal Wastewater Planning Program (MWPP) Annual Report for the State of Utah Division of Environmental Quality.


NOW THEREFORE, BE IT RESOLVED THAT THE LOGAN MUNICIPAL COUNCIL informs the Water Quality Board the following actions were taken:

1. Reviewed the attached Municipal Wastewater Planning Program Report for 2017.
2. Have taken all appropriate actions necessary to maintain effluent requirements contained in the UPDES Permit.

PASSED BY THE LOGAN MUNICIPAL COUNCIL THIS 17 DAY OF JULY, 2018

  
\_\_\_\_\_  
Thomas C. Jensen, Chairman

ATTEST:

  
\_\_\_\_\_  
Teresa Harris, City Recorder





# Municipal Wastewater Planning Program (MWPP) Annual Report 2017

*Please Select the Appropriate Facility from the Dropdown Menu*

Facility Name:

LOGAN

Facility Class and Grade

COLLECTION III

TREATMENT II

Owner Name:

Logan City

Name and Title of Contact Person:

Issa A. Hamud

Environmental Director

Phone:

(435) 716-9752

E-mail:

issa.hamud@loganutah.org

SUBMIT BY APRIL 16, 2018

Electronic Submittal:

<https://deq.utah.gov/ProgramsServices/services/submissions/index.htm>

NOTE: This questionnaire has been compiled for your benefit to assist you in evaluating the technical and financial needs of your wastewater systems. If you received financial assistance from the Water Quality Board, annual submittal of this report is a condition of that assistance. Please answer questions as accurately as possible to give you the best evaluation of your facility. If you need assistance please call Beth or Judy, Utah Division of Water Quality: (801) 536-4300.

## Definitions

I. Definitions: The following terms and definitions will help you complete the worksheets and questionnaire:

<sup>1</sup>**Asset Management** – Any combination of management tools applied to physical assets of the sewer system with the objective of providing the required level of service in the most cost-effective manner. It incorporates asset lifecycle management tools, including depreciation, with the accountant's cost allocation process.

<sup>2</sup>**Capital Facility Plan** – An engineering report detailing the planning procedures including a comprehensive analysis to establish the need, scope, basis, viability and implementation schedule of proposed sewer system projects.

<sup>3</sup>**Capital Improvements** - Addition of a permanent structural change or the restoration of a property that renews or improves its value, increases its useful life, or adapts it to new uses.

<sup>4</sup>**Capital Improvement Reserve Fund** - A fund or account established for capital improvement projects.

<sup>5</sup>**Debt Service** – A payment of interest and principal, usually due annually, made in repayment of a loan or bond obligation.

<sup>6</sup>**Debt Service Reserve Fund** - A fund or account established for use in making up deficiencies in bond repayment funds.

<sup>7</sup>**Equivalent Residential Connection (ERC)** - A unit of wastewater that incurs the same cost for operations and maintenance as the average volume of domestic waste discharged from a single family residence in the sewer system service area

<sup>8</sup>**Impact Fee** – A fee established by ordinance to be imposed on new development for payment of capital costs associated with providing public services to the new development.

<sup>9</sup>**Operation and Maintenance Costs** - The total annual cost for management, operations and maintenance of sewer systems including labor and benefits, general and administrative overhead, materials, supplies, utilities, fuel, tools, etc. These costs do not include capital improvements costs or debt service. Repair and replacement costs for fixed assets may be included.

<sup>10</sup>**Plan of Operations** – A plan summarizing the operational and financial requirements that the sewer system must meet to achieve its goals and purpose. The minimum requirements are established I UAC R137-3-1.8

<sup>11</sup>**Rate Study** – A study that establishes the user charge(s) of a sewer system based on the required level of service and its cost.

<sup>12</sup>**Repair and Replacement Costs** - The annual cost to renew or replace fixed assets of the sewer system. Fixed assets are generally land, buildings and equipment. These are often major major costs not included in operations and maintenance budgets.

<sup>13</sup>**Repair and Replacement Sinking Fund** - A fund or account established for renewal or replacement of fixed assets.

<sup>14</sup>**Sewer Revenues** - Income from user charges and other fees or taxes collected to pay the cost of sewer systems.

<sup>15</sup>**Sewer System** - The collective of sewerage systems and treatment works operated by the public utility or sponsor.

<sup>16</sup>**User Charge** - A fee established by ordinance and used to pay the cost of sewer systems. Different fees may be established for one or more classes of users. For purposes of this survey, user charge means the annual average fee charges per sewer connection.

## Instructions

Save this file to your local computer. The digital MWPP form is built in Microsoft excel. Please contact Beth or Judy if you cannot find your facility name or having trouble downloading your digital MWPP form.

You will need to fill all the yellow boxes with the appropriate information. Several of the questions are Yes/No questions that require you to select the yellow cell and then click the small arrow drop down button to be able to select the appropriate answer. You may move through the worksheet by simply pressing tab to move from box to box. Hitting Enter within the form may cause you to skip over questions. Please be sure to verify that all yellow boxes have been filled with the appropriate information. Begin filling out the form by selecting the name of your facility from the dropdown menu. Please be sure to select the correct facility from the dropdown menu. DWQ will only accept one form from each facility. Once you have entered all the appropriate information in all the yellow boxes the MWPP form is complete and you are ready to submit the completed MWPP package back to DWQ. Please be sure to save your completed form. Please do not submit your form until you have the date the MWPP was presented to your Board or Council completed. You may not submit a second form with the date at a later time. DWQ will only accept one form from each facility. If you experience any trouble or have any questions please contact DWQ Engineering Section Staff.

## Financial Evaluation Section

Form completed by:

Jim Harps

May Receive Continuing Education /units (CEUs)

Complete the following table:

LOGAN

Part I: OPERATION AND MAINTENANCE	
Question	Answer
	Amount
What was the User Charge <sup>16</sup> for 2017?	\$ 345.00
	Yes/No
Are property taxes or other assessments applied to the sewer systems <sup>15</sup> ?	No
Are sewer revenues <sup>14</sup> sufficient to cover operations & maintenance costs <sup>9</sup> , and repair & replacement costs <sup>12</sup> (OM&R) <b><i>at this time</i></b> ?	Yes
Are projected sewer revenues sufficient to cover OM&R costs for the <b><i>next five years</i></b> ?	Yes
Does the sewer system have sufficient staff to provide proper OM&R?	Yes
Has a repair and replacement sinking fund <sup>13</sup> been established for the sewer system?	Yes
Is the repair & replacement sinking fund sufficient to meet anticipated needs?	Yes

Complete the following table:

LOGAN

Part II: CAPITAL IMPROVEMENTS	
Question	Answer
	YES/NO
Are sewer revenues sufficient to cover all costs of current capital improvements <sup>3</sup> projects?	Yes
Has a Capital Improvements Reserve Fund <sup>4</sup> been established to provide for anticipated capital improvement projects?	Yes
Are projected Capital Improvements Reserve Funds sufficient for the <b><i>next five years</i></b> ?	Yes
Are projected Capital Improvements Reserve Funds sufficient for the <b><i>next ten years</i></b> ?	Yes
Are projected Capital Improvements Reserve Funds sufficient for the <b><i>next twenty years</i></b> ?	Yes

Complete the following table:

LOGAN

Part III: GENERAL QUESTIONS	
Question	Answer
	YES/NO
Are sewer revenues maintained in a dedicated purpose enterprise/district account?	Yes

Are you collecting 95% or more of your anticipated sewer revenue?	Yes
Are Debt Service Reserve Fund <sup>6</sup> requirements being met?	Yes
Do you have a written emergency response plan for sewer systems?	Yes
Do you have a written safety plan for sewer systems?	Yes

Complete the following table:

**LOGAN**

Part IV: FISCAL SUSTAINABILITY REVIEW	
Question	Answer YES/NO
Have you completed a Rate Study <sup>11</sup> within the last five years?	Yes
Do you charge Impact fees <sup>8</sup> ?	Yes
Have you completed an Impact Fee Study in accordance with UCA 11-36a-3 within the last five years?	Yes
Do you maintain a Plan of Operations <sup>10</sup> ?	Yes
Have you updated your Capital Facility Plan <sup>2</sup> within the last five years?	Yes
Do you use an Asset Management <sup>1</sup> system for your sewer systems?	Yes
Do you know the total replacement cost of your sewer system capital assets?	Yes
Do you fund sewer system capital improvements annually with sewer revenues at 2% or more of the total replacement cost?	Yes
Please enter the date that this MWPP package was presented to your Board or Council	4/17/2018

Provide your best estimate of the following costs:

Part IV: PROJECTED NEEDS				
	2018	2019	2020	2021
Cost of projected capital improvements	#####	\$45,000,000	\$45,000,000	\$0
		2022	2023	
		\$0	\$0	

**FINANCIAL EVALUATION SECTION END**

## Collection System Section

Form completed by:

Cameron Draney, PE

May Receive Continuing Education /units (CEUs)

Complete the following table:

LOGAN

Part I: SYSTEM AGE	
Question	Answer
What year was your collection system first constructed (approximately)?	1914
What year was the the oldest part of your collection system constructed, replaced, or renewed?	1914

Complete the following table:

LOGAN

Part II: DISCHARGES	
Question	Answer Number
How many days last year was there a sewage bypass, overflow or basement flooding in the system due to rain or snowmelt?	1
How many days last year was there a sewage bypass, overflow or basement flooding due to equipment failure (except plugged laterals)?	0

The Utah Sewer Management Program defines two classes of sanitary sewer overflows (SSOs):

**Class 1 - a Significant SSO means a SSO or backup that is not caused by a private lateral**

- (a) affects more than five private structures;
- (b) affects one or more public, commercial or industrial structure(s);
- (c) may result in a public health risk to the general public;
- (d) has a spill volume that exceeds 5,000 gallons, excluding those in single private structures; or
- (e) discharges to Waters of the state.

**Class 2 - a Non-Significant SSO means a SSO or backup that is not caused by a private lateral**

Below include the number of SSOs that occurred in year: 2017

Number of Class 1 SSOs in Calendar year	1
Number of Class 2 SSOs in Calendar year	0

Please indicate what caused the SSO(s) in the previous question.

In February of 2017 there was a abnormally warm night with rain that caused the abnormally high amount of snow on the ground to rapidly melt. The sewer system in areas reached capacity but did not overflow. However, at one point during the capacity night, a sandbag used to plug an old connection dislodged and plugged a manhole, causing the basements of several homes to flood before the cause was found and

Please specify whether the SSOs were caused by contract or tributary community, etc.

No.



Complete the following table:

LOGAN

Part III: NEW DEVELOPMENT	
Question	Answer Yes/No
Did an industry or other development enter the community or expand production in the past two years, such that flow or wastewater loadings to the sewerage system increased by 10% or more?	No
Are new developments (industrial, commercial, or residential) anticipated in the next 2 - 3 years that will increase flow or BOD <sub>5</sub> loadings to the sewerage system by 25% or more?	No
Number of new residential sewer connections added in the last year	100
Number of new commercial/industrial connections in the last year	15
Equivalent residential connections <sup>7</sup> served	9,550

Complete the following table:

LOGAN

Part IV: OPERATOR CERTIFICATION	
Question	Answer
How many collection system operators do you employ?	5
Approximate population served	48000
<i>State of Utah Administrative Rules requires all public system operators considered to be in Direct-Responsible-Charge (DRC) to be appropriately certified at lease at the Facility's Grade.</i>	
What is the current grade of the collection system DRC operator(s)?	
Paul Lindhardt	4
Bill Young	4
Issa Hamud	4
Jim Johnson	4
Jim Harps	4
Jared Pratt	4

Facility Class & Grade	
COLLECTION	III
TREATMENT	II

List all other collection operators in your system by their certification.

*Note: Enter all names even if the list isn't visible within the cell.*

ichley, Scott Dawson, Aus

Not Certified  
Small Lagoons  
Collection I

[Names]

[Names]

Collection II	[Names]	
Collection III	Corey Brindley	
Collection IV	Draney, Paul Lindhardt, J	
		<b>Yes/No</b>
Is/are your DRC operator(s) currently certified at the appropriate grade for this facility?		<b>Yes</b>

Complete the following table:

**LOGAN**

Part V: FACILITY MAINTENANCE	
Question	Answer Yes/No
Have you implemented a preventative maintenance program for your collection system?	<b>Yes</b>
Have you updated the collection system operations and maintenance manual within the past 5 years?	<b>Yes</b>
Complete the following table:	
<b>LOGAN</b>	
Part VI: SSMP EVALUATION	
Question	Answer Yes/No
Has your system completed a Sewer System Management Plan (SSMP)?	<b>Yes</b>
Has the completed SSMP been public noticed?	<b>Yes</b>
Date of Public Notice	<b>9/1/15</b>
Has the SSMP been adopted by the permittee's governing body at a public meeting?	<b>Yes</b>
During the annual assessment of the SSMP, were any adjustments needed based on the performance of the plan?	<b>No</b>
If yes, what components of the plan were changed (i.e. line cleaning, CCTV inspections, manhole inspections and/or SSO events)?	
<b>Yes/No</b>	
During 2017, was any part of the SSMP audited as part of the five year audit?	<b>No</b>
If yes, what part of the SSMP was audited and were changes made to the SSMP as a result of the audit?	

	<b>Yes/No</b>
Have you completed a System Evaluation and Capacity Assurance Plan (SECAP) as defined by the Utah Sewer Management Program?	<b>Yes</b>

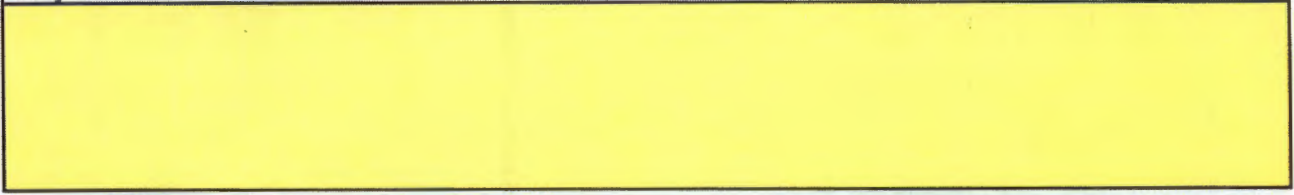
Complete the following table:

This section should be completed with the system operators.

LOGAN

Part VII: NARRATIVE EVALUATION	
Question	
Describe the physical condition of the sewerage system: (lift stations, etc. included)	
<p><b>The system as a whole is adequately meets the demands of the City's populations. There are areas that need repairs and/or upsizing.</b></p>	
What sewerage system capital improvements <sup>3</sup> does the utility need to implement in the next 10 years?	
<p><b>Certain areas that are increasing in housing density may need to be upsized. I&amp;I in certain areas will be addressed to increase existng infrastructure capacity.</b></p>	
What sewerage system problems, other than plugging, have you had over the last year?	
<p><b>High I&amp;I in certain areas have caused sewer mains to approach or exceed capacity. Root issues remains a consistant battle.</b></p>	
Is your utility currently preparing or updating its capital facility plan <sup>2</sup> ?	
<p><b>Yes, we are in the process of completing a new master plan.</b></p>	
<b>Select Answer</b>	
Does the municipality/district pay for the continuing education expenses of operators?	100% covered
Is there a written policy regarding continuing education and training for wastewater operators?	
<p><b>No.</b></p>	

Any additional comments?



**COLLECTION SYSTEM SECTION END**





## Discharging Lagoon Facility

Form completed by:

Jim Harps

May Receive Continuing Education /units (CE:Us)



Complete the following table:

LOGAN

Part I: INFLUENT INFORMATION			
Question			
Please provide the average <u>influent</u> flow rate and average <u>influent</u> BOD <sub>5</sub> and TSS loading rates listed below for your facility.			
	Average Daily Flow (MGD)	Average Daily BOD <sub>5</sub> Load (lb/day)	Average Daily TSS Load (lb/day)
Design Basis or Rated Capacity	19.3	21310	21310
2017 Average	15.8	15680	15680
Percent Capacity in Use	82%	74%	74%

Complete the following table:

LOGAN

Part II: EFFLUENT INFORMATION	
Question	Answer
How many Notices of Violation (NOVs) did you receive for this facility in the review year?	0

Complete the following table:

LOGAN

Part III: FACILITY AGE			
Question			
In what year were the following process units most recently constructed, upgraded or renewed?			
<b>Note: If a unit process does not apply to your system enter the Evaluation Year under Construction or Upgrade Year.</b>			
	Evaluation Year	Construction or Upgrade Year	Age
Unit Process			
Headworks	2017	1988	29
Lagoons (including aeration)	2017	1988	29
Disinfection	2017	2007	10

Complete the following table:

LOGAN

Part IV: DISCHARGES	
Question	Answer
How many days in the past year was there a bypass or overflow of wastewater at the facility due to high flows?	2
How many days in the last year was there a bypass or overflow of wastewater at the facility due to equipment failure?	0

Complete the following table:

LOGAN

Part V: NEW DEVELOPMENT	
Question	Answer
Number of new residential sewer connections added in the last year	472
Number of new commercial/industrial connections added in the last year	39
Equivalent residential connections <sup>7</sup> served	21,539

Complete the following table:

LOGAN

Part VI: OPERATOR CERTIFICATION							
Question	Answer						
How many treatment operators do you employ?	6						
<i>Utah Administrative Rules require all public system operators considered to be in Direct-Responsible-Charge (DRC) to be appropriately certified at least at the Facility's Grade.</i>							
What is the current grade of the treatment system DRC operator(s)?							
Jim Harps	Treatment II						
Issa Hamud	Treatment II						
[Names]	[Grade]						
[Names]	[Grade]						
[Names]	[Grade]						
[Names]	[Grade]						
<table border="1" style="float: right;"> <thead> <tr> <th colspan="2">Facility Class &amp; Grade</th> </tr> </thead> <tbody> <tr> <td>COLLECTION</td> <td>III</td> </tr> <tr> <td>TREATMEN T</td> <td>II</td> </tr> </tbody> </table>		Facility Class & Grade		COLLECTION	III	TREATMEN T	II
Facility Class & Grade							
COLLECTION	III						
TREATMEN T	II						
List all the operators in your system by their certification class. <i>Note: Enter all names even if the list isn't visible within the cell</i>							
Not Certified	John Newbold, Ryan Jenk						
Small Lagoons	[Names]						
Treatment I	[Names]						
Treatment II	, Jim Harps, Tim Lindsay,						
Treatment III	[Names]						
Treatment IV	[Names]						
Is/are your DRC operator(s) currently certified at the appropriate grade for this facility?	Yes/No Yes						

Complete the following table:

LOGAN

Part VII: FACILITY MAINTENANCE	
Question	Answer
	Yes/No
Have you implemented a preventative maintenance program for your treatment system?	Yes

Have you updated the treatment system operations and maintenance manual within the past 5 years?	Yes
--	-----

Identify the types of treatment units at your facility.

TREATMENT TYPE	Yes/No
Screening	Yes
Grit Removal	No
Lagoon Variations	Yes
Phosphorus Treatment	No
Chlorine Disinfection	Yes
UV Disinfection	No

**DISCHARGING LAGOON FACILITY SECTION END**