Lowell City Council
Regular Meeting
Tuesday, September 20, 2022 at 7:00 p.m.

Lowell Rural Fire Protection District Fire Station 1
389 N. Pioneer Street, Lowell, OR 97452

Members of the public are encouraged to provide comment or testimony through the following:

- Joining in person or by phone, tablet, or PC. For details, click on the event at www.ci.lowell.or.us.
- In writing, by using the drop box at Lowell City Hall, 107 East Third Street, Lowell, OR 97452.
- By email to: admin@ci.lowell.or.us.

Regular Meeting Agenda

Call to Order/Roll Call/Pledge of Allegiance
Councilors: Mayor Bennett ___ Harris ___ Stratis ___ Weathers ___ Murray ___

Approval of Agenda

Consent Agenda
Council members may request an item be removed from the Consent Agenda to be discussed as the first business item of the meeting.

1. Approval of the minutes for the August 2, 2022 City Council regular meeting
2. Approval of the minutes for the August 16, 2022 City Council regular meeting and executive session
3. Approval of the minutes for the September 6, 2022 City Council regular meeting
4. August 2022 check register
5. June 2022 financial statements
6. July 2022 financial statements

The meeting location is accessible to pesons with disabilities. A request for an interpreter for the hearing impaired of other accommodations for persons with disabilities must be made at least 48 hours before the meeting to City Clerk Sam Dragt at 541-937-2157.

Public Comments

Speakers will be limited to three (3) minutes. The Council may ask questions but will not engage in discussion or make decisions based on public comment at this time. The Mayor may direct the City Administrator to follow up on comments received. When called, please state your name and address for the record.

Direct all comments to the Council through the Mayor. All speakers are expected to be polite, courteous, and respectful when making their comments. Personal attacks, insults, profanity, and inflammatory comments will not be permitted.

Council Comments (three minutes per speaker)

Staff Reports

1. City Administrator report
2. Public Works report

Public Hearings

Old Business

New Business

1. Motion to authorize the City Administrator to submit the "Water master plan" and "Seismic risk assessment and mitigation plan" to the Oregon Health Authority. – Discussion/ Possible action

2. Motion to approve the September 15, 2022 "Engineering scope of services" from Civil West Engineering Services, Inc. in the amount not to exceed $11,486 to update water and parks system development charges and to authorize the City Administrator to sign. – Discussion/ Possible action

3. Review quotations for replacement HVAC unit at 70 N. Pioneer St. – Discussion/ Possible action
    a. Priority One
    b. Innovative Air
    c. Harvey and Price
    d. Alpine Heating and Air Conditioning

    At this time, City Council may vote to accept a proposal from one of the vendors.

4. Receive resignation letter from Planning Commissioner William D. Priser – Discussion/ Possible action

Recommended motion: I move to accept the resignation of William D. Priser from the Planning Commission.

5. Review volunteer application from Lloyd Hall for Planning Commissioner vacancy – Discussion/ Possible action
   At this time, City Council may take any of the following actions: (1) appoint the applicant to the Planning Commission; (2) keep the position open to allow for additional actions; (3) any other action within the City Council's discretion.

6. Discussion on holiday programming and Christmas tree lighting – Discussion

Other Business

Mayor Comments

Community Comments: Limited to two (2) minutes if prior to 9:30 P.M.

Adjourn the Regular Meeting

City of Lowell, Oregon
Minutes of the City Council Regular Session
August 2, 2022

The Regular Session was called to order at 7:03 PM by Mayor Bennett.

Members Present: Mayor Don Bennett, Gail Harris, Tim Stratis, Maureen Weathers, Jimmy Murray
Staff Present: CA Jeremy Caudle, Public Works Director Max Baker

Consent Agenda: None

Public Comments:

- Hall O'Regan, 62 E 3rd St, spoke about code issues that he has observed and encouraged the council to be more active in code enforcement
- Larry Senn, property owner 134/136 W 2nd St.- echoed Mr. O'Regan's sentiments.

Council Comments: None

Old Business:

1. Mayor introduced RAIN CEO Caroline Cummings and Venture Catalyst Aqsa Khan presented information regarding the changes that RAIN is working on to create more options for new and existing small businesses. Councilor Weathers made a motion to approve a 2-year memorandum of understanding among RAIN and the City of Oakridge in the amount of $10,000 per year, and to authorize the City Administrator to sign. This was seconded by Councilor Harris. PASS 5:0
2. Mayor Bennett made a motion to rescind the July 19, 2022, motion to approve the first reading of Ordinance 307, "An ordinance declaring a ban on psilocybin service centers and the manufacture of psilocybin products, by title only. Seconded by Councilor Weathers. PASS 5:0

New Business:

- Councilor Stratis made a motion to approve Resolution 790, "A resolution authorizing an extension of the maturity of the City of Lowell, Lane County, Oregon's full faith and credit financing agreement and note, series 2020 (taxable) and related matters. Seconded by Councilor Murray. PASS 5:0
- Discussion and update on the Land and Water Conservation grant application for Rolling Rock Park. No decision s required to be made.
- Councilor Stratis made a motion to approve Resolution 792, "A resolution to amend the 'Utility Assistance Program to 30% from the previous 25%. This was seconded by Councilor Weathers. PASS 5:0

- Councilor Murray made a motion to approve Resolution 793, "A resolution to authorize the issuance of a city credit card to the Library Director under the City of Lowell general accounts seconded by Councilor Harris. PASS 5:0
- Councilor Stratis made a motion to approve sales order 21193 with Correct Equipment for water meters in the amount not to exceed $41,500 and to authorize the City Administrator to sign. Motion was seconded by Councilor Murray. PASS 5:0
- Discussion on development code update project timeline. – Discussion
  September 28, Wednesday– community meeting on proposed updates
  October 18, Tuesday– joint meeting with City Council and Planning Commission.

Mayor Comments: none.

Community Comments –

- **Hall O'Regan, 62 E 3rd St**, supports the flexibility of the Parks planning. And in keeping the Paul Fisher Park as the family park and Rolling Rock Park as the tourist, interpretive park.
- **Larry Senn,134/136 W 2nd St**, reiterated his previous statements regarding to the code enforcement.

Adjourn: 7:48 PM

Approved: _____ _____
Don Bennett, Mayor Date

Attest: _____ _____
Jeremy Caudle, City Recorder Date

City of Lowell, Oregon
Minutes of the City Council Regular Session & Executive Session
August 16, 2022, at 7:04 pm

The Regular Session was called to order at 7:00 PM by Mayor Bennett.

Members Present: Mayor Don Bennett, Gail Harris, Tim Stratis, Maureen Weathers
Excused Absence: Jimmy Murray
Staff Present: CA Jeremy Caudle, Max Baker, Public Works Director, Peggy O'Kane, Library Director

Consent Agenda: Councilor Weathers made a moved to approve the Consent Agenda as presented, second by Councilor Stratis. PASS 4:0

Public Comments: None
Council Comments: None

City Administrator Report: Transition to the new building will occur in stages. We are evaluating furnishings and office equipment for the needs of the city. At this stage the older records will remain at the current City Hall until there is a climate-controlled storage for maintaining required records. Disposal process of the surplus 3rd Street property would occur after the documents are safely stored. Donor Bricks options will be considered once we are closer to the completion of the library space. External Lighting change order. We received the third pay application for the project. We have yet to make a draw request for the Business Oregon loan but will need to soon as we exhaust the grant, donations, property sales.
East Main Street status, more work will be necessary to complete the UST decommissioning to meet the DEQ guidelines. Per the DEQ it may take as long as two more months for the process to be completed. Property line adjustment for the 70 N Pioneer Street should be ready for Lane County to process, once adjusted this will be ready to place on the market. Partition plats for Rolling Rock Park and the current City Hall property are both on the September 7 Planning Commission meeting. BBJ committee meeting for a review of this year's BBJ Festival
Emergency procurement – replacement of the SCADA due to failure after a scheduled power outage. This a vital to keep the water plant running.

Public Works Report: Water plant SCADA replacement – will have redundancy. This is a key and vital piece of equipment. Water Master Plan Draft, reviewed with Civil West. Including the Management Conservation plan was turned in to Lane County, this is part of the Master plan. Water meter update – we have purchased all the remaining meters needed. Algae update – there is a bloom but there is still no discernable detect in the reads. Fire Danger – currently at high, using any spark emitting equipment is prohibited after 10 am through 8pm.

Old Business: none

New Business:

1. Presentation by Library Director Peggy O'Kane to Review quotes for library shelving **– Councilor Stratis made a motion to approve Quote #95781 with BroDart Library Supplies and Furnishings in the amount of $23,364.99 and to authorize the City Administrator to sign." This was seconded by Councilor Harris. PASS 4:0**

2. Other updates on the library –

Reestablishing the Library Committee and volunteers
ILS and Digital Library Consortium
Opening-day book collection
Other furniture needs

3. Councilor Harris made a Motion to approve an "Audit engagement letter" with Emerald CPA Group, LLP in the amount not to exceed $15,000. Seconded by Councilor Stratis. PASS 4:0

4. Councilor Stratis made a Motion to approve an "Additional services proposal" with Wilson Architecture in the amount of $15,600 and to authorize the City Administrator to sign. Seconded by Councilor Harris. PASS 4:0

5. Councilor Stratis made a motion to approve Infrastructure contract 4432-DR-OR" with the State of Oregon Office of Emergency Management and to authorize the City Administrator to sign. Seconded by Councilor Weathers. PASS 4:0

Other Business: None
Mayor Comments: None
Councilor Comments: None

Community Comments: None
Recess Regular Session: 8:00 PM

Members Present: Mayor Don Bennett, Gail Harris, Tim Stratis, Maureen Weathers
Excused Absence: Jimmy Murray
Staff Present: CA Jeremy Caudle

The **Executive Session** was called to order at 8:12 PM by Mayor Bennett

> **The executive session is being held pursuant to ORS 192.660(2)(h), to consult with legal counsel concerning the legal rights and duties of the city with regards to litigation**

Adjourn the Executive Session: 9:24 PM
Reconvene Regular Session: 9:24 PM

> Councilor Stratis made a motion to Approval revising the contract for legal services with Thorp, Purdy, Jewett, Urness & Wilkinson P.C., not to exceed $7500.00, seconded by Councilor Weathers. PASS 4:0

Adjourn: 9:26 PM

Approved: _____ _____
Don Bennett, Mayor Date

Attest: _____ _____
Jeremy Caudle, City Recorder Date

City of Lowell, Oregon
Minutes of the City Council Regular Session
September 6, 2022

The Regular Session was called to order at 7:00 PM by Mayor Bennett.

Members Present: Mayor Don Bennett, Gail Harris, Maureen Weathers, Jimmy Murray
Members Absent: Tim Stratis
Staff Present: CA Jeremy Caudle, Public Works Director Max Baker

Public Comments: Hall O'Regan 62 E 3rd Lowell. Reminded the city of the previous comments regarding status of the towns code compliance issues

Council Comments: None

Old Business: None
New Business:
1. Matt Waddlington, PE, Principal with Civil West Engineering made a presentation of the draft of the "Water master plan and seismic resiliency and mitigation plan".

2. Lon Dragt, Fire Chief with Lowell Rural Fire Protection District made a presentation recommending changes to the City's "Open burning" ordinance that more closely aligns with Lane County's burn ordinance.

3. Library Director Peggy O'Kane made a presentation of the recommended policies for the Maggie Osgood Library

4. Public Works Director Max Baker gave an update on easement renewal with U.S. Army Corps of Engineers

5. Decision on hold - for more research regarding motion to approve change order #13b with Bridgeway Contracting in the amount of $18,300.29 for a Carrier 14 SEER Heat Pump.

6. Councilor Murray made a motion to approve a proposal with Colyer Asphalt in the amount not to exceed $8,000.00 for asphalt coating, sealing, patching, and striping. Seconded by Councilor Weathers. PASS 4:0

7. Councilor Weathers made a motion to approve an "Agreement for law enforcement services" with the City of Oakridge and to authorize the City Administrator to sign. Seconded by Councilor Harris. PASS 4:0

8. Councilor Harris made a motion to approve a "Water fund technical assistance project financing contract, project #V22013" for the "Water facilities plan" with the Oregon Infrastructure Finance Authority in the amount of $20,000 and to authorize the Mayor to sign. Seconded by Councilor Weathers. PASS 4:0

9. Councilor Harris made a motion to approve a “Water fund technical assistance project financing contract, project #V22012” for the “Wastewater facilities plan” with the Oregon Infrastructure Finance Authority in the amount of $20,000 and to authorize the Mayor to sign, seconded by Councilor Weathers. PASS 4:0

Other Business: Public Works director informed the council of a significant line break on asbestos concrete main break over the weekend on D street. The leak was stopped but highlights the need for updating to some of the 60+ year old water pipes.

Mayor Comments: None
Community Comments: None

Adjourn: 9:20 PM

Approved: _____ _____
Don Bennett, Mayor Date

Attest: _____ _____
Jeremy Caudle, City Recorder Date

Report Criteria:
Report type: GL detail
Check.Type = {<>} "Adjustment"
Bank.Name = "General"

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount
17107								
17107	Banner Bank	JEREMY JUL	1	Microsoft Cloud Storage	110-410-6230	.00	2.79	2.79
17107	Banner Bank	JEREMY JUL	2	Microsoft Cloud Storage	110-420-6234	.00	.37	.37
17107	Banner Bank	JEREMY JUL	3	Microsoft Cloud Storage	110-440-6230	.00	.92	.92
17107	Banner Bank	JEREMY JUL	4	Microsoft Cloud Storage	110-450-6230	.00	.37	.37
17107	Banner Bank	JEREMY JUL	5	Microsoft Cloud Storage	110-460-6234	.00	.92	.92
17107	Banner Bank	JEREMY JUL	6	Microsoft Cloud Storage	110-480-6230	.00	.55	.55
17107	Banner Bank	JEREMY JUL	7	Microsoft Cloud Storage	220-490-6230	.00	1.11	1.11
17107	Banner Bank	JEREMY JUL	8	Microsoft Cloud Storage	230-490-6230	.00	4.80	4.80
17107	Banner Bank	JEREMY JUL	9	Microsoft Cloud Storage	240-490-6230	.00	4.80	4.80
17107	Banner Bank	JEREMY JUL	10	Microsoft Cloud Storage	312-490-6234	.00	1.85	1.85
17107	Banner Bank	JEREMY JUL	11	Indeed- Library Director	110-410-6220	.00	452.03	452.03
17107	Banner Bank	JEREMY JUL	12	Zoom- remote meetings regular	110-410-6122	.00	14.99	14.99
17107	Banner Bank	JEREMY JUL	13	Zoom - Remote Meetings BBJ Co	314-490-6122	.00	14.99	14.99
17107	Banner Bank	JEREMY JUL	14	Indeed - library Director	110-410-6220	.00	49.63	49.63
17107	Banner Bank	JEREMY JUL	15	USPS - certified mail to Lane Cou	110-410-6226	.00	7.58	7.58
17107	Banner Bank	SAM JULY 2	1	Zoro tools- poop bags for the park	110-420-6234	.00	91.90	91.90
17107	Banner Bank	SAM JULY 2	2	one Box - BBJ	220-490-6230	.00	17.65	17.65
17107	Banner Bank	SAM JULY 2	3	Staples - Classification folders	110-410-6230	.00	5.32	5.32
17107	Banner Bank	SAM JULY 2	4	Staples - Classification folders	110-420-6234	.00	1.77	1.77
17107	Banner Bank	SAM JULY 2	5	Staples - Classification folders	110-450-6230	.00	.71	.71
17107	Banner Bank	SAM JULY 2	6	Staples - Classification folders	110-460-6234	.00	1.77	1.77
17107	Banner Bank	SAM JULY 2	7	Staples - Classification folders	110-480-6230	.00	1.06	1.06
17107	Banner Bank	SAM JULY 2	8	Staples - Classification folders	220-490-6230	.00	2.13	2.13
17107	Banner Bank	SAM JULY 2	9	Staples - Classification folders	230-490-6230	.00	9.23	9.23
17107	Banner Bank	SAM JULY 2	10	Staples - Classification folders	240-490-6230	.00	9.23	9.23
17107	Banner Bank	SAM JULY 2	11	Staples - Classification folders	312-490-6230	.00	3.55	3.55
17107	Banner Bank	SAM JULY 2	12	Staples - PostIt Arrows, Envelope	110-410-6230	.00	8.04	8.04
17107	Banner Bank	SAM JULY 2	13	Staples - PostIt Arrows, Envelope	110-420-6234	.00	1.07	1.07
17107	Banner Bank	SAM JULY 2	14	Staples - PostIt Arrows, Envelope	110-440-6230	.00	2.68	2.68
17107	Banner Bank	SAM JULY 2	15	Staples - PostIt Arrows, Envelope	110-450-6230	.00	1.07	1.07
17107	Banner Bank	SAM JULY 2	16	Staples - PostIt Arrows, Envelope	110-460-6234	.00	2.68	2.68
17107	Banner Bank	SAM JULY 2	17	Staples - PostIt Arrows, Envelope	110-460-6234	.00	1.61	1.61
17107	Banner Bank	SAM JULY 2	18	Staples - PostIt Arrows, Envelope	220-490-6230	.00	3.21	3.21
17107	Banner Bank	SAM JULY 2	19	Staples - PostIt Arrows, Envelope	230-490-6230	.00	13.93	13.93
17107	Banner Bank	SAM JULY 2	20	Staples - PostIt Arrows, Envelope	240-490-6230	.00	13.93	13.93
17107	Banner Bank	SAM JULY 2	21	Staples - PostIt Arrows, Envelope	312-490-6230	.00	5.36	5.36
17107	Banner Bank	SAM JULY 2	22	Inf-Good Hire - O'Kane Backgroun	110-450-6290	.00	20.50	20.50
17107	Banner Bank	SAM JULY 2	23	Inf-Good Hire - O'Kane Backgroun	110-450-6290	.00	54.99	54.99
17107	Banner Bank	SAM JULY 2	24	Staples - Classification Folders	110-420-6234	.00	.71	.71
Total 17107:						.00		831.80
17108								
17108	Biblionix	8334	1	Appollo Retrospective Conversion	110-450-6122	.00	1,200.00	1,200.00
17108	Biblionix	8334	2	Appollo Automation Annual Subsc	110-450-6122	.00	800.00	800.00
Total 17108:						.00		2,000.00
17109								
17109	CenturyLink Business Serv	300464576	1	Telephone Service	110-410-6440	.00	1.00	1.00

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount
Total 17109:						.00		1.00
17110								
17110	City of Lowell	AUG 2022 W	1	Water Service	110-410-6420	.00	102.33	102.33
17110	City of Lowell	AUG 2022 W	2	Water Service	110-420-6420	.00	1,026.15	1,026.15
17110	City of Lowell	AUG 2022 W	3	Water Service	110-450-6420	.00	7.77	7.77
17110	City of Lowell	AUG 2022 W	4	Water Service	220-490-6420	.00	3.10	3.10
17110	City of Lowell	AUG 2022 W	5	Water Service	230-490-6420	.00	52.94	52.94
17110	City of Lowell	AUG 2022 W	6	Water Service	240-490-6420	.00	531.56	531.56
17110	City of Lowell	AUG 2022 W	7	Sewer Service	110-410-6425	.00	245.06	245.06
17110	City of Lowell	AUG 2022 W	8	Sewer Service	110-420-6425	.00	134.28	134.28
17110	City of Lowell	AUG 2022 W	9	Sewer Service	110-450-6425	.00	16.79	16.79
17110	City of Lowell	AUG 2022 W	10	Sewer Service	220-490-6425	.00	6.71	6.71
17110	City of Lowell	AUG 2022 W	11	Sewer Service	230-490-6425	.00	67.14	67.14
17110	City of Lowell	AUG 2022 W	12	Sewer Service	240-490-6425	.00	604.26	604.26
Total 17110:						.00		2,798.09
17111								
17111	City of Oakridge	0056-07-22	1	Police Service	110-430-6118	.00	2,673.99	2,673.99
17111	City of Oakridge	0056-07-22	2	Ally Security Subscription/Motorol	110-430-6118	.00	1,575.00	1,575.00
Total 17111:						.00		4,248.99
17112								
17112	Consolidated Supply	S010914823.	1	Customer shut-offs and Poly Servi	230-700-8540	.00	2,270.78	2,270.78
Total 17112:						.00		2,270.78
17113								
17113	Gatehouse Eugene - Adver	0000116897	1	Public Notice LB1 6/1/2022	110-410-6220	.00	825.00	825.00
17113	Gatehouse Eugene - Adver	0000116897	2	Public Notice Budget Notice 6/15/	110-410-6220	.00	247.50	247.50
Total 17113:						.00		1,072.50
17114								
17114	J & K Electrical LLC	7508A	1	Power cord for Generator at tower	230-490-6234	.00	389.30	389.30
Total 17114:						.00		389.30
17115								
17115	Lane Electric Cooperative	JULY 2022	1	Electricity	110-410-6430	.00	139.26	139.26
17115	Lane Electric Cooperative	JULY 2022	2	Electricity	110-420-6430	.00	187.06	187.06
17115	Lane Electric Cooperative	JULY 2022	3	Electricity	110-450-6430	.00	20.77	20.77
17115	Lane Electric Cooperative	JULY 2022	4	Electricity	110-470-6326	.00	63.87	63.87
17115	Lane Electric Cooperative	JULY 2022	5	Electricity	220-490-6430	.00	8.31	8.31
17115	Lane Electric Cooperative	JULY 2022	6	Electricity	230-490-6430	.00	1,504.58	1,504.58
17115	Lane Electric Cooperative	JULY 2022	7	Electricity	240-490-6430	.00	2,116.03	2,116.03
17115	Lane Electric Cooperative	JULY 2022	8	Electricity	312-490-6430	.00	1,042.05	1,042.05
Total 17115:						.00		5,081.93
17116								
17116	LiftOff LLC	6482ADD6	1	Office 365	110-410-6122	.00	269.76	269.76
17116	LiftOff LLC	6482ADD6	2	Office 365	110-450-6122	.00	64.75	64.75

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount
17116	LiftOff LLC	6482ADD6	3	Office 365	220-490-6122	.00	97.11	97.11
17116	LiftOff LLC	6482ADD6	4	Office 365	230-490-6122	.00	269.76	269.76
17116	LiftOff LLC	6482ADD6	5	Office 365	240-490-6122	.00	269.76	269.76
17116	LiftOff LLC	6482ADD6	6	Office 365	312-490-6122	.00	107.90	107.90
Total 17116:						.00		1,079.04
17117								
17117	Lowell Mini Storage	AUGUST 202	1	Storage Rental Unit #L029	314-490-6705	.00	80.00	80.00
Total 17117:						.00		80.00
17118								
17118	Mersereau Shannon, LLP	205 E MAIN	1	Amending Finance Agreement &	110-440-6128	.00	3,500.00	3,500.00
Total 17118:						.00		3,500.00
17119								
17119	Professional Credit Service	24847	1	Collection Service Fee	110-480-6565	.00	7.99	7.99
Total 17119:						.00		7.99
17120								
17120	Renewable Resource Grou	149175,1500	1	Invoice 149175 BOD, TSS	240-490-6755	.00	196.20	196.20
17120	Renewable Resource Grou	149175,1500	2	Invoice 150060 BOD, TSS	240-490-6755	.00	196.20	196.20
17120	Renewable Resource Grou	149175,1500	3	Invoice 150186 E-Coli	240-490-6755	.00	62.10	62.10
17120	Renewable Resource Grou	149175,1500	4	Invoice 150269 BOD TSS	240-490-6755	.00	196.20	196.20
17120	Renewable Resource Grou	149175,1500	5	Invoice 150402 E-Coli	240-490-6755	.00	62.10	62.10
17120	Renewable Resource Grou	149175,1500	6	Invoice 150155 BAc-T	230-490-6755	.00	45.90	45.90
Total 17120:						.00		758.70
17121								
17121	S & F Land Services, LLC	20220767	1	Survey 70 N Pioneer boundry line	110-450-6128	.00	4,902.00	4,902.00
Total 17121:						.00		4,902.00
17122								
17122	Sanders, Tim	95	1	Monthly DRC Fee for Collections	240-490-6128	.00	300.00	300.00
Total 17122:						.00		300.00
17123								
17123	St. Cousair Oregon Orchar	JAM 2022	1	Jam	314-490-6814	.00	294.00	294.00
Total 17123:						.00		294.00
17124								
17124	USA Blue Book	043550, 044	1	PH buffers, CL17 Reagent	230-490-6750	.00	782.29	782.29
17124	USA Blue Book	043550, 044	2	Shutoff Tool for SED Basin	230-490-6234	.00	351.95	351.95
17124	USA Blue Book	043550, 044	3	PH Buffers, Hoses for Chemical fe	240-490-6750	.00	812.33	812.33
17124	USA Blue Book	043550, 044	4	Poles for Skimmer Nets	240-490-6234	.00	100.95	100.95
Total 17124:						.00		2,047.52

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount
17125								
17125	Caselle	118996	1	Contract Support and Maintenanc	110-410-6122	.00	219.03	219.03
17125	Caselle	118996	2	Contract Support and Maintenanc	110-420-6122	.00	86.15	86.15
17125	Caselle	118996	3	Contract Support and Maintenanc	110-440-6122	.00	16.87	16.87
17125	Caselle	118996	4	Contract Support and Maintenanc	110-450-6122	.00	46.13	46.13
17125	Caselle	118996	5	Contract Support and Maintenanc	220-490-6122	.00	22.10	22.10
17125	Caselle	118996	6	Contract Support and Maintenanc	230-490-6122	.00	400.37	400.37
17125	Caselle	118996	7	Contract Support and Maintenanc	240-490-6122	.00	400.37	400.37
17125	Caselle	118996	8	Contract Support and Maintenanc	312-490-6122	.00	82.38	82.38
17125	Caselle	118996	9	Contract Support and Maintenanc	314-490-6122	.00	11.60	11.60
Total 17125:						.00		1,285.00
17126								
17126	City of Lowell	BBJ 2022	1	QR Donation for shade tree for -	314-490-6816	.00	350.00	350.00
Total 17126:						.00		350.00
17127								
17127	City of Lowell	BBJ 2022 .2	1	QR Donation for water/sewer cust	314-490-6816	.00	250.00	250.00
Total 17127:						.00		250.00
17128								
17128	Honey Bucket	0552929191	1	BBJ Portable Toilet	314-490-6852	.00	1,120.00	1,120.00
Total 17128:						.00		1,120.00
17129								
17129	Hunter Communications	226110	1	Internet Service	110-410-6435	.00	120.21	120.21
17129	Hunter Communications	226110	2	Internet Service	110-450-6435	.00	46.24	46.24
17129	Hunter Communications	226110	3	Internet Service	220-490-6435	.00	18.49	18.49
Total 17129:						.00		184.94
17130								
17130	Lane County Deeds & Rec	70 N HYLAN	1	Declaration of Property Line Adjus	110-450-6290	.00	92.00	92.00
Total 17130:						.00		92.00
17131								
17131	Lowell Rural Fire Protectio	BBJ 2022	1	Quilt Raffle Donation	314-490-6816	.00	2,850.00	2,850.00
Total 17131:						.00		2,850.00
17132								
17132	Lowell School District	BBJ 2022	1	QR Donation for School supplies	314-490-6816	.00	500.00	500.00
Total 17132:						.00		500.00
17133								
17133	Lowell School District	BBJ 2022.1	1	QR Donation for use of the Gym	314-490-6816	.00	250.00	250.00
Total 17133:						.00		250.00

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount
17134								
17134	Nichols, Layli	JULY 2022	1	Consulting Services	110-410-6114	.00	728.00	728.00
17134	Nichols, Layli	JULY 2022	2	Consulting Services	312-490-6114	.00	455.00	455.00
17134	Nichols, Layli	JULY 2022	3	Consulting Services	230-490-6114	.00	455.00	455.00
17134	Nichols, Layli	JULY 2022	4	Consulting Services	240-490-6114	.00	182.00	182.00
Total 17134:						.00		1,820.00
17135								
17135	Northwest Code Profession	4125	1	Building Permit Cost	220-490-6150	.00	2,792.89	2,792.89
17135	Northwest Code Profession	4125	2	Electrical Permit Cost	220-490-6152	.00	93.00	93.00
Total 17135:						.00		2,885.89
17136								
17136	Pacific Office Automation In	5021214430	1	Postage Machine	110-410-6128	.00	41.69	41.69
17136	Pacific Office Automation In	5021214430	2	Postage Machine	230-490-6128	.00	83.37	83.37
17136	Pacific Office Automation In	5021214430	3	Postage Machine	240-490-6128	.00	83.37	83.37
Total 17136:						.00		208.43
17137								
17137	Southside Bank	AUGUST 202	1	Interest- Main Street Property	110-800-7510	.00	667.28	667.28
Total 17137:						.00		667.28
17138								
17138	U.S. Equipment Finance	479187817	1	Copier Contract	110-410-6124	.00	147.98	147.98
Total 17138:						.00		147.98
17139								
17139	Bridge Town Market	JULY2022	1	Fuel for Mower and 2017 Ram	110-420-6710	.00	441.81	441.81
17139	Bridge Town Market	JULY2022	2	water and Gatorade	230-490-6234	.00	39.45	39.45
17139	Bridge Town Market	JULY2022	3	Ratchet Straps and Batteries	240-490-6234	.00	51.06	51.06
Total 17139:						.00		532.32
17140								
17140	Century Link	AUGUST 202	1	Telephone Service	110-410-6440	.00	133.39	133.39
17140	Century Link	AUGUST 202	2	Telephone Service	110-450-6440	.00	34.27	34.27
17140	Century Link	AUGUST 202	3	Telephone Service	220-490-6440	.00	18.63	18.63
17140	Century Link	AUGUST 202	4	Internet Service	230-490-6435	.00	75.00	75.00
17140	Century Link	AUGUST 202	5	Telephone Service	230-490-6440	.00	63.96	63.96
17140	Century Link	AUGUST 202	6	Telephone Service	240-490-6440	.00	177.18	177.18
17140	Century Link	JULY 2022 W	1	Internet Service	230-490-6435	.00	79.50	79.50
Total 17140:						.00		581.93
17141								
17141	CenturyLink Business Serv	304518381	1	Telephone Service	110-410-6440	.00	2.53	2.53
Total 17141:						.00		2.53
17142								
17142	City of Lowell	JULY 2022 F	1	Water Franchise fees	230-490-6760	.00	1,391.06	1,391.06

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount	
17142	City of Lowell	JULY 2022 F	2	Sewer Franchise Fees	240-490-6760	.00	1,736.19	1,736.19	
Total 17142:						.00		3,127.25	
17143									
17143	City of Oakridge	0056-AUG22	1	Police Service	110-430-6118	.00	2,673.99	2,673.99	
Total 17143:						.00		2,673.99	
17144									
17144	Civil West Engineering Ser	2101.001.00	1	2101.001.007.1.07.5 McDougal C	110-440-6116	.00	1,402.50	1,402.50	
17144	Civil West Engineering Ser	2101.001.00	2	2101.001.007.1.07.6 Valencia	110-440-6116	.00	330.00	330.00	
17144	Civil West Engineering Ser	2101.001.00	3	2101.001.007.1.07.7 Dollar Gener	110-440-6116	.00	330.00	330.00	
17144	Civil West Engineering Ser	2101.001.00	4	2101.001.007.1.01 205 E Main St	110-440-6116	.00	82.50	82.50	
17144	Civil West Engineering Ser	2101.001.00	5	2101.001.007.0.01 Rolling Rock P	110-420-6128	.00	247.50	247.50	
17144	Civil West Engineering Ser	2101.001.00	6	2101.001.007.1.01 City Hall 103	110-410-6128	.00	247.50	247.50	
17144	Civil West Engineering Ser	2101.001.00	7	2101.001.007.1.03 Sewer Service	240-490-6116	.00	263.25	263.25	
17144	Civil West Engineering Ser	2101.001.00	8	2101.0015.011 WW facilities Plan	440-490-6128	.00	963.50	963.50	
Total 17144:						.00		3,866.75	
17145									
17145	Correct Equipment, Inc.	47217	1	Water Meters	230-700-8540	.00	40,117.08	40,117.08	
17145	Correct Equipment, Inc.	47217	1	Water Meters	230-700-8540	.00	40,117.08-	40,117.08-	V
Total 17145:						.00		.00	
17146									
17146	Ferguson	1123727, 112	1	Materials for New Service Connec	230-490-6234	.00	2,155.79	2,155.79	
Total 17146:						.00		2,155.79	
17147									
17147	Gatehouse Eugene - Adver	0000118321	1	Public Notice SECOND READING	110-410-6220	.00	105.00	105.00	
Total 17147:						.00		105.00	
17148									
17148	J & K Electrical LLC	7986	1	Repairing Power/outlets to Rolling	110-420-6320	.00	1,309.82	1,309.82	
Total 17148:						.00		1,309.82	
17149									
17149	Lane Council of Governme	84492	1	City Hall Renovation	110-410-8225	.00	128.98	128.98	
17149	Lane Council of Governme	84492	2	Library Renovation	110-450-8225	.00	300.96	300.96	
17149	Lane Council of Governme	84492	3	Lake Town SD Valencia	110-440-6128	.00	28.66	28.66	
17149	Lane Council of Governme	84492	4	Crestview SD	110-440-6128	.00	257.97	257.97	
17149	Lane Council of Governme	84492	5	VAlencia Mixed Use	110-440-6128	.00	143.32	143.32	
17149	Lane Council of Governme	84492	6	Dollar General	110-440-6128	.00	114.65	114.65	
17149	Lane Council of Governme	84492	7	General legal Service	110-410-6112	.00	458.59	458.59	
17149	Lane Council of Governme	84523	1	LU 2022-06 Dollar General	110-440-6522	.00	692.68	692.68	
17149	Lane Council of Governme	84523	2	LU 2022-2 Valencia Site Review	110-440-6522	.00	856.23	856.23	
17149	Lane Council of Governme	84523	3	LU2021-13 Lake Town SD Valenci	110-440-6522	.00	139.38	139.38	
17149	Lane Council of Governme	84523	4	LU 2022-01 ZC Dollar General	110-440-6522	.00	338.51	338.51	
17149	Lane Council of Governme	84523	5	LU 2022-03 City PLA	110-440-6522	.00	258.86	258.86	
17149	Lane Council of Governme	84523	6	General Planning Assist	110-440-6522	.00	318.60	318.60	

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount
17149	Lane Council of Governme	84523	7	Code Update	110-440-6522	.00	338.53	338.53
17149	Lane Council of Governme	84834	1	IT Service - general	110-410-6122	.00	29.72	29.72
17149	Lane Council of Governme	84834	2	IT Service Water	230-490-6122	.00	29.72	29.72
17149	Lane Council of Governme	84834	3	IT Service Sewer	240-490-6122	.00	29.71	29.71
Total 17149:						.00		4,465.07
17150								
17150	Lane Council of Governme	84848	1	OSLG - Star Printer Receipt --Libr	110-450-8225	.00	376.93	376.93
17150	Lane Council of Governme	84848	2	OSLG - HP LaserJet (2) - CDWG	110-450-8225	.00	767.26	767.26
17150	Lane Council of Governme	84848	3	OSLG - Sell Opiplex/Monitor 5090	110-450-8225	.00	2,530.71	2,530.71
17150	Lane Council of Governme	84848	4	OSLG - Faronics Depp Freese - F	110-450-8225	.00	240.00	240.00
17150	Lane Council of Governme	84848	5	OSLG - Dell 3420 (4) - Dell	110-450-8225	.00	2,891.88	2,891.88
17150	Lane Council of Governme	84848	6	Labor	110-450-8225	.00	558.49	558.49
17150	Lane Council of Governme	84848	7	CH - APC USP -- APS	110-410-8225	.00	1,808.28	1,808.28
17150	Lane Council of Governme	84848	8	CH Server Frame Rack Cabinet/L	110-410-8225	.00	470.46	470.46
17150	Lane Council of Governme	84848	9	CH Server-- Dell	110-410-8225	.00	4,800.00	4,800.00
17150	Lane Council of Governme	84848	10	CH Labor	110-410-8225	.00	682.60	682.60
Total 17150:						.00		15,126.61
17151								
17151	Lane County Waste Mgmt.	PWA0001115	1	Sweeping	312-490-6128	.00	800.49	800.49
Total 17151:						.00		800.49
17152								
17152	Lane Forest Products	S561400	1	Green waste haul off fee	312-490-6330	.00	21.00	21.00
Total 17152:						.00		21.00
17153								
17153	Mid-State Industrial Inc	0200213, 02	1	Vac-truck excavation New and Old	230-490-6330	.00	2,541.25	2,541.25
17153	Mid-State Industrial Inc	0200213, 02	2	Root Saw and Jet Sewer Line S.	240-490-6330	.00	511.89	511.89
Total 17153:						.00		3,053.14
17154								
17154	One Call Concepts	2070425	1	Fee for Locates	230-490-6712	.00	8.40	8.40
17154	One Call Concepts	2070425	2	Fee for Locates	240-490-6712	.00	8.40	8.40
Total 17154:						.00		16.80
17155								
17155	Peterson	SW29007817	1	Annual inspection and Load Test	230-490-6324	.00	1,415.00	1,415.00
17155	Peterson	SW29007817	2	Annual Inspection and Load Test	240-490-6324	.00	1,035.00	1,035.00
Total 17155:						.00		2,450.00
17156								
17156	SaniPac	4274881S01	1	Refuse Services	230-490-6445	.00	97.81	97.81
17156	SaniPac	4274881S01	2	Refuse Services	240-490-6445	.00	97.81	97.81
Total 17156:						.00		195.62

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount
17157								
17157	Verizon Wireless	9911774062	1	Cell Phone, tablet	110-410-6440	.00	90.02	90.02
17157	Verizon Wireless	9911774062	2	Cell Phone, tablet	230-490-6440	.00	108.09	108.09
17157	Verizon Wireless	9911774062	3	Cell Phone	240-490-6440	.00	68.09	68.09
Total 17157:						.00		266.20
17158								
17158	Banner Bank	SAM 8/22 PL	1	one Box - BBJ	220-490-6230	.00	17.65	17.65
17158	Banner Bank	SAM 8/22 PL	2	Staples - Envelopes	110-410-6230	.00	9.89	9.89
17158	Banner Bank	SAM 8/22 PL	3	Staples - Envelopes	110-420-6234	.00	1.32	1.32
17158	Banner Bank	SAM 8/22 PL	4	Staples - Envelopes	110-440-6230	.00	3.30	3.30
17158	Banner Bank	SAM 8/22 PL	5	Staples - Envelopes	110-450-6230	.00	1.32	1.32
17158	Banner Bank	SAM 8/22 PL	6	Staples - Envelopes	110-460-6234	.00	3.30	3.30
17158	Banner Bank	SAM 8/22 PL	7	Staples - Envelopes	110-480-6230	.00	1.98	1.98
17158	Banner Bank	SAM 8/22 PL	8	Staples - Envelopes	220-490-6230	.00	3.96	3.96
17158	Banner Bank	SAM 8/22 PL	9	Staples - Envelopes	230-490-6230	.00	17.14	17.14
17158	Banner Bank	SAM 8/22 PL	10	Staples - Envelopes	240-490-6230	.00	17.14	17.14
17158	Banner Bank	SAM 8/22 PL	11	Staples - Envelopes	312-490-6230	.00	6.59	6.59
17158	Banner Bank	SAM 8/22 PL	12	OAMR Conference Registration	110-410-6240	.00	350.00	350.00
17158	Banner Bank	SAM 8/22 PL	13	Demco - Ato Z Animal Carpet Squ	110-450-8225	.00	159.99	159.99
17158	Banner Bank	SAM 8/22 PL	14	Demco- Plastic Shelf Markers (as	110-450-8225	.00	52.48	52.48
17158	Banner Bank	SAM 8/22 PL	15	Demco - Monace Deluxe HangUp	110-450-8225	.00	6.54	6.54
17158	Banner Bank	SAM 8/22 PL	16	Demco - Monace Deluxe HangUp	110-450-8225	.00	7.04	7.04
17158	Banner Bank	SAM 8/22 PL	17	Demco - Monace Deluxe HangUp	110-450-8225	.00	12.39	12.39
17158	Banner Bank	SAM 8/22 PL	18	Demco - Monace Deluxe HangUp	110-450-8225	.00	8.29	8.29
17158	Banner Bank	SAM 8/22 PL	19	Demco- Demco Counter top hangi	110-450-8225	.00	100.99	100.99
17158	Banner Bank	SAM 8/22 PL	20	Demco - shipping	110-450-8225	.00	83.37	83.37
17158	Banner Bank	SAM 8/22 PL	21	Amazon- Springflower Wooden To	110-450-8225	.00	18.39	18.39
17158	Banner Bank	SAM 8/22 PL	22	Amazon - Melissa and Doug Anim	110-450-8225	.00	15.09	15.09
17158	Banner Bank	SAM 8/22 PL	23	Amazon - Lego Duplo My First Alp	110-450-8225	.00	49.98	49.98
17158	Banner Bank	SAM 8/22 PL	24	Amazon Gouezcc Toddler Musical	110-450-8225	.00	26.34	26.34
17158	Banner Bank	SAM 8/22 PL	25	Amazon - lego Duplo Classic Delu	110-450-8225	.00	80.00	80.00
17158	Banner Bank	SAM 8/22 PL	26	Amazon - Melissa and Doug Child	110-450-8225	.00	13.33	13.33
17158	Banner Bank	SAM 8/22 PL	27	Amazon - Melissa and Doug Alph	110-450-8225	.00	19.98	19.98
17158	Banner Bank	SAM 8/22 PL	28	Amazon - Basics Magnetic Dry Er	110-450-8225	.00	29.99	29.99
17158	Banner Bank	SAM 8/22 PL	29	Amazon - Lego Build Me Emotion	110-450-8225	.00	89.95	89.95
17158	Banner Bank	SAM 8/22 PL	30	Amazon - Lego Duplo Green Build	110-450-8225	.00	35.97	35.97
17158	Banner Bank	SAM 8/22 PL	31	Amazon- Melissa and Doug Dinos	110-450-8225	.00	29.99	29.99
17158	Banner Bank	SAM 8/22 PL	32	Amazon - Yihong 72 pc Kawaii Sq	314-490-6858	.00	25.48	25.48
17158	Banner Bank	SAM 8/22 PL	33	Amazon - 144 pc slap bracelets	314-490-6858	.00	19.99	19.99
17158	Banner Bank	SAM 8/22 PL	34	Amazon - 180 Pc Bubble Wands	314-490-6858	.00	29.98	29.98
17158	Banner Bank	SAM 8/22 PL	35	Amazon- Party Favors for Kids	314-490-6858	.00	14.99	14.99
17158	Banner Bank	SAM 8/22 PL	36	Amazon - Budi 467 pcs Glow Stic	314-490-6858	.00	19.99	19.99
17158	Banner Bank	SAM 8/22 PL	37	Amazon Animal Pencil Cartoon P	314-490-6858	.00	31.99	31.99
17158	Banner Bank	SAM 8/22 PL	38	Amazon - 80 Pc Unfinished Wood	314-490-6858	.00	18.99	18.99
17158	Banner Bank	SAM 8/22 PL	39	Amazon Axbotoy 48 pc Mini Plush	314-490-6858	.00	29.98	29.98
17158	Banner Bank	SAM 8/22 PL	40	GoDaddy - BBJ Subscription	314-490-6122	.00	251.64	251.64
17158	Banner Bank	SAM 8/22 PL	41	Amazon- Lego Duplo My First Nu	110-450-8225	.00	33.98	33.98
17158	Banner Bank	SAM 8/22 PL	42	Amazon - Melissa and Doug Worl	110-450-8225	.00	10.99	10.99
Total 17158:						.00		1,761.69
17159								
17159	Bridgeway Contracting, LL	PAY APP3 22	1	City Hall Remodel Allocation	110-410-8225	.00	30,003.00	30,003.00
17159	Bridgeway Contracting, LL	PAY APP3 22	2	Library Remodel Allocation FG	110-450-8225	.00	89,415.40	89,415.40

Check Number	Payee	Invoice Number	Inv Seq	Description	Invoice GL Account	Disc Taken	Invoice Amount	Check Amount
17159	Bridgeway Contracting, LL	PAY APP3 22	3	Library Remodel Allocation	110-450-8225	.00	9,034.87	9,034.87
17159	Bridgeway Contracting, LL	PAY APP3 22	4	Conference Room Remodel Alloc	110-410-8225	.00	18,057.80	18,057.80
Total 17159:						.00		146,511.07
17160								
17160	Correct Equipment, Inc.	47217	1	Water Meters	230-700-8540	.00	40,117.08	40,117.08
Total 17160:						.00		40,117.08
17161								
17161	Dougherty Landscape Arch	7089	1	Parks Capital Improvements -RR	110-420-8520	.00	270.00	270.00
Total 17161:						.00		270.00
17162								
17162	Oregon RAIN	1172	1	Rural Economic Development Su	110-440-6128	.00	10,000.00	10,000.00
Total 17162:						.00		10,000.00
17163								
17163	Southside Bank	GCC FILE #9	1	Full Faith and credit note Series 2	110-800-7510	.00	4,003.71	4,003.71
Total 17163:						.00		4,003.71
Grand Totals:						.00		287,689.02

Summary by General Ledger Account Number

GL Account	Debit	Credit	Proof
110-2125	.00	209,951.98-	209,951.98-
110-410-6112	458.59	.00	458.59
110-410-6114	728.00	.00	728.00
110-410-6122	533.50	.00	533.50
110-410-6124	147.98	.00	147.98
110-410-6128	289.19	.00	289.19
110-410-6220	1,679.16	.00	1,679.16
110-410-6226	7.58	.00	7.58
110-410-6230	26.04	.00	26.04
110-410-6240	350.00	.00	350.00
110-410-6420	102.33	.00	102.33
110-410-6425	245.06	.00	245.06
110-410-6430	139.26	.00	139.26
110-410-6435	120.21	.00	120.21
110-410-6440	226.94	.00	226.94
110-410-8225	55,951.12	.00	55,951.12
110-420-6122	86.15	.00	86.15
110-420-6128	247.50	.00	247.50
110-420-6234	97.14	.00	97.14
110-420-6320	1,309.82	.00	1,309.82
110-420-6420	1,026.15	.00	1,026.15
110-420-6425	134.28	.00	134.28
110-420-6430	187.06	.00	187.06

GL Account	Debit	Credit	Proof
110-420-6710	441.81	.00	441.81
110-420-8520	270.00	.00	270.00
110-430-6118	6,922.98	.00	6,922.98
110-440-6116	2,145.00	.00	2,145.00
110-440-6122	16.87	.00	16.87
110-440-6128	14,044.60	.00	14,044.60
110-440-6230	6.90	.00	6.90
110-440-6522	2,942.79	.00	2,942.79
110-450-6122	2,110.88	.00	2,110.88
110-450-6128	4,902.00	.00	4,902.00
110-450-6230	3.47	.00	3.47
110-450-6290	167.49	.00	167.49
110-450-6420	7.77	.00	7.77
110-450-6425	16.79	.00	16.79
110-450-6430	20.77	.00	20.77
110-450-6435	46.24	.00	46.24
110-450-6440	34.27	.00	34.27
110-450-8225	107,001.57	.00	107,001.57
110-460-6234	10.28	.00	10.28
110-470-6326	63.87	.00	63.87
110-480-6230	3.59	.00	3.59
110-480-6565	7.99	.00	7.99
110-800-7510	4,670.99	.00	4,670.99
220-2125	.00	3,106.05-	3,106.05-
220-490-6122	119.21	.00	119.21
220-490-6150	2,792.89	.00	2,792.89
220-490-6152	93.00	.00	93.00
220-490-6230	45.71	.00	45.71
220-490-6420	3.10	.00	3.10
220-490-6425	6.71	.00	6.71
220-490-6430	8.31	.00	8.31
220-490-6435	18.49	.00	18.49
220-490-6440	18.63	.00	18.63
230-2125	40,117.08	94,957.67-	54,840.59-
230-490-6114	455.00	.00	455.00
230-490-6122	699.85	.00	699.85
230-490-6128	83.37	.00	83.37
230-490-6230	45.10	.00	45.10
230-490-6234	2,936.49	.00	2,936.49
230-490-6324	1,415.00	.00	1,415.00
230-490-6330	2,541.25	.00	2,541.25
230-490-6420	52.94	.00	52.94
230-490-6425	67.14	.00	67.14
230-490-6430	1,504.58	.00	1,504.58
230-490-6435	154.50	.00	154.50
230-490-6440	172.05	.00	172.05
230-490-6445	97.81	.00	97.81
230-490-6712	8.40	.00	8.40
230-490-6750	782.29	.00	782.29
230-490-6755	45.90	.00	45.90
230-490-6760	1,391.06	.00	1,391.06
230-700-8540	82,504.94	40,117.08-	42,387.86
240-2125	.00	10,137.11-	10,137.11-
240-490-6114	182.00	.00	182.00
240-490-6116	263.25	.00	263.25
240-490-6122	699.84	.00	699.84
240-490-6128	383.37	.00	383.37

GL Account	Debit	Credit	Proof
240-490-6230	45.10	.00	45.10
240-490-6234	152.01	.00	152.01
240-490-6324	1,035.00	.00	1,035.00
240-490-6330	511.89	.00	511.89
240-490-6420	531.56	.00	531.56
240-490-6425	604.26	.00	604.26
240-490-6430	2,116.03	.00	2,116.03
240-490-6440	245.27	.00	245.27
240-490-6445	97.81	.00	97.81
240-490-6712	8.40	.00	8.40
240-490-6750	812.33	.00	812.33
240-490-6755	712.80	.00	712.80
240-490-6760	1,736.19	.00	1,736.19
312-2125	.00	2,526.17-	2,526.17-
312-490-6114	455.00	.00	455.00
312-490-6122	190.28	.00	190.28
312-490-6128	800.49	.00	800.49
312-490-6230	15.50	.00	15.50
312-490-6234	1.85	.00	1.85
312-490-6330	21.00	.00	21.00
312-490-6430	1,042.05	.00	1,042.05
314-2125	.00	6,163.62-	6,163.62-
314-490-6122	278.23	.00	278.23
314-490-6705	80.00	.00	80.00
314-490-6814	294.00	.00	294.00
314-490-6816	4,200.00	.00	4,200.00
314-490-6852	1,120.00	.00	1,120.00
314-490-6858	191.39	.00	191.39
440-2125	.00	963.50-	963.50-
440-490-6128	963.50	.00	963.50
Grand Totals:	367,923.18	367,923.18-	.00

Dated: _____

Mayor: _____

City Council: _____

_____

_____

_____

_____

_____

City Recorder: _____

GL Account	Debit	Credit	Proof

Report Criteria:
Report type: GL detail
Check.Type = {<>} "Adjustment"
Bank.Name = "General"

CITY OF LOWELL
COMBINED CASH INVESTMENT
JUNE 30, 2022

COMBINED CASH ACCOUNTS

999-1111	CASH IN BANK - CHECKING	529,622.02
999-1115	CASH IN BANK - LGIP	969,671.82
999-1175	UTILITY CASH CLEARING	(367.25)
	TOTAL COMBINED CASH	1,498,926.59
999-1110	CASH ALLOCATED TO FUNDS	(1,498,926.59)
	TOTAL UNALLOCATED CASH	.00

CASH ALLOCATION RECONCILIATION

110	ALLOCATION TO GENERAL FUND	262,709.90
220	ALLOCATION TO BUILDING FUND	57,234.41
230	ALLOCATION TO WATER FUND	80,051.60
240	ALLOCATION TO SEWER FUND	182,187.05
312	ALLOCATION TO STREET FUND	111,798.43
314	ALLOCATION TO BLACKBERRY JAM FUND	13,823.92
410	ALLOCATION TO PARKS SDC FUND	89,532.89
412	ALLOCATION TO STREETS SDC FUND	68,635.11
430	ALLOCATION TO WATER SDC FUND	376,132.96
440	ALLOCATION TO SEWER SDC FUND	132,237.60
445	ALLOCATION TO STORMWATER SDC FUND	69,353.04
520	ALLOCATION TO WATER RESERVE FUND	39,457.48
521	ALLOCATION TO SEWER RESERVE FUND	15,772.22
	TOTAL ALLOCATIONS TO OTHER FUNDS	1,498,926.61
	ALLOCATION FROM COMBINED CASH FUND - 999-1110	(1,498,926.59)
	ZERO PROOF IF ALLOCATIONS BALANCE	.02

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

GENERAL FUND

	ASSETS			
110-1110	ALLOCATED CASH		43,638.25	
110-1115	CASH IN BANK - LGIP		219,071.65	
110-1120	PETTY CASH		250.00	
110-1620	INVENTORY		308,934.79	
110-1710	LAND		2,595,845.69	
110-1720	BUILDINGS & FACILITIES		430,908.77	
110-1730	EQUIPMENT & FURNISHINGS		28,874.28	
110-1740	VEHICLES & ROLLING STOCK		40,847.50	
110-1750	INFRASTRUCTURE		32,762.99	
110-1795	CONSTRUCTION IN PROGRESS		14,195.83	
110-1820	AD - BUILDINGS & FACILITIES		(187,520.17)	
110-1830	AD - EQUIPMENT & FURNISHINGS		(7,893.90)	
110-1840	AD - VEHICLES & ROLLING STOCK		(13,908.46)	
110-1850	AD - INFRASTRUCTURE		(15,469.63)	
	TOTAL ASSETS			3,490,537.59
	LIABILITIES AND EQUITY			
	LIABILITIES			
110-2525	OTHER DEPOSITS		603.00	
110-2750	LONG TERM DEBT		803,036.97	
	TOTAL LIABILITIES			803,639.97
	FUND EQUITY			
110-3100	BEGINNING FUND BALANCE		205,803.47	
110-3275	GASB - FIXED ASSETS		3,227,577.69	
110-3277	GAAP - LONG TERM DEBT		(803,036.97)	
	REVENUE OVER EXPENDITURES - YTD	56,553.43		
	BALANCE - CURRENT DATE		56,553.43	
	TOTAL FUND EQUITY			2,686,897.62
	TOTAL LIABILITIES AND EQUITY			3,490,537.59

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	TAXES					
110-310-4112	PROPERTY TAXES - CURRENT	3,193.43	181,054.66	153,139.00	(27,915.66)	118.2
110-310-4114	PROPERTY TAXES - PRIOR	182.51	2,260.26	2,600.00	339.74	86.9
	TOTAL TAXES	3,375.94	183,314.92	155,739.00	(27,575.92)	117.7
	INVESTMENT EARNINGS					
110-315-4125	INTEREST EARNED	214.33	1,448.06	2,500.00	1,051.94	57.9
	TOTAL INVESTMENT EARNINGS	214.33	1,448.06	2,500.00	1,051.94	57.9
	INTERGOVERNMENTAL					
110-320-4132	STATE REVENUE SHARING	.00	11,783.61	11,000.00	(783.61)	107.1
110-320-4134	CIGARETTE TAX	153.23	946.79	3,407.00	2,460.21	27.8
110-320-4136	LIQUOR TAX	1,356.24	21,312.34	22,000.00	687.66	96.9
110-320-4145	TRANSIENT ROOM TAX	23.69	58.17	.00	(58.17)	.0
110-320-4148	MARIJUANA TAX DISTRIBUTION	.00	1,782.09	6,000.00	4,217.91	29.7
	TOTAL INTERGOVERNMENTAL	1,533.16	35,883.00	42,407.00	6,524.00	84.6
	GRANT REVENUES					
110-325-4151	GENERAL GOVT - OPERATING GRANT	.00	78,436.55	140,000.00	61,563.45	56.0
110-325-4152	TOURISM - OPERATING GRANT	.00	10,586.00	10,200.00	(386.00)	103.8
110-325-4154	SUMMER READING - OPER GRANT	.00	1,000.00	.00	(1,000.00)	.0
110-325-4155	LIBRARY - CAPITAL GRANT	20,000.00	223,741.00	225,500.00	1,759.00	99.2
110-325-4158	COMM DEV - OPERATING GRANT	.00	999.55	.00	(999.55)	.0
110-325-4160	PARKS - OPERATING GRANT	.00	.00	240,000.00	240,000.00	.0
	TOTAL GRANT REVENUES	20,000.00	314,763.10	615,700.00	300,936.90	51.1
	FRANCHISE FEES					
110-330-4310	CABLE FRANCHISE FEES	.00	7,101.10	5,900.00	(1,201.10)	120.4
110-330-4312	ELECTRIC FRANCHISE FEES	.00	53,452.44	53,000.00	(452.44)	100.9
110-330-4316	TELECOM FRANCHISE FEES	.00	1,338.54	3,000.00	1,661.46	44.6
110-330-4318	WATER FRANCHISE FEES	1,242.67	16,341.27	18,500.00	2,158.73	88.3
110-330-4320	SEWER FRANCHISE FEES	1,742.13	18,163.31	20,335.00	2,171.69	89.3
	TOTAL FRANCHISE FEES	2,984.80	96,396.66	100,735.00	4,338.34	95.7

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	LICENSES & PERMITS					
110-335-4352	LAND USE & DEVELOPMENT	.00	17,951.15	15,000.00	(2,951.15)	119.7
110-335-4354	MISC PERMITS & LICENSES	365.03	385.03	275.00	(110.03)	140.0
110-335-4360	DOG LICENSES	.00	347.00	800.00	453.00	43.4
	TOTAL LICENSES & PERMITS	365.03	18,683.18	16,075.00	(2,608.18)	116.2
	CHARGES FOR SERVICE					
110-340-4410	COPY, FAX, NOTARY & RESEARCH	29.90	398.05	1,030.00	631.95	38.7
110-340-4415	LIBRARY BUSINESS SERVICES	.00	.00	250.00	250.00	.0
110-340-4417	LIEN SEARCHES	40.00	840.00	515.00	(325.00)	163.1
110-340-4419	ELECTION FILING FEES	25.00	25.00	100.00	75.00	25.0
110-340-4421	SDC/CET ADMIN FEE	951.39	10,128.88	4,005.00	(6,123.88)	252.9
110-340-4423	PAY STATION REVENUE	.00	45.75	125.00	79.25	36.6
	TOTAL CHARGES FOR SERVICE	1,046.29	11,437.68	6,025.00	(5,412.68)	189.8
	SDC REVENUE					
110-345-4511	PARKS REIMBURSEMENT SDC	47.00	1,457.00	735.00	(722.00)	198.2
	TOTAL SDC REVENUE	47.00	1,457.00	735.00	(722.00)	198.2
	FINES & FORFEITURES					
110-350-4625	MUNICIPAL COURT REVENUE	2,425.00	10,565.19	3,146.00	(7,419.19)	335.8
	TOTAL FINES & FORFEITURES	2,425.00	10,565.19	3,146.00	(7,419.19)	335.8
	LOAN PAYMENTS & PROCEEDS					
110-360-4225	LOAN PROCEEDS	.00	.00	500,000.00	500,000.00	.0
	TOTAL LOAN PAYMENTS & PROCEEDS	.00	.00	500,000.00	500,000.00	.0
	OTHER REVENUE					
110-370-4825	LIBRARY DONATIONS	.00	301.85	.00	(301.85)	.0
110-370-4826	PARKS DONATIONS	1,660.00	4,105.00	.00	(4,105.00)	.0
110-370-4849	CAPITAL ASSET DISPOSAL	.00	57,860.00	418,700.00	360,840.00	13.8
	TOTAL OTHER REVENUE	1,660.00	62,266.85	418,700.00	356,433.15	14.9

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	FUNDRAISING & EVENT REVENUE					
110-380-4865	LIBRARY CAPITAL CAMPAIGN	.00	13,270.00	.00	(13,270.00)	.0
	TOTAL FUNDRAISING & EVENT REVENUE	.00	13,270.00	.00	(13,270.00)	.0
	MISELLANEOUS REVENUE					
110-385-4895	MISCELLANEOUS REVENUE	.00	675.16	2,250.00	1,574.84	30.0
	TOTAL MISELLANEOUS REVENUE	.00	675.16	2,250.00	1,574.84	30.0
	TOTAL FUND REVENUE	33,651.55	750,160.80	1,864,012.00	1,113,851.20	40.2

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	ADMINISTRATION					
	PERSONAL SERVICES					
110-410-5110	CITY ADMINISTRATOR	743.75	18,131.26	17,850.00	(281.26)	101.6
110-410-5114	CITY CLERK	190.25	5,282.71	5,828.00	545.29	90.6
110-410-5158	MAINTENANCE WORKER I	91.52	1,812.30	2,195.00	382.70	82.6
110-410-5220	OVERTIME	.00	71.22	84.00	12.78	84.8
110-410-5315	SOCIAL SECURITY/MEDICARE	78.45	1,935.18	1,978.00	42.82	97.8
110-410-5320	WORKER'S COMP	.35	50.03	457.00	406.97	11.0
110-410-5350	UNEMPLOYMENT	.00	.00	1,728.00	1,728.00	.0
110-410-5410	HEALTH INSURANCE	.00	3,753.38	3,901.00	147.62	96.2
110-410-5450	PUBLIC EMPLOYEES RETIREMENT	(37.38)	4,228.85	5,095.00	866.15	83.0
	TOTAL PERSONAL SERVICES	1,066.94	35,264.93	39,116.00	3,851.07	90.2
	MATERIALS & SERVICES					
110-410-6110	AUDITING	.00	5,675.01	5,500.00	(175.01)	103.2
110-410-6112	LEGAL SERVICES	.00	1,049.14	2,500.00	1,450.86	42.0
110-410-6114	FINANCIAL SERVICES	351.75	4,481.75	6,215.00	1,733.25	72.1
110-410-6122	IT SERVICES	385.00	9,286.36	12,000.00	2,713.64	77.4
110-410-6124	COPIER CONTRACT	147.98	1,775.76	2,250.00	474.24	78.9
110-410-6128	OTHER CONTRACT SERVICES	50.00	6,327.00	12,500.00	6,173.00	50.6
110-410-6210	INSURANCE & BONDS	.00	1,033.45	6,426.00	5,392.55	16.1
110-410-6220	PUBLICATIONS, PRINTING & DUES	(76.50)	4,464.37	1,400.00	(3,064.37)	318.9
110-410-6222	NEWSLETTER EXPENDITURE	.00	.00	1,200.00	1,200.00	.0
110-410-6226	POSTAGE	4.33	705.78	500.00	(205.78)	141.2
110-410-6228	PUBLIC NOTICES	.00	293.85	500.00	206.15	58.8
110-410-6230	OFFICE SUPPLIES/EQUIPMENT	54.55	2,264.29	2,000.00	(264.29)	113.2
110-410-6234	GENERAL SUPPLIES	.00	858.22	1,000.00	141.78	85.8
110-410-6238	BANK SERVICE CHARGES	.20	212.93	1,000.00	787.07	21.3
110-410-6240	TRAVEL & TRAINING	.00	2,076.42	5,700.00	3,623.58	36.4
110-410-6290	MISCELLANEOUS	.00	862.62	500.00	(362.62)	172.5
110-410-6320	BUILDING REPAIR & MAINTENANCE	.00	256.00	1,000.00	744.00	25.6
110-410-6324	EQUIPMENT REPAIR & MAINTENANCE	688.61	1,364.77	100.00	(1,264.77)	1364.8
110-410-6334	NON-CAPITALIZED ASSETS	.00	.00	2,000.00	2,000.00	.0
110-410-6420	WATER SERVICES	102.76	2,395.82	1,398.00	(997.82)	171.4
110-410-6425	SEWER SERVICES	233.38	2,793.77	825.00	(1,968.77)	338.6
110-410-6430	ELECTRICITY SERVICES	277.38	3,282.00	2,100.00	(1,182.00)	156.3
110-410-6435	INTERNET SERVICES	350.46	2,813.99	1,322.00	(1,491.99)	212.9
110-410-6440	TELEPHONE SERVICES	222.19	2,543.97	1,875.00	(668.97)	135.7
110-410-6445	REFUSE SERVICES	.00	420.09	120.00	(300.09)	350.1
110-410-6510	COUNCIL EXPENDITURE	.00	.00	2,000.00	2,000.00	.0
110-410-6512	STATE ETHICS COMMISSION	.00	548.82	650.00	101.18	84.4
	TOTAL MATERIALS & SERVICES	2,792.09	57,786.18	74,581.00	16,794.82	77.5

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	CAPITAL OUTLAY					
110-410-8225	BUILDINGS & FACILITIES	49,396.45	57,983.11	185,700.00	127,716.89	31.2
	TOTAL CAPITAL OUTLAY	49,396.45	57,983.11	185,700.00	127,716.89	31.2
	TOTAL ADMINISTRATION	53,255.48	151,034.22	299,397.00	148,362.78	50.5
	PARKS & RECREATION					
	PERSONAL SERVICES					
110-420-5110	CITY ADMINISTRATOR	185.94	4,443.07	4,463.00	19.93	99.6
110-420-5150	PUBLIC WORKS DIRECTOR	158.25	3,796.72	3,798.00	1.28	100.0
110-420-5152	UTILITY WORKER I	361.18	8,676.12	4,551.00	(4,125.12)	190.6
110-420-5154	UTILITY WORKER II	.00	.00	4,551.00	4,551.00	.0
110-420-5156	TEMPORARY/ SEASONAL	.00	2,564.00	3,028.00	464.00	84.7
110-420-5158	MAINTENANCE WORKER I	457.59	9,061.15	10,976.00	1,914.85	82.6
110-420-5220	OVERTIME	60.95	1,446.94	1,409.00	(37.94)	102.7
110-420-5315	SOCIAL SECURITY/MEDICARE	93.63	2,294.41	2,512.00	217.59	91.3
110-420-5320	WORKER'S COMP	.58	570.44	1,670.00	1,099.56	34.2
110-420-5350	UNEMPLOYMENT	.00	.00	2,328.00	2,328.00	.0
110-420-5410	HEALTH INSURANCE	.00	4,203.20	4,384.00	180.80	95.9
110-420-5450	PUBLIC EMPLOYEES RETIREMENT	240.26	5,373.33	6,444.00	1,070.67	83.4
	TOTAL PERSONAL SERVICES	1,558.38	42,429.38	50,114.00	7,684.62	84.7

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
110-420-6122	IT SERVICES	86.15	948.00	.00	(948.00)	.0
110-420-6128	OTHER CONTRACT SERVICES	811.58	2,499.26	20,000.00	17,500.74	12.5
110-420-6210	INSURANCE & BONDS	.00	1,826.14	1,861.00	34.86	98.1
110-420-6234	GENERAL SUPPLIES	7.24	2,838.64	2,000.00	(838.64)	141.9
110-420-6238	BANK SERVICE CHARGES	.00	5.21	4.00	(1.21)	130.3
110-420-6240	TRAVEL & TRAINING	.00	255.91	.00	(255.91)	.0
110-420-6290	MISCELLANEOUS	.00	226.01	500.00	273.99	45.2
110-420-6320	BUILDING REPAIR & MAINTENANCE	.00	206.99	3,000.00	2,793.01	6.9
110-420-6324	EQUIPMENT REPAIR & MAINTENANCE	.00	2,524.94	2,000.00	(524.94)	126.3
110-420-6328	PROPERTY MAINTENANCE	.00	.00	1,000.00	1,000.00	.0
110-420-6330	OTHER REPAIR & MAINTENANCE	.00	1,983.93	2,000.00	16.07	99.2
110-420-6334	NON-CAPITALIZED ASSETS	.00	8,132.29	11,000.00	2,867.71	73.9
110-420-6339	MAINTENANCE - NELSON LAND DONA	.00	5,813.30	10,000.00	4,186.70	58.1
110-420-6420	WATER SERVICES	274.06	5,641.63	25,000.00	19,358.37	22.6
110-420-6425	SEWER SERVICES	127.88	1,530.84	1,650.00	119.16	92.8
110-420-6430	ELECTRICITY SERVICES	259.01	2,389.24	2,129.00	(260.24)	112.2
110-420-6445	REFUSE SERVICES	.00	.00	365.00	365.00	.0
110-420-6535	MOVIES IN THE PARK	.00	1,140.00	.00	(1,140.00)	.0
110-420-6710	GAS & OIL	683.15	2,486.41	1,500.00	(986.41)	165.8
	TOTAL MATERIALS & SERVICES	2,249.07	40,448.74	84,009.00	43,560.26	48.2
	CAPITAL OUTLAY					
110-420-8520	PARKS IMPROVEMENTS	4,740.00	21,285.04	624,700.00	603,414.96	3.4
	TOTAL CAPITAL OUTLAY	4,740.00	21,285.04	624,700.00	603,414.96	3.4
	TOTAL PARKS & RECREATION	8,547.45	104,163.16	758,823.00	654,659.84	13.7
	POLICE					
	MATERIALS & SERVICES					
110-430-6118	POLICE SERVICES	2,533.41	29,453.22	29,530.00	76.78	99.7
	TOTAL MATERIALS & SERVICES	2,533.41	29,453.22	29,530.00	76.78	99.7
	TOTAL POLICE	2,533.41	29,453.22	29,530.00	76.78	99.7
	COMMUNITY DEVELOPMENT					

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	PERSONAL SERVICES					
110-440-5110	CITY ADMINISTRATOR	185.94	4,443.07	4,463.00	19.93	99.6
110-440-5315	SOCIAL SECURITY/MEDICARE	14.23	340.02	341.00	.98	99.7
110-440-5320	WORKER'S COMP	.05	3.53	68.00	64.47	5.2
110-440-5350	UNEMPLOYMENT	.00	.00	360.00	360.00	.0
110-440-5410	HEALTH INSURANCE	.00	464.02	484.00	19.98	95.9
110-440-5450	PUBLIC EMPLOYEES RETIREMENT	36.50	884.54	876.00	(8.54)	101.0
	TOTAL PERSONAL SERVICES	236.72	6,135.18	6,592.00	456.82	93.1
	MATERIALS & SERVICES					
110-440-6116	ENGINEERING SERVICES	3,252.50	25,603.42	30,000.00	4,396.58	85.3
110-440-6122	IT SERVICES	16.87	310.86	300.00	(10.86)	103.6
110-440-6128	OTHER CONTRACT SERVICES	.00	8,136.17	15,000.00	6,863.83	54.2
110-440-6210	INSURANCE & BONDS	.00	264.49	300.00	35.51	88.2
110-440-6220	PUBLICATIONS, PRINTING & DUES	(370.26)	21.99	400.00	378.01	5.5
110-440-6226	POSTAGE	.00	97.78	175.00	77.22	55.9
110-440-6230	OFFICE SUPPLIES/EQUIPMENT	18.18	37.25	.00	(37.25)	.0
110-440-6238	BANK SERVICE CHARGES	.00	167.16	.00	(167.16)	.0
110-440-6240	TRAVEL & TRAINING	.00	4.84	.00	(4.84)	.0
110-440-6290	MISCELLANEOUS	.00	.00	250.00	250.00	.0
110-440-6522	LAND USE & DEVELOPMENT COSTS	.00	17,499.96	24,500.00	7,000.04	71.4
	TOTAL MATERIALS & SERVICES	2,917.29	52,143.92	70,925.00	18,781.08	73.5
	CAPITAL OUTLAY					
110-440-8225	BUILDINGS & FACILITIES	48,700.60	81,939.50	101,000.00	19,060.50	81.1
	TOTAL CAPITAL OUTLAY	48,700.60	81,939.50	101,000.00	19,060.50	81.1
	TOTAL COMMUNITY DEVELOPMENT	51,854.61	140,218.60	178,517.00	38,298.40	78.6
	LIBRARY					

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	PERSONAL SERVICES					
110-450-5156	TEMPORARY/ SEASONAL	.00	512.82	606.00	93.18	84.6
110-450-5158	MAINTENANCE WORKER I	91.52	1,812.30	2,194.00	381.70	82.6
110-450-5315	SOCIAL SECURITY/MEDICARE	7.00	177.92	1,467.00	1,289.08	12.1
110-450-5320	WORKER'S COMP	.06	21.94	326.00	304.06	6.7
110-450-5350	UNEMPLOYMENT	.00	.00	1,323.00	1,323.00	.0
110-450-5410	HEALTH INSURANCE	.00	.00	4,833.00	4,833.00	.0
110-450-5450	PUBLIC EMPLOYEES RETIREMENT	17.97	353.84	3,764.00	3,410.16	9.4
	TOTAL PERSONAL SERVICES	116.55	2,878.82	14,513.00	11,634.18	19.8
	MATERIALS & SERVICES					
110-450-6122	IT SERVICES	53.33	1,174.59	1,460.00	285.41	80.5
110-450-6128	OTHER CONTRACT SERVICES	8,999.76	20,686.56	16,880.00	(3,806.56)	122.6
110-450-6210	INSURANCE & BONDS	.00	7.02	.00	(7.02)	.0
110-450-6226	POSTAGE	.00	304.83	50.00	(254.83)	609.7
110-450-6230	OFFICE SUPPLIES/EQUIPMENT	7.27	18.08	500.00	481.92	3.6
110-450-6234	GENERAL SUPPLIES	69.98	276.24	1,500.00	1,223.76	18.4
110-450-6238	BANK SERVICE CHARGES	.00	100.87	1.00	(99.87)	10087.
110-450-6290	MISCELLANEOUS	20.85	103.61	250.00	146.39	41.4
110-450-6320	BUILDING REPAIR & MAINTENANCE	.00	613.06	1,656.00	1,042.94	37.0
110-450-6420	WATER SERVICES	7.71	96.89	950.00	853.11	10.2
110-450-6425	SEWER SERVICES	15.99	191.41	750.00	558.59	25.5
110-450-6430	ELECTRICITY SERVICES	44.92	436.33	2,400.00	1,963.67	18.2
110-450-6435	INTERNET SERVICES	46.24	554.88	780.00	225.12	71.1
110-450-6440	TELEPHONE SERVICES	33.70	391.31	350.00	(41.31)	111.8
110-450-6445	REFUSE SERVICES	.00	.00	525.00	525.00	.0
110-450-6530	SUMMER READING PROGRAM	.00	.00	1,000.00	1,000.00	.0
	TOTAL MATERIALS & SERVICES	9,299.75	24,955.68	29,052.00	4,096.32	85.9
	CAPITAL OUTLAY					
110-450-8225	BUILDINGS & FACILITIES	110,196.26	159,188.22	307,115.00	147,926.78	51.8
	TOTAL CAPITAL OUTLAY	110,196.26	159,188.22	307,115.00	147,926.78	51.8
	TOTAL LIBRARY	119,612.56	187,022.72	350,680.00	163,657.28	53.3
	CODE ENFORCEMENT					

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	PERSONAL SERVICES					
110-460-5110	CITY ADMINISTRATOR	185.94	4,443.07	4,463.00	19.93	99.6
110-460-5150	PUBLIC WORKS DIRECTOR	158.25	3,796.72	3,798.00	1.28	100.0
110-460-5220	OVERTIME	.00	73.95	315.00	241.05	23.5
110-460-5315	SOCIAL SECURITY/MEDICARE	26.33	636.00	341.00	(295.00)	186.5
110-460-5320	WORKER'S COMP	.09	17.99	154.00	136.01	11.7
110-460-5350	UNEMPLOYMENT	.00	.00	692.00	692.00	.0
110-460-5410	HEALTH INSURANCE	.00	1,401.36	1,462.00	60.64	95.9
110-460-5450	PUBLIC EMPLOYEES RETIREMENT	67.57	1,640.83	1,684.00	43.17	97.4
	TOTAL PERSONAL SERVICES	438.18	12,009.92	12,909.00	899.08	93.0
	MATERIALS & SERVICES					
110-460-6128	OTHER CONTRACT SERVICES	.00	(42.06)	.00	42.06	.0
110-460-6234	GENERAL SUPPLIES	18.18	37.70	100.00	62.30	37.7
110-460-6238	BANK SERVICE CHARGES	.00	.35	1.00	.65	35.0
110-460-6290	MISCELLANEOUS	.00	.00	100.00	100.00	.0
110-460-6445	REFUSE SERVICES	.00	253.00	2,600.00	2,347.00	9.7
	TOTAL MATERIALS & SERVICES	18.18	248.99	2,801.00	2,552.01	8.9
	TOTAL CODE ENFORCEMENT	456.36	12,258.91	15,710.00	3,451.09	78.0
	TOURISM					
	MATERIALS & SERVICES					
110-470-6224	MARKETING	.00	415.00	295.00	(120.00)	140.7
110-470-6226	POSTAGE	.00	17.16	100.00	82.84	17.2
110-470-6290	MISCELLANEOUS	.00	.00	250.00	250.00	.0
110-470-6326	COVERED BRIDGE MAINTENANCE	65.43	775.45	2,466.00	1,690.55	31.5
110-470-6527	COMMUNITY GRANT PROGRAM	.00	1,993.92	3,000.00	1,006.08	66.5
	TOTAL MATERIALS & SERVICES	65.43	3,201.53	6,111.00	2,909.47	52.4
	TOTAL TOURISM	65.43	3,201.53	6,111.00	2,909.47	52.4
	MUNICIPAL COURT					

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	PERSONAL SERVICES					
110-480-5110	CITY ADMINISTRATOR	185.94	4,622.66	4,463.00	(159.66)	103.6
110-480-5114	CITY CLERK	95.13	2,641.49	2,914.00	272.51	90.7
110-480-5220	OVERTIME	.00	35.62	42.00	6.38	84.8
110-480-5315	SOCIAL SECURITY/MEDICARE	21.51	558.57	567.00	8.43	98.5
110-480-5320	WORKER'S COMP	.10	16.10	135.00	118.90	11.9
110-480-5350	UNEMPLOYMENT	.00	.00	599.00	599.00	.0
110-480-5410	HEALTH INSURANCE	.00	1,412.66	1,468.00	55.34	96.2
110-480-5450	PUBLIC EMPLOYEES RETIREMENT	55.17	1,172.27	1,456.00	283.73	80.5
	TOTAL PERSONAL SERVICES	357.85	10,459.37	11,644.00	1,184.63	89.8
	MATERIALS & SERVICES					
110-480-6120	JUDGE CONTRACT	200.00	1,280.00	1,450.00	170.00	88.3
110-480-6121	BAILIFF CONTRACT	63.34	190.02	200.00	9.98	95.0
110-480-6128	OTHER CONTRACT SERVICES	947.92	3,618.63	3,500.00	(118.63)	103.4
110-480-6220	PUBLICATIONS, PRINTING & DUES	.00	150.00	75.00	(75.00)	200.0
110-480-6226	POSTAGE	.00	25.11	75.00	49.89	33.5
110-480-6230	OFFICE SUPPLIES/EQUIPMENT	18.18	35.71	.00	(35.71)	.0
110-480-6238	BANK SERVICE CHARGES	3.26	97.38	200.00	102.62	48.7
110-480-6240	TRAVEL & TRAINING	270.14	442.36	.00	(442.36)	.0
110-480-6560	STATE ASSESSMENTS	500.00	1,550.00	1,530.00	(20.00)	101.3
110-480-6565	COURT COLLECTION FEES	.00	52.69	61.00	8.31	86.4
	TOTAL MATERIALS & SERVICES	2,002.84	7,441.90	7,091.00	(350.90)	105.0
	TOTAL MUNICIPAL COURT	2,360.69	17,901.27	18,735.00	833.73	95.6
	DEBT SERVICE					
	DEBT SERVICES					
110-800-7110	LOAN PRINCIPAL	.00	.00	298,000.00	298,000.00	.0
110-800-7111	LOAN PRINCIPAL - LIBRARY/CITY	.00	10,017.91	10,458.00	440.09	95.8
110-800-7112	LOAN PRINCIPAL - ROLLING ROCK	.00	7,827.35	68,171.00	60,343.65	11.5
110-800-7510	LOAN INTEREST	667.28	8,007.36	8,010.00	2.64	100.0
110-800-7511	LOAN INTEREST - LIBRARY/CITY	.00	12,631.61	12,194.00	(437.61)	103.6
110-800-7512	LOAN INTEREST - ROLLING ROCK	.00	9,869.51	9,526.00	(343.51)	103.6
	TOTAL DEBT SERVICES	667.28	48,353.74	406,359.00	358,005.26	11.9
	TOTAL DEBT SERVICE	667.28	48,353.74	406,359.00	358,005.26	11.9
	OTHER REQUIREMENTS					

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	OTHER REQUIREMENTS					
110-900-9590	CONTINGENCY	.00	.00	39,825.00	39,825.00	.0
110-900-9895	RESERVED FOR FUTURE USE - PARK	.00	.00	2,500.00	2,500.00	.0
110-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	168,248.00	168,248.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	210,573.00	210,573.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	210,573.00	210,573.00	.0
	TOTAL FUND EXPENDITURES	239,353.27	693,607.37	2,274,435.00	1,580,827.63	30.5
	NET REVENUE OVER EXPENDITURES	(205,701.72)	56,553.43	(410,423.00)	(466,976.43)	13.8

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

BUILDING FUND

	ASSETS			
220-1110	ALLOCATED CASH		57,234.41	
	TOTAL ASSETS			57,234.41
	LIABILITIES AND EQUITY			
	FUND EQUITY			
220-3100	BEGINNING FUND BALANCE		29,944.12	
	REVENUE OVER EXPENDITURES - YTD	27,290.29		
	BALANCE - CURRENT DATE		27,290.29	
	TOTAL FUND EQUITY			57,234.41
	TOTAL LIABILITIES AND EQUITY			57,234.41

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

BUILDING FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
220-315-4125	INTEREST EARNED	1.22	10.73	.00	(10.73)	.0
	TOTAL INVESTMENT EARNINGS	1.22	10.73	.00	(10.73)	.0
	LICENSES & PERMITS					
220-335-4356	BUILDING PERMIT FEES	5,009.74	113,929.70	95,000.00	(18,929.70)	119.9
220-335-4358	ELECTRICAL PERMIT FEES	547.68	14,464.16	12,500.00	(1,964.16)	115.7
	TOTAL LICENSES & PERMITS	5,557.42	128,393.86	107,500.00	(20,893.86)	119.4
	TOTAL FUND REVENUE	5,558.64	128,404.59	107,500.00	(20,904.59)	119.5

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

BUILDING FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	PERSONAL SERVICES					
220-490-5110	CITY ADMINISTRATOR	.00	179.59	.00	(179.59)	.0
220-490-5114	CITY CLERK	95.13	2,641.49	3,414.00	772.51	77.4
220-490-5220	OVERTIME	.00	35.62	42.00	6.38	84.8
220-490-5315	SOCIAL SECURITY/MEDICARE	7.28	218.55	574.00	355.45	38.1
220-490-5320	WORKER'S COMP	.05	398.36	354.00	(44.36)	112.5
220-490-5350	UNEMPLOYMENT	.00	.00	240.00	240.00	.0
220-490-5410	HEALTH INSURANCE	.00	948.64	984.00	35.36	96.4
220-490-5450	PUBLIC EMPLOYEES RETIREMENT	21.43	290.50	680.00	389.50	42.7
	TOTAL PERSONAL SERVICES	123.89	4,712.75	6,288.00	1,575.25	75.0
	MATERIALS & SERVICES					
220-490-6110	AUDITING	.00	.00	500.00	500.00	.0
220-490-6112	LEGAL SERVICES	.00	.00	500.00	500.00	.0
220-490-6122	IT SERVICES	22.10	1,121.53	2,400.00	1,278.47	46.7
220-490-6128	OTHER CONTRACT SERVICES	.00	10.98	.00	(10.98)	.0
220-490-6150	BUILDING INSPECTION SERVICES	17,407.46	74,821.66	62,520.00	(12,301.66)	119.7
220-490-6152	ELECTRICAL INSPECTION SERVICES	1,882.50	8,888.25	8,800.00	(88.25)	101.0
220-490-6226	POSTAGE	.00	33.02	.00	(33.02)	.0
220-490-6230	OFFICE SUPPLIES/EQUIPMENT	57.12	112.11	.00	(112.11)	.0
220-490-6238	BANK SERVICE CHARGES	12.48	52.91	125.00	72.09	42.3
220-490-6240	TRAVEL & TRAINING	.00	116.00	.00	(116.00)	.0
220-490-6290	MISCELLANEOUS	.00	.00	100.00	100.00	.0
220-490-6420	WATER SERVICES	3.09	35.59	175.00	139.41	20.3
220-490-6425	SEWER SERVICES	6.39	70.11	125.00	54.89	56.1
220-490-6430	ELECTRICITY SERVICES	17.97	173.73	225.00	51.27	77.2
220-490-6435	INTERNET SERVICES	18.49	221.88	148.00	(73.88)	149.9
220-490-6440	TELEPHONE SERVICES	18.36	211.14	225.00	13.86	93.8
220-490-6445	REFUSE SERVICES	.00	.00	50.00	50.00	.0
220-490-6524	BUILDING STATE SURCHARGE	2,736.00	9,015.84	14,500.00	5,484.16	62.2
220-490-6525	ELECTRICAL STATE SURCHARGE	509.52	1,516.80	1,840.00	323.20	82.4
	TOTAL MATERIALS & SERVICES	22,691.48	96,401.55	92,233.00	(4,168.55)	104.5
	TOTAL NON-DEPARTMENTAL	22,815.37	101,114.30	98,521.00	(2,593.30)	102.6
	OTHER REQUIREMENTS					

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

BUILDING FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	OTHER REQUIREMENTS					
220-900-9590	CONTINGENCY	.00	.00	7,959.00	7,959.00	.0
220-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	20,875.00	20,875.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	28,834.00	28,834.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	28,834.00	28,834.00	.0
	TOTAL FUND EXPENDITURES	22,815.37	101,114.30	127,355.00	26,240.70	79.4
	NET REVENUE OVER EXPENDITURES	(17,256.73)	27,290.29	(19,855.00)	(47,145.29)	137.5

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

WATER FUND

	ASSETS			
230-1110	ALLOCATED CASH		39,335.48	
230-1115	CASH IN BANK - LGIP		40,716.12	
230-1510	ACCOUNTS RECEIVABLE		37,103.54	
230-1710	LAND		81,179.00	
230-1720	BUILDINGS & FACILITIES		35,875.00	
230-1730	EQUIPMENT & FURNISHINGS		108,645.38	
230-1740	VEHICLES & ROLLING STOCK		34,066.66	
230-1750	INFRASTRUCTURE		4,432,770.46	
230-1820	AD - BUILDINGS & FACILITIES		(19,711.68)	
230-1830	AD - EQUIPMENT & FURNISHINGS		(75,105.02)	
230-1840	AD - VEHICLES & ROLLING STOCK		(17,729.64)	
230-1850	AD - INFRASTRUCTURE		(2,255,795.60)	
	TOTAL ASSETS			2,441,349.70
	LIABILITIES AND EQUITY			
	LIABILITIES			
230-2520	UTILITY DEPOSITS		39,640.00	
230-2530	H2O DONATIONS		360.00	
230-2750	LONG TERM DEBT		1,051,825.87	
	TOTAL LIABILITIES			1,091,825.87
	FUND EQUITY			
230-3100	BEGINNING FUND BALANCE		41,481.94	
230-3275	GASB - FIXED ASSETS		2,324,194.56	
230-3277	GAAP - LONG TERM DEBT		(1,051,825.87)	
	REVENUE OVER EXPENDITURES - YTD	35,673.20		
	BALANCE - CURRENT DATE		35,673.20	
	TOTAL FUND EQUITY			1,349,523.83
	TOTAL LIABILITIES AND EQUITY			2,441,349.70

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

WATER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
230-315-4125	INTEREST EARNED	50.24	389.55	2,200.00	1,810.45	17.7
	TOTAL INVESTMENT EARNINGS	50.24	389.55	2,200.00	1,810.45	17.7
	GRANT REVENUES					
230-325-4151	WATER - OPERATING GRANTS	.00	.00	120,000.00	120,000.00	.0
230-325-4162	WATER - CAPITAL GRANTS	.00	54,248.82	.00	(54,248.82)	.0
	TOTAL GRANT REVENUES	.00	54,248.82	120,000.00	65,751.18	45.2
	LICENSES & PERMITS					
230-335-4370	WATER/SEWER CONNECTION PERMIT	250.00	8,250.00	2,750.00	(5,500.00)	300.0
	TOTAL LICENSES & PERMITS	250.00	8,250.00	2,750.00	(5,500.00)	300.0
	CHARGES FOR SERVICE					
230-340-4425	WATER/SEWER SALES	27,878.03	383,628.04	364,700.00	(18,928.04)	105.2
230-340-4426	BULK WATER SALES	181.11	9,164.00	10,000.00	836.00	91.6
230-340-4435	FIRE HYDRANT FEE	328.64	4,496.11	4,240.00	(256.11)	106.0
230-340-4450	WATER/SEWER PENALTIES	2.50	977.50	1,500.00	522.50	65.2
	TOTAL CHARGES FOR SERVICE	28,390.28	398,265.65	380,440.00	(17,825.65)	104.7
	SDC REVENUE					
230-345-4531	WATER REIMBURSEMENT SDC	745.00	23,095.00	7,450.00	(15,645.00)	310.0
	TOTAL SDC REVENUE	745.00	23,095.00	7,450.00	(15,645.00)	310.0
	MISELLANEOUS REVENUE					
230-385-4895	MISCELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL MISELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL FUND REVENUE	29,435.52	484,249.02	513,340.00	29,090.98	94.3

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

WATER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	PERSONAL SERVICES					
230-490-5110	CITY ADMINISTRATOR	1,022.66	25,873.40	24,544.00	(1,329.40)	105.4
230-490-5114	CITY CLERK	761.00	21,131.01	23,310.00	2,178.99	90.7
230-490-5150	PUBLIC WORKS DIRECTOR	1,345.16	32,272.92	32,284.00	11.08	100.0
230-490-5152	UTILITY WORKER I	1,535.04	36,874.12	19,341.00	(17,533.12)	190.7
230-490-5154	UTILITY WORKER II	.00	.00	19,341.00	19,341.00	.0
230-490-5156	TEMPORARY/ SEASONAL	.00	512.82	606.00	93.18	84.6
230-490-5158	MAINTENANCE WORKER I	137.28	2,718.33	3,293.00	574.67	82.6
230-490-5220	OVERTIME	259.04	6,749.01	5,000.00	(1,749.01)	135.0
230-490-5315	SOCIAL SECURITY/MEDICARE	387.11	9,649.13	9,993.00	343.87	96.6
230-490-5320	WORKER'S COMP	1.88	2,080.88	6,317.00	4,236.12	32.9
230-490-5350	UNEMPLOYMENT	.00	.00	10,420.00	10,420.00	.0
230-490-5410	HEALTH INSURANCE	.00	30,017.34	31,270.00	1,252.66	96.0
230-490-5450	PUBLIC EMPLOYEES RETIREMENT	887.65	22,364.56	25,639.00	3,274.44	87.2
	TOTAL PERSONAL SERVICES	6,336.82	190,243.52	211,358.00	21,114.48	90.0

WATER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
230-490-6110	AUDITING	.00	5,775.00	6,000.00	225.00	96.3
230-490-6112	LEGAL SERVICES	.00	.00	500.00	500.00	.0
230-490-6114	FINANCIAL SERVICES	351.75	4,481.75	4,100.00	(381.75)	109.3
230-490-6116	ENGINEERING SERVICES	.00	4,360.50	1,500.00	(2,860.50)	290.7
230-490-6122	IT SERVICES	414.77	6,861.20	5,500.00	(1,361.20)	124.8
230-490-6128	OTHER CONTRACT SERVICES	95.84	1,354.39	8,500.00	7,145.61	15.9
230-490-6210	INSURANCE & BONDS	.00	8,736.69	8,000.00	(736.69)	109.2
230-490-6220	PUBLICATIONS, PRINTING & DUES	900.00	2,764.30	1,200.00	(1,564.30)	230.4
230-490-6226	POSTAGE	.00	1,249.09	1,100.00	(149.09)	113.6
230-490-6230	OFFICE SUPPLIES/EQUIPMENT	333.04	715.84	3,500.00	2,784.16	20.5
230-490-6234	GENERAL SUPPLIES	9.99	3,663.27	3,000.00	(663.27)	122.1
230-490-6238	BANK SERVICE CHARGES	292.87	3,058.04	4,000.00	941.96	76.5
230-490-6240	TRAVEL & TRAINING	169.00	1,736.62	1,500.00	(236.62)	115.8
230-490-6290	MISCELLANEOUS	.00	.00	1,500.00	1,500.00	.0
230-490-6320	BUILDING REPAIR & MAINTENANCE	.00	2,210.12	3,000.00	789.88	73.7
230-490-6324	EQUIPMENT REPAIR & MAINTENANCE	.00	8,397.85	5,000.00	(3,397.85)	168.0
230-490-6330	OTHER REPAIR & MAINTENANCE	.00	7,552.36	17,000.00	9,447.64	44.4
230-490-6334	NON-CAPITALIZED ASSETS	.00	1,809.97	2,000.00	190.03	90.5
230-490-6420	WATER SERVICES	145.62	911.29	500.00	(411.29)	182.3
230-490-6425	SEWER SERVICES	63.94	765.42	775.00	9.58	98.8
230-490-6430	ELECTRICITY SERVICES	1,288.85	18,024.22	19,800.00	1,775.78	91.0
230-490-6435	INTERNET SERVICES	75.00	980.92	900.00	(80.92)	109.0
230-490-6440	TELEPHONE SERVICES	331.41	2,885.70	3,950.00	1,064.30	73.1
230-490-6445	REFUSE SERVICES	48.18	539.49	540.00	.51	99.9
230-490-6710	GAS & OIL	.00	473.08	2,000.00	1,526.92	23.7
230-490-6712	OPERATIONS & SUPPLIES	353.55	3,958.55	1,500.00	(2,458.55)	263.9
230-490-6750	CHEMICALS & LAB SUPPLIES	3,927.31	17,867.01	18,000.00	132.99	99.3
230-490-6755	WATER/SEWER ANALYSIS	320.40	2,950.40	6,400.00	3,449.60	46.1
230-490-6758	WATER/SEWER CONNECTION EXPENDI	.00	.00	3,200.00	3,200.00	.0
230-490-6760	WATER/SEWER FRANCHISE FEES	1,242.67	16,341.27	18,235.00	1,893.73	89.6
	TOTAL MATERIALS & SERVICES	10,364.19	130,424.34	152,700.00	22,275.66	85.4
	TOTAL NON-DEPARTMENTAL	16,701.01	320,667.86	364,058.00	43,390.14	88.1
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
230-700-8540	WATER SYSTEMS IMPROVEMTS	29,985.00	69,568.88	63,030.00	(6,538.88)	110.4
	TOTAL CAPITAL OUTLAY	29,985.00	69,568.88	63,030.00	(6,538.88)	110.4
	TOTAL CAPITAL OUTLAY	29,985.00	69,568.88	63,030.00	(6,538.88)	110.4

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

WATER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	DEBT SERVICE					
	DEBT SERVICES					
230-800-7122	LOAN PRINCIPAL - J05001 SPWF	.00	4,717.75	4,962.00	244.25	95.1
230-800-7124	LOAN PRINCIPAL - RUS 91-03	.00	16,990.82	16,991.00	.18	100.0
230-800-7125	LOAN PRINCIPAL - L21001	.00	7,612.70	7,651.00	38.30	99.5
230-800-7522	LOAN INTEREST - J05001 SPWF	.00	2,704.76	2,705.00	.24	100.0
230-800-7524	LOAN INTEREST - RUS 91-03	.00	22,389.18	22,390.00	.82	100.0
230-800-7525	LOAN INTEREST - L21001	.00	3,923.87	3,915.00	(8.87)	100.2
	TOTAL DEBT SERVICES	.00	58,339.08	58,614.00	274.92	99.5
	TOTAL DEBT SERVICE	.00	58,339.08	58,614.00	274.92	99.5
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
230-900-9590	CONTINGENCY	.00	.00	2.00	2.00	.0
230-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	73,190.00	73,190.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	73,192.00	73,192.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	73,192.00	73,192.00	.0
	TOTAL FUND EXPENDITURES	46,686.01	448,575.82	558,894.00	110,318.18	80.3
	NET REVENUE OVER EXPENDITURES	(17,250.49)	35,673.20	(45,554.00)	(81,227.20)	78.3

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

SEWER FUND

	ASSETS			
240-1110	ALLOCATED CASH		94,128.61	
240-1115	CASH IN BANK - LGIP		88,058.44	
240-1510	ACCOUNTS RECEIVABLE		39,757.06	
240-1710	LAND		11,000.00	
240-1720	BUILDINGS & FACILITIES		89,114.40	
240-1730	EQUIPMENT & FURNISHINGS		68,330.05	
240-1740	VEHICLES & ROLLING STOCK		21,779.50	
240-1750	INFRASTRUCTURE		4,708,963.28	
240-1820	AD - BUILDINGS & FACILITIES		(42,695.71)	
240-1830	AD - EQUIPMENT & FURNISHINGS		(28,515.11)	
240-1840	AD - VEHICLES & ROLLING STOCK		(5,444.88)	
240-1850	AD - INFRASTRUCTURE		(2,898,225.48)	
	TOTAL ASSETS			2,146,250.16
	LIABILITIES AND EQUITY			
	LIABILITIES			
240-2750	LONG TERM DEBT		547,119.72	
	TOTAL LIABILITIES			547,119.72
	FUND EQUITY			
240-3100	BEGINNING FUND BALANCE		184,427.11	
240-3275	GASB - FIXED ASSETS		1,924,306.05	
240-3277	GAAP - LONG TERM DEBT		(547,119.72)	
	REVENUE OVER EXPENDITURES - YTD	37,517.00		
	BALANCE - CURRENT DATE		37,517.00	
	TOTAL FUND EQUITY			1,599,130.44
	TOTAL LIABILITIES AND EQUITY			2,146,250.16

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

SEWER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
240-315-4125	INTEREST EARNED	67.82	632.69	2,150.00	1,517.31	29.4
	TOTAL INVESTMENT EARNINGS	67.82	632.69	2,150.00	1,517.31	29.4
	GRANT REVENUES					
240-325-4151	SEWER - OPERATING GRANTS	.00	.00	20,000.00	20,000.00	.0
	TOTAL GRANT REVENUES	.00	.00	20,000.00	20,000.00	.0
	LICENSES & PERMITS					
240-335-4370	WATER/SEWER CONNECTION PERMIT	115.00	3,795.00	1,150.00	(2,645.00)	330.0
	TOTAL LICENSES & PERMITS	115.00	3,795.00	1,150.00	(2,645.00)	330.0
	CHARGES FOR SERVICE					
240-340-4425	WATER/SEWER SALES	33,788.99	435,549.78	406,700.00	(28,849.78)	107.1
240-340-4426	BULK GREY WATER DISPOSAL	.00	10,425.00	.00	(10,425.00)	.0
240-340-4450	WATER/SEWER PENALTIES	2.50	802.50	2,200.00	1,397.50	36.5
	TOTAL CHARGES FOR SERVICE	33,791.49	446,777.28	408,900.00	(37,877.28)	109.3
	SDC REVENUE					
240-345-4541	SEWER REIMBURSEMENT SDC	618.00	19,158.00	6,180.00	(12,978.00)	310.0
	TOTAL SDC REVENUE	618.00	19,158.00	6,180.00	(12,978.00)	310.0
	MISELLANEOUS REVENUE					
240-385-4895	MISCELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL MISELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL FUND REVENUE	34,592.31	470,362.97	438,880.00	(31,482.97)	107.2

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

SEWER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	PERSONAL SERVICES					
240-490-5110	CITY ADMINISTRATOR	1,022.65	25,872.99	24,544.00	(1,328.99)	105.4
240-490-5114	CITY CLERK	760.99	21,130.75	23,310.00	2,179.25	90.7
240-490-5150	PUBLIC WORKS DIRECTOR	1,345.17	32,273.14	32,284.00	10.86	100.0
240-490-5152	UTILITY WORKER I	1,535.02	36,873.62	19,341.00	(17,532.62)	190.7
240-490-5154	UTILITY WORKER II	.00	.00	19,341.00	19,341.00	.0
240-490-5156	TEMPORARY/ SEASONAL	.00	512.82	606.00	93.18	84.6
240-490-5158	MAINTENANCE WORKER I	137.28	2,718.33	3,293.00	574.67	82.6
240-490-5220	OVERTIME	259.03	6,748.96	7,663.00	914.04	88.1
240-490-5315	SOCIAL SECURITY/MEDICARE	387.11	9,648.79	9,993.00	344.21	96.6
240-490-5320	WORKER'S COMP	1.88	1,808.47	5,716.00	3,907.53	31.6
240-490-5350	UNEMPLOYMENT	.00	.00	10,420.00	10,420.00	.0
240-490-5410	HEALTH INSURANCE	.00	30,017.37	31,270.00	1,252.63	96.0
240-490-5450	PUBLIC EMPLOYEES RETIREMENT	887.68	22,364.62	25,639.00	3,274.38	87.2
	TOTAL PERSONAL SERVICES	6,336.81	189,969.86	213,420.00	23,450.14	89.0

SEWER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
240-490-6110	AUDITING	.00	5,775.00	6,000.00	225.00	96.3
240-490-6112	LEGAL SERVICES	.00	.00	500.00	500.00	.0
240-490-6114	FINANCIAL SERVICES	351.75	4,481.75	5,000.00	518.25	89.6
240-490-6116	ENGINEERING SERVICES	.00	4,076.50	2,500.00	(1,576.50)	163.1
240-490-6122	IT SERVICES	414.77	6,861.20	5,500.00	(1,361.20)	124.8
240-490-6128	OTHER CONTRACT SERVICES	395.84	4,954.39	8,600.00	3,645.61	57.6
240-490-6210	INSURANCE & BONDS	.00	8,307.21	9,000.00	692.79	92.3
240-490-6220	PUBLICATIONS, PRINTING & DUES	160.00	454.30	1,200.00	745.70	37.9
240-490-6226	POSTAGE	.00	1,249.09	1,100.00	(149.09)	113.6
240-490-6230	OFFICE SUPPLIES/EQUIPMENT	333.06	631.16	500.00	(131.16)	126.2
240-490-6234	GENERAL SUPPLIES	10.00	2,018.03	2,500.00	481.97	80.7
240-490-6238	BANK SERVICE CHARGES	400.63	3,320.47	4,000.00	679.53	83.0
240-490-6240	TRAVEL & TRAINING	.00	1,711.62	1,500.00	(211.62)	114.1
240-490-6290	MISCELLANEOUS	.00	49.99	500.00	450.01	10.0
240-490-6320	BUILDING REPAIR & MAINTENANCE	.00	4,301.08	3,000.00	(1,301.08)	143.4
240-490-6324	EQUIPMENT REPAIR & MAINTENANCE	213.94	20,230.42	5,000.00	(15,230.42)	404.6
240-490-6330	OTHER REPAIR & MAINTENANCE	337.50	1,800.99	15,000.00	13,199.01	12.0
240-490-6334	NON-CAPITALIZED ASSETS	.00	1,809.98	7,500.00	5,690.02	24.1
240-490-6420	WATER SERVICES	830.48	9,179.39	21,500.00	12,320.61	42.7
240-490-6425	SEWER SERVICES	575.46	6,895.16	6,200.00	(695.16)	111.2
240-490-6430	ELECTRICITY SERVICES	1,958.32	23,434.11	24,000.00	565.89	97.6
240-490-6435	INTERNET SERVICES	.00	1,409.69	1,440.00	30.31	97.9
240-490-6440	TELEPHONE SERVICES	240.26	2,849.03	2,200.00	(649.03)	129.5
240-490-6445	REFUSE SERVICES	48.18	625.01	9,450.00	8,824.99	6.6
240-490-6520	PERMITS	.00	3,579.00	3,000.00	(579.00)	119.3
240-490-6710	GAS & OIL	130.09	542.12	1,450.00	907.88	37.4
240-490-6712	OPERATIONS & SUPPLIES	61.80	1,231.96	1,500.00	268.04	82.1
240-490-6750	CHEMICALS & LAB SUPPLIES	2,365.56	16,864.84	15,500.00	(1,364.84)	108.8
240-490-6755	WATER/SEWER ANALYSIS	1,878.30	12,854.90	11,250.00	(1,604.90)	114.3
240-490-6758	WATER/SEWER CONNECTION EXPENDI	.00	.00	3,000.00	3,000.00	.0
240-490-6760	WATER/SEWER FRANCHISE FEES	1,742.13	18,163.31	19,344.00	1,180.69	93.9
	TOTAL MATERIALS & SERVICES	12,448.07	169,661.70	198,734.00	29,072.30	85.4
	TOTAL NON-DEPARTMENTAL	18,784.88	359,631.56	412,154.00	52,522.44	87.3
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
240-700-8335	EQUIPMENT & FURNISHINGS	.00	.00	6,000.00	6,000.00	.0
240-700-8550	SEWER SYSTEMS	.00	23,377.31	40,342.00	16,964.69	58.0
	TOTAL CAPITAL OUTLAY	.00	23,377.31	46,342.00	22,964.69	50.5
	TOTAL CAPITAL OUTLAY	.00	23,377.31	46,342.00	22,964.69	50.5

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

SEWER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	DEBT SERVICE					
	DEBT SERVICES					
240-800-7110	LOAN PRINCIPAL - G02002	.00	18,628.00	18,628.00	.00	100.0
240-800-7122	LOAN PRINCIPAL - J05001 SPWF	.00	4,717.74	4,962.00	244.26	95.1
240-800-7124	LOAN PRINCIPAL - RUS 92-05	.00	6,793.14	6,794.00	.86	100.0
240-800-7510	LOAN INTEREST - G02002	.00	8,042.61	8,043.00	.39	100.0
240-800-7522	LOAN INTEREST - J05001 SPWF	.00	2,704.75	2,705.00	.25	100.0
240-800-7524	LOAN INTEREST - RUS 92-05	.00	8,950.86	9,133.00	182.14	98.0
	TOTAL DEBT SERVICES	.00	49,837.10	50,265.00	427.90	99.2
	TOTAL DEBT SERVICE	.00	49,837.10	50,265.00	427.90	99.2
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
240-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	144,968.00	144,968.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	144,968.00	144,968.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	144,968.00	144,968.00	.0
	TOTAL FUND EXPENDITURES	18,784.88	432,845.97	653,729.00	220,883.03	66.2
	NET REVENUE OVER EXPENDITURES	15,807.43	37,517.00	(214,849.00)	(252,366.00)	17.5

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

STREET FUND

	ASSETS			
312-1110	ALLOCATED CASH		55,876.41	
312-1115	CASH IN BANK - LGIP		55,922.02	
312-1720	BUILDINGS & FACILITIES		528.00	
312-1730	EQUIPMENT & FURNISHINGS		6,061.05	
312-1740	VEHICLES & ROLLING STOCK		11,299.83	
312-1750	INFRASTRUCTURE		1,610,571.62	
312-1820	AD - BUILDINGS & FACILITIES		(35.20)	
312-1830	AD - EQUIPMENT & FURNISHINGS		(1,361.79)	
312-1840	AD - VEHICLES & ROLLING STOCK		(2,824.95)	
312-1850	AD - INFRASTRUCTURE		(414,193.72)	
	TOTAL ASSETS			1,321,843.27
	LIABILITIES AND EQUITY			
	LIABILITIES			
312-2750	LONG TERM DEBT		83,091.72	
	TOTAL LIABILITIES			83,091.72
	FUND EQUITY			
312-3100	BEGINNING FUND BALANCE		76,010.79	
312-3275	GASB - FIXED ASSETS		1,210,044.84	
312-3277	GAAP - LONG TERM DEBT		(83,091.72)	
	REVENUE OVER EXPENDITURES - YTD	35,787.64		
	BALANCE - CURRENT DATE		35,787.64	
	TOTAL FUND EQUITY			1,238,751.55
	TOTAL LIABILITIES AND EQUITY			1,321,843.27

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

STREET FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
312-315-4125	INTEREST EARNED	43.00	278.77	1,400.00	1,121.23	19.9
	TOTAL INVESTMENT EARNINGS	43.00	278.77	1,400.00	1,121.23	19.9
	INTERGOVERNMENTAL					
312-320-4142	STATE DISTRIBUTIONS	8,395.74	91,937.70	64,212.00	(27,725.70)	143.2
	TOTAL INTERGOVERNMENTAL	8,395.74	91,937.70	64,212.00	(27,725.70)	143.2
	SDC REVENUE					
312-345-4513	TRANSPORTATION REIMBURSEMENT S	104.00	3,224.00	1,560.00	(1,664.00)	206.7
	TOTAL SDC REVENUE	104.00	3,224.00	1,560.00	(1,664.00)	206.7
	MISELLANEOUS REVENUE					
312-385-4895	MISCELLANEOUS REVENUE	.00	.00	77.00	77.00	.0
	TOTAL MISELLANEOUS REVENUE	.00	.00	77.00	77.00	.0
	TOTAL FUND REVENUE	8,542.74	95,440.47	67,249.00	(28,191.47)	141.9

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

STREET FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	PERSONAL SERVICES					
312-490-5110	CITY ADMINISTRATOR	185.94	4,443.07	4,463.00	19.93	99.6
312-490-5150	PUBLIC WORKS DIRECTOR	158.25	3,796.72	3,798.00	1.28	100.0
312-490-5152	UTILITY WORKER I	180.60	4,338.30	2,275.00	(2,063.30)	190.7
312-490-5154	UTILITY WORKER II	.00	.00	2,275.00	2,275.00	.0
312-490-5156	TEMPORARY/ SEASONAL	.00	1,025.62	1,210.00	184.38	84.8
312-490-5220	OVERTIME	30.47	760.48	861.00	100.52	88.3
312-490-5315	SOCIAL SECURITY/MEDICARE	42.45	1,098.36	1,140.00	41.64	96.4
312-490-5320	WORKER'S COMP	.19	132.04	1,350.00	1,217.96	9.8
312-490-5350	UNEMPLOYMENT	.00	.00	1,281.00	1,281.00	.0
312-490-5410	HEALTH INSURANCE	.00	2,802.81	2,924.00	121.19	95.9
312-490-5450	PUBLIC EMPLOYEES RETIREMENT	80.71	2,593.74	2,929.00	335.26	88.6
	TOTAL PERSONAL SERVICES	678.61	20,991.14	24,506.00	3,514.86	85.7
	MATERIALS & SERVICES					
312-490-6110	AUDITING	.00	1,925.00	1,812.00	(113.00)	106.2
312-490-6114	FINANCIAL SERVICES	117.25	1,494.25	1,737.00	242.75	86.0
312-490-6116	ENGINEERING SERVICES	.00	162.50	2,500.00	2,337.50	6.5
312-490-6122	IT SERVICES	82.38	1,907.66	2,102.00	194.34	90.8
312-490-6128	OTHER CONTRACT SERVICES	832.46	1,265.34	8,500.00	7,234.66	14.9
312-490-6210	INSURANCE & BONDS	.00	3,034.14	2,225.00	(809.14)	136.4
312-490-6230	OFFICE SUPPLIES/EQUIPMENT	13.37	84.40	.00	(84.40)	.0
312-490-6234	GENERAL SUPPLIES	15.72	114.38	200.00	85.62	57.2
312-490-6238	BANK SERVICE CHARGES	.00	1.04	2.00	.96	52.0
312-490-6240	TRAVEL & TRAINING	.00	265.51	.00	(265.51)	.0
312-490-6290	MISCELLANEOUS	1,000.00	1,000.00	500.00	(500.00)	200.0
312-490-6324	EQUIPMENT REPAIR & MAINTENANCE	.00	.00	500.00	500.00	.0
312-490-6330	OTHER REPAIR & MAINTENANCE	.00	10,348.16	10,000.00	(348.16)	103.5
312-490-6334	NON-CAPITALIZED ASSETS	.00	.00	2,500.00	2,500.00	.0
312-490-6430	ELECTRICITY SERVICES	1,113.01	11,887.76	13,250.00	1,362.24	89.7
312-490-6720	STORM DRAIN MAINTENANCE	.00	.00	1,218.00	1,218.00	.0
312-490-6724	STREET SIGNS	.00	.00	1,000.00	1,000.00	.0
	TOTAL MATERIALS & SERVICES	3,174.19	33,490.14	48,046.00	14,555.86	69.7
	TOTAL NON-DEPARTMENTAL	3,852.80	54,481.28	72,552.00	18,070.72	75.1
	DEBT SERVICE					

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

STREET FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	DEBT SERVICES					
312-800-7125	LOAN PRINCIPAL - L21001	.00	3,412.58	3,429.00	16.42	99.5
312-800-7525	LOAN INTEREST - L21001	.00	1,758.97	1,746.00	(12.97)	100.7
	TOTAL DEBT SERVICES	.00	5,171.55	5,175.00	3.45	99.9
	TOTAL DEBT SERVICE	.00	5,171.55	5,175.00	3.45	99.9
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
312-900-9590	CONTINGENCY	.00	.00	7,368.00	7,368.00	.0
312-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	45,865.00	45,865.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	53,233.00	53,233.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	53,233.00	53,233.00	.0
	TOTAL FUND EXPENDITURES	3,852.80	59,652.83	130,960.00	71,307.17	45.6
	NET REVENUE OVER EXPENDITURES	4,689.94	35,787.64	(63,711.00)	(99,498.64)	56.2

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

BLACKBERRY JAM FUND

	ASSETS			
314-1110	ALLOCATED CASH		13,823.92	
	TOTAL ASSETS			13,823.92
	LIABILITIES AND EQUITY			
	FUND EQUITY			
314-3100	BEGINNING FUND BALANCE		11,467.99	
	REVENUE OVER EXPENDITURES - YTD	2,355.93		
	BALANCE - CURRENT DATE		2,355.93	
	TOTAL FUND EQUITY			13,823.92
	TOTAL LIABILITIES AND EQUITY			13,823.92

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

BLACKBERRY JAM FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
314-315-4125	INTEREST EARNED	.21	2.87	.00	(2.87)	.0
	TOTAL INVESTMENT EARNINGS	.21	2.87	.00	(2.87)	.0
	OTHER REVENUE					
314-370-4824	BBJ DONATIONS	.00	25.00	.00	(25.00)	.0
	TOTAL OTHER REVENUE	.00	25.00	.00	(25.00)	.0
	FUNDRAISING & EVENT REVENUE					
314-380-4861	CRAFT/COMMERCIAL BOOTH SALES	455.00	760.00	.00	(760.00)	.0
314-380-4862	FOOD BOOTH SALES	620.00	820.00	.00	(820.00)	.0
314-380-4864	JAM SALES	.00	340.00	.00	(340.00)	.0
314-380-4866	QUILT RAFFLE SALES	.00	4,458.00	4,000.00	(458.00)	111.5
314-380-4870	SPONSORSHIP REVENUE	.00	1,550.00	.00	(1,550.00)	.0
314-380-4889	BBJ FESTIVAL OTHER REVENUE	.00	85.06	.00	(85.06)	.0
	TOTAL FUNDRAISING & EVENT REVENUE	1,075.00	8,013.06	4,000.00	(4,013.06)	200.3
	TOTAL FUND REVENUE	1,075.21	8,040.93	4,000.00	(4,040.93)	201.0

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

BLACKBERRY JAM FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
314-490-6122	IT SERVICES	41.58	418.72	500.00	81.28	83.7
314-490-6220	PUBLICATIONS, PRINTING & DUES	.00	50.45	.00	(50.45)	.0
314-490-6238	BANK SERVICE CHARGES	8.10	26.68	.00	(26.68)	.0
314-490-6705	RENT	80.00	960.00	1,250.00	290.00	76.8
314-490-6814	JAM SALES EXP	.00	378.00	.00	(378.00)	.0
314-490-6816	QUILT RAFFLE	.00	3,600.00	4,000.00	400.00	90.0
314-490-6852	CAR SHOW EXP	.00	251.15	1,000.00	748.85	25.1
	TOTAL MATERIALS & SERVICES	129.68	5,685.00	6,750.00	1,065.00	84.2
	TOTAL NON-DEPARTMENTAL	129.68	5,685.00	6,750.00	1,065.00	84.2
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
314-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	7,795.00	7,795.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	7,795.00	7,795.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	7,795.00	7,795.00	.0
	TOTAL FUND EXPENDITURES	129.68	5,685.00	14,545.00	8,860.00	39.1
	NET REVENUE OVER EXPENDITURES	945.53	2,355.93	(10,545.00)	(12,900.93)	22.3

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

PARKS SDC FUND

	ASSETS			
410-1110	ALLOCATED CASH		29,568.76	
410-1115	CASH IN BANK - LGIP		59,964.13	
	TOTAL ASSETS			89,532.89
	LIABILITIES AND EQUITY			
	FUND EQUITY			
410-3100	BEGINNING FUND BALANCE		58,681.83	
	REVENUE OVER EXPENDITURES - YTD	30,851.06		
	BALANCE - CURRENT DATE		30,851.06	
	TOTAL FUND EQUITY			89,532.89
	TOTAL LIABILITIES AND EQUITY			89,532.89

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

PARKS SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
410-315-4125	INTEREST EARNED	45.65	316.06	200.00	(116.06)	158.0
	TOTAL INVESTMENT EARNINGS	45.65	316.06	200.00	(116.06)	158.0
	SDC REVENUE					
410-345-4510	PARK SDC FEES	985.00	30,535.00	14,775.00	(15,760.00)	206.7
	TOTAL SDC REVENUE	985.00	30,535.00	14,775.00	(15,760.00)	206.7
	TOTAL FUND REVENUE	1,030.65	30,851.06	14,975.00	(15,876.06)	206.0

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

PARKS SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
410-900-9895	RESERVED FOR FUTURE USE - PARK	.00	.00	5,000.00	5,000.00	.0
410-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	67,725.00	67,725.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	72,725.00	72,725.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	72,725.00	72,725.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	72,725.00	72,725.00	.0
	NET REVENUE OVER EXPENDITURES	1,030.65	30,851.06	(57,750.00)	(88,601.06)	53.4

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

STREETS SDC FUND

	ASSETS			
412-1110	ALLOCATED CASH		22,231.44	
412-1115	CASH IN BANK - LGIP		46,403.67	
	TOTAL ASSETS			68,635.11
	LIABILITIES AND EQUITY			
	FUND EQUITY			
412-3100	BEGINNING FUND BALANCE		50,028.24	
	REVENUE OVER EXPENDITURES - YTD	18,606.87		
	BALANCE - CURRENT DATE		18,606.87	
	TOTAL FUND EQUITY			68,635.11
	TOTAL LIABILITIES AND EQUITY			68,635.11

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

STREETS SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
412-315-4125	INTEREST EARNED	35.31	254.87	200.00	(54.87)	127.4
	TOTAL INVESTMENT EARNINGS	35.31	254.87	200.00	(54.87)	127.4
	SDC REVENUE					
412-345-4512	TRANSPORTATION SDC	592.00	18,352.00	8,880.00	(9,472.00)	206.7
	TOTAL SDC REVENUE	592.00	18,352.00	8,880.00	(9,472.00)	206.7
	TOTAL FUND REVENUE	627.31	18,606.87	9,080.00	(9,526.87)	204.9

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

STREETS SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
412-490-6128	OTHER CONTRACT SERVICES	.00	.00	5,000.00	5,000.00	.0
	TOTAL MATERIALS & SERVICES	.00	.00	5,000.00	5,000.00	.0
	TOTAL NON-DEPARTMENTAL	.00	.00	5,000.00	5,000.00	.0
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
412-700-8530	STREET IMPROVEMENTS	.00	.00	40,000.00	40,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	40,000.00	40,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	40,000.00	40,000.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
412-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	13,710.00	13,710.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	13,710.00	13,710.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	13,710.00	13,710.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	58,710.00	58,710.00	.0
	NET REVENUE OVER EXPENDITURES	627.31	18,606.87	(49,630.00)	(68,236.87)	37.5

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

WATER SDC FUND

	ASSETS			
430-1110	ALLOCATED CASH		73,195.43	
430-1115	CASH IN BANK - LGIP		302,937.53	
	TOTAL ASSETS			376,132.96
	LIABILITIES AND EQUITY			
	FUND EQUITY			
430-3100	BEGINNING FUND BALANCE		329,227.75	
	REVENUE OVER EXPENDITURES - YTD	46,905.21		
	BALANCE - CURRENT DATE		46,905.21	
	TOTAL FUND EQUITY			376,132.96
	TOTAL LIABILITIES AND EQUITY			376,132.96

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

WATER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
430-315-4125	INTEREST EARNED	229.51	1,731.55	1,000.00	(731.55)	173.2
	TOTAL INVESTMENT EARNINGS	229.51	1,731.55	1,000.00	(731.55)	173.2
	SDC REVENUE					
430-345-4530	WATER SDC	3,830.00	118,730.00	57,450.00	(61,280.00)	206.7
	TOTAL SDC REVENUE	3,830.00	118,730.00	57,450.00	(61,280.00)	206.7
	TOTAL FUND REVENUE	4,059.51	120,461.55	58,450.00	(62,011.55)	206.1

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

WATER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
430-490-6128	OTHER CONTRACT SERVICES	7,194.00	73,556.34	102,446.00	28,889.66	71.8
	TOTAL MATERIALS & SERVICES	7,194.00	73,556.34	102,446.00	28,889.66	71.8
	TOTAL NON-DEPARTMENTAL	7,194.00	73,556.34	102,446.00	28,889.66	71.8
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
430-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	284,506.00	284,506.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	284,506.00	284,506.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	284,506.00	284,506.00	.0
	TOTAL FUND EXPENDITURES	7,194.00	73,556.34	386,952.00	313,395.66	19.0
	NET REVENUE OVER EXPENDITURES	(3,134.49)	46,905.21	(328,502.00)	(375,407.21)	14.3

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

SEWER SDC FUND

	ASSETS			
440-1110	ALLOCATED CASH		64,088.25	
440-1115	CASH IN BANK - LGIP		68,149.35	
	TOTAL ASSETS			132,237.60
	LIABILITIES AND EQUITY			
	FUND EQUITY			
440-3100	BEGINNING FUND BALANCE		146,159.38	
	REVENUE OVER EXPENDITURES - YTD	(13,921.78)		
	BALANCE - CURRENT DATE		(13,921.78)	
	TOTAL FUND EQUITY			132,237.60
	TOTAL LIABILITIES AND EQUITY			132,237.60

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

SEWER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
440-315-4125	INTEREST EARNED	52.38	550.50	1,000.00	449.50	55.1
	TOTAL INVESTMENT EARNINGS	52.38	550.50	1,000.00	449.50	55.1
	SDC REVENUE					
440-345-4540	SEWER SDC	1,071.00	33,201.00	16,065.00	(17,136.00)	206.7
	TOTAL SDC REVENUE	1,071.00	33,201.00	16,065.00	(17,136.00)	206.7
	TOTAL FUND REVENUE	1,123.38	33,751.50	17,065.00	(16,686.50)	197.8

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

SEWER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
440-490-6128	OTHER CONTRACT SERVICES	.00	47,673.28	53,616.00	5,942.72	88.9
	TOTAL MATERIALS & SERVICES	.00	47,673.28	53,616.00	5,942.72	88.9
	TOTAL NON-DEPARTMENTAL	.00	47,673.28	53,616.00	5,942.72	88.9
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
440-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	109,194.00	109,194.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	109,194.00	109,194.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	109,194.00	109,194.00	.0
	TOTAL FUND EXPENDITURES	.00	47,673.28	162,810.00	115,136.72	29.3
	NET REVENUE OVER EXPENDITURES	1,123.38	(13,921.78)	(145,745.00)	(131,823.22)	(9.6)

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

STORMWATER SDC FUND

	ASSETS			
445-1110	ALLOCATED CASH		20,980.35	
445-1115	CASH IN BANK - LGIP		48,372.69	
	TOTAL ASSETS			69,353.04
	LIABILITIES AND EQUITY			
	FUND EQUITY			
445-3100	BEGINNING FUND BALANCE		47,976.04	
	REVENUE OVER EXPENDITURES - YTD	21,377.00		
	BALANCE - CURRENT DATE		21,377.00	
	TOTAL FUND EQUITY			69,353.04
	TOTAL LIABILITIES AND EQUITY			69,353.04

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

STORMWATER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
445-315-4125	INTEREST EARNED	36.78	254.05	635.00	380.95	40.0
	TOTAL INVESTMENT EARNINGS	36.78	254.05	635.00	380.95	40.0
	SDC REVENUE					
445-345-4545	STORM DRAINAGE SDC	673.00	21,122.95	10,095.00	(11,027.95)	209.2
	TOTAL SDC REVENUE	673.00	21,122.95	10,095.00	(11,027.95)	209.2
	TOTAL FUND REVENUE	709.78	21,377.00	10,730.00	(10,647.00)	199.2

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

STORMWATER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
445-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	59,008.00	59,008.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	59,008.00	59,008.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	59,008.00	59,008.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	59,008.00	59,008.00	.0
	NET REVENUE OVER EXPENDITURES	709.78	21,377.00	(48,278.00)	(69,655.00)	44.3

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

WATER RESERVE FUND

	ASSETS			
520-1110	ALLOCATED CASH		9,400.30	
520-1115	CASH IN BANK - LGIP		30,057.18	
	TOTAL ASSETS			39,457.48
	LIABILITIES AND EQUITY			
	FUND EQUITY			
520-3100	BEGINNING FUND BALANCE		39,395.13	
	REVENUE OVER EXPENDITURES - YTD	62.35		
	BALANCE - CURRENT DATE		62.35	
	TOTAL FUND EQUITY			39,457.48
	TOTAL LIABILITIES AND EQUITY			39,457.48

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

WATER RESERVE FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
520-315-4125	INTEREST EARNED	22.80	62.35	4.00	(58.35)	1558.8
	TOTAL INVESTMENT EARNINGS	22.80	62.35	4.00	(58.35)	1558.8
	TOTAL FUND REVENUE	22.80	62.35	4.00	(58.35)	1558.8

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

WATER RESERVE FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
520-900-9892	RESERVED FOR WATER BOND PYMT	.00	.00	39,402.00	39,402.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	39,402.00	39,402.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	39,402.00	39,402.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	39,402.00	39,402.00	.0
	NET REVENUE OVER EXPENDITURES	22.80	62.35	(39,398.00)	(39,460.35)	.2

CITY OF LOWELL
BALANCE SHEET
JUNE 30, 2022

SEWER RESERVE FUND

	ASSETS			
521-1110	ALLOCATED CASH		5,753.16	
521-1115	CASH IN BANK - LGIP		10,019.06	
	TOTAL ASSETS			15,772.22
	LIABILITIES AND EQUITY			
	FUND EQUITY			
521-3100	BEGINNING FUND BALANCE		15,750.85	
	REVENUE OVER EXPENDITURES - YTD	21.37		
	BALANCE - CURRENT DATE		21.37	
	TOTAL FUND EQUITY			15,772.22
	TOTAL LIABILITIES AND EQUITY			15,772.22

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

SEWER RESERVE FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
521-315-4125	INTEREST EARNED	7.64	21.37	2.00	(19.37)	1068.5
	TOTAL INVESTMENT EARNINGS	7.64	21.37	2.00	(19.37)	1068.5
	TOTAL FUND REVENUE	7.64	21.37	2.00	(19.37)	1068.5

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2022

SEWER RESERVE FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
521-900-9892	RESERVED FOR SEWER BOND PYMT	.00	.00	15,756.00	15,756.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	15,756.00	15,756.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	15,756.00	15,756.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	15,756.00	15,756.00	.0
	NET REVENUE OVER EXPENDITURES	7.64	21.37	(15,754.00)	(15,775.37)	.1

CITY OF LOWELL
COMBINED CASH INVESTMENT
JULY 31, 2022

COMBINED CASH ACCOUNTS

999-1111	CASH IN BANK - CHECKING	495,352.07
999-1115	CASH IN BANK - LGIP	971,300.12
999-1175	UTILITY CASH CLEARING	(367.27)
	TOTAL COMBINED CASH	1,466,284.92
999-1110	CASH ALLOCATED TO FUNDS	(1,466,473.50)
	TOTAL UNALLOCATED CASH	(188.58)

CASH ALLOCATION RECONCILIATION

110	ALLOCATION TO GENERAL FUND	248,313.22
220	ALLOCATION TO BUILDING FUND	57,229.07
230	ALLOCATION TO WATER FUND	70,673.87
240	ALLOCATION TO SEWER FUND	178,736.44
312	ALLOCATION TO STREET FUND	112,838.32
314	ALLOCATION TO BLACKBERRY JAM FUND	17,196.67
410	ALLOCATION TO PARKS SDC FUND	89,596.40
412	ALLOCATION TO STREETS SDC FUND	68,684.26
430	ALLOCATION TO WATER SDC FUND	366,412.57
440	ALLOCATION TO SEWER SDC FUND	132,116.28
445	ALLOCATION TO STORMWATER SDC FUND	69,404.27
520	ALLOCATION TO WATER RESERVE FUND	39,489.32
521	ALLOCATION TO SEWER RESERVE FUND	15,782.83
	TOTAL ALLOCATIONS TO OTHER FUNDS	1,466,473.52
	ALLOCATION FROM COMBINED CASH FUND - 999-1110	(1,466,473.50)
	ZERO PROOF IF ALLOCATIONS BALANCE	.02

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

GENERAL FUND

	ASSETS			
110-1110	ALLOCATED CASH		28,408.27	
110-1115	CASH IN BANK - LGIP		219,904.95	
110-1120	PETTY CASH		250.00	
110-1620	INVENTORY		308,934.79	
110-1710	LAND		2,595,845.69	
110-1720	BUILDINGS & FACILITIES		430,908.77	
110-1730	EQUIPMENT & FURNISHINGS		28,874.28	
110-1740	VEHICLES & ROLLING STOCK		40,847.50	
110-1750	INFRASTRUCTURE		32,762.99	
110-1795	CONSTRUCTION IN PROGRESS		14,195.83	
110-1820	AD - BUILDINGS & FACILITIES		(187,520.17)	
110-1830	AD - EQUIPMENT & FURNISHINGS		(7,893.90)	
110-1840	AD - VEHICLES & ROLLING STOCK		(13,908.46)	
110-1850	AD - INFRASTRUCTURE		(15,469.63)	
	TOTAL ASSETS			3,476,140.91
	LIABILITIES AND EQUITY			
	LIABILITIES			
110-2205	WAGES PAYABLE		2,761.72	
110-2210	PAYROLL TAXES PAYABLE		1,169.86	
110-2245	HEALTH INSURANCE PAYABLE		831.84	
110-2250	RETIREMENT PAYABLE		1,053.38	
110-2255	DEFERRED COMP PAYABLE		30.01	
110-2510	BAIL HELD		430.00	
110-2515	CET TAX COLLECTED		1,759.68	
110-2518	LANE ELECTRIC - PAY STATION		216.00	
110-2525	OTHER DEPOSITS		603.00	
110-2750	LONG TERM DEBT		803,036.97	
	TOTAL LIABILITIES			811,892.46
	FUND EQUITY			
110-3100	BEGINNING FUND BALANCE		262,356.90	
110-3275	GASB - FIXED ASSETS		3,227,577.69	
110-3277	GAAP - LONG TERM DEBT		(803,036.97)	
	REVENUE OVER EXPENDITURES - YTD	(22,463.62)		
	BALANCE - CURRENT DATE		(22,463.62)	
	TOTAL FUND EQUITY			2,664,434.00
	TOTAL LIABILITIES AND EQUITY			3,476,326.46

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	TAXES					
110-310-4112	PROPERTY TAXES - CURRENT	.00	.00	175,885.00	175,885.00	.0
110-310-4114	PROPERTY TAXES - PRIOR	325.88	325.88	2,761.00	2,435.12	11.8
	TOTAL TAXES	325.88	325.88	178,646.00	178,320.12	.2
	INVESTMENT EARNINGS					
110-315-4125	INTEREST EARNED	255.46	255.46	1,252.00	996.54	20.4
	TOTAL INVESTMENT EARNINGS	255.46	255.46	1,252.00	996.54	20.4
	INTERGOVERNMENTAL					
110-320-4132	STATE REVENUE SHARING	.00	.00	12,000.00	12,000.00	.0
110-320-4134	CIGARETTE TAX	73.38	73.38	3,700.00	3,626.62	2.0
110-320-4136	LIQUOR TAX	2,389.19	2,389.19	22,000.00	19,610.81	10.9
110-320-4145	TRANSIENT ROOM TAX	10.43	10.43	.00	(10.43)	.0
110-320-4148	MARIJUANA TAX DISTRIBUTION	601.00	601.00	6,000.00	5,399.00	10.0
	TOTAL INTERGOVERNMENTAL	3,074.00	3,074.00	43,700.00	40,626.00	7.0
	GRANT REVENUES					
110-325-4151	GENERAL GOVT - OPERATING GRANT	.00	.00	50,000.00	50,000.00	.0
110-325-4152	TOURISM - OPERATING GRANT	.00	.00	10,586.00	10,586.00	.0
110-325-4154	SUMMER READING - OPER GRANT	.00	.00	1,000.00	1,000.00	.0
110-325-4155	LIBRARY - CAPITAL GRANT	.00	.00	40,000.00	40,000.00	.0
110-325-4158	COMM DEV - OPERATING GRANT	.00	.00	1,000.00	1,000.00	.0
110-325-4160	PARKS - OPERATING GRANT	.00	.00	740,715.00	740,715.00	.0
	TOTAL GRANT REVENUES	.00	.00	843,301.00	843,301.00	.0
	FRANCHISE FEES					
110-330-4310	CABLE FRANCHISE FEES	.00	.00	6,500.00	6,500.00	.0
110-330-4312	ELECTRIC FRANCHISE FEES	.00	.00	54,000.00	54,000.00	.0
110-330-4316	TELECOM FRANCHISE FEES	.00	.00	1,500.00	1,500.00	.0
110-330-4318	WATER FRANCHISE FEES	1,172.44	1,172.44	23,975.00	22,802.56	4.9
110-330-4320	SEWER FRANCHISE FEES	1,578.74	1,578.74	22,711.00	21,132.26	7.0
	TOTAL FRANCHISE FEES	2,751.18	2,751.18	108,686.00	105,934.82	2.5

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	LICENSES & PERMITS					
110-335-4352	LAND USE & DEVELOPMENT	1,167.00	1,167.00	19,195.00	18,028.00	6.1
110-335-4354	MISC PERMITS & LICENSES	.00	.00	100.00	100.00	.0
110-335-4360	DOG LICENSES	15.00	15.00	500.00	485.00	3.0
	TOTAL LICENSES & PERMITS	1,182.00	1,182.00	19,795.00	18,613.00	6.0
	CHARGES FOR SERVICE					
110-340-4410	COPY, FAX, NOTARY & RESEARCH	52.00	52.00	500.00	448.00	10.4
110-340-4417	LIEN SEARCHES	10.00	10.00	500.00	490.00	2.0
110-340-4419	ELECTION FILING FEES	25.00	25.00	100.00	75.00	25.0
110-340-4421	SDC/CET ADMIN FEE	.00	.00	8,537.00	8,537.00	.0
110-340-4423	PAY STATION REVENUE	.00	.00	100.00	100.00	.0
	TOTAL CHARGES FOR SERVICE	87.00	87.00	9,737.00	9,650.00	.9
	SDC REVENUE					
110-345-4511	PARKS REIMBURSEMENT SDC	.00	.00	940.00	940.00	.0
	TOTAL SDC REVENUE	.00	.00	940.00	940.00	.0
	FINES & FORFEITURES					
110-350-4625	MUNICIPAL COURT REVENUE	780.00	780.00	5,000.00	4,220.00	15.6
	TOTAL FINES & FORFEITURES	780.00	780.00	5,000.00	4,220.00	15.6
	LOAN PAYMENTS & PROCEEDS					
110-360-4225	LOAN PROCEEDS	.00	.00	230,224.00	230,224.00	.0
	TOTAL LOAN PAYMENTS & PROCEEDS	.00	.00	230,224.00	230,224.00	.0
	OTHER REVENUE					
110-370-4825	LIBRARY DONATIONS	50.00	50.00	500.00	450.00	10.0
110-370-4826	PARKS DONATIONS	2,000.00	2,000.00	13,000.00	11,000.00	15.4
110-370-4849	CAPITAL ASSET DISPOSAL	.00	.00	685,897.00	685,897.00	.0
	TOTAL OTHER REVENUE	2,050.00	2,050.00	699,397.00	697,347.00	.3

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	MISELLANEOUS REVENUE					
110-385-4895	MISCELLANEOUS REVENUE	.00	.00	800.00	800.00	.0
	TOTAL MISELLANEOUS REVENUE	.00	.00	800.00	800.00	.0
	TOTAL FUND REVENUE	10,505.52	10,505.52	2,141,478.00	2,130,972.48	.5

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	ADMINISTRATION					
	PERSONAL SERVICES					
110-410-5110	CITY ADMINISTRATOR	2,253.65	2,253.65	18,475.00	16,221.35	12.2
110-410-5114	CITY CLERK	575.53	575.53	4,624.00	4,048.47	12.5
110-410-5158	MAINTENANCE WORKER I	222.37	222.37	2,387.00	2,164.63	9.3
110-410-5220	OVERTIME	29.96	29.96	67.00	37.04	44.7
110-410-5315	SOCIAL SECURITY/MEDICARE	235.71	235.71	1,955.00	1,719.29	12.1
110-410-5320	WORKER'S COMP	51.48	51.48	476.00	424.52	10.8
110-410-5350	UNEMPLOYMENT	.00	.00	1,700.00	1,700.00	.0
110-410-5410	HEALTH INSURANCE	524.00	524.00	3,912.00	3,388.00	13.4
110-410-5450	PUBLIC EMPLOYEES RETIREMENT	604.91	604.91	5,017.00	4,412.09	12.1
	TOTAL PERSONAL SERVICES	4,497.61	4,497.61	38,613.00	34,115.39	11.7
	MATERIALS & SERVICES					
110-410-6110	AUDITING	.00	.00	6,440.00	6,440.00	.0
110-410-6112	LEGAL SERVICES	.00	.00	3,317.00	3,317.00	.0
110-410-6114	FINANCIAL SERVICES	351.75	351.75	8,736.00	8,384.25	4.0
110-410-6122	IT SERVICES	219.03	219.03	10,918.00	10,698.97	2.0
110-410-6124	COPIER CONTRACT	147.98	147.98	2,250.00	2,102.02	6.6
110-410-6128	OTHER CONTRACT SERVICES	1,326.54	1,326.54	4,880.00	3,553.46	27.2
110-410-6210	INSURANCE & BONDS	1,923.09	1,923.09	465.00	(1,458.09)	413.6
110-410-6220	PUBLICATIONS, PRINTING & DUES	2,158.34	2,158.34	2,433.00	274.66	88.7
110-410-6226	POSTAGE	170.00	170.00	739.00	569.00	23.0
110-410-6228	PUBLIC NOTICES	.00	.00	501.00	501.00	.0
110-410-6230	OFFICE SUPPLIES/EQUIPMENT	.00	.00	3,761.00	3,761.00	.0
110-410-6234	GENERAL SUPPLIES	.00	.00	527.00	527.00	.0
110-410-6238	BANK SERVICE CHARGES	.55	.55	2,000.00	1,999.45	.0
110-410-6240	TRAVEL & TRAINING	.00	.00	4,000.00	4,000.00	.0
110-410-6290	MISCELLANEOUS	(35.00)	(35.00)	464.00	499.00	(7.5)
110-410-6320	BUILDING REPAIR & MAINTENANCE	.00	.00	73,000.00	73,000.00	.0
110-410-6420	WATER SERVICES	103.08	103.08	4,700.00	4,596.92	2.2
110-410-6425	SEWER SERVICES	233.38	233.38	4,700.00	4,466.62	5.0
110-410-6430	ELECTRICITY SERVICES	143.89	143.89	3,000.00	2,856.11	4.8
110-410-6435	INTERNET SERVICES	248.19	248.19	3,000.00	2,751.81	8.3
110-410-6440	TELEPHONE SERVICES	223.41	223.41	2,000.00	1,776.59	11.2
110-410-6445	REFUSE SERVICES	.00	.00	2,000.00	2,000.00	.0
110-410-6510	COUNCIL EXPENDITURE	.00	.00	1,000.00	1,000.00	.0
110-410-6512	STATE ETHICS COMMISSION	.00	.00	549.00	549.00	.0
	TOTAL MATERIALS & SERVICES	7,214.23	7,214.23	145,380.00	138,165.77	5.0

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	CAPITAL OUTLAY					
110-410-8225	BUILDINGS & FACILITIES	.00	.00	145,283.00	145,283.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	145,283.00	145,283.00	.0
	TOTAL ADMINISTRATION	11,711.84	11,711.84	329,276.00	317,564.16	3.6
	PARKS & RECREATION					
	PERSONAL SERVICES					
110-420-5110	CITY ADMINISTRATOR	563.42	563.42	4,619.00	4,055.58	12.2
110-420-5150	PUBLIC WORKS DIRECTOR	484.25	484.25	3,914.00	3,429.75	12.4
110-420-5152	UTILITY WORKER I	1,123.62	1,123.62	9,150.00	8,026.38	12.3
110-420-5156	TEMPORARY/ SEASONAL	1,028.00	1,028.00	3,900.00	2,872.00	26.4
110-420-5158	MAINTENANCE WORKER I	1,111.80	1,111.80	11,935.00	10,823.20	9.3
110-420-5220	OVERTIME	208.25	208.25	1,444.00	1,235.75	14.4
110-420-5315	SOCIAL SECURITY/MEDICARE	345.74	345.74	2,670.00	2,324.26	13.0
110-420-5320	WORKER'S COMP	691.72	691.72	2,126.00	1,434.28	32.5
110-420-5350	UNEMPLOYMENT	.00	.00	2,323.00	2,323.00	.0
110-420-5410	HEALTH INSURANCE	613.19	613.19	5,095.00	4,481.81	12.0
110-420-5450	PUBLIC EMPLOYEES RETIREMENT	752.89	752.89	6,855.00	6,102.11	11.0
	TOTAL PERSONAL SERVICES	6,922.88	6,922.88	54,031.00	47,108.12	12.8
	MATERIALS & SERVICES					
110-420-6122	IT SERVICES	86.15	86.15	500.00	413.85	17.2
110-420-6128	OTHER CONTRACT SERVICES	41.25	41.25	500.00	458.75	8.3
110-420-6210	INSURANCE & BONDS	2,173.15	2,173.15	2,020.00	(153.15)	107.6
110-420-6234	GENERAL SUPPLIES	281.54	281.54	3,000.00	2,718.46	9.4
110-420-6238	BANK SERVICE CHARGES	.00	.00	20.00	20.00	.0
110-420-6290	MISCELLANEOUS	.00	.00	500.00	500.00	.0
110-420-6320	BUILDING REPAIR & MAINTENANCE	.00	.00	3,000.00	3,000.00	.0
110-420-6324	EQUIPMENT REPAIR & MAINTENANCE	.00	.00	2,500.00	2,500.00	.0
110-420-6330	OTHER REPAIR & MAINTENANCE	202.80	202.80	3,500.00	3,297.20	5.8
110-420-6339	MAINTENANCE - NELSON LAND DONA	.00	.00	3,700.00	3,700.00	.0
110-420-6420	WATER SERVICES	270.27	270.27	20,000.00	19,729.73	1.4
110-420-6425	SEWER SERVICES	127.88	127.88	1,920.00	1,792.12	6.7
110-420-6430	ELECTRICITY SERVICES	233.87	233.87	2,500.00	2,266.13	9.4
110-420-6445	REFUSE SERVICES	.00	.00	500.00	500.00	.0
110-420-6535	MOVIES IN THE PARK	.00	.00	1,000.00	1,000.00	.0
110-420-6710	GAS & OIL	.00	.00	2,500.00	2,500.00	.0
	TOTAL MATERIALS & SERVICES	3,416.91	3,416.91	47,660.00	44,243.09	7.2

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	CAPITAL OUTLAY					
110-420-8520	PARKS IMPROVEMENTS	.00	.00	751,170.00	751,170.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	751,170.00	751,170.00	.0
	TOTAL PARKS & RECREATION	10,339.79	10,339.79	852,861.00	842,521.21	1.2
	POLICE					
	MATERIALS & SERVICES					
110-430-6118	POLICE SERVICES	.00	.00	29,530.00	29,530.00	.0
	TOTAL MATERIALS & SERVICES	.00	.00	29,530.00	29,530.00	.0
	TOTAL POLICE	.00	.00	29,530.00	29,530.00	.0
	COMMUNITY DEVELOPMENT					
	PERSONAL SERVICES					
110-440-5110	CITY ADMINISTRATOR	563.42	563.42	4,619.00	4,055.58	12.2
110-440-5150	PUBLIC WORKS DIRECTOR	.00	.00	2,347.00	2,347.00	.0
110-440-5220	OVERTIME	.00	.00	174.00	174.00	.0
110-440-5315	SOCIAL SECURITY/MEDICARE	43.12	43.12	546.00	502.88	7.9
110-440-5320	WORKER'S COMP	31.00	31.00	111.00	80.00	27.9
110-440-5350	UNEMPLOYMENT	.00	.00	475.00	475.00	.0
110-440-5410	HEALTH INSURANCE	64.80	64.80	1,074.00	1,009.20	6.0
110-440-5450	PUBLIC EMPLOYEES RETIREMENT	110.60	110.60	1,403.00	1,292.40	7.9
	TOTAL PERSONAL SERVICES	812.94	812.94	10,749.00	9,936.06	7.6

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
110-440-6116	ENGINEERING SERVICES	1,649.00	1,649.00	20,000.00	18,351.00	8.3
110-440-6122	IT SERVICES	16.87	16.87	350.00	333.13	4.8
110-440-6128	OTHER CONTRACT SERVICES	.00	.00	10,000.00	10,000.00	.0
110-440-6210	INSURANCE & BONDS	318.07	318.07	292.00	(26.07)	108.9
110-440-6226	POSTAGE	.00	.00	200.00	200.00	.0
110-440-6238	BANK SERVICE CHARGES	14.55	14.55	.00	(14.55)	.0
110-440-6522	LAND USE & DEVELOPMENT COSTS	.00	.00	25,000.00	25,000.00	.0
	TOTAL MATERIALS & SERVICES	1,998.49	1,998.49	55,842.00	53,843.51	3.6
	CAPITAL OUTLAY					
110-440-8225	BUILDINGS & FACILITIES	2,604.94	2,604.94	.00	(2,604.94)	.0
	TOTAL CAPITAL OUTLAY	2,604.94	2,604.94	.00	(2,604.94)	.0
	TOTAL COMMUNITY DEVELOPMENT	5,416.37	5,416.37	66,591.00	61,174.63	8.1
	LIBRARY					
	PERSONAL SERVICES					
110-450-5130	LIBRARIAN/SPECIAL EVENTS	360.00	360.00	18,720.00	18,360.00	1.9
110-450-5156	TEMPORARY/ SEASONAL	205.60	205.60	780.00	574.40	26.4
110-450-5158	MAINTENANCE WORKER I	222.37	222.37	2,387.00	2,164.63	9.3
110-450-5315	SOCIAL SECURITY/MEDICARE	60.29	60.29	1,675.00	1,614.71	3.6
110-450-5320	WORKER'S COMP	41.23	41.23	397.00	355.77	10.4
110-450-5350	UNEMPLOYMENT	.00	.00	1,455.00	1,455.00	.0
110-450-5410	HEALTH INSURANCE	2.58	2.58	4,847.00	4,844.42	.1
110-450-5450	PUBLIC EMPLOYEES RETIREMENT	127.83	127.83	4,297.00	4,169.17	3.0
	TOTAL PERSONAL SERVICES	1,019.90	1,019.90	34,558.00	33,538.10	3.0

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
110-450-6122	IT SERVICES	46.13	46.13	5,000.00	4,953.87	.9
110-450-6128	OTHER CONTRACT SERVICES	359.40	359.40	5,000.00	4,640.60	7.2
110-450-6210	INSURANCE & BONDS	8.45	8.45	1,195.00	1,186.55	.7
110-450-6226	POSTAGE	.00	.00	500.00	500.00	.0
110-450-6230	OFFICE SUPPLIES/EQUIPMENT	.00	.00	500.00	500.00	.0
110-450-6234	GENERAL SUPPLIES	.00	.00	5,000.00	5,000.00	.0
110-450-6238	BANK SERVICE CHARGES	.00	.00	200.00	200.00	.0
110-450-6290	MISCELLANEOUS	.00	.00	142.00	142.00	.0
110-450-6320	BUILDING REPAIR & MAINTENANCE	.00	.00	4,200.00	4,200.00	.0
110-450-6420	WATER SERVICES	7.84	7.84	800.00	792.16	1.0
110-450-6425	SEWER SERVICES	15.99	15.99	800.00	784.01	2.0
110-450-6430	ELECTRICITY SERVICES	23.98	23.98	3,000.00	2,976.02	.8
110-450-6435	INTERNET SERVICES	46.24	46.24	3,000.00	2,953.76	1.5
110-450-6440	TELEPHONE SERVICES	34.27	34.27	1,200.00	1,165.73	2.9
110-450-6445	REFUSE SERVICES	.00	.00	1,000.00	1,000.00	.0
110-450-6530	SUMMER READING PROGRAM	.00	.00	1,000.00	1,000.00	.0
	TOTAL MATERIALS & SERVICES	542.30	542.30	32,537.00	31,994.70	1.7
	CAPITAL OUTLAY					
110-450-8225	BUILDINGS & FACILITIES	.00	.00	309,455.00	309,455.00	.0
110-450-8335	EQUIPMENT & FURNISHINGS	.00	.00	40,000.00	40,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	349,455.00	349,455.00	.0
	TOTAL LIBRARY	1,562.20	1,562.20	416,550.00	414,987.80	.4
	CODE ENFORCEMENT					
	PERSONAL SERVICES					
110-460-5110	CITY ADMINISTRATOR	563.42	563.42	4,619.00	4,055.58	12.2
110-460-5150	PUBLIC WORKS DIRECTOR	484.25	484.25	.00	(484.25)	.0
110-460-5220	OVERTIME	82.27	82.27	.00	(82.27)	.0
110-460-5315	SOCIAL SECURITY/MEDICARE	86.45	86.45	503.00	416.55	17.2
110-460-5320	WORKER'S COMP	52.59	52.59	90.00	37.41	58.4
110-460-5350	UNEMPLOYMENT	.00	.00	308.00	308.00	.0
110-460-5410	HEALTH INSURANCE	200.14	200.14	485.00	284.86	41.3
110-460-5450	PUBLIC EMPLOYEES RETIREMENT	221.81	221.81	907.00	685.19	24.5
	TOTAL PERSONAL SERVICES	1,690.93	1,690.93	6,912.00	5,221.07	24.5

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
110-460-6128	OTHER CONTRACT SERVICES	.00	.00	500.00	500.00	.0
110-460-6234	GENERAL SUPPLIES	.00	.00	100.00	100.00	.0
110-460-6238	BANK SERVICE CHARGES	.00	.00	100.00	100.00	.0
110-460-6290	MISCELLANEOUS	.00	.00	100.00	100.00	.0
110-460-6445	REFUSE SERVICES	.00	.00	500.00	500.00	.0
110-460-6540	DOG/CAT CONTROL	.00	.00	100.00	100.00	.0
	TOTAL MATERIALS & SERVICES	.00	.00	1,400.00	1,400.00	.0
	TOTAL CODE ENFORCEMENT	1,690.93	1,690.93	8,312.00	6,621.07	20.3
	TOURISM					
	MATERIALS & SERVICES					
110-470-6128	OTHER CONTRACT SERVICES	.00	.00	500.00	500.00	.0
110-470-6224	MARKETING	.00	.00	500.00	500.00	.0
110-470-6226	POSTAGE	.00	.00	50.00	50.00	.0
110-470-6290	MISCELLANEOUS	.00	.00	100.00	100.00	.0
110-470-6326	COVERED BRIDGE MAINTENANCE	64.69	64.69	5,936.00	5,871.31	1.1
110-470-6527	COMMUNITY GRANT PROGRAM	.00	.00	3,500.00	3,500.00	.0
	TOTAL MATERIALS & SERVICES	64.69	64.69	10,586.00	10,521.31	.6
	TOTAL TOURISM	64.69	64.69	10,586.00	10,521.31	.6
	MUNICIPAL COURT					
	PERSONAL SERVICES					
110-480-5110	CITY ADMINISTRATOR	563.42	563.42	4,619.00	4,055.58	12.2
110-480-5114	CITY CLERK	287.77	287.77	2,312.00	2,024.23	12.5
110-480-5220	OVERTIME	14.99	14.99	33.00	18.01	45.4
110-480-5315	SOCIAL SECURITY/MEDICARE	66.28	66.28	533.00	466.72	12.4
110-480-5320	WORKER'S COMP	7.10	7.10	135.00	127.90	5.3
110-480-5350	UNEMPLOYMENT	.00	.00	463.00	463.00	.0
110-480-5410	HEALTH INSURANCE	195.91	195.91	1,472.00	1,276.09	13.3
110-480-5450	PUBLIC EMPLOYEES RETIREMENT	170.04	170.04	1,367.00	1,196.96	12.4
	TOTAL PERSONAL SERVICES	1,305.51	1,305.51	10,934.00	9,628.49	11.9

GENERAL FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
110-480-6120	JUDGE CONTRACT	200.00	200.00	1,250.00	1,050.00	16.0
110-480-6128	OTHER CONTRACT SERVICES	.00	.00	1,000.00	1,000.00	.0
110-480-6226	POSTAGE	.00	.00	29.00	29.00	.0
110-480-6238	BANK SERVICE CHARGES	10.53	10.53	150.00	139.47	7.0
110-480-6560	STATE ASSESSMENTS	.00	.00	1,023.00	1,023.00	.0
110-480-6565	COURT COLLECTION FEES	.00	.00	80.00	80.00	.0
	TOTAL MATERIALS & SERVICES	210.53	210.53	3,532.00	3,321.47	6.0
	TOTAL MUNICIPAL COURT	1,516.04	1,516.04	14,466.00	12,949.96	10.5
	DEBT SERVICE					
	DEBT SERVICES					
110-800-7110	LOAN PRINCIPAL	.00	.00	307,980.00	307,980.00	.0
110-800-7111	LOAN PRINCIPAL - LIBRARY/CITY	.00	.00	10,917.00	10,917.00	.0
110-800-7112	LOAN PRINCIPAL - ROLLING ROCK	.00	.00	8,530.00	8,530.00	.0
110-800-7113	LOAN PRINCIPAL - OEDD LIBRARY	.00	.00	145,042.00	145,042.00	.0
110-800-7114	LOAN PRINCIPAL - OEDD CITYHALL	.00	.00	85,182.00	85,182.00	.0
110-800-7510	LOAN INTEREST	667.28	667.28	8,008.00	7,340.72	8.3
110-800-7511	LOAN INTEREST - LIBRARY/CITY	.00	.00	11,734.00	11,734.00	.0
110-800-7512	LOAN INTEREST - ROLLING ROCK	.00	.00	9,168.00	9,168.00	.0
110-800-7513	LOAN INTEREST - OEDD LIBRARY	.00	.00	3,148.00	3,148.00	.0
110-800-7514	LOAN INTEREST - OEDD CITY HALL	.00	.00	1,849.00	1,849.00	.0
	TOTAL DEBT SERVICES	667.28	667.28	591,558.00	590,890.72	.1
	TOTAL DEBT SERVICE	667.28	667.28	591,558.00	590,890.72	.1
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
110-900-9590	CONTINGENCY	.00	.00	97,186.00	97,186.00	.0
110-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	65,610.00	65,610.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	162,796.00	162,796.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	162,796.00	162,796.00	.0

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

GENERAL FUND

	PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
TOTAL FUND EXPENDITURES	32,969.14	32,969.14	2,482,526.00	2,449,556.86	1.3
NET REVENUE OVER EXPENDITURES	(22,463.62)	(22,463.62)	(341,048.00)	(318,584.38)	(6.6)

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

BUILDING FUND

	ASSETS			
220-1110	ALLOCATED CASH		57,229.07	
	TOTAL ASSETS			57,229.07
	LIABILITIES AND EQUITY			
	LIABILITIES			
220-2205	WAGES PAYABLE		76.91	
220-2210	PAYROLL TAXES PAYABLE		33.85	
220-2245	HEALTH INSURANCE PAYABLE		66.30	
220-2250	RETIREMENT PAYABLE		28.11	
	TOTAL LIABILITIES			205.17
	FUND EQUITY			
220-3100	BEGINNING FUND BALANCE		57,234.41	
	REVENUE OVER EXPENDITURES - YTD	(213.22)		
	BALANCE - CURRENT DATE		(213.22)	
	TOTAL FUND EQUITY			57,021.19
	TOTAL LIABILITIES AND EQUITY			57,226.36

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

BUILDING FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
220-315-4125	INTEREST EARNED	1.11	1.11	10.00	8.89	11.1
	TOTAL INVESTMENT EARNINGS	1.11	1.11	10.00	8.89	11.1
	LICENSES & PERMITS					
220-335-4356	BUILDING PERMIT FEES	4,108.03	4,108.03	71,374.00	67,265.97	5.8
220-335-4358	ELECTRICAL PERMIT FEES	138.88	138.88	.00	(138.88)	.0
	TOTAL LICENSES & PERMITS	4,246.91	4,246.91	71,374.00	67,127.09	6.0
	TOTAL FUND REVENUE	4,248.02	4,248.02	71,384.00	67,135.98	6.0

BUILDING FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	PERSONAL SERVICES					
220-490-5110	CITY ADMINISTRATOR	.00	.00	1,847.00	1,847.00	.0
220-490-5114	CITY CLERK	287.77	287.77	2,312.00	2,024.23	12.5
220-490-5150	PUBLIC WORKS DIRECTOR	.00	.00	3,912.00	3,912.00	.0
220-490-5220	OVERTIME	14.99	14.99	323.00	308.01	4.6
220-490-5315	SOCIAL SECURITY/MEDICARE	23.16	23.16	642.00	618.84	3.6
220-490-5320	WORKER'S COMP	8.27	8.27	162.00	153.73	5.1
220-490-5350	UNEMPLOYMENT	.00	.00	558.00	558.00	.0
220-490-5410	HEALTH INSURANCE	131.11	131.11	2,162.00	2,030.89	6.1
220-490-5450	PUBLIC EMPLOYEES RETIREMENT	59.44	59.44	1,649.00	1,589.56	3.6
	TOTAL PERSONAL SERVICES	524.74	524.74	13,567.00	13,042.26	3.9
	MATERIALS & SERVICES					
220-490-6110	AUDITING	.00	.00	1,140.00	1,140.00	.0
220-490-6112	LEGAL SERVICES	.00	.00	5,000.00	5,000.00	.0
220-490-6122	IT SERVICES	22.10	22.10	744.00	721.90	3.0
220-490-6128	OTHER CONTRACT SERVICES	.00	.00	9.00	9.00	.0
220-490-6150	BUILDING INSPECTION SERVICES	3,487.58	3,487.58	51,187.00	47,699.42	6.8
220-490-6152	ELECTRICAL INSPECTION SERVICES	366.75	366.75	6,630.00	6,263.25	5.5
220-490-6220	PUBLICATIONS, PRINTING & DUES	.00	.00	250.00	250.00	.0
220-490-6226	POSTAGE	.00	.00	250.00	250.00	.0
220-490-6230	OFFICE SUPPLIES/EQUIPMENT	.00	.00	250.00	250.00	.0
220-490-6238	BANK SERVICE CHARGES	3.82	3.82	1,500.00	1,496.18	.3
220-490-6420	WATER SERVICES	3.14	3.14	500.00	496.86	.6
220-490-6425	SEWER SERVICES	6.39	6.39	500.00	493.61	1.3
220-490-6430	ELECTRICITY SERVICES	9.59	9.59	1,000.00	990.41	1.0
220-490-6435	INTERNET SERVICES	18.49	18.49	500.00	481.51	3.7
220-490-6440	TELEPHONE SERVICES	18.64	18.64	500.00	481.36	3.7
220-490-6524	BUILDING STATE SURCHARGE	.00	.00	8,190.00	8,190.00	.0
220-490-6525	ELECTRICAL STATE SURCHARGE	.00	.00	1,061.00	1,061.00	.0
	TOTAL MATERIALS & SERVICES	3,936.50	3,936.50	79,211.00	75,274.50	5.0
	TOTAL NON-DEPARTMENTAL	4,461.24	4,461.24	92,778.00	88,316.76	4.8
	CAPITAL OUTLAY					

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

BUILDING FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	CAPITAL OUTLAY					
220-700-8335	EQUIPMENT & FURNISHINGS	.00	.00	10,000.00	10,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	10,000.00	10,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	10,000.00	10,000.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
220-900-9590	CONTINGENCY	.00	.00	18,750.00	18,750.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	18,750.00	18,750.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	18,750.00	18,750.00	.0
	TOTAL FUND EXPENDITURES	4,461.24	4,461.24	121,528.00	117,066.76	3.7
	NET REVENUE OVER EXPENDITURES	(213.22)	(213.22)	(50,144.00)	(49,930.78)	(.4)

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

WATER FUND

	ASSETS			
230-1110	ALLOCATED CASH		29,914.63	
230-1115	CASH IN BANK - LGIP		40,759.24	
230-1510	ACCOUNTS RECEIVABLE		46,778.85	
230-1710	LAND		81,179.00	
230-1720	BUILDINGS & FACILITIES		35,875.00	
230-1730	EQUIPMENT & FURNISHINGS		108,645.38	
230-1740	VEHICLES & ROLLING STOCK		34,066.66	
230-1750	INFRASTRUCTURE		4,432,770.46	
230-1820	AD - BUILDINGS & FACILITIES		(19,711.68)	
230-1830	AD - EQUIPMENT & FURNISHINGS		(75,105.02)	
230-1840	AD - VEHICLES & ROLLING STOCK		(17,729.64)	
230-1850	AD - INFRASTRUCTURE		(2,255,795.60)	
	TOTAL ASSETS			2,441,647.28
	LIABILITIES AND EQUITY			
	LIABILITIES			
230-2205	WAGES PAYABLE		3,751.90	
230-2210	PAYROLL TAXES PAYABLE		1,769.21	
230-2245	HEALTH INSURANCE PAYABLE		2,144.50	
230-2250	RETIREMENT PAYABLE		1,435.06	
230-2255	DEFERRED COMP PAYABLE		127.52	
230-2520	UTILITY DEPOSITS		39,640.00	
230-2530	H2O DONATIONS		360.00	
230-2750	LONG TERM DEBT		1,051,825.87	
	TOTAL LIABILITIES			1,101,054.06
	FUND EQUITY			
230-3100	BEGINNING FUND BALANCE		77,155.14	
230-3275	GASB - FIXED ASSETS		2,324,194.56	
230-3277	GAAP - LONG TERM DEBT		(1,051,825.87)	
	REVENUE OVER EXPENDITURES - YTD	(9,129.21)		
	BALANCE - CURRENT DATE		(9,129.21)	
	TOTAL FUND EQUITY			1,340,394.62
	TOTAL LIABILITIES AND EQUITY			2,441,448.68

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

WATER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
230-315-4125	INTEREST EARNED	43.79	43.79	273.00	229.21	16.0
	TOTAL INVESTMENT EARNINGS	43.79	43.79	273.00	229.21	16.0
	LICENSES & PERMITS					
230-335-4370	WATER/SEWER CONNECTION PERMIT	250.00	250.00	4,125.00	3,875.00	6.1
	TOTAL LICENSES & PERMITS	250.00	250.00	4,125.00	3,875.00	6.1
	CHARGES FOR SERVICE					
230-340-4425	WATER/SEWER SALES	37,472.07	37,472.07	454,373.00	416,900.93	8.3
230-340-4426	BULK WATER SALES	1,287.72	1,287.72	10,000.00	8,712.28	12.9
230-340-4435	FIRE HYDRANT FEE	345.02	345.02	4,250.00	3,904.98	8.1
230-340-4450	WATER/SEWER PENALTIES	.00	.00	1,500.00	1,500.00	.0
	TOTAL CHARGES FOR SERVICE	39,104.81	39,104.81	470,123.00	431,018.19	8.3
	SDC REVENUE					
230-345-4531	WATER REIMBURSEMENT SDC	.00	.00	14,900.00	14,900.00	.0
	TOTAL SDC REVENUE	.00	.00	14,900.00	14,900.00	.0
	MISELLANEOUS REVENUE					
230-385-4895	MISCELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL MISELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL FUND REVENUE	39,398.60	39,398.60	489,921.00	450,522.40	8.0

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

WATER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	PERSONAL SERVICES					
230-490-5110	CITY ADMINISTRATOR	3,098.78	3,098.78	24,479.00	21,380.22	12.7
230-490-5114	CITY CLERK	2,302.14	2,302.14	18,494.00	16,191.86	12.5
230-490-5150	PUBLIC WORKS DIRECTOR	4,116.16	4,116.16	32,078.00	27,961.84	12.8
230-490-5152	UTILITY WORKER I	4,775.48	4,775.48	38,884.00	34,108.52	12.3
230-490-5156	TEMPORARY/ SEASONAL	205.60	205.60	780.00	574.40	26.4
230-490-5158	MAINTENANCE WORKER I	333.55	333.55	3,580.00	3,246.45	9.3
230-490-5220	OVERTIME	1,354.62	1,354.62	7,555.00	6,200.38	17.9
230-490-5315	SOCIAL SECURITY/MEDICARE	1,238.31	1,238.31	9,616.00	8,377.69	12.9
230-490-5320	WORKER'S COMP	1,496.81	1,496.81	7,482.00	5,985.19	20.0
230-490-5350	UNEMPLOYMENT	.00	.00	9,363.00	9,363.00	.0
230-490-5410	HEALTH INSURANCE	4,260.44	4,260.44	33,922.00	29,661.56	12.6
230-490-5450	PUBLIC EMPLOYEES RETIREMENT	3,150.57	3,150.57	24,671.00	21,520.43	12.8
	TOTAL PERSONAL SERVICES	26,332.46	26,332.46	210,904.00	184,571.54	12.5

WATER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
230-490-6110	AUDITING	.00	.00	6,440.00	6,440.00	.0
230-490-6114	FINANCIAL SERVICES	351.75	351.75	5,460.00	5,108.25	6.4
230-490-6116	ENGINEERING SERVICES	82.50	82.50	15,916.00	15,833.50	.5
230-490-6122	IT SERVICES	400.37	400.37	5,500.00	5,099.63	7.3
230-490-6128	OTHER CONTRACT SERVICES	83.37	83.37	1,500.00	1,416.63	5.6
230-490-6210	INSURANCE & BONDS	10,462.23	10,462.23	9,663.00	(799.23)	108.3
230-490-6220	PUBLICATIONS, PRINTING & DUES	.00	.00	1,500.00	1,500.00	.0
230-490-6226	POSTAGE	.00	.00	1,200.00	1,200.00	.0
230-490-6230	OFFICE SUPPLIES/EQUIPMENT	.00	.00	1,250.00	1,250.00	.0
230-490-6234	GENERAL SUPPLIES	99.04	99.04	5,500.00	5,400.96	1.8
230-490-6238	BANK SERVICE CHARGES	234.27	234.27	6,900.00	6,665.73	3.4
230-490-6240	TRAVEL & TRAINING	.00	.00	2,000.00	2,000.00	.0
230-490-6290	MISCELLANEOUS	.00	.00	1,500.00	1,500.00	.0
230-490-6320	BUILDING REPAIR & MAINTENANCE	.00	.00	5,000.00	5,000.00	.0
230-490-6324	EQUIPMENT REPAIR & MAINTENANCE	.00	.00	5,000.00	5,000.00	.0
230-490-6330	OTHER REPAIR & MAINTENANCE	1,903.50	1,903.50	18,000.00	16,096.50	10.6
230-490-6334	NON-CAPITALIZED ASSETS	.00	.00	3,000.00	3,000.00	.0
230-490-6420	WATER SERVICES	36.19	36.19	1,200.00	1,163.81	3.0
230-490-6425	SEWER SERVICES	63.94	63.94	960.00	896.06	6.7
230-490-6430	ELECTRICITY SERVICES	1,295.77	1,295.77	22,000.00	20,704.23	5.9
230-490-6435	INTERNET SERVICES	75.00	75.00	2,100.00	2,025.00	3.6
230-490-6440	TELEPHONE SERVICES	171.89	171.89	2,000.00	1,828.11	8.6
230-490-6445	REFUSE SERVICES	48.90	48.90	720.00	671.10	6.8
230-490-6710	GAS & OIL	.00	.00	2,000.00	2,000.00	.0
230-490-6712	OPERATIONS & SUPPLIES	.00	.00	1,500.00	1,500.00	.0
230-490-6750	CHEMICALS & LAB SUPPLIES	2,765.09	2,765.09	20,000.00	17,234.91	13.8
230-490-6755	WATER/SEWER ANALYSIS	45.90	45.90	7,250.00	7,204.10	.6
230-490-6758	WATER/SEWER CONNECTION EXPENDI	.00	.00	3,500.00	3,500.00	.0
230-490-6760	WATER/SEWER FRANCHISE FEES	1,172.44	1,172.44	23,975.00	22,802.56	4.9
	TOTAL MATERIALS & SERVICES	19,292.15	19,292.15	182,534.00	163,241.85	10.6
	TOTAL NON-DEPARTMENTAL	45,624.61	45,624.61	393,438.00	347,813.39	11.6
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
230-700-8540	WATER SYSTEMS IMPROVEMTS	2,903.20	2,903.20	43,416.00	40,512.80	6.7
	TOTAL CAPITAL OUTLAY	2,903.20	2,903.20	43,416.00	40,512.80	6.7
	TOTAL CAPITAL OUTLAY	2,903.20	2,903.20	43,416.00	40,512.80	6.7
	DEBT SERVICE					

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

WATER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	DEBT SERVICES					
230-800-7122	LOAN PRINCIPAL - J05001 SPWF	.00	.00	4,962.00	4,962.00	.0
230-800-7124	LOAN PRINCIPAL - RUS 91-03	.00	.00	17,459.00	17,459.00	.0
230-800-7125	LOAN PRINCIPAL - L21001	.00	.00	7,644.00	7,644.00	.0
230-800-7522	LOAN INTEREST - J05001 SPWF	.00	.00	2,461.00	2,461.00	.0
230-800-7524	LOAN INTEREST - RUS 91-03	.00	.00	21,922.00	21,922.00	.0
230-800-7525	LOAN INTEREST - L21001	.00	.00	3,893.00	3,893.00	.0
	TOTAL DEBT SERVICES	.00	.00	58,341.00	58,341.00	.0
	TOTAL DEBT SERVICE	.00	.00	58,341.00	58,341.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
230-900-9590	CONTINGENCY	.00	.00	20,000.00	20,000.00	.0
230-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	36,770.00	36,770.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	56,770.00	56,770.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	56,770.00	56,770.00	.0
	TOTAL FUND EXPENDITURES	48,527.81	48,527.81	551,965.00	503,437.19	8.8
	NET REVENUE OVER EXPENDITURES	(9,129.21)	(9,129.21)	(62,044.00)	(52,914.79)	(14.7)

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

SEWER FUND

	ASSETS			
240-1110	ALLOCATED CASH		90,584.73	
240-1115	CASH IN BANK - LGIP		88,151.71	
240-1510	ACCOUNTS RECEIVABLE		40,671.19	
240-1710	LAND		11,000.00	
240-1720	BUILDINGS & FACILITIES		89,114.40	
240-1730	EQUIPMENT & FURNISHINGS		68,330.05	
240-1740	VEHICLES & ROLLING STOCK		21,779.50	
240-1750	INFRASTRUCTURE		4,708,963.28	
240-1820	AD - BUILDINGS & FACILITIES		(42,695.71)	
240-1830	AD - EQUIPMENT & FURNISHINGS		(28,515.11)	
240-1840	AD - VEHICLES & ROLLING STOCK		(5,444.88)	
240-1850	AD - INFRASTRUCTURE		(2,898,225.48)	
	TOTAL ASSETS			2,143,713.68
	LIABILITIES AND EQUITY			
	LIABILITIES			
240-2205	WAGES PAYABLE		3,751.94	
240-2210	PAYROLL TAXES PAYABLE		1,769.18	
240-2245	HEALTH INSURANCE PAYABLE		2,144.49	
240-2250	RETIREMENT PAYABLE		1,435.06	
240-2255	DEFERRED COMP PAYABLE		127.46	
240-2750	LONG TERM DEBT		547,119.72	
	TOTAL LIABILITIES			556,347.85
	FUND EQUITY			
240-3100	BEGINNING FUND BALANCE		221,944.11	
240-3275	GASB - FIXED ASSETS		1,924,306.05	
240-3277	GAAP - LONG TERM DEBT		(547,119.72)	
	REVENUE OVER EXPENDITURES - YTD	(12,000.09)		
	BALANCE - CURRENT DATE		(12,000.09)	
	TOTAL FUND EQUITY			1,587,130.35
	TOTAL LIABILITIES AND EQUITY			2,143,478.20

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

SEWER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
240-315-4125	INTEREST EARNED	95.05	95.05	662.00	566.95	14.4
	TOTAL INVESTMENT EARNINGS	95.05	95.05	662.00	566.95	14.4
	LICENSES & PERMITS					
240-335-4370	WATER/SEWER CONNECTION PERMIT	115.00	115.00	1,725.00	1,610.00	6.7
	TOTAL LICENSES & PERMITS	115.00	115.00	1,725.00	1,610.00	6.7
	CHARGES FOR SERVICE					
240-340-4425	WATER/SEWER SALES	35,899.88	35,899.88	450,375.00	414,475.12	8.0
240-340-4450	WATER/SEWER PENALTIES	.00	.00	1,100.00	1,100.00	.0
	TOTAL CHARGES FOR SERVICE	35,899.88	35,899.88	451,475.00	415,575.12	8.0
	SDC REVENUE					
240-345-4541	SEWER REIMBURSEMENT SDC	.00	.00	12,360.00	12,360.00	.0
	TOTAL SDC REVENUE	.00	.00	12,360.00	12,360.00	.0
	MISELLANEOUS REVENUE					
240-385-4895	MISCELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL MISELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL FUND REVENUE	36,109.93	36,109.93	466,722.00	430,612.07	7.7

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

SEWER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	PERSONAL SERVICES					
240-490-5110	CITY ADMINISTRATOR	3,098.72	3,098.72	24,479.00	21,380.28	12.7
240-490-5114	CITY CLERK	2,302.13	2,302.13	18,494.00	16,191.87	12.5
240-490-5150	PUBLIC WORKS DIRECTOR	4,116.17	4,116.17	32,078.00	27,961.83	12.8
240-490-5152	UTILITY WORKER I	4,775.42	4,775.42	38,884.00	34,108.58	12.3
240-490-5156	TEMPORARY/ SEASONAL	205.60	205.60	780.00	574.40	26.4
240-490-5158	MAINTENANCE WORKER I	333.55	333.55	3,580.00	3,246.45	9.3
240-490-5220	OVERTIME	1,354.64	1,354.64	7,555.00	6,200.36	17.9
240-490-5315	SOCIAL SECURITY/MEDICARE	1,238.30	1,238.30	9,616.00	8,377.70	12.9
240-490-5320	WORKER'S COMP	1,512.27	1,512.27	6,714.00	5,201.73	22.5
240-490-5350	UNEMPLOYMENT	.00	.00	8,348.00	8,348.00	.0
240-490-5410	HEALTH INSURANCE	4,260.43	4,260.43	33,922.00	29,661.57	12.6
240-490-5450	PUBLIC EMPLOYEES RETIREMENT	3,150.49	3,150.49	24,671.00	21,520.51	12.8
	TOTAL PERSONAL SERVICES	26,347.72	26,347.72	209,121.00	182,773.28	12.6

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

SEWER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	MATERIALS & SERVICES					
240-490-6110	AUDITING	.00	.00	6,440.00	6,440.00	.0
240-490-6114	FINANCIAL SERVICES	351.75	351.75	5,460.00	5,108.25	6.4
240-490-6122	IT SERVICES	400.37	400.37	5,727.00	5,326.63	7.0
240-490-6128	OTHER CONTRACT SERVICES	383.37	383.37	4,500.00	4,116.63	8.5
240-490-6210	INSURANCE & BONDS	9,966.21	9,966.21	9,187.00	(779.21)	108.5
240-490-6220	PUBLICATIONS, PRINTING & DUES	120.00	120.00	1,500.00	1,380.00	8.0
240-490-6226	POSTAGE	.00	.00	1,200.00	1,200.00	.0
240-490-6230	OFFICE SUPPLIES/EQUIPMENT	.00	.00	500.00	500.00	.0
240-490-6234	GENERAL SUPPLIES	.00	.00	5,000.00	5,000.00	.0
240-490-6238	BANK SERVICE CHARGES	272.32	272.32	6,600.00	6,327.68	4.1
240-490-6240	TRAVEL & TRAINING	.00	.00	2,000.00	2,000.00	.0
240-490-6290	MISCELLANEOUS	2,362.50	2,362.50	500.00	(1,862.50)	472.5
240-490-6320	BUILDING REPAIR & MAINTENANCE	.00	.00	500.00	500.00	.0
240-490-6324	EQUIPMENT REPAIR & MAINTENANCE	.00	.00	8,500.00	8,500.00	.0
240-490-6330	OTHER REPAIR & MAINTENANCE	1,012.97	1,012.97	15,000.00	13,987.03	6.8
240-490-6334	NON-CAPITALIZED ASSETS	.00	.00	7,500.00	7,500.00	.0
240-490-6420	WATER SERVICES	971.90	971.90	18,000.00	17,028.10	5.4
240-490-6425	SEWER SERVICES	575.46	575.46	8,000.00	7,424.54	7.2
240-490-6430	ELECTRICITY SERVICES	2,098.67	2,098.67	28,500.00	26,401.33	7.4
240-490-6435	INTERNET SERVICES	.00	.00	1,550.00	1,550.00	.0
240-490-6440	TELEPHONE SERVICES	245.23	245.23	3,200.00	2,954.77	7.7
240-490-6445	REFUSE SERVICES	48.91	48.91	9,000.00	8,951.09	.5
240-490-6520	PERMITS	.00	.00	4,000.00	4,000.00	.0
240-490-6710	GAS & OIL	.00	.00	2,000.00	2,000.00	.0
240-490-6712	OPERATIONS & SUPPLIES	.00	.00	1,500.00	1,500.00	.0
240-490-6750	CHEMICALS & LAB SUPPLIES	857.30	857.30	18,000.00	17,142.70	4.8
240-490-6755	WATER/SEWER ANALYSIS	516.60	516.60	14,000.00	13,483.40	3.7
240-490-6758	WATER/SEWER CONNECTION EXPENDI	.00	.00	2,500.00	2,500.00	.0
240-490-6760	WATER/SEWER FRANCHISE FEES	1,578.74	1,578.74	22,711.00	21,132.26	7.0
	TOTAL MATERIALS & SERVICES	21,762.30	21,762.30	213,075.00	191,312.70	10.2
	TOTAL NON-DEPARTMENTAL	48,110.02	48,110.02	422,196.00	374,085.98	11.4
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
240-700-8225	BUILDINGS & FACILITIES	.00	.00	25,000.00	25,000.00	.0
240-700-8550	SEWER SYSTEMS	.00	.00	35,000.00	35,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	60,000.00	60,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	60,000.00	60,000.00	.0

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

SEWER FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	DEBT SERVICE					
	DEBT SERVICES					
240-800-7110	LOAN PRINCIPAL - G02002	.00	.00	23,801.00	23,801.00	.0
240-800-7122	LOAN PRINCIPAL - J05001 SPWF	.00	.00	4,962.00	4,962.00	.0
240-800-7124	LOAN PRINCIPAL - RUS 92-05	.00	.00	6,980.00	6,980.00	.0
240-800-7510	LOAN INTEREST - G02002	.00	.00	7,158.00	7,158.00	.0
240-800-7522	LOAN INTEREST - J05001 SPWF	.00	.00	2,461.00	2,461.00	.0
240-800-7524	LOAN INTEREST - RUS 92-05	.00	.00	8,765.00	8,765.00	.0
	TOTAL DEBT SERVICES	.00	.00	54,127.00	54,127.00	.0
	TOTAL DEBT SERVICE	.00	.00	54,127.00	54,127.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
240-900-9590	CONTINGENCY	.00	.00	20,000.00	20,000.00	.0
240-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	59,580.00	59,580.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	79,580.00	79,580.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	79,580.00	79,580.00	.0
	TOTAL FUND EXPENDITURES	48,110.02	48,110.02	615,903.00	567,792.98	7.8
	NET REVENUE OVER EXPENDITURES	(12,000.09)	(12,000.09)	(149,181.00)	(137,180.91)	(8.0)

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

STREET FUND

	ASSETS			
312-1110	ALLOCATED CASH		56,857.07	
312-1115	CASH IN BANK - LGIP		55,981.25	
312-1720	BUILDINGS & FACILITIES		528.00	
312-1730	EQUIPMENT & FURNISHINGS		6,061.05	
312-1740	VEHICLES & ROLLING STOCK		11,299.83	
312-1750	INFRASTRUCTURE		1,610,571.62	
312-1820	AD - BUILDINGS & FACILITIES		(35.20)	
312-1830	AD - EQUIPMENT & FURNISHINGS		(1,361.79)	
312-1840	AD - VEHICLES & ROLLING STOCK		(2,824.95)	
312-1850	AD - INFRASTRUCTURE		(414,193.72)	
	TOTAL ASSETS			1,322,883.16
	LIABILITIES AND EQUITY			
	LIABILITIES			
312-2205	WAGES PAYABLE		504.59	
312-2210	PAYROLL TAXES PAYABLE		229.49	
312-2245	HEALTH INSURANCE PAYABLE		200.54	
312-2250	RETIREMENT PAYABLE		205.32	
312-2255	DEFERRED COMP PAYABLE		15.01	
312-2750	LONG TERM DEBT		83,091.72	
	TOTAL LIABILITIES			84,246.67
	FUND EQUITY			
312-3100	BEGINNING FUND BALANCE		111,798.43	
312-3275	GASB - FIXED ASSETS		1,210,044.84	
312-3277	GAAP - LONG TERM DEBT		(83,091.72)	
	REVENUE OVER EXPENDITURES - YTD	(43.87)		
	BALANCE - CURRENT DATE		(43.87)	
	TOTAL FUND EQUITY			1,238,707.68
	TOTAL LIABILITIES AND EQUITY			1,322,954.35

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

STREET FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
312-315-4125	INTEREST EARNED	60.32	60.32	211.00	150.68	28.6
	TOTAL INVESTMENT EARNINGS	60.32	60.32	211.00	150.68	28.6
	INTERGOVERNMENTAL					
312-320-4142	STATE DISTRIBUTIONS	8,333.03	8,333.03	91,464.00	83,130.97	9.1
	TOTAL INTERGOVERNMENTAL	8,333.03	8,333.03	91,464.00	83,130.97	9.1
	SDC REVENUE					
312-345-4513	TRANSPORTATION REIMBURSEMENT S	.00	.00	2,080.00	2,080.00	.0
	TOTAL SDC REVENUE	.00	.00	2,080.00	2,080.00	.0
	TOTAL FUND REVENUE	8,393.35	8,393.35	93,755.00	85,361.65	9.0

STREET FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	PERSONAL SERVICES					
312-490-5110	CITY ADMINISTRATOR	563.42	563.42	4,618.00	4,054.58	12.2
312-490-5150	PUBLIC WORKS DIRECTOR	484.25	484.25	3,912.00	3,427.75	12.4
312-490-5152	UTILITY WORKER I	561.84	561.84	4,574.00	4,012.16	12.3
312-490-5156	TEMPORARY/ SEASONAL	411.20	411.20	1,664.00	1,252.80	24.7
312-490-5220	OVERTIME	145.26	145.26	868.00	722.74	16.7
312-490-5315	SOCIAL SECURITY/MEDICARE	165.57	165.57	1,196.00	1,030.43	13.8
312-490-5320	WORKER'S COMP	411.70	411.70	1,763.00	1,351.30	23.4
312-490-5350	UNEMPLOYMENT	.00	.00	1,040.00	1,040.00	.0
312-490-5410	HEALTH INSURANCE	400.34	400.34	3,281.00	2,880.66	12.2
312-490-5450	PUBLIC EMPLOYEES RETIREMENT	371.45	371.45	3,071.00	2,699.55	12.1
	TOTAL PERSONAL SERVICES	3,515.03	3,515.03	25,987.00	22,471.97	13.5
	MATERIALS & SERVICES					
312-490-6110	AUDITING	.00	.00	1,240.00	1,240.00	.0
312-490-6114	FINANCIAL SERVICES	117.25	117.25	2,184.00	2,066.75	5.4
312-490-6116	ENGINEERING SERVICES	.00	.00	20,000.00	20,000.00	.0
312-490-6122	IT SERVICES	82.38	82.38	1,480.00	1,397.62	5.6
312-490-6128	OTHER CONTRACT SERVICES	.00	.00	8,000.00	8,000.00	.0
312-490-6210	INSURANCE & BONDS	3,636.94	3,636.94	3,356.00	(280.94)	108.4
312-490-6234	GENERAL SUPPLIES	.00	.00	500.00	500.00	.0
312-490-6238	BANK SERVICE CHARGES	.00	.00	50.00	50.00	.0
312-490-6290	MISCELLANEOUS	.00	.00	500.00	500.00	.0
312-490-6324	EQUIPMENT REPAIR & MAINTENANCE	.00	.00	500.00	500.00	.0
312-490-6330	OTHER REPAIR & MAINTENANCE	.00	.00	10,000.00	10,000.00	.0
312-490-6334	NON-CAPITALIZED ASSETS	.00	.00	2,500.00	2,500.00	.0
312-490-6430	ELECTRICITY SERVICES	1,085.62	1,085.62	14,575.00	13,489.38	7.5
312-490-6720	STORM DRAIN MAINTENANCE	.00	.00	1,500.00	1,500.00	.0
312-490-6724	STREET SIGNS	.00	.00	500.00	500.00	.0
312-490-6726	STREET LIGHTS	.00	.00	410.00	410.00	.0
	TOTAL MATERIALS & SERVICES	4,922.19	4,922.19	67,295.00	62,372.81	7.3
	TOTAL NON-DEPARTMENTAL	8,437.22	8,437.22	93,282.00	84,844.78	9.0
	CAPITAL OUTLAY					

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

STREET FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	CAPITAL OUTLAY					
312-700-8530	STREET IMPROVEMENTS	.00	.00	70,000.00	70,000.00	.0
312-700-8532	SIGNAGE	.00	.00	5,000.00	5,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	75,000.00	75,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	75,000.00	75,000.00	.0
	DEBT SERVICE					
	DEBT SERVICES					
312-800-7125	LOAN PRINCIPAL - L21001	.00	.00	3,427.00	3,427.00	.0
312-800-7525	LOAN INTEREST - L21001	.00	.00	1,745.00	1,745.00	.0
	TOTAL DEBT SERVICES	.00	.00	5,172.00	5,172.00	.0
	TOTAL DEBT SERVICE	.00	.00	5,172.00	5,172.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
312-900-9590	CONTINGENCY	.00	.00	10,819.00	10,819.00	.0
312-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	10,770.00	10,770.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	21,589.00	21,589.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	21,589.00	21,589.00	.0
	TOTAL FUND EXPENDITURES	8,437.22	8,437.22	195,043.00	186,605.78	4.3
	NET REVENUE OVER EXPENDITURES	(43.87)	(43.87)	(101,288.00)	(101,244.13)	.0

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

BLACKBERRY JAM FUND

	ASSETS			
314-1110	ALLOCATED CASH		17,196.67	
	TOTAL ASSETS			17,196.67
	LIABILITIES AND EQUITY			
	FUND EQUITY			
314-3100	BEGINNING FUND BALANCE		13,823.92	
	REVENUE OVER EXPENDITURES - YTD	3,359.96		
	BALANCE - CURRENT DATE		3,359.96	
	TOTAL FUND EQUITY			17,183.88
	TOTAL LIABILITIES AND EQUITY			17,183.88

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

BLACKBERRY JAM FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
314-315-4125	INTEREST EARNED	.30	.30	10.00	9.70	3.0
	TOTAL INVESTMENT EARNINGS	.30	.30	10.00	9.70	3.0
	FUNDRAISING & EVENT REVENUE					
314-380-4861	CRAFT/COMMERCIAL BOOTH SALES	905.00	905.00	1,980.00	1,075.00	45.7
314-380-4862	FOOD BOOTH SALES	610.00	610.00	1,200.00	590.00	50.8
314-380-4864	JAM SALES	325.00	325.00	500.00	175.00	65.0
314-380-4866	QUILT RAFFLE SALES	4,115.00	4,115.00	4,000.00	(115.00)	102.9
314-380-4870	SPONSORSHIP REVENUE	330.00	330.00	8,772.00	8,442.00	3.8
314-380-4889	BBJ FESTIVAL OTHER REVENUE	.00	.00	145.00	145.00	.0
	TOTAL FUNDRAISING & EVENT REVENUE	6,285.00	6,285.00	16,597.00	10,312.00	37.9
	MISELLANEOUS REVENUE					
314-385-4895	MISCELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL MISELLANEOUS REVENUE	.00	.00	500.00	500.00	.0
	TOTAL FUND REVENUE	6,285.30	6,285.30	17,107.00	10,821.70	36.7

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

BLACKBERRY JAM FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
314-490-6118	POLICE SERVICES	.00	.00	1,000.00	1,000.00	.0
314-490-6122	IT SERVICES	11.60	11.60	350.00	338.40	3.3
314-490-6220	PUBLICATIONS, PRINTING & DUES	.00	.00	100.00	100.00	.0
314-490-6238	BANK SERVICE CHARGES	18.74	18.74	100.00	81.26	18.7
314-490-6290	MISCELLANEOUS	340.00	340.00	2,200.00	1,860.00	15.5
314-490-6440	TELEPHONE SERVICES	.00	.00	150.00	150.00	.0
314-490-6445	REFUSE SERVICES	.00	.00	1,000.00	1,000.00	.0
314-490-6705	RENT	80.00	80.00	1,000.00	920.00	8.0
314-490-6714	MATERIALS & SERVICES	.00	.00	150.00	150.00	.0
314-490-6810	CRAFT/COMMERCIAL BOOTH EXP	.00	.00	150.00	150.00	.0
314-490-6812	FOOD BOOTH EXP	.00	.00	100.00	100.00	.0
314-490-6814	JAM SALES EXP	.00	.00	500.00	500.00	.0
314-490-6816	QUILT RAFFLE	.00	.00	4,000.00	4,000.00	.0
314-490-6820	SPONSORSHIP EXP	.00	.00	100.00	100.00	.0
314-490-6852	CAR SHOW EXP	.00	.00	100.00	100.00	.0
314-490-6856	HORSESHOE TOURNEY EXP	.00	.00	100.00	100.00	.0
314-490-6864	ENTERTAINMENT EXP	2,475.00	2,475.00	12,042.00	9,567.00	20.6
	TOTAL MATERIALS & SERVICES	2,925.34	2,925.34	23,142.00	20,216.66	12.6
	TOTAL NON-DEPARTMENTAL	2,925.34	2,925.34	23,142.00	20,216.66	12.6
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
314-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	5,007.00	5,007.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	5,007.00	5,007.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	5,007.00	5,007.00	.0
	TOTAL FUND EXPENDITURES	2,925.34	2,925.34	28,149.00	25,223.66	10.4
	NET REVENUE OVER EXPENDITURES	3,359.96	3,359.96	(11,042.00)	(14,401.96)	30.4

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

PARKS SDC FUND

	ASSETS			
410-1110	ALLOCATED CASH		29,568.76	
410-1115	CASH IN BANK - LGIP		60,027.64	
	TOTAL ASSETS			89,596.40
	LIABILITIES AND EQUITY			
	FUND EQUITY			
410-3100	BEGINNING FUND BALANCE		89,532.89	
	REVENUE OVER EXPENDITURES - YTD	64.08		
	BALANCE - CURRENT DATE		64.08	
	TOTAL FUND EQUITY			89,596.97
	TOTAL LIABILITIES AND EQUITY			89,596.97

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

PARKS SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
410-315-4125	INTEREST EARNED	64.08	64.08	200.00	135.92	32.0
	TOTAL INVESTMENT EARNINGS	64.08	64.08	200.00	135.92	32.0
	SDC REVENUE					
410-345-4510	PARK SDC FEES	.00	.00	19,700.00	19,700.00	.0
	TOTAL SDC REVENUE	.00	.00	19,700.00	19,700.00	.0
	TOTAL FUND REVENUE	64.08	64.08	19,900.00	19,835.92	.3

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

PARKS SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
410-490-6714	MATERIALS & SERVICES	.00	.00	10,000.00	10,000.00	.0
	TOTAL MATERIALS & SERVICES	.00	.00	10,000.00	10,000.00	.0
	TOTAL NON-DEPARTMENTAL	.00	.00	10,000.00	10,000.00	.0
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
410-700-8520	PARKS IMPROVEMENTS	.00	.00	80,313.00	80,313.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	80,313.00	80,313.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	80,313.00	80,313.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
410-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	18,080.00	18,080.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	18,080.00	18,080.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	18,080.00	18,080.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	108,393.00	108,393.00	.0
	NET REVENUE OVER EXPENDITURES	64.08	64.08	(88,493.00)	(88,557.08)	.1

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

STREETS SDC FUND

	ASSETS			
412-1110	ALLOCATED CASH		22,231.44	
412-1115	CASH IN BANK - LGIP		46,452.82	
	TOTAL ASSETS			68,684.26
	LIABILITIES AND EQUITY			
	FUND EQUITY			
412-3100	BEGINNING FUND BALANCE		68,635.11	
	REVENUE OVER EXPENDITURES - YTD	49.58		
	BALANCE - CURRENT DATE		49.58	
	TOTAL FUND EQUITY			68,684.69
	TOTAL LIABILITIES AND EQUITY			68,684.69

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

STREETS SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
412-315-4125	INTEREST EARNED	49.58	49.58	150.00	100.42	33.1
	TOTAL INVESTMENT EARNINGS	49.58	49.58	150.00	100.42	33.1
	SDC REVENUE					
412-345-4512	TRANSPORTATION SDC	.00	.00	11,840.00	11,840.00	.0
	TOTAL SDC REVENUE	.00	.00	11,840.00	11,840.00	.0
	TOTAL FUND REVENUE	49.58	49.58	11,990.00	11,940.42	.4

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

STREETS SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
412-490-6128	OTHER CONTRACT SERVICES	.00	.00	15,000.00	15,000.00	.0
	TOTAL MATERIALS & SERVICES	.00	.00	15,000.00	15,000.00	.0
	TOTAL NON-DEPARTMENTAL	.00	.00	15,000.00	15,000.00	.0
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
412-700-8530	STREET IMPROVEMENTS	.00	.00	60,260.00	60,260.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	60,260.00	60,260.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	60,260.00	60,260.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
412-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	4,736.00	4,736.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	4,736.00	4,736.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	4,736.00	4,736.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	79,996.00	79,996.00	.0
	NET REVENUE OVER EXPENDITURES	49.58	49.58	(68,006.00)	(68,055.58)	.1

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

WATER SDC FUND

	ASSETS			
430-1110	ALLOCATED CASH		63,154.18	
430-1115	CASH IN BANK - LGIP		303,258.39	
	TOTAL ASSETS			366,412.57
	LIABILITIES AND EQUITY			
	FUND EQUITY			
430-3100	BEGINNING FUND BALANCE		376,132.96	
	REVENUE OVER EXPENDITURES - YTD	(9,719.07)		
	BALANCE - CURRENT DATE		(9,719.07)	
	TOTAL FUND EQUITY			366,413.89
	TOTAL LIABILITIES AND EQUITY			366,413.89

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

WATER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
430-315-4125	INTEREST EARNED	322.18	322.18	500.00	177.82	64.4
	TOTAL INVESTMENT EARNINGS	322.18	322.18	500.00	177.82	64.4
	SDC REVENUE					
430-345-4530	WATER SDC	.00	.00	76,600.00	76,600.00	.0
	TOTAL SDC REVENUE	.00	.00	76,600.00	76,600.00	.0
	TOTAL FUND REVENUE	322.18	322.18	77,100.00	76,777.82	.4

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

WATER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
430-490-6128	OTHER CONTRACT SERVICES	10,041.25	10,041.25	80,000.00	69,958.75	12.6
	TOTAL MATERIALS & SERVICES	10,041.25	10,041.25	80,000.00	69,958.75	12.6
	TOTAL NON-DEPARTMENTAL	10,041.25	10,041.25	80,000.00	69,958.75	12.6
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
430-700-8540	WATER SYSTEMS IMPROVEMTS	.00	.00	300,000.00	300,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	300,000.00	300,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	300,000.00	300,000.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
430-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	79,797.00	79,797.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	79,797.00	79,797.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	79,797.00	79,797.00	.0
	TOTAL FUND EXPENDITURES	10,041.25	10,041.25	459,797.00	449,755.75	2.2
	NET REVENUE OVER EXPENDITURES	(9,719.07)	(9,719.07)	(382,697.00)	(372,977.93)	(2.5)

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

SEWER SDC FUND

	ASSETS			
440-1110	ALLOCATED CASH		63,894.75	
440-1115	CASH IN BANK - LGIP		68,221.53	
	TOTAL ASSETS			132,116.28
	LIABILITIES AND EQUITY			
	FUND EQUITY			
440-3100	BEGINNING FUND BALANCE		132,237.60	
	REVENUE OVER EXPENDITURES - YTD	(120.08)		
	BALANCE - CURRENT DATE		(120.08)	
	TOTAL FUND EQUITY			132,117.52
	TOTAL LIABILITIES AND EQUITY			132,117.52

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

SEWER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
440-315-4125	INTEREST EARNED	73.42	73.42	500.00	426.58	14.7
	TOTAL INVESTMENT EARNINGS	73.42	73.42	500.00	426.58	14.7
	SDC REVENUE					
440-345-4540	SEWER SDC	.00	.00	21,420.00	21,420.00	.0
	TOTAL SDC REVENUE	.00	.00	21,420.00	21,420.00	.0
	TOTAL FUND REVENUE	73.42	73.42	21,920.00	21,846.58	.3

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

SEWER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
440-490-6128	OTHER CONTRACT SERVICES	193.50	193.50	99,000.00	98,806.50	.2
	TOTAL MATERIALS & SERVICES	193.50	193.50	99,000.00	98,806.50	.2
	TOTAL NON-DEPARTMENTAL	193.50	193.50	99,000.00	98,806.50	.2
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
440-700-8550	SEWER SYSTEMS	.00	.00	35,000.00	35,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	35,000.00	35,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	35,000.00	35,000.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
440-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	13,172.00	13,172.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	13,172.00	13,172.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	13,172.00	13,172.00	.0
	TOTAL FUND EXPENDITURES	193.50	193.50	147,172.00	146,978.50	.1
	NET REVENUE OVER EXPENDITURES	(120.08)	(120.08)	(125,252.00)	(125,131.92)	(.1)

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

STORMWATER SDC FUND

	ASSETS			
445-1110	ALLOCATED CASH		20,980.35	
445-1115	CASH IN BANK - LGIP		48,423.92	
	TOTAL ASSETS			69,404.27
	LIABILITIES AND EQUITY			
	FUND EQUITY			
445-3100	BEGINNING FUND BALANCE		69,353.04	
	REVENUE OVER EXPENDITURES - YTD	51.64		
	BALANCE - CURRENT DATE		51.64	
	TOTAL FUND EQUITY			69,404.68
	TOTAL LIABILITIES AND EQUITY			69,404.68

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

STORMWATER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
445-315-4125	INTEREST EARNED	51.64	51.64	200.00	148.36	25.8
	TOTAL INVESTMENT EARNINGS	51.64	51.64	200.00	148.36	25.8
	SDC REVENUE					
445-345-4545	STORM DRAINAGE SDC	.00	.00	13,460.00	13,460.00	.0
	TOTAL SDC REVENUE	.00	.00	13,460.00	13,460.00	.0
	TOTAL FUND REVENUE	51.64	51.64	13,660.00	13,608.36	.4

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

STORMWATER SDC FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	NON-DEPARTMENTAL					
	MATERIALS & SERVICES					
445-490-6128	OTHER CONTRACT SERVICES	.00	.00	20,000.00	20,000.00	.0
	TOTAL MATERIALS & SERVICES	.00	.00	20,000.00	20,000.00	.0
	TOTAL NON-DEPARTMENTAL	.00	.00	20,000.00	20,000.00	.0
	CAPITAL OUTLAY					
	CAPITAL OUTLAY					
445-700-8560	STORMWATER IMPROVEMENTS	.00	.00	40,000.00	40,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	40,000.00	40,000.00	.0
	TOTAL CAPITAL OUTLAY	.00	.00	40,000.00	40,000.00	.0
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
445-900-9899	UNAPPROPRIATED ENDING BALANCE	.00	.00	22,295.00	22,295.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	22,295.00	22,295.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	22,295.00	22,295.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	82,295.00	82,295.00	.0
	NET REVENUE OVER EXPENDITURES	51.64	51.64	(68,635.00)	(68,686.64)	.1

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

WATER RESERVE FUND

	ASSETS			
520-1110	ALLOCATED CASH		9,400.30	
520-1115	CASH IN BANK - LGIP		30,089.02	
	TOTAL ASSETS			39,489.32
	LIABILITIES AND EQUITY			
	FUND EQUITY			
520-3100	BEGINNING FUND BALANCE		39,457.48	
	REVENUE OVER EXPENDITURES - YTD	32.02		
	BALANCE - CURRENT DATE		32.02	
	TOTAL FUND EQUITY			39,489.50
	TOTAL LIABILITIES AND EQUITY			39,489.50

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

WATER RESERVE FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
520-315-4125	INTEREST EARNED	32.02	32.02	10.00	(22.02)	320.2
	TOTAL INVESTMENT EARNINGS	32.02	32.02	10.00	(22.02)	320.2
	TOTAL FUND REVENUE	32.02	32.02	10.00	(22.02)	320.2

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

WATER RESERVE FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
520-900-9892	RESERVED FOR WATER BOND PYMT	.00	.00	39,415.00	39,415.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	39,415.00	39,415.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	39,415.00	39,415.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	39,415.00	39,415.00	.0
	NET REVENUE OVER EXPENDITURES	32.02	32.02	(39,405.00)	(39,437.02)	.1

CITY OF LOWELL
BALANCE SHEET
JULY 31, 2022

SEWER RESERVE FUND

	ASSETS			
521-1110	ALLOCATED CASH		5,753.16	
521-1115	CASH IN BANK - LGIP		10,029.67	
	TOTAL ASSETS			15,782.83
	LIABILITIES AND EQUITY			
	FUND EQUITY			
521-3100	BEGINNING FUND BALANCE		15,772.22	
	REVENUE OVER EXPENDITURES - YTD	10.72		
	BALANCE - CURRENT DATE		10.72	
	TOTAL FUND EQUITY			15,782.94
	TOTAL LIABILITIES AND EQUITY			15,782.94

CITY OF LOWELL
REVENUES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

SEWER RESERVE FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEARNED	PCNT
	INVESTMENT EARNINGS					
521-315-4125	INTEREST EARNED	10.72	10.72	10.00	(.72)	107.2
	TOTAL INVESTMENT EARNINGS	10.72	10.72	10.00	(.72)	107.2
	TOTAL FUND REVENUE	10.72	10.72	10.00	(.72)	107.2

CITY OF LOWELL
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 1 MONTHS ENDING JULY 31, 2022

SEWER RESERVE FUND

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	OTHER REQUIREMENTS					
	OTHER REQUIREMENTS					
521-900-9892	RESERVED FOR SEWER BOND PYMT	.00	.00	15,764.00	15,764.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	15,764.00	15,764.00	.0
	TOTAL OTHER REQUIREMENTS	.00	.00	15,764.00	15,764.00	.0
	TOTAL FUND EXPENDITURES	.00	.00	15,764.00	15,764.00	.0
	NET REVENUE OVER EXPENDITURES	10.72	10.72	(15,754.00)	(15,764.72)	.1

City Administrator's Office
P.O. Box 490 Lowell, OR 97452
Phone: 541-937-2157
Email: admin@ci.lowell.or.us

To: Mayor Bennett and City Council
From: Jeremy Caudle, City Administrator
Date: Friday, September 16, 2022
Re: Administrator's report for September

MEMO

This City Administrator's report covers activities since the August 16 regular meeting. A summary of major activities is as follows:

Library/city hall renovation project.

1. Most of the construction work is completed. The doors, cabinetwork, carpet, and floor tiles have all been installed. Federal Security installed the security cameras and security system. Federal Security needed a low-voltage permit, and their inspection is scheduled for September 29. The patching and seal coating work is completed on the parking lot, and they'll be striping the parking lot this weekend. The HVAC unit appears to be the hold up, as I'll report later on the agenda. LCOG has ordered all of our computers, servers, and other equipment. They will not start setting this equipment up until all of the security features are installed at the building.
2. Change orders. I am meeting with the architect on September 19, where we will discuss any further changes. I'll report on my meeting with him at the September 20 city council meeting.
3. The Library Director and volunteers have been busy with collection management. This includes processing current collections to send to ThriftBooks. It also includes inputting new books, as well as books that we're taking with us, into our new ILS.

E. Main Street Property.

1. On August 31, I received an "Additional work required" letter from DEQ. The letter stated, "Please submit a workplan within the next 45 days which addresses these data gaps for Department approval….I look forward to your response on how these areas of concern will be addressed." The "data gaps" cited include:
    a. "Soil vapor sampling is necessary to ensure protection of human health."
    b. "Downgradient groundwater conditions have not been adequately assessed."
    c. "A beneficial water use survey of properties downgradient of the site may ensure protection of human health if additional assessment indicates groundwater is impacted."

2. Upon receiving the letter, I contacted BB&A Environmental, our contractor working on the decommissioning. I asked for a meeting with them to discuss the letter and the next steps we need to take. The contractor stated that they would like to contact DEQ for clarification prior to meeting with me. I have not heard from them yet, and I will contact them next week for an update.

Other items.

1. The Blackberry Jam Festival Committee met on August 23. At this meeting, the committee talked about areas for improvement for the next festival. The festival was a success, considering this was the first time since 2019 that we've had the festival and considering that a (mostly) new crew was in charge. However, there must be a higher level of organization and discipline if we're going to continue holding the festival. The biggest area of concern for me was around risk management for volunteers and attendees. I'm going to have to take a hands-on approach to managing the festival next year. This means that during the lead up to the festival, I'm going to have to devote more of my time towards coordinating the festival at the expense of everything else. We are also going to need 12, if not more, dedicated volunteers who are going to show up and treat the festival like a part-time job. I suggest setting a deadline for early in 2023 for having the requisite number of volunteers. If we don't have the required staffing level by the deadline, then the festival doesn't move forward. I will work with the committee chairperson through the rest of this year to work out the details.
2. The Parks Committee met on September 1. The discussion centered around the budget for the Parks Department, as well as projects that the committee can do with limited supervision from city staff. The committee selected Joe Brazill to be the next chairperson. I am meeting with Brazill on September 21 to discuss his priorities for the coming year.
3. The Planning Commission met on September 7. The Planning Commission approved the city's partition plats. The commission also decided to continue the application for the mixed-use development of Moss St. to the November 2 meeting. The commission continued the meeting and is holding open the record to allow the applicant to submit additional information needed prior to making a decision.
4. I completed a "Marketing and Branding" course with the Oregon Economic Development Association. This course counts towards the 8 required courses needed to attain the Oregon Certified Economic Developer credential.

Agenda Item Sheet

City of Lowell City Council

Type of item:	Other

Item title/recommended action:

Motion to authorize the City Administrator to submit the "Water master plan" and "Seismic risk assessment and mitigation plan" to the Oregon Health Authority. – Discussion/ Possible action

Justification or background:

City Council received a presentation at the September 6 meeting on the proposed water master plan. Staff recommend submitting the plan to the Oregon Health Authority as the next step in the process. Once OHA completes the review, staff will make any required changes and present a final draft to City Council for approval via a resolution or ordinance. OHA charges a plan review fee, which is listed below. Changes since the September 6 meeting: adding a booster pump station associated with the new reservoir, along with miscellaneous edits for spelling. Staff cannot make further edits to the plan once we submit it to OHA, except to incorporate any required changes from OHA.

Budget impact:

OHA plan review fee of $4,125

Department or Council sponsor:

Public Works

Attachments:

Plan review requirements from OHA, for information on next steps; draft of plan to be submitted to OHA.

Meeting date:	09/20/2022

Document Revision Date: 3/2/2022

Oregon Health Authority, Drinking Water Services

Plan Review requirements for Master Plans at existing or new public water systems.

The requirements apply to master plans for existing and new Community water systems with 300 or more connections. Other water systems (Community with less than 300 connections), Non-Transient Non-Community, Transient Non-Community, and Oregon Very Small water systems, which are defined on page 5, may also prepare a master plan and submit the document for review. Two sets of information are provided below, 'short' and 'long' instructions. The short instructions are abbreviated. If you are unfamiliar with the plan review process, it is strongly recommended you read the long instructions.

For assistance, call (971) 673-0405, fax (971) 673-0694, or email dws.planreview@state.or.us.

SHORT INSTRUCTIONS:

The following shall be submitted to OHA-DWS for review and approval:

1. One digital copy of a final master plan prepared by an Oregon Professional Engineer. The document must be electronically stamped by the engineer.
2. The appropriate plan review fee. For a current fee schedule, check http://healthoregon.org/pwsplanreview. Note that the fee payment can be made online at that link or a check can be mailed to OHA-DWS.

   The fee check should be made payable to: 'OHA Drinking Water'.

Specific Requirements

1. The master plan shall evaluate the needs to the water system for at least a 20-year period and shall include at a minimum all of the required elements outlined in Oregon Administrative Rule (OAR) 333-061-0060 (5).

2. Based on the submitted information, OHA-DWS may send a letter to the water system indicating that OHA-DWS concurs with the master plan. If the master plan is missing required elements outlined above, then OHA-DWS will notify the water system, or engineer, as appropriate. The water system, or engineer, will need to submit a revised document with the required missing elements in order for OHA-DWS to be able to concur with the master plan.

END OF SHORT INSTRUCTIONS

Document Revision Date: 3/2/2022

LONG INSTRUCTIONS:

These requirements apply to master plans for existing or new Community water systems with 300 or more connections. Other water systems (Community with less than 300 connections), Non-Transient Non-Community, Transient Non-Community and Oregon Very Small water systems may also prepare a master plan and submit the document for review.
For assistance, call (971) 673-0405, fax (971) 673-0694, or email dws.planreview@state.or.us.

The responsibilities associated with this process include:

I. Submittal Requirements
II. Specific Requirements
III. Plan Review

They are addressed in detail as follows. Additional detail may exist in the Oregon Administrative Rules.

I. Submittal requirements:

The following shall be submitted to OHA-DWS for review and approval:

A. One digital copy of a final master plan prepared by an Oregon Professional Engineer. The document must be electronically stamped by the engineer.
B. The appropriate plan review fee.

Please email the digital copy of the master plan to DWS.PlanReview@dhsoha.state.or.us.

The plan review fee can be mailed to:

Attn: Plan Review
OHA Drinking Water Services
800 NE Oregon St., Ste 640
Portland, OR 97232-2162

The plan review fee may also be made online at http://healthoregon.org/pwsplanreview.

(Materials may be sent electronically to the relevant regional engineer, though the fee payment should be sent to the address above or paid online. Sending the fee to a regional engineer may slow processing time.)

II. Specific Requirements:

A. The master plan shall evaluate the needs to the water system for at least a 20-year period and shall include at a minimum:

1. A summary of the overall plan including:
    a. Water quality and service goals;
    b. Present and future water system deficiencies;
    c. The engineer's recommended alternative for achieving the goals and correcting the deficiencies;
    d. The recommended implementation schedule; and
    e. A financing program for constructing improvements.

    The summary includes various metrics or parameters that the water system will be evaluated against, how the system matches up to these parameters both currently and at the end of the planning period, a brief description of the recommendations to address any deficiencies identified, a schedule or timeframe for improvements to address deficiencies, and any financing strategies.
2. A description of the existing water system including:
    a. The service area;
    b. The source(s) of supply;
    c. Status of water rights;
    d. Current status of drinking water quality and compliance with regulatory standards;
    e. Maps or schematics of the water system showing size and location of facilities;
    f. Estimates of water use; and
    g. Operation and maintenance requirements.

    The description includes a narrative discussion and schematic describing the source, storage, pumping, distribution system, and treatment features of the water system. Current status includes a discussion of compliance with OAR 333-061 [public water system rules]. The water use estimate typically involves a multi-year evaluation of water use data in which average day demand, maximum day demand, or peak hour demand are determined. Operation and maintenance (O & M) requirements and approximate expenses should be defined for the existing system to which improvements with the associated O & M requirements and expense can be compared.
3. A description of water quality and level of service goals for the water system, considering, as appropriate:
    a. Existing and future (near term) regulatory requirements;
    b. Non-regulatory water quality needs of water users;
    c. Flow and pressure requirements; and
    d. Capacity needs related to water use and fire flow needs.

    Water quality of the water system with respect to current and future health-based standards (e.g., Maximum Contaminant Levels) or applicable drinking water rules, in addition to level of service goals (e.g., minimum system flow/ pressure requirements), to meet water system user demands and fire suppression requirements..
4. An estimate of the projected growth of the water system during the master plan period and the impacts on:
    a. The service area boundaries;
    b. The water supply source(s) and availability; and
    c. Customer water use.

    This section typically incorporates population projections generated from modeling or other statistical

projections to estimate the population throughout the planning period. Given this projected growth, water use is projected, and the adequacy of current source(s) is determined as well as impacts on service areas boundaries.

5. An engineering evaluation of the ability of the existing water system to meet the water quality and service goals, identification of existing water system deficiencies, and deficiencies likely to develop within the master plan period. The evaluation shall include:
    a. The water supply source;
    b. Water treatment, storage and distribution facilities;
    c. O & M requirements;
    d. A description of the water rights with a determination of additional water availability; and
    e. The impacts of present and probable future drinking water quality regulations.

    This section should include an evaluation of the water system's ability to meet the water quality and service goals during the planning period, factoring in anticipated future customer usage and any near-term drinking water quality regulations. The evaluation should include source, treatment, storage and distribution infrastructure needs, and changes to O & M requirements that may be necessary.
6. The master plan shall include an identification of the following which may be needed to correct water system deficiencies and achieve system expansion to meet anticipated growth:
    a. Alternative engineering solutions;
    b. Environmental impacts;
    c. Associated capital costs;
    d. Operational and maintenance costs; and
    e. Identification of available options for cooperative or coordinated water system improvements with other local water suppliers.

    This section should identify alternatives for each of the identified water system deficiencies along with consideration of changes to existing O & M requirements and costs.
7. A description of alternatives to finance water system improvements including local financing (such as user rates and system development charges) and financing assistance programs.
    This section includes a review of options to finance the infrastructure improvements outlined above, including both local water system-generated financing, and supplemental assistance programs that are available to the water system at the federal, state and local levels.
8. A recommended water system improvement program including:
    a. The recommended engineering alternative and associated costs;
    b. Maps or schematics showing size and location of proposed facilities;
    c. The recommended financing alternative; and
    d. A recommended schedule for water system design and construction.

    This section presents the recommended water system improvements, rationale for selection of the improvements, and estimates or opinions of cost of each of the recommendations (i.e. Capital Improvement Plan). Typically, the recommended improvements are also prioritized and a schedule developed to assist the system planning efforts. Finally, recommendations are made relating to financing each of the improvements.
9. If required as a condition of a water use permit issued by the Oregon Water Resources Department, the master plan shall address the requirements of OAR 690-086-0120 (Water Management and Conservation Plans).

10. A seismic risk assessment and mitigation plan for water systems fully or partially located in areas identified as VII to X, inclusive, for moderate to very heavy damage potential using the Map of Earthquake and Tsunami Damage Potential for a Simulated Magnitude 9 Cascadia Earthquake, Open File Report 0-13-06, Plate 7 published by the State of Oregon, Department of Geology and Mineral Industries.
    a. The seismic risk assessment must identify critical facilities capable of supplying key community needs, including fire suppression, health and emergency response and community drinking water supply points.
    b. The seismic risk assessment must identify and evaluate the likelihood and consequences of seismic failures for each critical facility.
    c. The mitigation plan may encompass a 50-year planning horizon and include recommendations to minimize water loss from each critical facility, capital improvements or recommendations for further study or analysis.

    Note that a seismic risk assessment and mitigation plan is not required if the water system is located further east than what is shown on the map.

B. A plan review fee is required for all master plans submitted and must be received before DWS starts the review. For a current fee schedule, check http://healthoregon.org/pwsplanreview.

The fee check should be made payable to: 'OHA Drinking Water'.

III. Plan Review:

The plan review process begins after both the master plan and appropriate plan review fee are received. OHA-DWS will:

A. Assign a plan review number (e.g., PR 1000-2011);
B. A plan review engineer will review submitted master plan for conformance with OAR 333-061-0060 (5); and
C. Based on the submitted information, OHA-DWS may send a letter to the water system indicating that OHA-DWS concurs with the master plan. If the master plan is required missing elements outlined above, then OHA-DWS will notify the water system. The water system will need to submit a revised document with the required missing elements in order for OHA-DWS to be able to concur with the master plan.
D. OHA-DWS will note in the concurrence letter that approval of the master plan does not constitute plan review approval for major water system improvements. The water system must seek plan review approval prior to beginning construction of any major improvement. Plan review requirements are outlined at: http://healthoregon.org/pwsplanreview. Note, water system suppliers may request plan review exemption for water main extension projects, such that plans and fees would not need to be submitted for each individual water main project. See http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/PlanReview/Pages/exemption.aspx, for further information and requirements for requesting and maintaining a water main plan review extension.

END OF LONG INSTRUCTIONS

Definitions:

"*Community* (C) *Water System*" means a public water system that has 15 or more service connections used by year-round residents, or that regularly serves 25 or more year-round residents.

"*Non-Transient Non-Community* (NTNC) *Water System*" means a public water system that is not a Community Water System and that regularly serves at least 25 of the same persons over 6 months per year.

"*Transient Non-Community* (TNC) *Water System*" means a public water system that serves a transient population of 25 or more persons.

"Oregon Very Small (OVS) Water System" (formerly named "*Non-EPA* (NP)" or "*State Regulated Water System*") means a public water system, which serves 4 to 14 service connections or serves 10 to 24 people.

City of Lowell

LANE COUNTY, OREGON

Water Master Plan

September 2022

Civil West Engineering Services, Inc.

www.civilwest.com | Willamette Valley | North Coast | South Coast | Rogue Valley

City of Lowell

LANE COUNTY, OREGON

Water Master Plan

September 2022

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Appendix DAWM – Department of State Lands – Approved Wetlands Mapping
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1 EXECUTIVE SUMMARY

1.1 Introduction

The City of Lowell is located north of Dexter Reservoir in Lane County, approximately 20 miles southeast of Springfield on State Highway 58. Lowell was incorporated in 1954 at the site of an abandoned town that originally housed workers from the U.S. Army Corps of Engineers for the construction of both the Dexter and Lookout Point Reservoirs. The City of Lowell is primarily a residential community with no major industries. The City owns and operates a community water system that is comprised of the following primary assets:

- An intake structure east of the covered bridge and associated piping running from the intake structure to the water treatment plant on the north bank of the Dexter Reservoir
- Three inactive wells, LANE 19572, LANE 1637, and L3714
- A conventional water treatment plant
- A 35,000-gallon clearwell underneath the water treatment plant
- One 460,000-gallon concrete finished water storage reservoir
- One 440,000-gallon glass-fused steel finished water storage reservoir
- Distribution pump station
- Booster pump station for high elevation service
- 2,500-gallon storage tank servicing high elevation pressure zone
- Approximately 30,000’ of distribution mains and transmission piping

The City of Lowell needs a new Water Master Plan, as their last master plan update was completed in the fall of 2006. Completion of this plan will enable City staff to prepare more appropriately for future growth and for water system improvements needed to address existing issues related to water system supply, treatment, storage, and distribution.

1.2 Water Demand

1.2.1 Current Water Demand

Daily total billing and production data was obtained from the City. Monthly billing data from the study period of 2016 - 2020 (60 months) show that a total of 151.7 million gallons of treated water was sold. For the study period, total unaccounted water averaged 26%. Average monthly production is 3.8 MG, and the average monthly quantity billed is 2.5 MG.

The average daily demand (ADD) for the dataset (2016 – 2020) was 123,064 gallons per day.

The maximum daily demand (MDD) for the dataset (2016 – 2020) was calculated by applying a peaking factor of 2 to the ADD and is 246,127 gallons per day.

The peak hourly demand (PHD) for the dataset (2016 – 2020) was calculated by applying a peaking factor of 5 to the ADD and is 615,318 gallons per day or 427 gpm.

Based on treatment plant records, (the 5-year totals 2016 - 2020) of the 44.9 million gallons pumped into distribution per year; 30.3 million gallons goes to metered water sales, 2.6 million gallons per year to miscellaneous use and main breaks, with 0.4 million gallons going to line flushing and fire protection testing/use. This leaves a remainder of 11.6 million gallons as unaccounted water.

1.2.2 Future Water Demand

Water demand projections over the planning period are estimated by multiplying the current per capita demand numbers by the projected future population estimates.
According to the 2020 US Census, the population of Lowell was 1,196. Since 2020, there have been several new developments in town that were not accounted for in the PSU estimate. These developments are adding approximately 35 EDUs to the system, which will add approximately 94 persons to the 2020 census number, pushing the population to 1,290. Using the AAGR (from the table below) beyond this slated bump in population from 2021 onward, the service population at the end of this planning period (2045) is projected to be 1,560.

TABLE 1.2 – LANE COUNTY POPULATION FORECAST AND AAGR

Figure 1. Lane County and Sub-Areas—Historical and Forecast Populations, and Average Annual Growth Rates (AAGR)

	Historical			Forecast					
	2000	2010	AAGR (2000-2010)	2019	2044	2069	AAGR (2010-2019)	AAGR (2019-2044)	AAGR (2044-2069)
Lane County	**322,959**	**351,715**	***0.9%***	**371,361**	**426,041**	**480,634**	***0.6%***	***0.6%***	***0.5%***
Coburg	969	1,032	*0.6%*	1,308	1,687	1,955	*2.6%*	*1.0%*	*0.6%*
Cottage Grove	8,952	10,164	*1.3%*	10,284	11,677	13,172	*0.1%*	*0.5%*	*0.5%*
Creswell	3,959	5,333	*3.0%*	5,663	7,573	9,813	*0.7%*	*1.2%*	*1.0%*
Dunes City	1,229	1,303	*0.6%*	1,292	1,474	1,665	*-0.1%*	*0.5%*	*0.5%*
Eugene	160,551	177,369	*1.0%*	192,607	232,099	273,794	*0.9%*	*0.7%*	*0.7%*
Florence	8,783	10,230	*1.5%*	10,579	12,518	14,635	*0.4%*	*0.7%*	*0.6%*
Junction City	5,942	6,100	*0.3%*	6,919	9,080	11,328	*1.4%*	*1.1%*	*0.9%*
Lowell	857	1,045	*2.0%*	1,108	1,352	1,620	*0.6%*	*0.8%*	*0.7%*
Oakridge	3,239	3,308	*0.2%*	3,278	3,344	3,320	*-0.1%*	*0.1%*	*0.0%*
Springfield	61,910	67,738	*0.9%*	70,278	76,443	81,677	*0.4%*	*0.3%*	*0.3%*
Veneta	2,737	4,561	*5.2%*	4,767	6,591	8,662	*0.5%*	*1.3%*	*1.1%*
Westfir	287	255	*-1.2%*	254	272	288	*0.0%*	*0.3%*	*0.2%*
Outside UGBs	63,544	63,277	*0.0%*	63,023	61,930	58,707	*0.0%*	*-0.1%*	*-0.2%*

Sources: U.S. Census Bureau, 2000 and 2010 Censuses; Forecast by Population Research Center (PRC).

Note: For simplicity each UGB is referred to by its primary city's name.

This population projection implemented a 0.8% Average Annual Growth Rate (AAGR) from 2019-2044 and a 0.7% AAGR from 2044-2069 and was based on information from the Office of Economic Analysis Population Forecast from the PRC at PSU.

The ADD is projected to increase to 160,518 gallons per day while the MDD is projected to increase to 321,035 gallons per day. PHD is calculated to increase to 802,588 gpd, or 557 gpm.

TABLE 1.2.2 - 20-YEAR WATER DEMAND DESIGN VALUES

Lowell 2016-2020 Data		Population = 1,196	
Unit	ADD	MDD	PHD
gpd	123,064	246,127	615,318
Peaking Factor	1	2	5
gpcpd	103	206	514
Lowell 2045 Data		Population = 1,560	
Unit	ADD	MDD	PHD
gpd	160,518	321,035	802,588
Peaking Factor	1	2	5
gpcpd	103	206	514

1.3 Existing Water System

1.3.1 Water Supply

The City currently relies upon a screened intake submerged in Dexter Reservoir for their raw water supply. In addition to the raw water intake in Dexter Reservoir, the City also has three inactive wells, two of which, well #1 LANE 19572 and well #2 LANE 1637, were most recently used.

1.3.2 Water Treatment Plant

The Lowell WTP is a conventional rapid media filter plant. The basic plant processes include chemical coagulation, mechanical flocculation, tube-settler sedimentation, dual-media filtration, and chemical disinfection and conditioning. The major system components that accomplish these processes are described in more detail in section 7.

PHOTO 1.3.2 – LOWELL WTP – FILTER BASIN

1.3.3 Treated Water Storage

The City currently uses a 440,000-gallon glass-fused to steel tank, and an older 460,000-gallon concrete tank for water storage. The two tanks sit adjacent to each other on a lot north of the intersection of East 1st Street and Sunridge Lane. The tanks share a base elevation of ~922'. The tanks can both be filled to approximately 952' while leaving two feet available for freeboard. There is also a 2,500-gallon tank that services a small upper pressure zone. This upper tank is fed from a booster pump.

PHOTO 1.3.3.1 – 440,000 GALLON RESERVOIR

1.3.4 Distribution System

The major components and layout of the water distribution system for the City are shown on the Water System Map. The existing system consists of a distribution grid consisting of a range of pipe materials and sizes from 2" up to 12". The various pipe materials in the distribution system include the following: galvanized steel, PVC, cast iron, steel and asbestos concrete.

PHOTO 1.3.3.2 – 460,000 GALLON RESERVOIR

The layout of the distribution system is generally grid-like in shape, and adequate to deliver the required flowrates to the community. Looped distribution lines allow the use of smaller diameter pipes and improves both the reliability and the redundancy of the system, as the water can reach the point of demand by more than one path. There are two longer lines that do not loop back into the rest of the system, one running west down Shoreline Drive, and the main line running north up Moss Street. With the exception of these two lines, the water distribution system in the City of Lowell is fairly well laid-out. WaterCAD modeling has determined that the distribution pipeline network will provide adequate domestic and fire flows for the duration of the planning period. Please see Appendix WCM for the data output detailing the WaterCAD analysis.

1.4 Improvement Needs

1.4.1 Data Collection and Management

The City presently has an early generation SCADA monitoring and control system, but the system hardware/firmware is very old and needs updating. Some of the equipment is newer and may be left in service. It is recommended that the City investigate outright replacement of the most antiquated SCADA equipment.

1.4.2 Water Supply

The GSI 2022 WMCP found that the City's surface water has proven to be an adequate source of supply. Certificate 23721 authorizes diversions from the Middle Fork of the Willamette River of up to 1.0 cfs, exceeding the City's historical average MDD. Further, the City has not experienced and does not anticipate experiencing restrictions on the rate of diversion associated with this certificate.

The two groundwater rights are adequate to meet the City's average MDD of 0.34 cfs (0.22 mgd), however, both sources have elevated arsenic. As the City's WTP was not designed to treat for arsenic, the only way the groundwater sources could utilized, would be if they were blended with the surface water to an acceptable arsenic level. The City would only consider blending in the unlikely event that the surface water source was not able to fully meet demand. Given the historical arsenic levels ~0.030 mg/L, the surface water to groundwater blend would need to be at least 2 parts surface water two one part groundwater to maintain arsenic levels below the MCL of 0.010 mg/L.

1.4.3 Water Treatment Plant

The conventional water treatment plant processes (in order of flow) include:

- Chemical coagulation
- Mechanical flocculation
- Tube-settler sedimentation
- Dual-media filtration
- Chemical disinfection (on-site generated sodium hypochlorite)

Production of water at the conventionally filtered WTP is highly limited upon the flow rate through the sedimentation basin. If the flow rate is pushed too high, the basin tends to cause turbidity spikes in the finished water.

1.4.4 Treated Water Storage

The City presently has a combined effective water storage capacity of approximately 845,000 gallons with both reservoirs full. Storage needs for 2021 and 2045 are calculated in section 7.3 at 1.0 and 1.2 million gallons respectively. Currently, the City does not have enough storage to

provide for equalization, anticipated fire flows, and emergency storage. The existing system will be deficient by approximately 330,000 gallons by the end of the planning period for this study.

The City also wishes to add an additional high elevation pressure zone to provide water service to anticipated residential growth in the remaining potential buildout section on the northeast side of town. This could be accomplished by building a third storage reservoir.

1.4.5 Distribution System

The distribution system mains vary considerably in both size and material, with 6" and 12" PVC comprising nearly half of the system, with a considerable amount of 6" AC still in service. There is still a significant amount of AC pipe in the system (26.2%), that is suspect for potential leakage in the distribution system. We recommend that the City's number one priority should be replacement of all AC pipe in the distribution system with HDPE. Second priority should be installation of a seismically resistant "backbone" as identified in the SRAMP. Thirdly, the distribution system could benefit from looping of dead end lines. Please see the table below for further detail regarding the size and material composition of the existing distribution system.

Length in feet

	2"	4"	6"	8"	10"	12"	TOTAL
PVC	2,645	1,380	10,345	4,305	-	9,240	**27,915**
STEEL	-	1,830	510	1,710	-	-	**4,050**
AC	-	-	9,595	-	1,745	-	**11,340**
TOTAL	**2,645**	**3,210**	**20,450**	**6,015**	**1,745**	**9,240**	**43,305**

Percentage of total

	2"	4"	6"	8"	10"	12"	TOTAL
PVC	6.1%	3.2%	23.9%	9.9%	-	21.3%	**64.5%**
STEEL	-	4.2%	1.2%	3.9%	-	-	**9.4%**
AC	-	-	22.2%	-	4.0%	-	**26.2%**
TOTAL	**6.1%**	**7.4%**	**47.2%**	**13.9%**	**4.0%**	**21.3%**	**100%**

With a few exceptions at the perimeter, the core layout of the existing water system is close to a grid in shape, and adequate to deliver the required flowrates to the community, with most lines being looped back into the system. Looped distribution lines allow the use of smaller diameter pipes and improves both the reliability and the redundancy of the system, as the water can reach the point of demand by more than one path. The water distribution system in the City of Lowell is fairly well laid-out and analysis with WaterCAD modeling indicates that the distribution pipeline network will provide adequate domestic and fire flows

for the duration of the planning period. We recommend that the City focus on making the AC pipe replacements as soon as possible. The SRAMP upgrades can be done on a 50-year planning horizon per OHA's recommendations. This would average 185' per year, we recommend these SRAMP waterline replacement projects be bundled to every 5 years or so to make them more cost effective vs. replacement of 185' per year every year. Please see Appendix WCM for the data output detailing the WaterCAD analysis.

To provide fire protection to all structures within city limits, there are 29 hydrants that will need to be added to maintain a maximum spacing of 500' between all hydrants on the main lines.

1.5 Recommendations

We are recommending that the following projects be included as part of the City's Capital Improvement Plan for water projects:

TABLE 1.5 - CIP PRIORITY RECOMMENDATIONS

Priority One - Should be completed within the next 10 years		
Treatment - New Ultrafiltration Water Treatment Plant - 500 gpm	$	1,843,022.50
SCADA - Upgrading Automation and Data Acquisition	$	306,420.00
1.5 MG Reservoir - Upper Pressure Zone	$	2,626,167.50
Total Priority One Projects:	$	4,775,610.00
Priority Two - Should be completed within 20 - 50 years		
Distribution - Citywide Fire Protection Upgrade Project	$	386,947.00
Distribution - AC Water Main Replacements - SRAMP Backbone Upgrades	$	5,876,825.00
Total Priority Two Projects:	$	6,263,772.00
Priority Three - Should be completed within the planning period		
Source - Raw Water Intake - Air Burst Retrofit	$	122,097.25
Total Priorty Three:	$	122,097.25
Total All Projects:	$	11,161,479.25

The costs for the City of Lowell's water system improvement needs are great and there may be reason to prioritize the improvements or take projects on in phases. We further recommend that the City attend a "One-Stop" financing meeting. The One-Stop meeting is held in Salem once a month with the goal of gathering the State and federal funding agencies together at one time and one place to discuss all potential funding possibilities and issues.

We recommend that the WTP replacement project, SCADA project, and new reservoir projects be classified as priority one, and completed within the next 10 years. Of these three projects, the WTP should be done first, as the system struggles more with water production than water storage.

The SCADA upgrade project is also priority one and could be started now and moved over later to the new WTP if desired. It is strongly recommended that any new equipment purchased prior to the new WTP project be compatible with the new WTP.

The reservoir project is also priority one, as the City is currently storage deficient.

The distribution system AC pipe replacement projects should be completed during the planning period, with the SRAMP backbone distribution projects completed on a 50-year planning horizon. The priority two projects would cost approximately $125,000 per year in 2022 dollars over 50 years. We recommend that both distribution replacement projects be budgeted for at ~5-year intervals to provide a more cost-effective project, rather than replacement of a shorter length of pipe each year.

The raw water intake improvement project (air burst screen cleaner) is not a high priority and may be completed as time and budget will allow.

2 INTRODUCTION

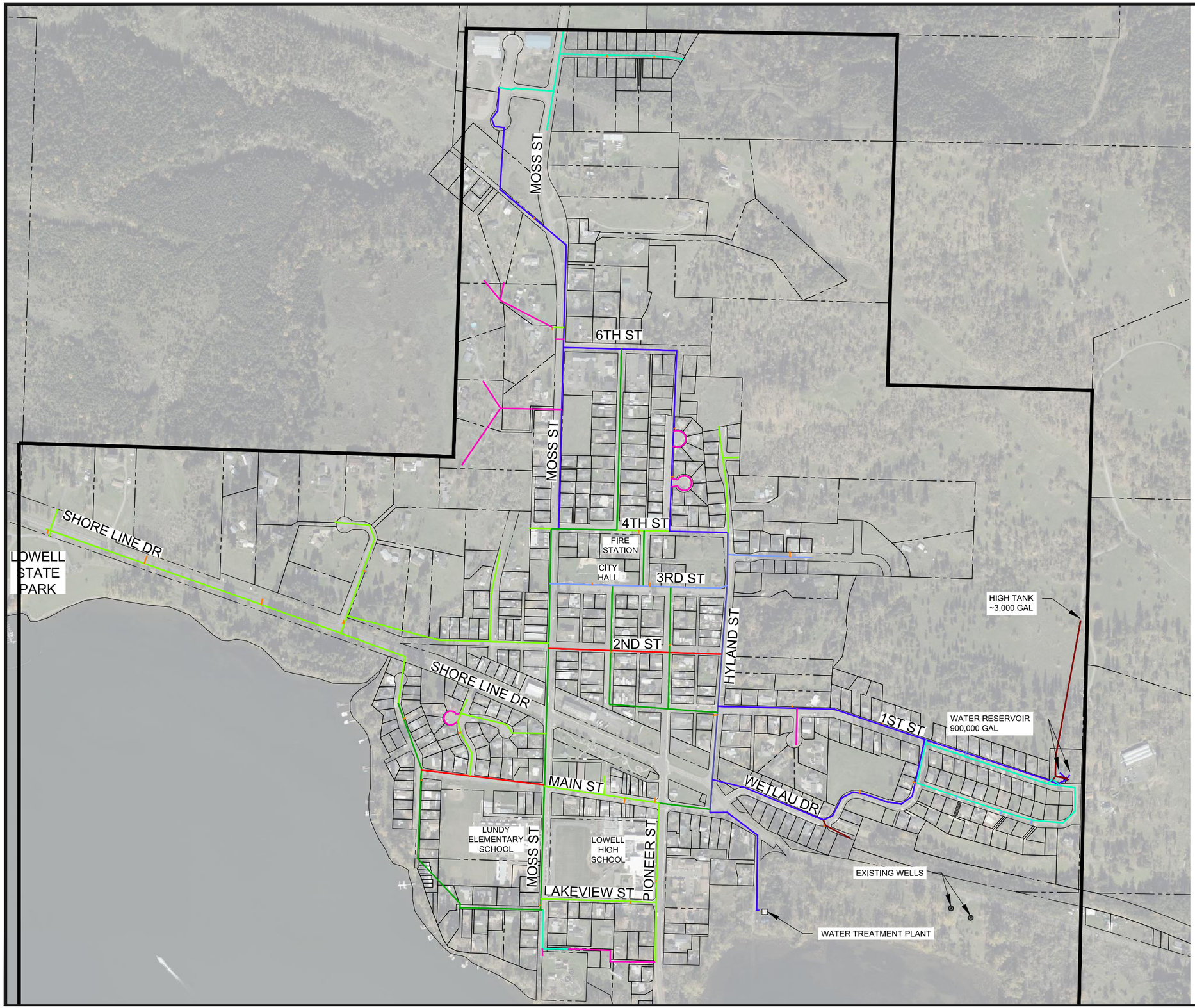
2.1 Background and Need

2.1.1 Water System Background

The City currently owns and operates a water system that is maintained by a crew of Public Works employees. The water system is comprised of the following primary assets:

- An intake structure east of the covered bridge and associated piping running from the intake structure to the water treatment plant on the north bank of the Dexter Reservoir
- Three inactive wells, LANE 19572, LANE 1637, and L3714
- A conventional water treatment plant
- A 35,000-gallon buried clearwell underneath the water treatment plant
- One 460,000-gallon concrete finished water storage reservoir
- One 440,000-gallon glass-fused steel finished water storage reservoir
- Distribution pump station
- Booster pump station for high elevation service
- 2,500-gallon storage tank servicing high elevation pressure zone
- Approximately 30,000’ of distribution mains and transmission piping

Historically, the City has used groundwater as its primary water source, until 2001 when the MCL for arsenic was lowered from 0.050 ppm to 0.010 ppm. At this time the arsenic levels in the well water were ~0.025 ppm, the City was forced to either treat the well water or go back to their surface water source. At the time, the City switched from their wells to the current Dexter Reservoir intake and conventional surface water treatment plant. The City still owns the original 3 wells located near to the WTP. Please see the water system map on the following page for more detail.



Civil West Engineering Services, Inc.

CITY OF LOWELL
LANE COUNTY, OR

EXHIBIT 2-1

2022 WATER MASTER PLAN

0 600' 1"

DRAWN BY: ERM
DATE: JANUARY, 2022

FIGURE
2-1

DATE:4/4/22 FILE:O:\CW_Projects\2101 Lowell\2101-020 Water Master Plan\04 Study\Drawings\Dwg\SYSTEM MAP.dwg

2.1.2 Need for Plan

The last update to the City of Lowell's Water Master Plan was in 2006. A new Water Master Plan (WMP) and Management and Conservation Plan (WMCP) should be developed to both:

- Meet requirements for approval of a water rights permit application extension
- Provide much needed guidance on water infrastructure improvement needs

This new WMP/WMCP is necessary to evaluate the state of existing water system infrastructure and operations, and to reevaluate overall system needs to ensure that the City is able to maintain regulatory compliance through the planning period (2022 – 2045). This document will serve as the master plan to guide the City's efforts to upgrade the existing treatment, distribution, and storage systems, to provide a safe and adequate supply of potable water, and to protect the public health.

2.1.3 Plan Authorization

The services of Civil West Engineering Services, Inc. were approved by vote of the City Council to complete a new Water Master Plan for the City in June of 2021.

2.1.4 Past Studies and Reports

The following plans and reports were used as background:

- The City's Water Master Plan Update, was prepared by HBH Consulting Engineers in December 2006

- Water Management and Conservation Plan, prepared by Systems West Engineers, Inc. in September 2001

2.2 Study Objective

The purpose of this Water Master Plan is to develop a comprehensive planning document for the City that includes the results of an engineering assessment of the existing water system infrastructure and operations, and to provide guidance for future planning and management of the water system. According to Oregon Administrative Rule (OAR) 333-061-0060, every community with 300 or more service connections must maintain a current master plan for the water system. The principal objectives of this planning effort aligning with the OARs includes the following:

- A summary of the plan that includes the water quality and service goals, identified present and future water system deficiencies, the engineer's recommended alternative for achieving the goals and correcting the deficiencies, and the recommended implementation schedule and financing program for constructing improvements.

- A description of the existing water system which includes service area, source(s) of supply, status of water rights, status of drinking water quality and compliance with regulatory standards, maps or schematics of the water system showing size and location of facilities, estimates of water use, and operation and maintenance requirements.

- A description of water quality and level of service goals for the water system, considering, as appropriate, existing, and future regulatory requirements, non-regulatory water quality needs of water users, flow and pressure requirements, and capacity needs related to water use and fire flow needs.

- An estimate of the projected growth of the water system during the master plan period and the impacts on the service area boundaries, water supply source(s) and availability, and customer water use.

- An engineering evaluation of the ability of the existing water system facilities to meet the water quality and level of service goals, identification of any existing water system deficiencies, and deficiencies likely to develop within the master plan period. The evaluation shall include the water supply source, water treatment, storage, distribution facilities, and operation and maintenance requirements. The evaluation shall also include a description of the water rights with a determination of additional water availability, and the impacts of present and probable future drinking water quality regulations.

- Identification of alternative engineering solutions, environmental impacts, and associated capital and operation and maintenance costs, to correct water system

deficiencies and achieve system expansion to meet anticipated growth, including identification of available options for cooperative or coordinated water system improvements with other local water suppliers.

- A description of alternatives to finance water system improvements including local financing, (such as user rates and system development charges) and financing assistance programs.

- A recommended water system improvement program (Capital Improvement Projects/CIP) including the recommended engineering alternative and associated costs, maps or schematics showing size and location of proposed facilities, the recommended financing alternative, and a recommended schedule for water system design and construction.

- If required as a condition of a water use permit issued by the Water Resources Department, the Master Plan shall address the requirements of OAR 690-086-0120 (Water Management and Conservation Plans).

This Plan details the existing water system as well as improvements recommended to:

- Maintain compliance with State and Federal standards

- Maintain a high level of service to customers

- Provide system capacities for anticipated growth.

Capital improvement recommendations (CIP) will include proposed project scopes, including budgetary cost estimates, to facilitate City planning and budgeting efforts. All portions of the master plan must be consistent with OAR 333-061 (Public Drinking Water Systems, Oregon Health Authority), OAR 660-011 (Public Facilities Planning, Department of Land Conservation and Development) and OAR 690-086 (Water Management and Conservation Plans, Water Resources Department).

2.3 Scope of Study

2.3.1 Planning Period

Water System Master Plans are typically developed with a planning period of 20 years in accordance with OAR 333-061-0060(5)(b) and OAR 690-086-0170. The period is short enough for current users to benefit from system improvements but long enough to provide additional capacity necessary to support projected growth and increased demands. The end of the planning period for this Master Plan is the year 2045, approximately 23 years from the anticipated completion of this Plan. We are adding 3 years to the plan to account for the time it is likely to take for the recommended planning projects to break ground.

2.3.2 Planning Area

The planning area for this report is limited to the present UGB of the City. The topography within the study area ranges from relatively flat for most of the town to steeper slopes and hills to the north and west of the City. The elevation within the study area ranges from approximately 750 feet in the central area, to elevations of ~950 feet along the northern and western boundaries of the City. Additional information and detailed maps of the planning area are presented in Section 3.0.

2.3.3 Work Tasks

In compliance with Drinking Water program standards, this plan provides descriptions, analysis, projections, and recommendations for the water system through the year 2045. The following elements are included:

- Study area characteristics, including land use and population trends and projections
- Description of the existing water system including storage and distribution
- Existing regulatory environment including regulations, rules, and plan requirements
- Current water usage quantities and allocations
- Projected water demands
- Existing system capacity analysis and evaluation
- Improvement alternatives and recommendations, including associated budgetary costs
- A summary of recommendations with a Capital Improvement Plan
- Maps of the existing system and recommended improvements
- Funding options

2.3.4 Report Organization

This Water System Master Plan for the City of Lowell is comprised of the following sections:

- Section 1 – Executive Summary. Provides a brief overview of the WMP, including important facts and findings contained within.

- Section 2 – Introduction. Provides a brief background of the existing water system in Lowell outlining the purpose and objectives of this Plan related to the OARs.

- Section 3 – Study Area. Describes the planning area, including details about climate, zoning, floodplains and other information relevant to water system planning. It also includes historic, existing, and projected populations for Lowell.

- Section 4 – Water Demand Analysis. Provides detailed information about current and anticipated future water demands.

- Section 5 – Design Criteria and Service Goals. Reviews water system infrastructure and operational strategies, providing details about design criteria and service goals.

- Section 6 – Regulatory Conditions. Discusses current and future regulatory conditions that affect water system planning.

- Section 7 – Existing Water System. Describes the existing water system in detail and discusses the current condition of water system assets.

- Section 8 – Improvement Alternatives. Provides alternatives and recommended improvements to the system over the course of the WMP planning period.

- Section 9 – Capital Improvement Plan. Summarizes proposed Capital Improvement Plan projects and associated budgetary cost estimates. It also presents possible scenarios and options for funding of recommended capital projects.

- Section 10 – Financing. Explores water rates/charges and funding options available.

2.4 Acknowledgements

Various members of the City of Lowell Public Works Department and City Staff have contributed significant time and effort to provide complete and accurate information and data required for proper planning of the community's water system needs. Water treatment operators, water distribution staff, billing records personnel and others have all helped to complete this effort. We wish to acknowledge and thank the following persons in particular:

Don Bennett - Mayor
Jeremy Caudle – City Administrator
Samantha Dragt – City Clerk
Max Baker – Public Works Director
Hunter Harris – Water System Operator
Nick Harris – Water System Operator

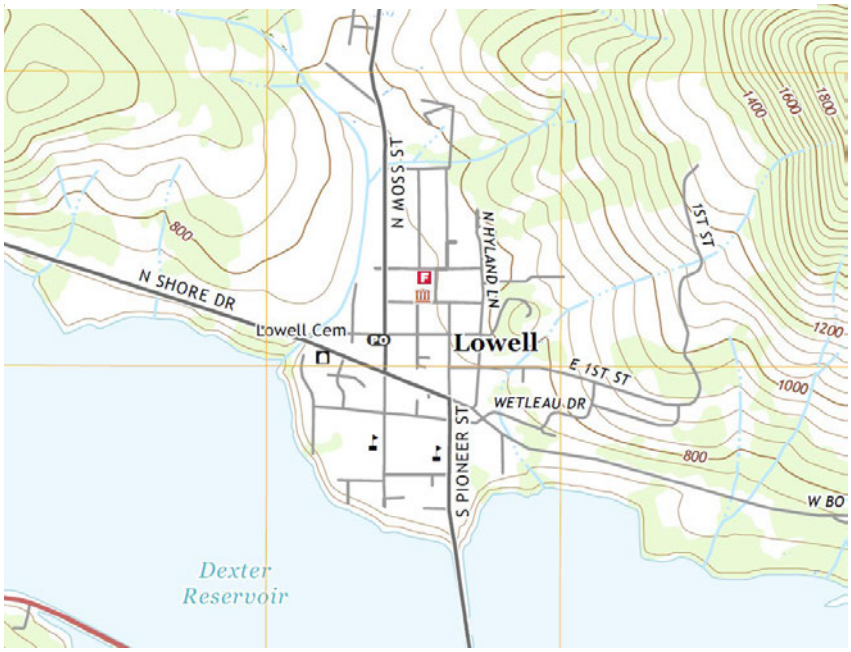
3 STUDY AREA

3.1 Physical Environment

3.1.1 Topography

The planning area for this report is limited to the present UGB of the City of Lowell. The topography within the study area ranges from relatively flat for most of the town to steeper slopes and hills to the north and west of the City. The elevation within the study area ranges from approximately 750 feet in the central area, to elevations of ~950 feet along the eastern and western boundaries of the City.

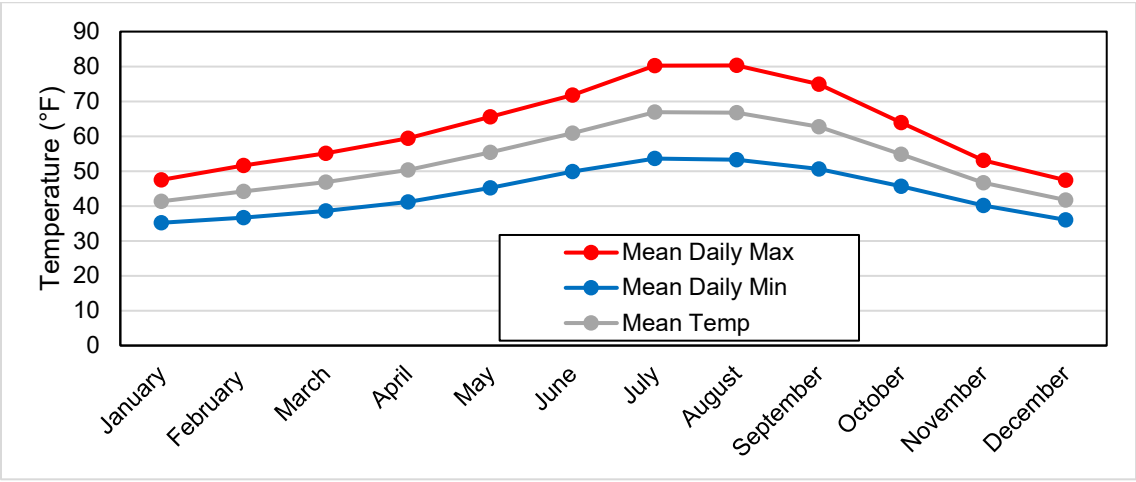
FIGURE 3.1.1 – TOPOGRAPHIC MAP



3.1.2 Climate

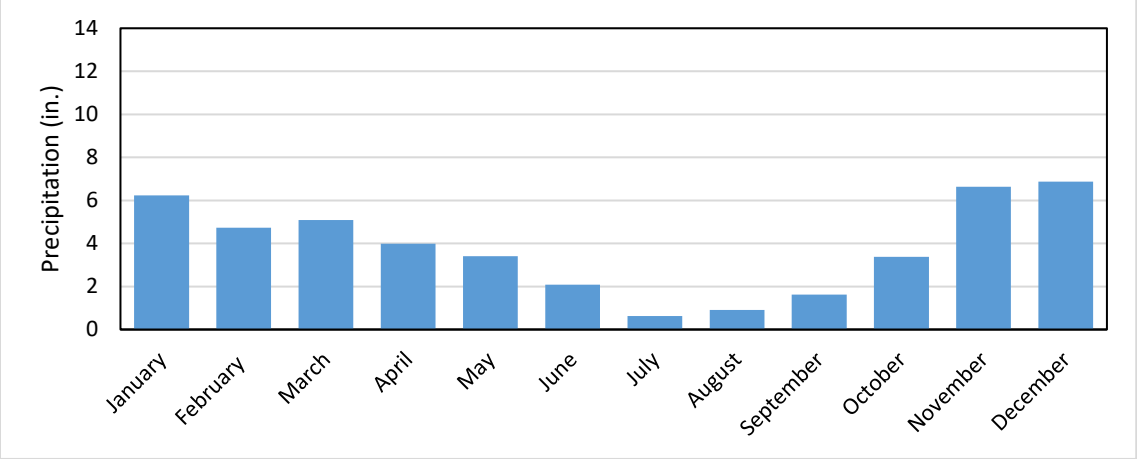
Climate data was obtained using long-term (1955-2016) records collected at the closest weather station, the Lookout Point Dam (Station 355050), as reported by the Western Regional Climate Center. The average monthly temperature in Lowell ranges from 41 to 67°F with an annual mean of 53°F. Monthly temperature normals are shown in the following chart.

FIGURE 3.1.2A – LOOKOUT DAM - MONTHLY TEMPERATURE NORMALS – 1955-2016



Average annual precipitation is approximately 46" in Lowell. Record low and high precipitation years recorded were 22.99-inches in 1944 and 73.21-inches in 1996. The maximum recorded 24-hour rainfall was 4.45-inches on November 19, 1996. Snowfall is minimal with most years recording little snowfall. The mean annual snowfall during the period from 1955 to 2016 is 1.8". Based on the NOAA Atlas 2 Isopluvial maps, the 2-year storm 24-hour rainfall is 3.44". Precipitation normals from the WRCC are shown in the following chart.

FIGURE 3.1.2B – LOOKOUT DAM - MONTHLY PRECIPITATION NORMALS – 1955-2016



3.2 General Information

This section provides a detailed description of the project location, physical environment along with an evaluation of the population trends and projections.

3.2.1 Planning Area Location

The City of Lowell is located adjacent to the northern bank of Dexter Reservoir in Lane County, approximately 20 miles southeast of Springfield on State Highway 58. Lowell was incorporated in 1954 at the site of an abandoned town that originally housed workers from the U.S. Army Corps of Engineers for the duration of construction of both the Dexter and Lookout Point Reservoirs.

The city limit and urban growth boundary (UGB) for Lowell are virtually identical at present, with an area of approximately 762 acres (1.19 square miles), of which about 286 acres (38%) are undeveloped.

3.2.2 Cultural Resources

According to the National Register of Historic Places (NRHP), there are two historic properties located in Lowell, please see the table below for a list of the historic properties.

TABLE 3.1.2 – HISTORIC PLACES IN LOWELL

Lowell Bridge – 1907/1945(rebuilt)	South Pioneer Street
Lowell Grange - 1913	51 East 2nd Street

In the future, cultural resources should always be considered during planning for system upgrades and/or improvements.

3.2.3 Land Use

The City of Lowell is in a primarily rural area. Land use within the City of Lowell is mostly residential, with some light commercial properties. The City has a total area of 1.19 square miles.

3.2.4 Zoning Information

The planning area for this report is limited to the land within the present UGB of the City. Currently the zoning within the City limits is divided into 6 categories: Single-Family Residential, Multi-Family Residential, Commercial, Downtown Commercial, Light Industrial, and Public Land. A Zoning Map of the City limits and the UGB is provided on the following page.

Lowell Zoning Districts

CITY OF Lowell

19 01 10

19 01 11

19 01 15

19 01 14

SENECA ST

W 7TH ST

JASPER LOWELL RD

E 6TH ST

D ST

CAROL ST

N MOSS ST

E 4TH ST

Lowell Fire Station

Lowell City Hall

E 3RD ST

N HYLAND LN

N DAMON ST

N CANNON ST

N PIONEER ST

W 2ND ST

E 2ND ST

E 2ND ST

E 2ND ST

PENGRA RD

MARINA VISTA DR

NORTH SHORE DR

E 1ST ST

E 1ST ST

LOFTUS AVE

E NORTH SHORE DR

N ALDER ST

W MAIN ST

E MAIN ST

WETLEAU DR

SUNRIDGE LN

Lundy Elementary School

Lowell Jr. High School

Lowell Sr. High School

S ALDER ST

S MOSS ST

S PIONEER ST

S PARKER LN

W LAKEVIEW AVE

E LAKEVIEW AVE

W BOUNDARY RD

JASPER LOWELL RD

HWY 58

NOISY CREEK

Union Pacific

DEXTER LAKE

DEXTER LAKE

Legend

- Tax Lots
- City Limits
- Urban Growth Boundary
- Section Lines

Zoning Designations

- C1, Commercial District
- C2, Downtown Commercial
- I1, Light Industrial
- PL, Public Land
- R1, Single-Family Residential
- R3, Multi-Family Residential

0 350 700

Feet

N

NAD 1983 HARN StatePlane Oregon South FIPS 3602

LCOG

Lane Council of Governments
859 Willamette Street, Suite 500
Eugene, Oregon 97401

Printing Date: January 26, 2012

3.2.5 Socio-Economic Conditions and Trends

The Median Household Income (MHI) for Lowell was $55,795, based on the 2020 *American Community Survey 5-Year Estimates.* The state of Oregon's 2020 MHI was $65,667.

As of the census of 2020, there were 1,196 people residing in the city. There were 467 housing units at an average density of 1,000 persons per square mile. The racial makeup of the city was 94.9% White, 0.3% African American, 0.8% Native American, 0.3% Asian, 1.1% from other races, and 7.0% from two or more races. Hispanic or Latino people of any race were 5.1% of the population.

The City of Lowell has slightly better poverty rates compared to both the national average and the Oregon average. In 2000, the U.S. Census Bureau found that 8.3% of families and 11.5% of all people living in Lowell had incomes below the poverty level, compared to 14.8% in Oregon and 14.3% in the United States.

3.2.6 Air

The Air Quality Index (AQI) for Lane County averaged to approximately 40 in 2020 where 0-50 is good air quality. The United States mean AQI is 42.

3.2.7 Soils

Soils within the Lowell area are dominated by silty clay loams. Within the study area there are several soil groups represented. See the soils legend and map on the following pages.

TABLE 3.2.4 – SOIL TYPE LEGEND

Symbol	Soil Type Name	Acres in AOI	Percent of AOI
11E	BELLPINE SILTY CLAY LOAM, 20 TO 30 PERCENT SLOPES	5	0.2%
28C	CHEHULPUM SILT LOAM, 3 TO 12 PERCENT SLOPES	16	0.8%
43C	DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 3 TO 12 PERCENT SLOPES	10	0.5%
43E	DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 12 TO 35 PERCENT SLOPES	286	13.4%
52B	HAZELAIR SILTY CLAY LOAM, 2 TO 7 PERCENT SLOPES	150	7.0%
52D	HAZELAIR SILTY CLAY LOAM, 7 TO 20 PERCENT SLOPES	298	13.9%
89C	NEKIA SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	91	4.2%
89D	NEKIA SILTY CLAY LOAM, 12 TO 20 PERCENT SLOPES	130	6.1%
89E	NEKIA SILTY CLAY LOAM, 20 TO 30 PERCENT SLOPES	72	3.3%
89F	NEKIA SILTY CLAY LOAM, 30 TO 50 PERCENT SLOPES	59	2.7%
100	OXLEY GRAVELLY SILT LOAM	18	0.9%
102C	PANTHER SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	52	2.4%

104G	PEAVINE SILTY CLAY LOAM, 30 TO 60 PERCENT SLOPES	2	0.1%
105A	PENGRA SILT LOAM, 1 TO 4 PERCENT SLOPES	23	1.1%
107C	PHILOMATH SILTY CLAY, 3 TO 12 PERCENT SLOPES	64	3.0%
108C	PHILOMATH COBBLY SILTY CLAY, 3 TO 12 PERCENT SLOPES	3	0.1%
108F	PHILOMATH COBBLY SILTY CLAY, 12 TO 45 PERCENT SLOPES	6	0.3%
113C	RITNER COBBLY SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	59	2.7%
113E	RITNER COBBLY SILTY CLAY LOAM, 12 TO 30 PERCENT SLOPES	98	4.6%
113G	RITNER COBBLY SILTY CLAY LOAM, 30 TO 60 PERCENT SLOPES	219	10.2%
115H	ROCK OUTCROP-KILCHIS COMPLEX, 30 TO 90 PERCENT SLOPES	5	0.2%
116G	ROCK OUTCROP-WITZEL COMPLEX, 10 TO 70 PERCENT SLOPES	3	0.1%
121B	SALKUM SILTY CLAY LOAM, 2 TO 8 PERCENT SLOPES	47	2.2%
121C	SALKUM SILTY CLAY LOAM, 8 TO 16 PERCENT SLOPES	16	0.7%
138E	WITZEL VERY COBBLY LOAM, 3 TO 30 PERCENT SLOPES	78	3.6%
138G	WITZEL VERY COBBLY LOAM, 30 TO 75 PERCENT SLOPES	18	0.8%
2224A	COURTNEY GRAVELLY SILTY CLAY LOAM, 0 TO 3 PERCENT SLOPES	29	1.3%
W	WATER	288	13.4%

FIGURE 3.2.4 – SOIL TYPE MAP

3.2.8 Wetlands

The U.S. Fish and Wildlife Service manages the National Wetlands Inventory (NWI) for wetlands and other aquatic habitats that may be subject to regulation under Section 404 of the Clean Water Act or other State/Federal statutes. A search of the NWI for Lowell shows several small wetlands and other aquatic habitats which are within or partially within the Lowell UGB. There is a single freshwater emergent area on the far north end of town. Please see the following page and appendix DAWM for maps of the wetland area.

FIGURE 3.2.8 – WETLAND MAP

3.2.9 Environmentally Sensitive Areas

There are no identified environmentally sensitive areas within the City limits of Lowell.

3.2.10 Flora and Fauna

No endangered species, either plant or animal, are known to inhabit the Lowell area.

3.2.11 Floodplains

The City of Lowell has areas defined on FEMA maps as susceptible to flooding in a 100-year flood event. This area is limited to the south side of town, where along the Dexter Reservoir. Of note, the 100-year floodplain just barely reaches the southern edge of the existing water treatment plant. Please see Figure 3.2.11 for this critical area of the FEMA Flood Hazard Map below.

FIGURE 3.2.11 – FEMA FLOODPLAIN MAP

3.3 Population

3.3.1 Historical and Existing Population

A population analysis for Lowell was completed using data from the US Census, and PSU Population Resource Center (PRC) on past, present, and projected future population growth for cities within Lane County.

TABLE 3.3.1 – LANE COUNTY HISTORICAL AND FORECAST POPULATIONS

Figure 1. Lane County and Sub-Areas—Historical and Forecast Populations, and Average Annual Growth Rates (AAGR)

	Historical			Forecast					
	2000	2010	AAGR (2000-2010)	2019	2044	2069	AAGR (2010-2019)	AAGR (2019-2044)	AAGR (2044-2069)
Lane County	**322,959**	**351,715**	***0.9%***	**371,361**	**426,041**	**480,634**	***0.6%***	***0.6%***	***0.5%***
Coburg	969	1,032	*0.6%*	1,308	1,687	1,955	*2.6%*	*1.0%*	*0.6%*
Cottage Grove	8,952	10,164	*1.3%*	10,284	11,677	13,172	*0.1%*	*0.5%*	*0.5%*
Creswell	3,959	5,333	*3.0%*	5,663	7,573	9,813	*0.7%*	*1.2%*	*1.0%*
Dunes City	1,229	1,303	*0.6%*	1,292	1,474	1,665	*-0.1%*	*0.5%*	*0.5%*
Eugene	160,551	177,369	*1.0%*	192,607	232,099	273,794	*0.9%*	*0.7%*	*0.7%*
Florence	8,783	10,230	*1.5%*	10,579	12,518	14,635	*0.4%*	*0.7%*	*0.6%*
Junction City	5,942	6,100	*0.3%*	6,919	9,080	11,328	*1.4%*	*1.1%*	*0.9%*
Lowell	857	1,045	*2.0%*	1,108	1,352	1,620	*0.6%*	*0.8%*	*0.7%*
Oakridge	3,239	3,308	*0.2%*	3,278	3,344	3,320	*-0.1%*	*0.1%*	*0.0%*
Springfield	61,910	67,738	*0.9%*	70,278	76,443	81,677	*0.4%*	*0.3%*	*0.3%*
Veneta	2,737	4,561	*5.2%*	4,767	6,591	8,662	*0.5%*	*1.3%*	*1.1%*
Westfir	287	255	*-1.2%*	254	272	288	*0.0%*	*0.3%*	*0.2%*
Outside UGBs	63,544	63,277	*0.0%*	63,023	61,930	58,707	*0.0%*	*-0.1%*	*-0.2%*

Sources: U.S. Census Bureau, 2000 and 2010 Censuses; Forecast by Population Research Center (PRC).

Note: For simplicity each UGB is referred to by its primary city's name.

3.3.2 Projected Population

According to the 2020 US Census, the population of Lowell was 1,196. Since 2020, there have been several new developments in town that were not accounted for in the PSU estimate. These developments are adding approximately 35 EDUs to the system, which will add approximately 94 persons to the 2020 census number, pushing the population to 1,290. Using the AAGRs (from the table above) beyond this slated bump in population from 2021 onward, the population at the end of this planning period (2045) is projected to be 1,560.

4 WATER DEMAND ANALYSIS

4.1 Definitions

System water demand is the quantity of water that must enter the distribution system to meet all water needs in the community, including that for customers, system storage and equalization, firefighting, and line flushing. In addition to these demands, overall demand increases when leakage within the system is present.

Unaccounted-for water is the difference between the total amount of water sold (based on billing records) and the total amount delivered to the system (based on production meter readings). Unaccounted water does not include unmetered water that has been tracked, this could be water used to flush lines, test hydrants, line break losses, and any other use that is known and volumes reasonably estimated.

Water demand varies seasonally, typical with western Oregon, with the lowest usage occurring during winter months from November through April, and the highest usage occurring during summer months (peak season) from May through October. This is largely due to increased landscape irrigation during the warm, dry peak season months. For Lowell, the average daily demand during the peak month of August 2020 was 204,486 gallons per day. This is over double the average daily demand during February, March, April, and May of the same year.

The objective of this section is to determine the current water demand characteristics and project future water demand requirements to establish system component adequacy and sizing needs.

Water demand is often described in the following terms:

- **Average Annual Demand (AAD)** - The total volume of water delivered to the system in a full year expressed in gallons. An average over a five-year period is typically used for planning purposes.
- **Average Daily Demand (ADD)** - The total volume of water delivered to the system over a year (AAD) divided by 365 days. The average use in a single day expressed in gallons per day.
- **Maximum Month Demand (MMD)** - The average gallons per day average during the month with the highest water demand. The highest monthly usage typically occurs during a summer month.
- **Maximum Day Demand (MDD)** - The largest volume of water delivered to the system in a single day expressed in gallons per day. The water supply and treatment facilities should be designed to handle the maximum day demand.

- **Peak Hourly Demand (PHD)** - The maximum volume of water delivered to the system in a single hour expressed in gallons per day or gallons per minute. Distribution systems should be designed to adequately handle the peak hourly demand or maximum day demand plus fire flows, whichever is greater. During peak hourly flows, storage reservoirs must supply the demand in excess of the maximum day demand.

The demands described above, expressed in gallons per day (gpd), can be divided by the population or Equivalent Dwelling Units (EDUs) served. These calculations provide a demand per person or per capita, expressed in gallons per capita per day (gpcd) or gallons per day per EDU (gpd/EDU), respectively. These unit demands are then multiplied by projected population or EDUs to estimate future water demands for planning purposes. Demand per capita is used in this Plan to predict future water demand.

4.2 Current Water Demand

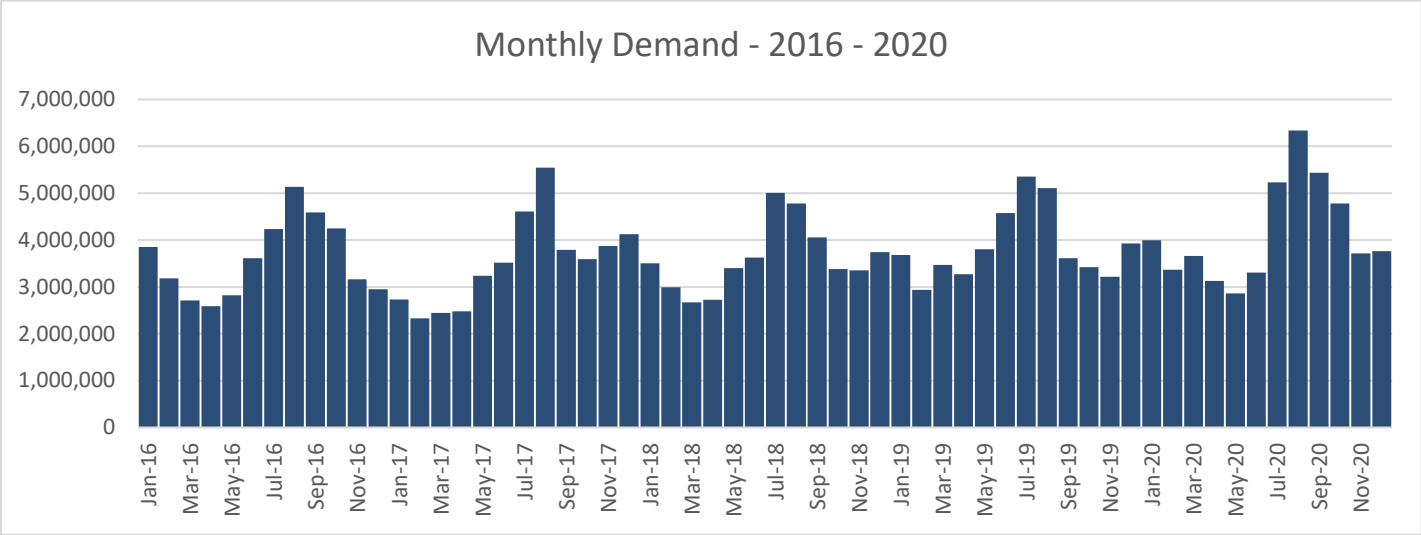
4.2.1 Water Production Records

Monthly water plant production records from January of 2016 through December of 2020 show a monthly production range of 2.3 million gallons to 6.3 million gallons to meet overall system demand. On average 123,064 gallons are treated and pumped into distribution daily. The maximum monthly demand was 6.3 million gallons in August of 2020.

4.2.2 Water Consumption

Monthly records of water demands were obtained from city staff for 2016 – 2020 and are summarized in Figure 4.2.2 below.

FIGURE 4.2.2 – MONTHLY WATER CONSUMPTION TRENDS



The highest monthly consumption of 6.3 MG occurred in August of 2020, while the lowest monthly consumption of 2.3 MG occurred in February of 2017. Several variables such as population, weather conditions, line breaks, construction usage, conservation measures, and/or the economy can lead to fluctuations in water consumption. Section 4.2.3 goes into further detail about some of these variables.

4.2.3 Water Demand

The water demand for Lowell from 2016 - 2020 was analyzed in terms of the average daily demand (ADD), maximum daily demand (MDD), and peak hourly demand (PHD) (see Section 4.1 for demand definitions). These values, summarized in Table 4.2.3 below, were calculated based on production data provided by the City for 2016 - 2020.

TABLE 4.2.3 – WATER DEMANDS, CURRENT AND PROJECTED

Lowell 2016-2020 Data		Population = 1,196	
Unit	ADD	MDD	PHD
gpd	123,064	246,127	615,318
Peaking Factor	1	2	5
gpcpd	103	206	514
Lowell 2045 Data		Population = 1,560	
Unit	ADD	MDD	PHD
gpd	160,518	321,035	802,588
Peaking Factor	1	2	5
gpcpd	103	206	514

The MDD and PHD were extrapolated through application of a peaking factor by multiplying the known ADD by the peaking factor. The MDD peaking factor was set at value of 2 for this analysis. The estimated MDD correlates well with the actual 2016-2020 water production records that show a maximum daily demand of 236,396 gallons on August 26th, 2020. Hourly flow data is not recorded, so we must rely on the peaking factors to estimate the peak hourly demand. The PHD peaking factor was set at a value of 5 for this analysis. At 802,588 gpd, the PHD equates to 557 gpm.

Many factors may influence MDD. MDD may fluctuate from month to month and year to year due to:

- Unusually high temperatures
- Number of consecutive days with high temperatures
- Overall summer rainfall levels
- Number of consecutive days without rainfall

Unusually hot and/or dry weather results in more outdoor irrigation, which increases the MDD. The economy may also affect MDD. The number tourists visiting the City can have a direct link to the water used and consumed.

Per capita demand, expressed in gallons per capita per day (gpcd), is the City's total demand divided by the estimated water delivery area population. Total demand includes water demand from all customers fed by the City water system, including industrial and commercial customers, such that the calculated per capita demand values exceed the amounts of water used by the typical individual. Per capita demand does not account for differences in customer demographics, climate, rainfall, or economic conditions. Thus, per capita demand may not accurately portray year-to-year water use. Per capita demand also does not account for changes in large volume users, which may not have any relationship to population or actual efficiency of use. Nevertheless, per capita demands do provide insight about water demand trends over time and can be used to compare water demand from the City's customers to that of other communities.

Water use in America is documented by the U.S. Department of the Interior in the 2018 U.S. Geological Survey - Circular 1441, last updated in 2015. According to the study, the average domestic per capita water use for the state of Oregon is 107 gallons per capita per day (gpcd). The average daily per capita unit demand for Lowell varied between 62 and 70 gpcd over the past five years based on population and annual total demand. This low figure for gpcd in Lowell may be due to conservation efforts, and the trend in smaller lot sizes (less irrigation) than the average town in Oregon. It should also be noted that Lowell has fewer than average commercial and industrial users in town, which can skew the data to a larger gpcd in towns with more commercial and industrial users.

4.2.4 Unaccounted Water

The difference between the metered quantity of water produced (water demand) and the quantity of water measured exiting the distribution system (water sold) is unaccounted water. This comparison is typically called a "water balance". Measured water exiting the system is primarily measured through individual customer water meters (water sold). Other sources of exiting water include authorized non-consumptive uses such as pipeline flushing and firefighting and unauthorized uses such as water theft, line breaks, and leakage.

In addition to "real" water loss resulting from leakage, unmetered flushing, etc., unaccounted water can also include "apparent" water loss due to meter inaccuracies or meter reading errors. In general, as water meters age they tend to read lower and lower resulting in higher and higher "apparent" water loss.

If there were no leakage in the system, all water meters were 100% accurate, and all water used for firefighting and system flushing was measured, there would be zero unaccounted water. Every water system has a certain amount of leakage, water meters are not 100% accurate, and it is rare for all water used in town to be metered and measured. Annual values for Lowell indicate a 5-year average unaccounted water total of 11.6 million gallons per year or 25.7% of the total water demand. This is quite a significant amount of water loss.

Per OAR 690-086 (Water Resources Department – Water Management and Conservation Plans), if the annual water audit indicates leakage exceeding 10%, a regularly scheduled and systematic program should be in place to detect leaks in the distribution system using methods and technology appropriate to the size and capabilities of the municipal water supplier. Other provisions in OAR 690-086 can require system-wide leak repair or line replacement programs to reduce leakage to no more than 15% under certain circumstances such as water permit extension requests or water diversion expansions or initiations.

Records are not available to determine how much of the current 25.7% unaccounted water is actual leakage. Some of the unaccounted water can be attributed to water system flushing through fire hydrants, unmetered sales of water, and meter inaccuracies. Efforts should be made to measure, and record water used for flushing and other authorized non-metered uses. Metering and recording of all plant use water should also begin. The City should also continue efforts to detect and repair leaks when discovered.

4.2.5 EDU Analysis

Based on water sales records from January 2016 to December of 2020, the average quantity of water sold to a typical single-family dwelling unit on a 3/4" meter is 4,716 gallons per month. This volume sold per month becomes the basis for Equivalent Dwelling Unit (EDU) calculations with 1 EDU = 4,716 gallons per month in metered sales. Other users can then be described as an equivalent number of EDUs based on their relative water consumption. For example, a

commercial business that had an average metered consumption of 9,432 gallons per month uses twice the amount of water as the typical single-family dwelling and can be considered 2 EDUs. Total water sold for the same period indicates the total number of system EDUs for the City of Lowell water system is 536 EDUs.

TABLE 4.2.5 – EDU ANALYSIS BY METER SIZE

		Residential	Commercial				Industrial	
		3/4"	3/4"	1"	1-1/2"	2"	3/4"	1"
Total Number of Meters:	457	423	16	2	1	12	2	1
Total Number of EDUs:	536	423.00	16.00	3.56	4.00	85.33	2.00	1.78

4.3 Future Water Demand

4.3.1 Basis for Projections

Water demand estimates for future years are determined by multiplying the current unit demand values (gallons per person or per EDU) by the projected number of future users in the water system. It is assumed new users added to the system will consume water at the same rate as current users. Population projections are presented in Section 3.2, and unit water demand values are presented in Section 4.2. The projections are based on the county average annual growth rate of 0.20% - 0.30% for the planning period, as defined in Section 3.2.2.

4.3.2 Water Demand Projections

Demand projections for the planning period were calculated based on the following values for ADD and MDD calculated from 2016 - 2020 water demand data provided by the City:

- ADD unit demand = 103 gpcd
- MDD unit demand = 206 gpcd

4.3.3 Future Unaccounted Water Assumptions

As discussed earlier in this section, unaccounted water in the City of Lowell averages 25.7%. This means the City is unable to fully account for all water they produce. This could be a result of:

- Meter inaccuracies (master and/or consumption)
- Accounting or entry errors
- Software glitches or errors
- Timing problems (between reading master vs. consumption)
- Not recording all public water use (fire, water plant, City Hall, parks, etc.)
- Actual leakage

Until it is known how much of the unaccounted water levels are a result of leakage, it is not appropriate to assume any change in the future water production rates. Making assumptions that future water demands would be less due to efforts, or results that are only hypothetical at this point, could potentially leave the City in a water supply deficit. However, if in the future the City reduces demand through leak repairs, conservation, or other proactive means, modifying projected water demands in plan updates would be appropriate. Until that time, the projected demands in this report should stand. Therefore, the projected water demands described include the current level of unaccounted water.

5 DESIGN CRITERIA AND SERVICE GOALS

5.1 Design Life of Improvements

The design life of a water system component is the time that the component is expected to be useful based on its intended use and required function. Design life is sometimes referred to as service life or life expectancy. Actual service life can depend on factors such as the type and intensity of use, type and quality of materials used in construction, and the quality of workmanship during installation and proper maintenance. Establishing a design life also provides an expected service life to aid in planning for future capital improvements.

The planning period for a water system and the design life for its components may not be identical. The typical 20-year planning period is limited due to the need to limit economic burdens on current population and inaccuracies that result from attempts at projecting needs too far into the future. Design life can be greater or less than the planning period. For example, a properly constructed and maintained storage tank may have a design life of 60 years, but the projected fire flow and consumptive water demand for a planning period of 20 years determine the size of the storage tank. At the end of the initial 20-year planning period, water demand may be such that an additional storage tank is required; however, the existing tank with a design life of 60 years would still be useful and remain in service for another 40 years. The typical design life for system components is discussed below.

5.1.1 Equipment and Structures

Equipment used in water systems such as pumps, valves, and other major treatment related equipment typically has an expected design life of 20 years and are therefore sized based on projections for their expected useful life. Minor equipment such as chemical feed pumps, turbidimeters, and other instrumentation typically have an expected useful life of 10-15 years and may need to be replaced or updated within the 20-year planning period. The useful life of some equipment can be extended with proper maintenance, and provided that no capacity issues prevent continued use, it is not uncommon for large equipment such as pumps to remain in service for more than 30 years. Major structures used in water systems, such as concrete basins and intake wet wells, have expected useful lives of 50 years or more when properly constructed and maintained.

5.1.2 Distribution Piping

Water distribution piping typically has an expected useful life of more than 50 years, but the quality of materials and workmanship, construction/installation procedures, maintenance programs, operating procedures, and adequate sizing are all critical factors that impact the longevity of a pipeline. Sections of buried steel piping commonly exhibits significant corrosion and leakage within 30 years, while cement mortar lined ductile iron piping can last up to 100

years when properly designed and installed. PVC and HDPE pipe manufacturers also claim a 100-year service life. Properly installed fused HDPE piping has the added benefit over long service life of being highly resistant to damage/breaks due to seismic events.

5.1.3 Treated Water Storage

Distribution storage tanks typically have a design life ranging from 60 years (painted steel construction) to 80 years (concrete construction). Steel tanks with a glass-fused coating have a design life close to the 80 years seen in concrete constructed tanks. The actual service life of the finished tank will depend on the quality of materials, the workmanship during installation, and the timely administration of maintenance activities. Several practices, such as: scheduled maintenance and inspections, the use of cathodic protection, regular cleaning and sealing can assure or even extend the service life of the tank.

5.2 Sizing Capacity and Service Goals

The 20-year projected water demands presented in Section 4 will be used to size improvements. Methods and demands used are discussed below.

5.2.1 Water Supply

The current water supply, including pumping capacity, should at minimum be adequate to meet the projected 20-year maximum daily demand (MDD). Considering the difficulty in obtaining new water rights, raw water supply should meet a longer-term need and it is not unreasonable to plan today for 60-year demand water sources. Currently, the MDD is 246,127 gpd, and at the end of the planning period (2021-2045), the projected MDD is 321,035 gpd. To plan for long-term water supply options, projections beyond the planning period are shown, assuming the same growth rate as the planning period.

- 20-Year Supply Capacity Goal: MDD of 311,650 gpd (0.48 cfs)
- 40-Year Supply Capacity Goal: MDD of 359,377 gpd (0.56 cfs)
- 60-Year Supply Capacity Goal: MDD of 413,180 gpd (0.64 cfs)

5.2.2 Water Treatment

Water treatment plant equipment and components such as pumps, filters, flocculators, etc. are typically sized to provide for the 20-year MDD. Filter capacities are typically sized for 20-year flows, but media or membranes may have to be replaced during that 20-year period. Any discussion of treatment sizing must include an additional allowance for water use that would occur at the treatment plant itself if demand estimates do not already include such allowances. Difficult to construct items with a long design life, such as buried piping and concrete wet wells for surface water intakes should, at minimum, be sized to accommodate projected 40 to 50-year

flow capacities. Other components such as concrete clearwells and buildings may be oversized beyond the 20-year MDD depending on future plans and ease of providing infrastructure for expansion now versus later.

5.2.3 Fire Protection

Per the 2019 Oregon Fire Code, the minimum fire-flow requirements for one- and two-family dwellings not exceeding 3,600 square feet shall be 1,000 gpm for one hour. When square footage exceeds 3,600 or for other types of buildings the minimum fire flow is 1,500 gpm for a minimum of two hours. When flows of 1,750 gpm or less are required a single fire hydrant is required to be accessible within 250 feet (200 feet on dead-end streets) resulting in a maximum hydrant spacing of 500 feet (400 feet on dead-end streets).

For other types of structures, the requirements of the Oregon Fire Code require flows up to 8,000 gpm (2014 OFC Table B105.2). For fire flows less than 2,750 gpm a flow duration of 2 hours is required. For flows between 3,000 and 3,750 gpm a duration of 3 hours is required. For flows of 4,000 gpm and above a duration of 4 hours is required. The minimum number of hydrants available at a specific location, the average spacing between hydrants, and the maximum distance from any point on the street to a hydrant are dependent on the fire-flow requirement. For structures, which require 4,000 gpm, at least 4 hydrants must be available spaced not more than 350 feet apart.

Fire Flow Capacity Goals

- Residential Only Outlying Areas; 1,000 gpm for one hour
- General Commercial Areas; 1,500 gpm for two hours
- Central Town Area, Industrial, and Schools; 3,500 gpm for three hours

5.2.4 Treated Water Storage

Total storage capacity must include reserve storage for fire suppression, equalization storage, and emergency storage. In larger communities it is common to provide storage capacity equal to the sum of equalization storage plus the larger of fire storage or emergency storage. In small communities it is recommended that total storage be the sum of all three: fire plus equalization plus emergency storage. This is considered prudent since it is possible for fire danger to increase during water emergencies, such as power failures when alternative sources of heating and cooking might be used.

Equalization storage is typically set at 20-25% of the MDD to balance out the difference between peak demand and supply capacity. When peak hour flows are known, equalization storage is the difference between the MDD and PHD for a duration of 8 hours [(PHD-MDD) x 8 hrs.]. Equalization storage typically rises and falls daily or hourly as storage tank levels fluctuate normally.

Emergency storage is required to protect against a total loss of water supply such as would occur with a broken line, an electrical outage, equipment breakdown, or source contamination. Emergency storage should be an adequate volume to supply the system's average daily demand for the duration of a possible emergency. For most systems, emergency storage should be equal to one maximum day of demand or 2.5 to 3.0 times the average day demand.

Fire reserve storage is needed to supply fire flow throughout the water system to fight a major fire. The fire reserve storage is based on the maximum flow and duration of flow required to confine a major fire.

Another important design parameter for treated water storage reservoirs is elevation. Efforts should be made to locate all reservoirs at the same elevation, if possible, within a pressure zone. If a consistent water surface is maintained in all reservoirs, the need for altitude valves, pressure reducing valves (PRVs), booster pumps and other control devices is minimized. The ideal pressure range for a distribution system is between 40 and 80 psi.

If there are subdivisions at higher elevations than allowed within the main pressure zone, a design review should be done to determine whether elevated storage tanks or booster pump stations are the best solution. Tank size needs to be determined on a case-by-case basis as part of the design review. Fire pumps with a capacity of at least 1,000 gpm together with standby generators should be provided when a storage tank is not possible. Minimum tank size should be 120,000 gallons for fire storage (1,000 gpm for 2 hours) plus the MDD per capita. For very small developments, individual sprinkler systems may be most appropriate.

5.2.5 Distribution System

Distribution mains are typically sized to convey projected maximum day flows plus simultaneous fire flows while maintaining at least 20 psi at all connections or projected peak hourly flows

while maintaining approximately 40 psi, whichever case is more stringent. Looped mains should be at least six inches in diameter to provide minimum fire flow capacity. The State of Oregon requires a water distribution system be designed and installed to always maintain a pressure of at least 20 psi at all service connections (at the property line), even during fire flow conditions. OAR 333-061-0050 governs the construction standards for water systems including distribution piping. The size and layout of pipelines must be designed to deliver the flows indicated above.

The installation of permanent dead-end mains and dependence of relatively large areas on a single main should be avoided. In all cases, except for minor looping using 6-inch or larger pipe, a hydraulic analysis should be performed to ensure adequate sizing.
Distribution Capacity Goal: Worst Case of projected MDD + fire flow with at least 20 psi residual pressure or Projected PHD with 40 psi residual pressure.

5.3 Basis for Cost Estimates

The cost estimates presented in this Plan will typically include four components: construction cost, engineering cost, contingency, and legal/non-engineering project management costs. Each of the cost components is discussed in this section. The estimates presented herein are preliminary and are based on the level and detail of planning presented in this Study. Construction costs are based on competitive bidding as public works projects with State prevailing wage rates. As projects proceed and as site-specific information becomes available, estimates should be updated accordingly. The cost estimates for this plan are in section 8, Improvement Alternatives. Overall costs and totals can be found in section 9, Capital Improvement Plan.

5.3.1 Construction Costs

The estimated construction costs in this plan are based on actual construction bidding results from similar work, published cost guides, and other construction cost experience. Construction costs are preliminary budget level estimates prepared without design plans and details. Future changes in the cost of labor, equipment, and materials may justify comparable changes in the cost estimates presented herein. For this reason, common engineering practices usually tie the cost estimates to an index that varies in proportion to long-term changes in the national economy. The Engineering News Record (ENR) construction cost index (CCI) is most used. This index is based on the value of 100 for the year 1913. The percent change is also calculated from the previous December to see how the fluctuation of prices has changed from December to December. Cost estimates presented in this Plan are based on May 2022 dollars with an ENR CCI of 13004. For construction performed in later years, costs should be projected based on the then current year ENR Index using the following equation:

Updated Cost = Plan Cost Estimate x (current ENR CCI /13004)

5.3.2 Engineering Costs

The cost of engineering services for major projects typically includes special investigations, predesign reports, surveying, foundation exploration, preparation of contract drawings and specifications, bidding services, construction management, inspection, construction staking, start-up services, and the preparation of operation and maintenance manuals. Depending on the size and type of project, engineering costs may range from 18% to 25% of the contract cost when all the above services are provided. The lower percentage applies to large projects without complicated mechanical systems. The higher percentage applies to small or complicated projects.

Engineering costs for basic design and construction services presented in this Plan are estimated at 20% of the estimated total construction cost. Other engineering costs such as specialized geotechnical exploration, easement research and preparation, and/or specific pre-design reports will typically be in addition to the basic engineering fees charged by firms.

5.3.3 Contingencies

A contingency factor equal to approximately twenty percent (20%) of the estimated construction cost has been added to the budgetary costs estimated in this Plan. In recognition that the cost estimates presented are based on conceptual planning, allowances must be made for variations in final quantities, bidding market conditions, adverse construction conditions, unanticipated specialized investigation and studies, and other difficulties which cannot be foreseen at this time may tend to increase final costs. Upon final design completion of any project, the contingency can be reduced to 10%. A contingency of at least 10% should always be maintained going into a construction project to allow for variances in quantities of materials and unforeseen conditions.

5.3.4 Legal and Management

An allowance of five percent (5%) of construction cost has been added for legal and other project management services. This allowance is intended to include internal project planning and budgeting, funding program management, interest on interim loan financing, legal review fees, advertising costs, wage rate monitoring, and other related expenses associated with the project that could be incurred.

5.3.5 Land Acquisition

Some projects may require the acquisition of additional right-of-way, property, or easements for construction of a specific improvement. The need and cost for such expenditures is difficult to predict and must be reviewed as a project is developed. Effort was made to include costs for land acquisition, where expected, within the cost estimates included in this Plan.

6 REGULATORY CONDITIONS

6.1 Responsibilities as a Water Supplier

Per OAR 333-061-0025, water suppliers are responsible for taking all reasonable precautions to assure that the water delivered to water users does not exceed maximum contaminant levels, water system facilities are free of public health hazards and water system operation and maintenance are performed as required by both these rules and the equipment manufacturer's requirements. The list of reasonable precautions includes the following tasks:

1. Routinely collecting and submitting water samples for laboratory analyses at the frequencies prescribed by OAR 333-061-0036
2. Taking immediate corrective action when the results of analyses or measurements indicate that maximum contaminant levels have been exceeded and report the results of these analyses as prescribed by OAR 333-061-0040
3. Reporting as prescribed by OAR 333-061-0040, the results of analyses or measurements which indicate that maximum contaminant levels have not been exceeded
4. Notifying the public and all customers of the water system, as prescribed by OAR 333-061-0042, when any maximum contaminant levels have been exceeded
5. Notifying all customers served by the water system, as prescribed by OAR 333-061-0042, when reporting requirements are not being met, when public health hazards are found to exist in the system, or when the operation of the system is subject to a permit or a variance
6. Maintaining monitoring and operating records and making these records available for review when the system is inspected
7. Maintaining a pressure of no less than 20 pounds per square inch (psi) at all service connections
8. Following-up on complaints relating to water quality from users and maintaining records and reports on actions undertaken
9. Conducting an active program for identifying and controlling cross connections
10. Submitting to OHA, plans prepared by a professional engineer registered in Oregon for review and approval before undertaking the construction of new water systems or major modifications to existing water systems, unless exempted from this requirement
11. Assuring that the water system is in compliance with OAR 333-061-0032 relating to water treatment
12. Assuring that the water system is in compliance with OAR 333-061-0210 through OAR 333-061-0272 relating to certification of water system operators

13. Assuring that Transient Non-Community water systems utilizing surface water sources or groundwater sources under the influence of surface water are in compliance with OAR 333-061-0065(2)(c) relating to required special training

In the last 5 years, the City of Lowell has had no Health Based violations and no reporting violations. For a more detailed explanation of the City of Lowell water system data, refer to the Oregon Public Health Drinking Water Data Online:

https://yourwater.oregon.gov/inventory.php?pwsno=00492

6.2 Public Water System Regulations

Water providers should always be informed of current standards, which can change over time, and should also be aware of pending future regulations. As of this writing, OAR Chapter 333, Division 061 covering Public Water Systems is over 300 pages in length, with the most recent version effective as of January 1, 2022. This section is not meant to be a comprehensive list of all requirements but a general overview of the requirements. Refer to OAR 333-061 for further clarification on any subject in this section. The rules can be found online at:

https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/RULES/Documents/pwsrules.pdf

Drinking water regulations were established in 1974 with the signing of the Safe Drinking Water Act (SDWA). This act and subsequent regulations were the first to apply to all public water systems in the United States. The Environmental Protection Agency (EPA) was authorized to set standards and implement the Act. With the enactment of the Oregon Drinking Water Quality Act in 1981, the State of Oregon accepted primary enforcement responsibility for all drinking water regulations within the state. Requirements are detailed in OAR Chapter 333, Division 061. The SDWA and associated regulations have been amended several times since inception with the goal of further protection of public health.

SDWA requires the EPA to regulate contaminants which present health risks, are known or are likely, to occur in public drinking water supplies. For each contaminant requiring federal regulation, EPA sets a non-enforceable health goal, or maximum contaminant level goal (MCLG). This is the level of a contaminant in drinking water below which there is no known or expected health risk. The EPA is then required to establish an enforceable limit, or maximum contaminant level (MCL), which is as close to the MCLG as is technologically feasible, taking cost into consideration. Where analytical methods are not sufficiently developed to measure the concentrations of certain contaminants in drinking water, the EPA specifies a treatment technique instead of an MCL to protect against these contaminants.

Water systems are required to collect water samples at designated intervals and locations. The samples must be tested in State approved laboratories. The test results are then reported to the State, which determines whether the water system complies or is in violation of the regulations.

There are three main types of violations:

- Maximum Contaminant Level (MCL) violation — occurs when tests indicate that the level of a contaminant in treated water is above the EPA or State's legal limit (states may set standards equal to, or more protective than, EPA's). These violations indicate a potential health risk, which may be immediate or long-term.

- Treatment Technique (TT) violation — occurs when a water system fails to treat its water in the way prescribed by EPA (for example, by not disinfecting). Like MCL violations, treatment technique violations indicate a potential health risk to consumers.

- Monitoring and Reporting (M&R) violation — occurs when a system fails to test its water for certain contaminants or fails to report test results in a timely fashion. If a water system does not monitor its water properly, no one can know whether its water poses a health risk to consumers.

If a water system violates EPA/State rules, it is required to notify the State and the public. States are primarily responsible for taking appropriate enforcement actions if systems with violations do not return to compliance. States are also responsible for reporting violation and enforcement information to the EPA quarterly. To comply with the regulations water systems must provide adequate treatment techniques, operate treatment processes to meet performance standards, and properly protect treated water to prevent subsequent contamination after treatment. A separate set of standards exists to address the beneficial use of public water, conservation, curtailment, and water planning. Governed by the Oregon Water Resources Department, OAR 690-086 includes provisions governing water consumption and conservation in Oregon. Section 690-086 requires that all public water systems develop and maintain a planning document known as a Water Management and Conservation Plan (WMCP). The WMCP includes four major components:

- Water System Description
- Water Conservation Plan
- Water Curtailment Plan
- Long-Range Water Supply Plan

The purpose of the plan is to help an agency plan for and responsibly and beneficially utilize public water resources for human demands. The goal of the planning is to reduce or eliminate

water demand that is not beneficial through efficiencies, conservation, education, and other practices. The City of Lowell is developing a WMCP in conjunction with this water master planning effort.

6.3 Current Standards

The EPA-established, National Primary Drinking Water Regulations, lists 87 contaminants. The list is broken into six categories as follows, with the number of contaminants in parentheses: Microorganism (7), Disinfection Byproduct (4), Disinfectant (3), Inorganic Chemical (16), Organic Chemical (53) and Radionuclides (4). These standards either have established MCLs or treatment techniques. In addition, there is a list of National Secondary Drinking Water Regulations that include 15 contaminants and the desired goals, and in the case of fluoride, may require special public notice.

6.3.1 Surface Water Treatment Rules

The Surface Water Treatment Rules (SWTR's) are a group of rules that have been developed by the EPA to protect the drinking water of communities. The Rules include the following:

- Surface Water Treatment Rule – June 1989
- Interim Enhanced Surface Water Treatment Rule (IESWTR) – December 1998
- Filter Backwash Recycling Rule (FBRR) – June 2001
- Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR) – January 2002
- Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) – January 2006

Not all the above rules will be discussed in this section. This is intended to provide summaries that are most applicable to the City of Lowell. In the SWTR's and the other related rules, Lowell is referred to as a "Subpart H Schedule 4" system. This refers to a system that uses surface water or ground water under the direct influence of surface water (GWUDI) are filtered using slow sand, diatomaceous earth, or alternative filtration; and serve fewer than 10,000 persons.

All water systems using surface water must provide a total level of filtration and disinfection treatment to remove/inactivate 99.9 percent (3-log) of Giardia lamblia, and to remove/inactivate 99.99 percent (4-log) of viruses. In addition, filtered water systems must physically remove 99 percent (2-log) of Cryptosporidium. Systems with source water Cryptosporidium levels exceeding specified limits must install and operate additional treatment processes.

Filtered water systems must meet specified performance standards for combined filter effluent turbidity levels. Water systems using conventional and direct filtration must also record individual filter effluent turbidity and take action if specified action levels are exceeded. When

more than 1 filter exists, each filter's effluent turbidity must be monitored continuously and recorded at least every 15 minutes. The combined flow from all filters must have a turbidity measurement at least every four hours by grab sampling or continuous monitoring. Turbidity monitoring must occur prior to any storage such as a clearwell or contact tank. Turbidity monitoring equipment must be calibrated using an approved method at least once per quarter. General requirements for systems utilizing conventional or direct filtration are:

- Individual filter turbidity monitored continuously and recorded every 15 minutes or less
- Combined filter turbidity monitored continuously or grab sample taken at least every 4 hours
- Combined filter turbidity less than 1 NTU in 100% of measurements
- Combined filter turbidity less than or equal to 0.3 NTU in 95% of measurements in a month
- Specific follow-up actions if individual filter turbidity exceeds 1.0 NTU twice

Filtered water systems that recycle spent filter backwash water or other waste flows must return those flows through all treatment processes in the filtration plant. Systems wishing to recycle filter backwash water must provide notice to the State including a plant schematic showing the origin, conveyance, and return location of recycled flows. Design flows, observed flows, and typical recycle flows are also required along with a state-approved plant operating capacity.

6.3.2 Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)

LT2ESWTR was published by the EPA on January 5, 2006. The rule requires source water monitoring for public water systems that use surface water or ground water under the direct influence of surface water (GWUDI). Based on the system size and filtration type, systems must monitor for Cryptosporidium, E. coli, and turbidity. Source water monitoring data will be used to categorize the source water Crypto concentration into four "bin" classifications that have associated treatment requirements.

Systems serving fewer than 10,000 people are required to conduct 12 months of E. coli monitoring and 12-24 months of Crypto monitoring if E. coli trigger levels are exceeded. The rule provides other options to comply with the initial source water monitoring that include either submitting previous Crypto data meeting (grandfathered data) the requirements or committing to provide a total of at least 5.5-log treatment for Cryptosporidium. A second round of source water monitoring will follow 6 years after the system makes its initial bin determination.

6.3.3 Disinfectants and Disinfection Byproducts

Disinfection treatment chemicals used to kill microorganisms in drinking water can react with naturally occurring organic and inorganic matter in source water called "DBP precursors" to form disinfection byproducts (DBPs). Some disinfection byproducts have been shown to cause cancer and reproductive effects in lab animals and suggested bladder cancer and reproductive effects in humans. The challenge is to apply levels of disinfection treatment needed to kill disease-causing microorganisms while limiting the levels of disinfection byproducts produced. The primary disinfection byproducts of concern in Oregon are the total trihalomethanes (TTHM) and the haloacetic acids (HAA5).

Disinfection byproducts must be monitored throughout the distribution system at frequencies of daily, monthly, quarterly, or annually. This depends on the population served, type of water source, specific disinfectant applied and in accordance with an approved monitoring plan. Disinfectant residuals must be monitored at the same locations and frequency as coliform bacteria.

Total organic carbon (TOC) is an indicator of the levels of DBP precursor compounds in the source water. Systems using surface water sources and conventional filtration treatment must monitor source water for TOC and alkalinity monthly and practice enhanced coagulation to remove TOC if it exceeds 2.0 mg/L as a running annual average.

Compliance is determined based on meeting maximum contaminant levels (MCL's) for disinfection byproducts and maximum levels for disinfectant residual (MRDL) over a running annual average of the sample results, computed quarterly. A summary is as follows:

- TTHM/HAA5 monitoring required in distribution system. One sample per quarter for systems serving 500-9,999 persons. One sample per year in warmest month required for systems serving less than 500.
- MCL for TTHM is 0.080 mg/L. MCL for HAA5 is 0.060 mg/L.
- Any system having TTHM > 0.064 mg/L or HAA5 > 0.048 based on a running annual average must conduct disinfection profiling.
- TOC and alkalinity monitoring in source water monthly. Enhanced coagulation if TOC greater than 2.0 mg/L
- Comply with MRDL. Limit for chlorine (free Cl2 residual) is 4.0 mg/L. Limit for chloramines is 4.0 mg/L (as total Cl2 residual). Limit for chlorine dioxide is 0.8 mg/L (as ClO2)
- Bromate MCL of 0.010 mg/L
- Chlorite MCL of 1.0 mg/L

6.3.4 Stage 2 Disinfectants and Disinfection Byproducts Rule (DBPR)

The Stage 2 DBPR was published by the EPA on January 4, 2006. The rule builds on existing regulations by requiring water systems to meet disinfection byproduct (DBP) MCL's at each monitoring site in the distribution system. The Stage 1 Rule controls average DBP levels across distribution systems, and the Stage 2 Rule controls the occurrence of peak DBP levels within distribution systems.

The rule requires all community water systems to conduct an Initial Distribution System Evaluation (IDSE). The goal of the IDSE is to characterize the distribution system and identify monitoring sites where customers may be exposed to high levels of TTHM and HAA5. There are four ways to comply with the IDSE requirements: Standard Monitoring, System Specific Study, 40/30 Certification and Very Small System (VSS) Waiver.
Standard monitoring (SM) is one year of increased monitoring for TTHM and HAA5 in addition to the data being collected under Stage 1 DBPR. This data will be used with the Stage 1 data to select Stage 2 DBPR TTHM and HAA5 compliance monitoring locations. Any system may conduct standard monitoring to meet the Initial Distribution System Evaluation (IDSE) requirements of the Stage 2 DBPR. The number of monitoring sites, the monitoring periods and monitoring frequency vary depending on population served.
Systems that have extensive TTHM and HAA5 data (including Stage 1 DBPR compliance data) or technical expertise to prepare a hydraulic model may choose to conduct a system specific study (SSS) to select the Stage 2 DBPR compliance monitoring locations.

The term "40/30" refers to a system that during a specific time period has all individual Stage 1 DBPR compliance samples less than or equal to 0.040 mg/L for TTHM and 0.030 mg/L for HAA5 and no monitoring violations during the same period. These systems have no IDSE monitoring requirements but will still need to conduct Stage 2 DBPR compliance monitoring.

The Very Small System (VSS) Waiver applies to systems that serve fewer than 500 people and have eligible TTHM and HAA5 data. The VSS eligibility does not depend on the actual TTHM and HAA5 sample results. These systems also have no IDSE monitoring requirements but will still need to conduct Stage 2 DBPR compliance monitoring. 40/30 certifications were previously due for systems larger than 10,000 persons.

6.3.5 Total Coliform Rule (TCR) and Revised Total Coliform Rule (RTCR)

The total coliform rule was established by the EPA in 1989 to reduce the risk of waterborne illness resulting from disease-causing organisms associated with animal or human waste. This rule was recently revised and effective on April 1, 2016, and is called the Revised Total Coliform Rule. Routine samples collected by Oregon public water suppliers are analyzed for total coliform bacteria. The number of monthly samples required varies based on population served. For Lowell, currently a minimum of two samples per month are required. Once the population

exceeds 2,500 then three samples will be required. Monitoring changes pertaining to RTCR are as follows; at non-community water systems operated seasonally, monthly monitoring will now be required.

Compliance is based on the presence or absence of total coliforms in any calendar month. Sample results are reported as "coliform-absent" or "coliform-present". If any routine sample is coliform-present, a set of at least three repeat samples must be collected within 24 hours. If any repeat sample is total coliform-present, the system must analyze that culture for fecal coliforms or E. coli, and must then collect another set of repeat samples, unless the MCL has been violated and the system has notified the state. Following a positive routine or repeat total coliform result, the system must collect a minimum of three routine samples the following month only for those who monitor quarterly and there is no longer required for those monitoring monthly. Both seasonal and non-community water systems will monitor monthly instead of quarterly.

Systems which collect fewer than 40 samples per month are allowed no more than one coliform-present sample per month including any repeat sample results. Larger systems (40 or more samples per month) are allowed no more than five percent coliform-present samples in any month including any repeat sample results. Confirmed presence of fecal coliform or E. coli presents a potential acute health risk and requires immediate notification of the public to take protective actions such as boiling or using bottled water. Any fecal coliform-positive repeat sample or E. coli-positive repeat sample, or any total coliform-positive repeat sample following a fecal or E. coli-positive routine sample is a violation of the MCL. For more information on the Revised Total Coliform Rule please visit the website below:
http://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/RULES/Pages/revised-coliform.aspx

6.3.6 Lead and Copper Rule (LCR)

Excessive levels of lead and copper are harmful, and rules exist to limit exposure through drinking water. Lead and copper enter drinking water mainly from corrosion of plumbing materials containing lead and copper. Lead comes from solder and brass fixtures. Copper comes from copper tubing and brass fixtures. Protection is provided by limiting the corrosivity of water sent to the distribution system. Treatment alternatives include pH adjustment, alkalinity adjustment, or by adding passivating agents such as orthophosphates.

Samples from community systems are collected from homes built prior to the 1985 prohibition of lead solder in Oregon. One-liter samples of standing water (first drawn after 6 hours of non-use) are collected at homes identified in the water system sampling plan. Two rounds of initial sampling are required, collected at 6-month intervals. Subsequent annual sampling from a reduced number of sites is required after demonstration that lead and copper action levels are met. After three rounds of annual sampling, samples are required every 3 years. The number of

initial and reduced samples required is dependent on the population served by the water system.

In each sampling round, 90% of samples from homes must have lead levels less than or equal to the Action Level of 0.015 mg/L and copper levels less than or equal to 1.3 mg/L. Water systems with lead above the Action Level must conduct periodic public education, and either install corrosion control treatment, change water sources, or replace plumbing. Testing requirements are as follows:

- Have sampling plan for applicable homes
- Collect required samples
- Meet Action Levels for Lead and Copper (0.015 mg/L for Lead and 1.3 mg/L for Copper)
- Rule out source water as a source of significant lead levels
- If Action Levels not met, provide corrosion control treatment and other steps

On December 22, 2020 EPA published the 2020 Final Revisions to the Lead and Copper Rule. The latest rule notes the following revisions:

- Using science-based testing protocols to find more sources of lead in drinking water
- Establishing a trigger level to jumpstart mitigation earlier and in more communities
- Drive more LSL replacements
- Required testing in schools and childcare facilities
- Requiring water systems to identify and make public the locations of lead service lines

At this time, the City of Lowell needs to sample at 20 sites every 6 months; if the results are below the action level, they may then get a reduction to 10 sites tested every year for two years, and then finally 10 sites every 3 years.

6.3.7 Inorganic Contaminants

The level of many inorganic contaminants is regulated for public health protection. These contaminants are both naturally occurring and can result from agriculture or industrial operations. Inorganic contaminants most often come from the source of water supply but can also enter water from contact with materials used for pipes and storage tanks. Regulated inorganic contaminants include arsenic, asbestos, fluoride, mercury, nitrate, nitrite, and others. A possible future MCL for nickel is currently being evaluated by EPA. Manganese may also become a primary drinking water contaminant in the future.

Compliance is achieved by meeting the established MCLs for each contaminant. Systems that cannot meet one or more MCL must either install treatment systems (such as ion exchange or reverse osmosis) or develop alternate sources of water. Various sampling schedules are applicable for inorganic contaminants, but a minimum of annual sampling should be completed.

6.3.8 Organic Chemicals

Organic contaminants are regulated to reduce exposure to harmful chemicals through drinking water. Examples include acrylamide, benzene, 2,4-D, styrene, toluene, and vinyl chloride. Major types of organic contaminants are Volatile Organic Chemicals (VOCs) and Synthetic Organic Chemicals (SOCs). Organic contaminants are usually associated with industrial or agricultural activities that affect sources of drinking water supply, including industrial and commercial solvents and chemicals, and pesticides. These contaminants can also enter from materials in contact with the water such as pipes, valves and paints and coatings used inside water storage tanks.

At least one test for each contaminant from each water source is required during every 3-year compliance period. Public water systems serving more than 3,300 people must test twice during each 3-year compliance period for SOCs. Public water systems using surface water sources must test for VOCs annually.

Compliance is achieved by meeting the established MCL for each contaminant. Quarterly follow up testing is required for any contaminants that are detected above the specified MCL. Only those systems determined by the State to be at risk must monitor for dioxin. Water systems using polymers containing acrylamide or epichlorohydrin in their water treatment process must keep their dosages below specified levels. Systems that cannot meet one or more MCL must either install or modify water treatment systems (such as activated carbon and aeration) or develop alternate sources of water. A summary of organic chemicals is as follows:

- At least one test for each contaminant (for each water source) every 3-year compliance period
- Sample twice each compliance period for each SOCs when system over 3,300 people
- Test VOCs annually
- Quarterly follow up testing required for any detects above MCL
- Maintain polymer dosages in treatment process below specified levels
- MCLs vary based on contaminant

6.3.9 Radiologic Contaminants

Radioactive contaminants, both natural and man-made, can result in an increased risk of cancer from long-term exposure and are regulated to reduce exposure through drinking water. Rules

were recently revised to include a new MCL for uranium (30 µg/L), and to clarify and modify monitoring requirements. Initial monitoring tests, quarterly for one year at the entry point from each source, were to be completed by December 31, 2007 for gross alpha, radium-226, radium-228 and uranium. A single analysis for all four contaminants collected between June 2000 and December 2003 will substitute for the four initial samples. Gross alpha may substitute for radium-226 if the gross alpha result does not exceed 5 pCi/L and may substitute for uranium monitoring if the gross alpha result does not exceed 15 pCi/L. Subsequent monitoring is required every three, six, or nine years depending on the initial results, with a return to quarterly monitoring if the MCL is exceeded. Compliance with MCLs is based on the average of the four initial test results, or subsequent quarterly tests. Community water systems than cannot meet MCLs must install treatment (such as ion exchange or reverse osmosis) or develop alternate water sources. The City on Lowell has a history of non-detects for radiologic contaminants, with only one detectable test in the year 2009 at 1.1 pCi/L, well under the 15 pCi/L MCL.

6.4 Future Water System Regulations

The 1996 Safe Drinking Water Act (SDWA) requires EPA to review and revise as appropriate each current standard at least every six years. Data is continually collected on contaminants currently unregulated in order to support development of future drinking water standards. Drinking water contaminant candidate lists (CCL) are prepared and revised every five years. The first DWCCL (CCL1) was published on March 2, 1998 which included 51 chemicals and 9 microbials. In 2003, EPA decided not to regulate any of the 9 microbials from the initial list. In 2005 EPA published the second CCL (CCL2) consisting of the remaining 51 contaminants from the first list. The Agency published the preliminary regulatory determinations for 11 of the 51 contaminants listed on the second CCL in April of 2007. In 2008 EPA published the draft third Contaminant Candidate List (CCL3) to help identify unregulated contaminants that may require a national drinking water regulation in the future. The 4th CCL was announced on November 17,2016. Preliminary determinations for CCL4 were announced on February 20, 2020. The EPA must publish a decision on whether to regulate at least five contaminants from the CCL every 5 years. As a result, additional contaminants can become regulated in the future.

In addition, rule revisions and new rules will occur to further address health risks from disinfection byproducts and pathogenic organisms. Rules such as the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and the Stage 2 Disinfectants/Disinfection Byproducts Rule (Stage 2 DBPR) have recently gone into effect at the federal level and require systems to begin planning for compliance. New and revised drinking water quality standards are mandated under the 1996 federal SDWA. Both rules are in effect and administered by the Oregon Health Authority (OHA).

Water suppliers should be aware of and familiar with these mandates and deadlines, and plan strategically to meet them. OHA, under the Primacy Agreement with the EPA, has up to two years to adopt each federal rule after it is finalized. Water suppliers generally have at least three years to comply with each federal rule after it is finalized; however, some of these rules will likely establish a significant number of compliance dates for water suppliers that will occur prior to state adoption of the rules. These "early implementation" dates will likely have to be implemented in Oregon directly by the EPA, because the state program will not yet have the rules in place or the resources to carry them out.

The lead and copper rule is currently in revision. Systems will need to build inventories of lead service lines LSLs. LSLs then have to be identified/replaced at a rate of 3% of the total inventory per year. The trigger level will be set at 10 parts per billion. This will likely be a very costly effort for many towns in the western US.

These anticipated rules are described generally below. Additional details will be found in the final EPA rules once they are promulgated.

6.4.1 Radon Rule

All community water systems using groundwater sources will conduct quarterly initial sampling at distribution system entry points for one year. Subsequent sampling will occur once every 3 years. The Radon MCL is expected to be 300 pCi/L. An alternative MCL (AMCL) of 4,000 pCi/L is proposed if the State develops and adopts an EPA-approved statewide Multi-Media Mitigation (MMM) program. Local communities may have the option of developing an EPA-approved local MMM program in the absence of a statewide MMM program and meeting the AMCL.

6.4.2 RTCR Distribution Rule

In April of 2016, the requirements for coliform bacteria have been revised, emphasizing fecal coliforms and E. coli, and focusing on protection of water within the distribution system. The new rule will apply to all public water systems and will involve identifying and correcting sanitary defects and hazards in water systems and using best management practices for disinfection to control coliform bacteria in the system.

6.5 Water Management and Conservation Plans

The Municipal Water Management and Conservation Planning (WMCP) program provides a process for municipal water suppliers to develop plans to meet future water needs. Municipal water suppliers are encouraged to prepare water management and conservation plans but are not required to do so unless a plan is prescribed by a condition of a water use permit; a permit extension; or another order or rule of the Commission. These plans will be used to demonstrate the communities' need for increased diversions of water under the permits as their demands grow. A master plan prepared under the requirements of the Oregon Health Authority, or the

water supply element of a public facilities plan prepared under the requirements of the Department of Land Conservation and Development which substantially meets the requirements of OAR 690-086-0125 to 690-086-0170 may be submitted to meet the requirements for WMCP's. Rules for WMCP's are detailed in OAR 690, Division 86.

Every municipal water supplier required to submit a WMCP shall exercise diligence in implementing the approved plan and shall update and resubmit a plan consistent with the requirements of the rules as prescribed during plan approval. Progress reports are required showing 5-year benchmarks, water use details, and a description of the progress made in implementing the associated conservation or other measures.

Failure to comply with rules for WMCPs can result in enforcement actions by the Water Resources Department Director. Enforcement actions can include requirements for additional information and planning, water use regulation, cancellation of water use permits, or civil penalties under OAR 690-260-0005 to 690-260-0110.

7 EXISTING WATER SYSTEM

The City of Lowell owns and operates a community water system that is comprised of the following primary assets:

- An intake structure east of the covered bridge and associated piping running from the intake structure to the water treatment plant on the north bank of the Dexter Reservoir
- Three inactive wells, LANE 19572, LANE 1637, and L3714
- A conventional water treatment plant
- WTP integrated buried clearwell
- One 440,000-gallon finished water storage reservoir
- One 460,000-gallon finished water storage reservoir
- Distribution pump station
- Booster pump station for high elevation service pumping to a 2,500-gallon storage tank to service the higher elevation pressure zone
- Approximately 30,000’ of distribution main and transmission piping

7.1 Water Supply

7.1.1 Water Sources

In addition to the raw surface water intake in Dexter Reservoir, the City also has three inactive wells (well #1 - LANE 19572, well #2 - LANE 1637, and well #3 - LANE 51014/L). OHA’s online data from 1986 to 2001 show that the combined output of the three wells averaged 28 parts per billion (ppb) for arsenic. In January of 2001, the EPA proposed that the MCL for arsenic should be lowered from 50 ppb to 10 ppb. The new arsenic standard was delayed until October 2001, when the EPA decided to let the proposed rule stand and that the more stringent standard would help protect public health. The City made the switch from groundwater to surface water in 2002 to comply with the new, more stringent regulation for arsenic. The City currently utilizes a screened raw water intake submerged in Dexter Reservoir for their water supply.

7.1.2 Water Rights

GSI Water Solutions Inc. has drafted a Water Conservation and Management Plan for the City of Lowell. Please refer to section 2.9 of the WCMP for further detail on the City of Lowell’s water rights.

7.1.3 Raw Water Intake

The source of water supply for the City of Lowell is Dexter Lake Reservoir. The existing raw water intake in Dexter Reservoir is located near the covered bridge on the Lane County causeway. In 1999, a letter was sent from the Army Corps of Engineers specifically indicating that the intake structure was 2 ft wide and deep, and 3 ft high, and that it was securely fastened at a depth of 15 ft to the center pier on the east (upstream) side of the bridge from the city to State Highway 58. The intake is screened on three sides, each side being 36 in by 23 in, with a total screen area of approximately 17 sq ft. The intake screen, which was replaced in 2005, is fabricated from stainless steel (of 3-mesh 14-gauge construction) and has not been inspected in many years. We recommend an annual inspection program be put in place as soon as possible. There are no systems in place to clear the screen of accumulated debris automatically or remotely. The raw water intake transmission line is about 2500 ft in length and comprised of 10-in diameter Schedule 80 PVC pipe.

7.2 Water Treatment Plant

7.2.1 General

The Lowell WTP is a conventional rapid sand media filter plant. The basic plant processes include chemical coagulation, flocculation, clarification, dual-media filtration, and chemical disinfection. The plant is generally in good condition, although it is not currently capable of producing the volume of water required to meet either the current or projeted demands of the community without extremely long run times. Many times during the warmer summer months the plant is run continuosly in an attempt to keep up with the water demand.

Instrumentation at the plant includes an array of turbidity meters, pH sensors, flow meters, a chlorine analyzer, and other equipment. All data from these instruments is collected and displayed on a central supervisory control and data acquisition (SCADA) system computer that collects and processes data from the entire water system.

When operating normally, the plant operates at 155 gpm with raw water turbidities typically ranging from 2–5 NTU throughout the year.

There are two centrifugal type intake pumps located in the raw water supply room of the WTP. Only one of these pumps (the newer pump) is currently utilized to draw water from Dexter Lake. The older pump, installed prior to 2001, has a 350 gallon per minute (gpm) capacity and is driven by a 10 horsepower (HP) motor. This pump sits idle because of problems with maintaining a proper seal during operation. The newer pump, added after the 2001 plant upgrade, also has a 350 gpm capacity and is driven by a 10 HP motor.

After the raw water supply pump, the raw water enters a 6" chemical injection header. Originally, the upgraded WTP was designed and built with the capability to introduce several chemical conditioners to pre-treat the raw water. However, it was later learned that just coagulant and powdered activated carbon (seasonally) could accomplish the required pre-treatment. Pre-chlorination was also recently discontinued because of the relatively-high total organic carbon (TOC) levels in the raw water and concerns about the formation of potentially-harmful disinfection byproducts (DPBs).

Currently, the only chemical conditioners utilized for pre-treatment are:

- PASS-C (polyaluminum chloride) coagulant
- Powdered Activated Carbon

The PASS-C serves as a coagulant to aid in the flocculation process. It has little impact upon pH levels and offers effective performance even in cold water. The powdered activated carbon (PAC) is used during the summer months to improve taste and odor related to the presence of algae in the raw water. PAC also is also advantageous in it's removal of organics, thus reducing the potential for the formation of disinfection by products (DBPs) after sodium hypochlorite disinfection.

PHOTO 7.2.1 – PAC MIXING BASIN

After exiting the static mixer, the pre-treated water leaves the pump room and is delivered into a slow mix chamber for mechanical stirring at approximately 50 rpm in order to promote flocculation. This chamber has a hopper-like shape that, due to gravity and the stirring action, funnels accumulated floc down to collect beneath a redwood baffle. The baffle separates the chamber from the clarifier tank. The passage below the baffle occurs through a restricted opening that entraps the accumulated floc and thereby forms a "sludge blanket", which extends into the clarifier tank and achieves a "straining effect" as the water flows through it. Except for removal due to annual inspections or blanket thickness maintenance, this blanket should remain intact to optimize clarification.

As the pre-treated water travels on into the clarifier tank, the natural uplift causes the water to move upward through tube settlers, promoting sedimentation of heavier impurities onto the tubes. At this stage, the topmost layer of water in the tank is the cleanest. This water is

then skimmed by means of fiberglass-reinforced plastic (FRP) weir plates and then flows to the filter cells by means of collection troughs. The weir plates are adjustable and have a typical 90° "V-notch" design.

There are about 220 sq ft of tube settlers and about 45 ft of FRP weir plates (three collection troughs with two weir plates mounted lengthwise along the sides of each trough, each weir plate being 7.5 ft long). Like the slow mix chamber, the clarifier tank has a hopper-like shape. The length of this tank is about 25.5 ft and the cross section of this shape is about 105 sq ft, yielding a volume of approximately 2655 cu ft for the clarifier tank. As a result, for a nominal treated water flow rate of 155 gpm, the theoretical clarifier detention time is about 2 hours.

As water enters the top of the filter bed, gravity pulls the fluid down through the filter media. Larger floc particles are caught higher up by the coarser media grains. Smaller floc particles are caught lower down by the finer media grains. Over time, the effectiveness of the filter will diminish due to trapped particles within the media. As a result, the filter media must be backwashed, during which the water flow direction through the filter is reversed. This flow reversal causes the layers of media to expand, enabling the grains to rub against each other and thereby scour the filter. The particles released from the filter media during backwashing are flushed into an outflow system and flow to the backwash settling basin.

The filter beds have a filtration area of 58 sq ft each and are rated for 3.5 gpm per sq ft, yielding a filtration capacity of about 200 gpm per filter. Both WTP records and communications with the operator have revealed that the plant is ordinarily operated utilizing only a single filter bed at a time and at a nominal flow rate of 155 gpm. The alternating duty cycles for the filters are dictated by the backwash intervals, which occur every two to three days. The WTP records also indicate that the filter's finished water turbidity performance target of 0.3 NTU or less is consistently and easily met.

Each filter bed is of the dual-media-type and sits upon a Leopold Universal underdrain with an IMS branded cap. The upper and lower media layers are anthracite coal and a sand mixture, respectively. These layers directly rest upon the IMS cap, which is a porous plate fabricated of high density polyethylene (HDPE) beads sintered together. This configuration eliminates the need for supporting gravel, thereby allowing for deeper media depth within the filter cell.

Backwashing and filter-to-waste processes at the WTP are done manually using existing system pressure along with pipes and valves in the piping gallery. Each filter is backwashed at a flowrate of ~1,000 gpm with finished water from the reservoir for 10-15 minutes.

7.2.2 Chemical Equipment and Disinfection

PHOTO 7.2.2 – CHLORINE ANALYZER

The water treatment system currently only adds three chemicals in the water treatment process, they are in order of application:

- Prior to the WTP powdered activated carbon is added to the raw water to remove organics
- Also prior to the WTP, PASS-C (polyaluminum chloride) coagulant is added to promote flocculation
- Post filtration, sodium hypochlorite is added for disinfection

The PASS-C and powdered activated carbon are dosed into the raw water intake on the effluent side of the raw water intake pump.

The sodium hypochlorite is generated onsite and dosed just prior to the filtered water entering the clearwell beneath the WTP.

7.2.3 Clearwell and Effluent Pumps

PHOTO 7.2.3 – FINISHED WATER PUMPS

The clearwell is located under the water treatment building. The clearwell includes baffling at the inlet as well as minor intermediate baffling to encourage serpentine flow. The current operating pool in the clearwell varies from 80" down to 75". At 75" of depth, the clearwell volume is estimated to be approximately 35,000 gallons.

Tracer testing in 2021 found the clearwell to have contact time of 81 minutes at a WTP production rate of 155 gpm. A second tracer test was conducted the water treatment plant running at 200 gpm and yielded a contact time of 66 minutes. The result of these two tests indicates a baffle factor for the clearwell of 0.37.

An onsite brine-based sodium hypochlorite generator provides for disinfection and is mixed at a solution strength of 0.80% chlorine. The injection point is on the clearwell influent line. A Hach CL-17 is used to measure residual chlorine levels with continuous samples taken from the outlet piping of the clearwell. Typically, a free chlorine residual level of 0.80-0.90 mg/L is maintained in the clearwell.

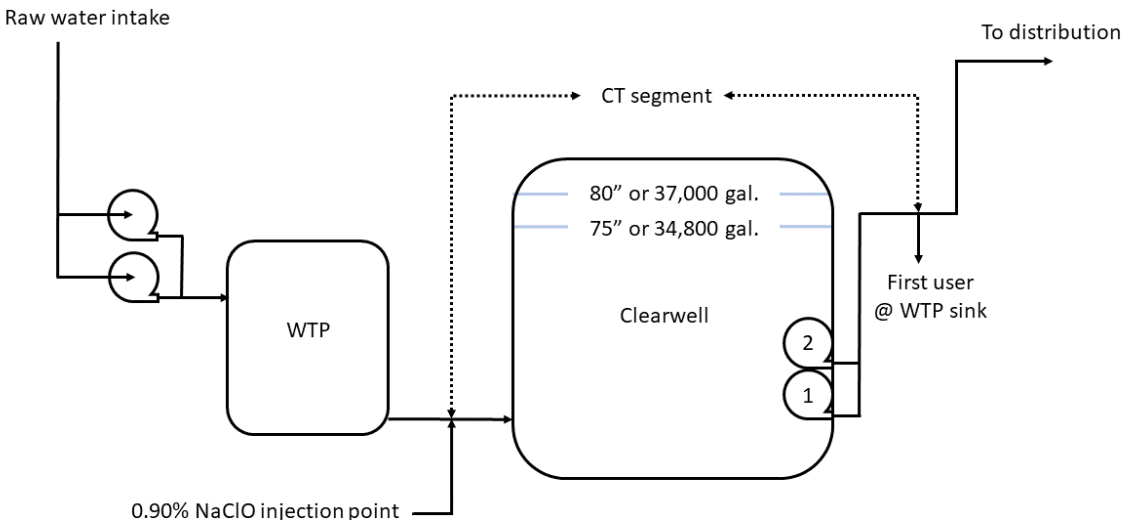


FIGURE 7.2.3 – CLEARWELL DISINFECTION SEGMENT

7.3 Treated Water Storage

7.3.1 Main Reservoirs

The City currently relies on a 440,000 gallon glass-fused to steel tank, and an older 460,000 gallon concrete tank for water storage. The tanks share a base elevation of ~922'. The tanks can both be filled to approximately 952' while leaving two feet available for freeboard. This equates to approximately 845,000 gallons of storage. The two tanks sit adjacent to each other on a lot north of the intersection of East 1st Street and Sunridge Lane. There is also a 2,500 gallon tank that services an upper pressure zone via gravity. A booster pump pumps water from the lower pressure zone to this upper 2,500 gallon tank.

In estimation of required water storage, we consider three criteria:

- Average Daily Demand – To calculate emergency storage
- Maximum Daily Demand – To calculate equalization storage
- Required Fire Storage – Based on building code and venerable structures in town

It is considered prudent to set emergency storage equal to 3 average days of water demand. Equalization storage should be set to 20% of the MDD. Fire storage volume is conservatively

calculated of the City of Lowell at 3,500 gpm for 3 hours. In addition to the basic volume calculations, storage locations and hydraulic distribution must be considered to assure each area of the system has enough flow and volume. The storage needs for 2045 are calculated in the chart below.

TABLE 7.3.1 – REQUIRED WATER STORAGE – CURRENT AND FUTURE

	2020	2045
Equalization Storage: 20% of the MDD	49,225	64,207
Emergency Storage: 3 times the ADD	369,191	481,553
Fire Reserve Storage: 3,500 gpm for 3 hours	630,000	630,000
Total Recommended Storage:	**1,048,416**	**1,175,760**

The City of Lowell currently has 845,000 gallons of storage. As shown in the table above, the City currently does not have enough storage to provide for equalization, anticipated fire flows, and emergency storage. The existing system is deficient by approximately 330,000 gallons by the end of the planning period for this study.

7.4 Distribution System

The major components of the water distribution system for the City are shown on the Water System Map. The distribution system mains vary considerably in both size and material, with 6” and 12” PVC comprising nearly half of the system, with a considerable amount of 6” AC still in service. Please see the table below for further detail.

Length in feet

	2"	4"	6"	8"	10"	12"	TOTAL
PVC	2,645	1,380	10,345	4,305	-	9,240	**27,915**
STEEL	-	1,830	510	1,710	-	-	**4,050**
AC	-	-	9,595	-	1,745	-	**11,340**
TOTAL	**2,645**	**3,210**	**20,450**	**6,015**	**1,745**	**9,240**	**43,305**

Percentage of total

	2"	4"	6"	8"	10"	12"	TOTAL
PVC	6.1%	3.2%	23.9%	9.9%	-	21.3%	**64.5%**
STEEL	-	4.2%	1.2%	3.9%	-	-	**9.4%**
AC	-	-	22.2%	-	4.0%	-	**26.2%**
TOTAL	**6.1%**	**7.4%**	**47.2%**	**13.9%**	**4.0%**	**21.3%**	**100%**

With a few exceptions at the perimeter, the core layout of the existing water system is geometrically a grid in shape, and adequate to deliver the required flowrates to the community, with most lines being looped back into the system. Looped distribution lines allow the use of smaller diameter pipes and improves both the reliability and the redundancy of the system, as the water can reach the point of demand by more than one path. The water distribution system in the City of Lowell is fairly well laid-out and analysis with WaterCAD modeling has determined that the distribution pipeline network will provide adequate domestic and fire flows for the duration of the planning period. Please see Appendix WCM for the data output detailing the WaterCAD analysis.

7.4.1 Pressure Zones

There are two pressure zones in the City, one small upper area north of the twin reservoirs that is pressurized by gravity from a boosted 2,500 gallon tank, and the rest of the City. The upper 2,500 gallon tank normally sits at a hydraulic grade of 1,063'. The two main reservoirs are both are at a hydraulic grade of 952' when completely full, leaving 2' available for freeboard.

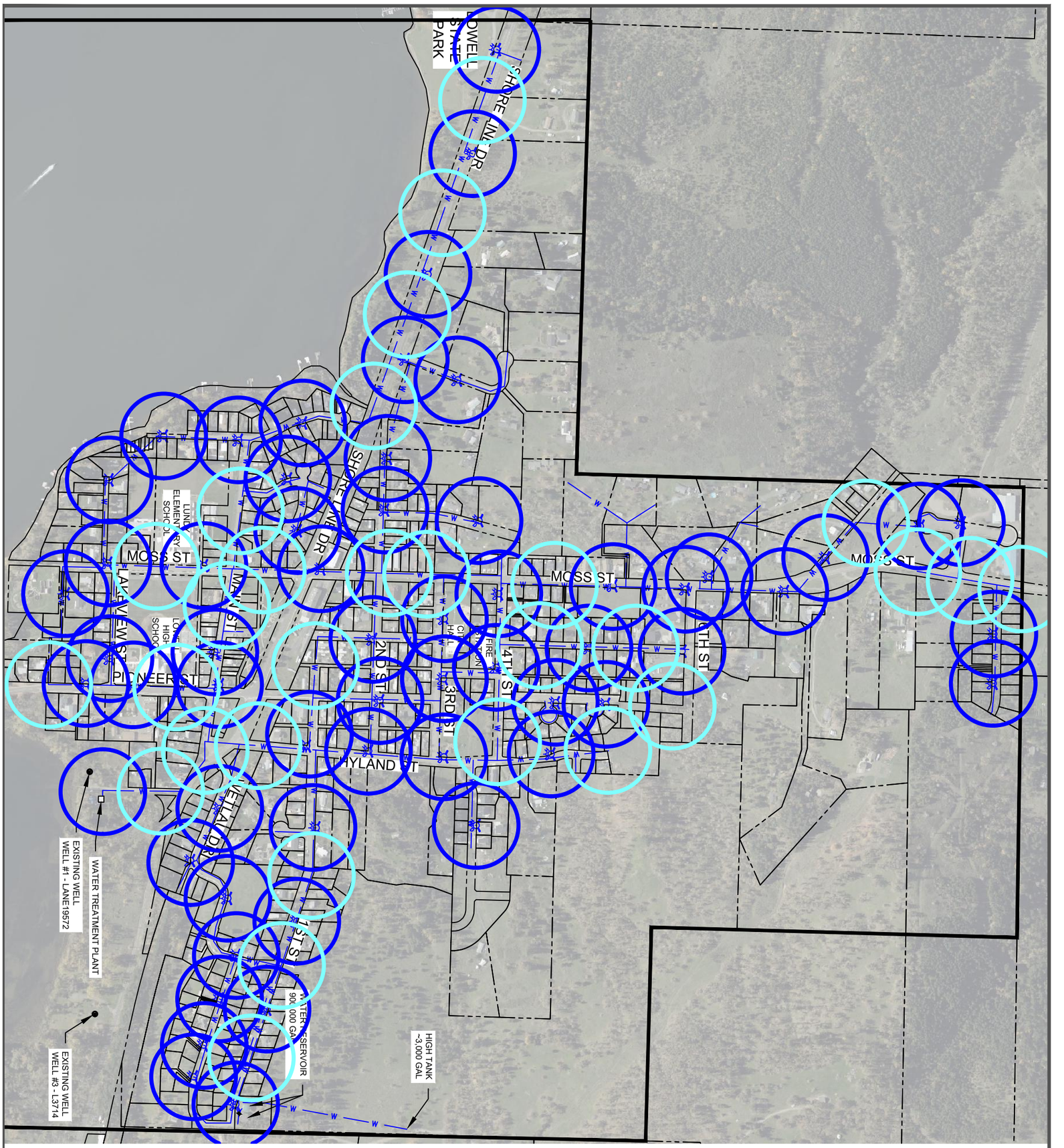
7.4.2 Fire Protection

Per the 2014 Oregon Fire Code, when flows of 1,750 gpm or less are required a single fire hydrant is required to be accessible within 250 feet (200 feet on dead-end streets) resulting in a maximum hydrant spacing of 500 feet (400 feet on dead-end streets).

The largest potential fire protection demand in town is likely at Lowell High/Middle School at 65 South Pioneer Street. Based on the total square footage (20,000+ ft^2) and being a Type IIIA building, the required demand is 2,000 gpm for 2 hours. This flow rate requires that two hydrants be within 500' of each other and the hydrants overlap the structure in question.

Mapping 500' diameter circles centered on existing fire hydrants throughout the town shows several areas within the city limits that have structures that are not within a 250' radius of an existing hydrant. Please see figure 7.4.2 on the following page for a map of existing and the proposed 29 additional fire hydrants. Note, dark blue circles are indicating existing fire hydrant coverage, light blue circles are showing proposed hydrants.

DATE:6/30/22 FILE:O:\CW_Projects\2101 Lowell\2101-020 Water Master Plan\04 Study\Drawings\Dwg\SYSTEM MAP.dwg



250' RADIUS - PROPOSED HYDRANT

250' RADIUS - EXISTING HYDRANT

EXISTING FIRE HYDRANT

URBAN GROWTH BOUNDARY

FIGURE 7.4.2

0 1"

600'

DRAWN BY: ERM

DATE: JANUARY, 2022

HYDRANT MAP

2022 WATER MASTER PLAN

CITY OF LOWELL
LANE COUNTY, OR

Civil West Engineering Services, Inc.

8 IMPROVEMENT ALTERNATIVES

8.1 Data Collection and Management Needs and Alternatives

8.1.1 Water System Data Collection and Management Needs

Although the water system has a functioning SCADA system in place, it is quite old and beyond its useful lifetime. The existing system uses aged software that is cumbersome, difficult to use and costly to maintain/update. We recommend a new SCADA system be installed to replace the old system with a more current/accessible software platform. In addition to the new SCADA system, the City should also consider adding SCADA capability to their reservoir network. This will require some effort and infrastructure improvements, as there is no existing telemetry in place for the reservoirs.

8.1.2 Data Collection and Management Recommendations

We recommend that the City investigate upgrading the existing water system SCADA to present technology and also add SCADA to the water storage reservoirs. The new system should at a minimum continue to cover the following parameters/processes:

- Temperature
- pH
- Turbidity (raw and finished)
- Hypochlorite concentrations and dosing
- All process related flowrates
- Clearwell levels – flow in/out
- Reservoir levels – flow in/out

SCADA - Upgrading Automation and Data Acquisition					
Item No.	Description	Unit	Quantity	Unit Cost	Item Cost
1	SCADA Client Computer, Software and Accessories - City Hall/WTP	EA	2	$18,500	$37,000
2	City Hall/WTP PLC,Telemetry Radio and Antenna	EA	2	$26,700	$53,400
3	Programming and Installation	LS	1	$45,000	$45,000
4	10" Panelview Upgrades - City Hall/WTP	EA	2	$9,900	$19,800
5	Remote Control of Raw Water Pump	LS	1	$6,500	$6,500
6	Remote Control of WTP	LS	1	$11,000	$11,000
7	Reservoir Levels/Meters and Telemetry	EA	3	$14,250	$42,750
8	Control Interface Panel Upgrade - City Hall/WTP	EA	2	$14,700	$29,400
9	IP Cameras for Reservoir, RWI and WTP Monitoring	EA	3	$3,500	$10,500
			Estimated Construction Cost:	**$**	**255,350.00**
	Contingency (20%)			$	51,070.00
			Estimated Project Total Cost:	**$**	**306,420.00**

8.2 Water Supply Needs and Alternatives

In addition to the surface water intake in Dexter Reservoir, the City also has three inactive wells (well #1 - LANE 19572, well #2 - LANE 1637, and well #3 - LANE 51014/L). OHA's online data from 1986 to 2001 show that the combined output of the three wells averaged 28 parts per billion (ppb) for arsenic. In January of 2001, the EPA proposed that the MCL for arsenic should be lowered from 50 ppb to 10 ppb. Implementation of the new arsenic standard was delayed until October 2001, when the EPA decided to put the new 10 ppb standard in effect to help protect public health. The City made the switch from groundwater to surface water in 2002 to comply with the new, more stringent regulation for arsenic.

8.2.1 Water Supply Needs

To date and through the design period, the current surface water supply is more than adequate to supply the needs of the City. Regarding the surface water source, GSI found in the WMCP that: *"Certificate 23721 authorizes diversions from the Middle Fork of the Willamette River of up to 1.0 cfs, exceeding the City's historical average MDD. With respect to the security of this water right during periods of low flow, the certificate is senior to instream water rights and, due to the abundant flow of the North Fork Willamette River and its tributaries upstream of the City's point of diversion, the City has not experienced and does not anticipate experiencing restrictions on the rate of diversion associated with this certificate."*

8.2.2 Water Supply Improvement Alternatives

The Dexter Lake Reservoir raw water intake currently has no means to automatically clean the intake screen. The existing method is either using a diver to clean the screen manually, or by backflushing the intake line with raw water from the WTP. The backflush method does not adequately clean the screen and is typically only employed when the screen is significantly clogged. We recommend an air-burst type screen be installed at the existing raw water intake. This system could be tied into the new SCADA system with telemetry or run on a timer set to operate when the WTP is not in operation. A cost estimate for retrofitting the existing raw water intake with an air burst system is provided below.

Source - Raw Water Intake - Air Burst Retrofit					
Item	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 7,655.00	$ 7,655.00
2	Construction Facilities and Temporary Controls	LS	1	$ 3,600.00	$ 3,600.00
3	Demo and Site Prep	LS	1	$ 3,250.00	$ 3,250.00
4	Air Burst System	LS	1	$ 28,500.00	$ 28,500.00
5	Piping and Appurtenances	LS	1	$ 8,700.00	$ 8,700.00
6	Protective Structure	LS	1	$ 12,000.00	$ 12,000.00
7	Electrical Service/Conduit Work	LS	1	$ 16,000.00	$ 16,000.00
8	Site Restoration	LS	1	$ 4,500.00	$ 4,500.00
	Estimated Construction Cost:			**$**	**84,205.00**
	Administrative/Legal (5%)			$	4,210.25
	Contingency (20%)			$	16,841.00
	Engineering (20%)			$	16,841.00
	Estimated Project Total Cost:			**$**	**122,097.25**

8.3 Water Treatment Needs and Alternatives

The existing conventional rapid sand media filter plant is quite old, but in generally in good condition. The major issue with the WTP is that it is not currently capable of producing the volume of water required to meet either the current nor projected planning period demands of the community without extremely long run times. The existing water right on Dexter Reservoir is 1.0 cfs, or 450 gpm, and the existing water treatment plant is unable to meet even half of this allotted water right flowrate. Many times, during the warmer summer months, the plant is run continuously to keep up with the water demand. The inability of the plant to meet distribution demands during work hours is the main issue at the WTP.

8.3.1 Water Treatment Needs

Currently the water treatment plant is struggling with several issues, mostly related to the limited output. In general, the following are the most notable issues:

- Sedimentation basin is too small to support flowrates exceeding 200 gpm
- Sedimentation wasting system needs upgrades
- Only one filter can be run at a time
- Only one raw water pump can be run at a time
- Only one finished water pump can be run at a time
- Turbidity meters in need of upgrades/relocation
- Control building has no backup power
- Backwash pond is undersized
- Chemical feed pumps lack SCADA control
- Concrete filter wall between filters 1 and 2 is failing

The existing sedimentation basin is only able to support flowrates less than about 200 gpm. Any flowrates through the sedimentation basin that are greater than approximately 200 gpm, cause the sludge blanket in the bottom of the basin to lift, and thus, turbidity issues in the finished water. Further the sedimentation basin has issues with its wasting system that will need to be addressed if the plant is kept online much longer.

The operational issues preventing more than one filter, raw water pump, or finished water pump from running at a time are related to programming issues with the aged existing SCADA system. These issues could be eliminated with the proposed SCADA upgrades, or an all new WTP SCADA system if the City elects to build a new WTP. The turbidity meter and chemical feed issues would also be covered by any SCADA upgrade or outright replacement.

8.3.2 Existing Water Treatment Plant Improvement Alternatives

There are two basic approaches to improving the existing water treatment system: rehabilitation and upgrading of the existing plant, and outright replacement of the existing plant with a new water treatment plant. Rehabilitation of the existing plant should be rather straightforward, but many elements of the plant are undersized to meet current production demands, let alone the projected demands at the end of the planning period. The existing water treatment plant is monolithic in construction and would likely be very expensive to upgrade in kind.

The main issue with the existing plant is that the sedimentation basin is too small to support flowrates approaching ~200 gallons per minute. If the plant is pushed beyond this limit, the sludge blanket begins to lift, causing turbidity spikes in filters, shortening run times and increasing the potential for turbidity breakthrough to the clearwell. The filtration basins are not in great condition and there is damage between basins number one and number two, these of course should also be repaired/rehabilitated if the existing plant is expected to be kept online for any further appreciable amount of time. Required major sedimentation basin upgrades and filtration basin rehabilitation cost estimates are included below for reference.

Treatment - Sedimentation Basin Expansion and Wasting Upgrades					
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 25,450.00	$ 25,450.00
2	Construction Facilities and Temporary Controls	LS	1	$ 5,500.00	$ 5,500.00
3	Demo, Subgrade, and Site Prep	LS	1	$ 22,500.00	$ 22,500.00
4	Construct new 25'x9'x11'deep Sedimentation Basin	LS	1	$ 125,000.00	$ 125,000.00
5	Sedimentation Basin Wasting Upgrades	EA	2	$ 16,000.00	$ 32,000.00
5	Piping and Appurtenances	EA	2	$ 32,500.00	$ 65,000.00
6	Site Restoration	LS	1	$ 4,500.00	$ 4,500.00
			Estimated Construction Cost:	**$**	**279,950.00**
	Administrative/Legal (5%)			$	13,997.50
	Contingency (20%)			$	55,990.00
	Engineering (20%)			$	55,990.00
			Estimated Project Total Cost:	**$**	**405,927.50**

Treatment - Filter Basin Rehabilitation					
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 11,920.00	$ 11,920.00
2	Construction Facilities and Temporary Controls	LS	1	$ 3,200.00	$ 3,200.00
3	Demo and Site Prep	LS	1	$ 8,000.00	$ 8,000.00
4	Restorative Concrete Work	EA	3	$ 20,000.00	$ 60,000.00
5	Piping, Pumps and Appurtenances	EA	3	$ 16,000.00	$ 48,000.00
6	Site Restoration	LS	1	$ 2,500.00	$ 2,500.00
			Estimated Construction Cost:	**$**	**133,620.00**
	Administrative/Legal (5%)			$	6,681.00
	Contingency (20%)			$	26,724.00
	Engineering (20%)			$	26,724.00
			Estimated Project Total Cost:	**$**	**193,749.00**

Currently, the WTP also suffers from an undersized backwash settling pond. If the plant is upgraded to run at 450 gpm, then the backwash pond will also need to be expanded to a minimum of 2.5 to three times the existing size. Cost estimation for an expanded backwash basin is shown below.

Treatment - Backwash Basin Expansion					
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 4,982.50	$ 4,982.50
2	Construction Facilities and Temporary Controls	LS	1	$ 3,200.00	$ 3,200.00
3	Demo and Site Prep	LS	1	$ 12,000.00	$ 12,000.00
4	Earthen Basin 35'x80'x6'	CY	625	$ 25.00	$ 15,625.00
5	Basin Liner System	SF	2800	$ 4.00	$ 11,200.00
6	Piping, Pumps and Appurtenances	LS	1	$ 7,800.00	$ 7,800.00
7	Site Restoration	LS	1	$ 2,500.00	$ 2,500.00
			Estimated Construction Cost:	**$**	**57,307.50**
	Administrative/Legal (5%)			$	2,865.38
	Contingency (20%)			$	11,461.50
	Engineering (20%)			$	11,461.50
			Estimated Project Total Cost:	**$**	**83,095.88**

Total costs for rehabilitation and upgrading the exiting plant are approaching $700,000. Although this option is considerably less expensive than building a new treatment plant, there

are no guarantees in respect to the longevity of the elements of the existing plant that have not been upgraded/rehabilitated. For this reason, this is not the recommended alternative.

8.3.3 New Water Treatment Plant

A new water treatment plant would solve all problems of the existing aged monolithic concrete conventional water treatment plant. Construction of all new infrastructure inherently guarantees longevity of the entire system, rather than relying on 60-year old rehabilitated infrastructure to last another 25 – 40 years.

Two treatment methods for the new plant are considered, conventional treatment and membrane filtration. Both systems will require a new building (40'x80') that will also incorporate office space for the controls/onsite laboratory. Cost estimates for a conventional packaged plant and a membrane plant are provided below. We strongly recommend running a pilot on both treatment technologies during a period of elevated turbidity to help select the best treatment option using actual worst case raw water conditions from the Dexter reservoir.

Treatment - New Conventional Water Treatment Plant - 500 gpm					
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 123,050.00	$ 123,050.00
2	Construction Facilities and Temporary Controls	LS	1	$ 38,000.00	$ 38,000.00
3	Demo and Site Prep	LS	1	$ 18,000.00	$ 18,000.00
4	175 gpm Packaged Conventional Treatment System	EA	3	$ 205,000.00	$ 615,000.00
5	50,000 Gallon Subterranean Clearwell	LS	1	$ 185,000.00	$ 185,000.00
6	40'x60' Steel Building	LS	1	$ 175,000.00	$ 175,000.00
7	Piping and related Appurtenances	LS	1	$ 65,000.00	$ 65,000.00
8	Electrical	LS	1	$ 55,000.00	$ 55,000.00
9	100kW Generator	LS	1	$ 63,000.00	$ 63,000.00
10	Site Restoration	LS	1	$ 16,500.00	$ 16,500.00
			Estimated Construction Cost:	**$**	**1,353,550.00**
	Administrative/Legal (5%)			$	67,677.50
	Contingency (20%)			$	270,710.00
	Engineering (20%)			$	270,710.00
			Estimated Project Total Cost:	**$**	**1,962,647.50**

Treatment - New Ultrafiltration Water Treatment Plant - 500 gpm					
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 115,550.00	$ 115,550.00
2	Construction Facilities and Temporary Controls	LS	1	$ 38,000.00	$ 38,000.00
3	Demo and Site Prep	LS	1	$ 18,000.00	$ 18,000.00
4	125 gpm UF Treatment System	EA	4	$ 135,000.00	$ 540,000.00
5	50,000 Gallon Subterranean Clearwell	LS	1	$ 185,000.00	$ 185,000.00
6	40'x60' Steel Building	LS	1	$ 175,000.00	$ 175,000.00
7	Piping and related Appurtenances	LS	1	$ 65,000.00	$ 65,000.00
9	Electrical	LS	1	$ 55,000.00	$ 55,000.00
10	100kW Generator	LS	1	$ 63,000.00	$ 63,000.00
11	Site Restoration	LS	1	$ 16,500.00	$ 16,500.00
			Estimated Construction Cost:	**$**	**1,271,050.00**
	Administrative/Legal (5%)			$	63,552.50
	Contingency (20%)			$	254,210.00
	Engineering (20%)			$	254,210.00
			Estimated Project Total Cost:	**$**	**1,843,022.50**

8.4 Water Storage Needs and Alternatives

8.4.1 Water Storage Needs

The City of Lowell currently has 845,000 gallons of storage. The City does not have enough storage to provide for equalization, anticipated fire flows, and emergency storage. The existing system is deficient by approximately 330,000 gallons by the end of the planning period for this study. We estimate that with the projected required storage of 1.2 MG at the end of the planning period, it would be prudent to add a large enough reservoir to provide 1.5 MG of total storage as insurance against the potential for the City building out more rapidly than the projected Lane County rate.

The City has several developable higher elevation areas within the UGB that they would like to be prepared to serve from a new higher elevation reservoir. The new reservoir is intended to serve all buildable lots in within City limits. Two potential sites have already been selected as potential build sites for the high elevation reservoir.

8.4.2 Water Storage Improvement Alternatives

To increase capacity and serve the upper undeveloped areas within the City's UGB, we estimate that with the projected required storage of 1.2 MG at the end of the planning period, it would be prudent to build 1.5 MG of storage as insurance against the potential for the City building out more rapidly than the projected Lane County rate. The City could either build a new 1.5 MG high elevation reservoir to solely cover the storage needs through the end of the planning period, or build a 1.1 MG reservoir and rely on the existing, relatively new, glass fused on steel 0.44 MG reservoir to make the total storage of 1.5 MG. Due to its poor condition, we do not recommend relying on the existing concrete reservoir through the planning period, and as such it is not considered in the storage calculation.

1.5 MG Reservoir - Upper Pressure Zone					
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 164,650.00	$ 164,650.00
2	Construction Facilities and Temporary Controls	LS	1	$ 35,000.00	$ 35,000.00
3	1.5 MG Glass Fused Steel Reservoir	LS	1	$ 850,000.00	$ 850,000.00
4	500 gpm Booster Pump Station	LS	1	$ 500,000.00	$ 500,000.00
5	Grading for Access Road	LS	1	$ 65,000.00	$ 65,000.00
6	Quarry Run Access Road	LS	1	$ 35,000.00	$ 35,000.00
7	Reservoir Venting System	LS	1	$ 11,500.00	$ 11,500.00
8	Concrete Slab/Engineeried Sub-base	LS	1	$ 150,000.00	$ 150,000.00
			Estimated Construction Cost:	**$**	**1,811,150.00**
	Administrative/Legal (5%)			$	90,557.50
	Contingency (20%)			$	362,230.00
	Engineering (20%)			$	362,230.00
			Estimated Project Total Cost:	**$**	**2,626,167.50**

1.1 MG Reservoir - Upper Pressure Zone					
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 150,150.00	$ 150,150.00
2	Construction Facilities and Temporary Controls	LS	1	$ 35,000.00	$ 35,000.00
3	1.1 MG Glass Fused Steel Reservoir	LS	1	$ 720,000.00	$ 720,000.00
4	500 gpm Booster Pump Station	LS	1	$ 500,000.00	$ 500,000.00
5	Grading for Access Road	LS	1	$ 65,000.00	$ 65,000.00
6	Quarry Run Access Road	LS	1	$ 35,000.00	$ 35,000.00
7	Reservoir Venting System	LS	1	$ 11,500.00	$ 11,500.00
8	Concrete Slab/Engineeried Sub-base	LS	1	$ 135,000.00	$ 135,000.00
			Estimated Construction Cost:	**$**	**1,651,650.00**
	Administrative/Legal (5%)			$	82,582.50
	Contingency (20%)			$	330,330.00
	Engineering (20%)			$	330,330.00
			Estimated Project Total Cost:	**$**	**2,394,892.50**

8.5 Distribution System Needs and Alternatives

8.5.1 Distribution System Needs

The distribution system mains vary considerably in both size and material, with 6" and 12" PVC comprising nearly half of the system, with a considerable amount of 6" AC still in service. There is still a significant amount of AC pipe in the system (26.2%), that is suspect for potential leakage in the distribution system. We recommend that the City's number one priority should be replacement of all AC pipe in the distribution system with HDPE. Second priority should be installation of a seismically resistant "backbone" as identified in the SRAMP. Thirdly, the distribution system could benefit from looping of dead end lines. Please see the table below for further detail regarding the size and material composition of the existing distribution system.

Length in feet

	2"	4"	6"	8"	10"	12"	TOTAL
PVC	2,645	1,380	10,345	4,305	-	9,240	**27,915**
STEEL	-	1,830	510	1,710	-	-	**4,050**
AC	-	-	9,595	-	1,745	-	**11,340**
TOTAL	**2,645**	**3,210**	**20,450**	**6,015**	**1,745**	**9,240**	**43,305**

Percentage of total

	2"	4"	6"	8"	10"	12"	TOTAL
PVC	6.1%	3.2%	23.9%	9.9%	-	21.3%	**64.5%**
STEEL	-	4.2%	1.2%	3.9%	-	-	**9.4%**
AC	-	-	22.2%	-	4.0%	-	**26.2%**
TOTAL	**6.1%**	**7.4%**	**47.2%**	**13.9%**	**4.0%**	**21.3%**	**100%**

With a few exceptions at the perimeter, the core layout of the existing water system is close to a grid in shape, and adequate to deliver the required flowrates to the community, with most lines being looped back into the system. Looped distribution lines allow the use of smaller diameter pipes and improves both the reliability and the redundancy of the system, as the water can reach the point of demand by more than one path. The water distribution system in the City of Lowell is fairly well laid-out and analysis with WaterCAD modeling indicates that the distribution pipeline network will provide adequate domestic and fire flows for the duration of the planning period. We recommend that the City focus on making the AC pipe replacements as soon as possible. The SRAMP upgrades can be done on a 50-year planning horizon per OHA's recommendations. This would average 185' per year, we recommend these SRAMP waterline replacement projects be bundled to every 5 years or so to make them more cost effective vs. replacement of 185' per year every year. Please see Appendix WCM for the data output detailing the WaterCAD analysis.

Distribution - AC Water Main Replacements - SRAMP Backbone Upgrades					
Project No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
AC-1	Replace all 6" AC Pipe with 8" HDPE	LF	9595	$ 255.00	$ 2,446,725.00
AC-2	Replace all 10" AC Pipe with 12" HDPE	LF	1745	$ 295.00	$ 514,775.00
SR-1	SRAMP Backbone of 8"-16" HDPE	LF	9255	$ 315.00	$ 2,915,325.00
	Estimated Total Distribution Projects Cost:			**$**	**5,876,825.00**

8.5.2 Fire Flow Improvement Alternatives

To provide fire protection to all structures within city limits, there are 29 hydrants that will need to be added to maintain a maximum spacing of 500' between all hydrants on the main lines.

Distribution - Citywide Fire Protection Upgrade Project					
Item No.	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Item Cost**
1	Mobilization - Bonds, Insurance (10%)	LS	1	$ 24,260.00	$ 24,260.00
2	Construction Facilities and Temporary Controls	LS	1	$ 11,250.00	$ 11,250.00
3	Demo and Site Prep	LS	1	$ 9,500.00	$ 9,500.00
4	New Fire Hydrant	EA	29	$ 3,800.00	$ 110,200.00
5	Hydrant Piping, Valves, and Fittings	EA	29	$ 2,850.00	$ 82,650.00
6	Site Restoration	EA	29	$ 1,000.00	$ 29,000.00
	Estimated Construction Cost:			**$**	**266,860.00**
	Administrative/Legal (5%)			$	13,343.00
	Contingency (20%)			$	53,372.00
	Engineering (20%)			$	53,372.00
	Estimated Project Total Cost:			**$**	**386,947.00**

9 CAPITAL IMPROVEMENT PLAN

9.1 Capital Improvement Plan Purpose and Need

This section summarizes the water system capital improvements needed to properly serve the community's needs over the planning period extending to 2045. The Capital Improvement Plan (CIP) consists of various projects to maintain and protect existing water system assets, projects to correct deficiencies, and projects necessary to increase water system capacity to serve the growing population.

The water system CIP is used to help establish funding needs, user rates, system development charges (SDCs), and to plan for and prioritize various project needs. The CIP can change over time as projects are completed and/or new unforeseen needs arise, and an attempt should be made to annually update the CIP and keep the list of needs current.

9.2 Capital Improvement Plan Projects

9.2.1 CIP Summary

Based on the alternatives developed in Section 8.0, a Capital Improvement Plan has been assembled that is comprised of recommended projects that the City of Lowell should undertake during the planning period to maintain and upgrade their water system. The various water supply, water treatment, water storage and water distribution projects recommended in this Water System Master Plan for the planning period are summarized in Table 9.2.1 below.

TABLE 9.2.1 – CIP SUMMARY

SCADA - Upgrading Automation and Data Acquisition	$	306,420.00
Total SCADA Projects:	$	306,420.00
Source - Raw Water Intake - Air Burst Retrofit	$	122,097.25
Total Source Projects:	$	122,097.25
Treatment - New Ultrafiltration Water Treatment Plant - 500 gpm	$	1,843,022.50
Total Treatment Projects:	$	1,843,022.50
1.5 MG Reservoir - Upper Pressure Zone	$	2,626,167.50
Total Reservoir Projects:	$	2,626,167.50
Distribution - Citywide Fire Protection Upgrade Project	$	386,947.00
Distribution - AC Water Main Replacements - SRAMP Backbone Upgrades	$	5,876,825.00
Total Distribution Projects:	$	6,263,772.00
Total All Projects:	$	11,161,479.25

9.2.2 CIP Priorities

The costs for the City of Lowell's water system improvement needs are great and there may be reason to prioritize the improvements or take projects on in phases. We recommend that the WTP replacement project, SCADA upgrades, and new reservoir projects be classified as priority one, and completed within the next 10 years.

The distribution system AC pipe replacement projects should be completed during the planning period, with the SRAMP backbone distribution projects completed on a 50-year planning horizon. This would take approximately $125,000 per year in 2022 dollars over 50 years. We recommend that both distribution replacement projects be budgeted for at ~5-year intervals to provide a more cost-effective project, rather than replacement of a shorter length of pipe each year.

The Air Burst Retrofit project is not critical and can be done whenever time and budget allows.

TABLE 9.2.2 – CIP PRIORITIES

Priority One - Should be completed within the next 10 years		
Treatment - New Ultrafiltration Water Treatment Plant - 500 gpm	$	1,843,022.50
SCADA - Upgrading Automation and Data Acquisition	$	306,420.00
1.5 MG Reservoir - Upper Pressure Zone	$	2,626,167.50
Total Priority One Projects:	$	4,775,610.00
Priority Two - Should be completed within 20 - 50 years		
Distribution - Citywide Fire Protection Upgrade Project	$	386,947.00
Distribution - AC Water Main Replacements - SRAMP Backbone Upgrades	$	5,876,825.00
Total Priority Two Projects:	$	6,263,772.00
Priority Three - Should be completed within the planning period		
Source - Raw Water Intake - Air Burst Retrofit	$	122,097.25
Total Priorty Three:	$	122,097.25
Total All Projects:	$	11,161,479.25

9.2.3 CIP Updates

Periodically, the Capital Improvement Plan should be updated and evaluated. It is suggested that every 3 to 5 years the CIP be evaluated and modified as necessary to reflect current development trends, system needs, and prior accomplishments. The City may modify the CIP at any time under ORS 223.309(2)

10 FINANCING

10.1 Existing Water Rates and Charges

10.1.1 Existing Rate Structure

The City of Lowell has varying rate structures based on the size and type of meter. There is also a consumption rate that is the same for all users in the city. In this section the single-family rate structure will be analyzed.

The Lowell water rate structure starts with a base rate for all users that does not include any water consumption of $26.87 per month. Therefore, it is a charge that each user pays prior to any consumption rate being charged. For the single-family residential user, the consumption rates are:

- $5.39 per 1,000 gallons for 0 – 5,000 gallons of water
- $6.79 per 1,000 gallons for consumption exceeding 5,000 gallons of water

It was determined (Section 4.0) that the typical single-family residence uses 4,716 gallons per month. Therefore, this translates to 4,716 gallons/EDU. Applying the average usage to the current rate structure, it is determined that the average residential user pays $52.29/month.

Funding agencies and the State of Oregon assume 7,500 gallons per month as the normal residential use. Therefore, in the City of Lowell, the average residential user would pay:

- Base rate = $26.87
- 0-5,000g consumption charge = $5.39/1,000 gallons *5 = $26.95
- >5,000g consumption charge = $6.79/1,000 gallons *2.5 =$16.98

Total charge = $70.80 based on state standard residential consumption according to current city rates. When this is compared with the average water bill in Oregon of $55.33/EDU, we find that the City of Lowell charges approximately 128% of what the average Oregonian pays.

10.2.1 Water Fund Budget

Water fund data was obtained from City staff for the fiscal years from 2016 - 2020. This five year period illustrates the condition and state the water fund for the City of Lowell. The costs associated with maintaining and improving the water system are shown in the expenditures section. The revenue that comes in is also shown. Ideally, this table would show that the expenditures and the revenues balance out. It is shown that the city has come out with a slight surplus in recent years. There has also been cash carry over that the city has been able to utilize. As these numbers approach a zero-dollar surplus, other sources of funds will have to be utilized in order to finance the city water system. A more detailed and extensive financial analysis

should be done in order to place the city in good standing with regards to the water fund. The table below (Table 10.2 1) summarizes the current water fund for the City.

TABLE 10.2.1 – CITY OF LOWELL WATER FUND 2016 – 2020

Water Fund					
	16-17	**17-18**	**18-19**	**19-20**	**20-21**
Beginning Fund Balance	98,873	151,833	139,109	140,326	112,957
Revenues					
Charges for Service	255,472	287,577	304,983	318,845	348,437
Misc.	19,294	20,987	23,368	14,252	15,599
Transfers In	78,179	7,715	0	0	6,049
Loan Proceeds	0	0	0	0	185,358
Total Revenue	**352,945**	**316,279**	**328,351**	**333,097**	**555,443**
Expenditures					
Personal Services	136,494	144,507	133,453	169,295	184,403
Material and Services	87,719	89,688	109,106	101,127	174,592
Debt Services	64,080	64,080	64,079	64,080	64,080
Capital Outlay	6,754	24,790	14,558	16,026	188,103
Contingency	0				
Total Expenses	**295,047**	**323,065**	**321,196**	**350,528**	**611,178**
Transfers Out	4,938	5,938	5,938	9,938	15,740
Ending Fun Balance	**151,833**	**139,109**	**140,326**	**112,957**	**41,482**

10.2 Revenue Increase Needed

10.2.1 Capital Improvement Costs

The Capital Improvement Plan in Section 9.0 has an estimated total cost of $11,162,000.

10.2.2 Additional Annual Revenue Required

The potential revenue increases needed to fund the CIP based on standard funding terms which include a 3.5% interest rate, and a 20-year payback will be $65,000/month. This is meant to be an example of the worst-case scenario of no grant, no city funds and all the money required from a loan.

10.3 Potential Grant and Loan Sources

10.3.1 Background Data for Funding

Funding for municipal water system capital improvements can occur with loans, grants, principal forgiveness, bonds or a combination thereof. The following parameters are typically used by funding agencies to evaluate the type and level of funding assistance that can be received by a community:

- Local and State median household income (MHI)
- Existing debt service
- Water use rates
- Low/moderate income level percentages
- Financial stability
- Project need

The calculations for user rates can incorporate fee-equivalents derived from other local funding sources that will be used to pay for the water system. These may include any special levies on taxable property within the system's territory.

10.3.2 Infrastructure Finance Authority

State level restructuring has resulted in the creation of the Business Oregon (BO) / Infrastructure Finance Authority (IFA) from what previously was the Oregon Economic and Community Development Department. BO/IFA administers resources aimed at community development activities primarily in the water and wastewater infrastructure areas. The BO/IFA Regional Coordinator for Lane County is Melissa Murphy (503-983-8857) and any application process should begin by contacting her. The funding programs through BO/IFA that are applicable to the City of Lowell include:

- Community Development Block Grants (CDBG)
- Safe Drinking Water Revolving Loan Fund (SDWRLF)
- Special Public Works Funds
- Water/Wastewater Financing

The SDWRLF generally must be used to address a health or compliance issue and could potentially provide a loan up to $6 million per project. To receive a loan the project must be ranked high enough on the Project Priority List developed by the State. The LOI process is now open year-round for submissions. Loan terms are typically 3-4% interest for 20 years, however, "Disadvantaged Communities" can potentially qualify for 1% loans for 30 years as well as some degree of principal forgiveness.

All recipients of SDWRLF awards need to complete an environmental review on every project in accordance with the State Environmental Review Process (SERP), pursuant to federal and state

environmental laws. The Environmental Report typically required can cost $25,000 to $75,000 depending on the specific biological, cultural, waterway, and wetland issues that arise. Loans and grants are available through the Special Public Works Funds and Water/Wastewater Financing depending on need and financial reviews by BO/IFA.

10.3.3 Rural Development / Rural Utilities Service

The United States Department of Agriculture (USDA) Rural Utilities Service (RUS) has a Water Programs Division which provides loans, guaranteed loans, and grants for water infrastructure projects for towns of less than 10,000 persons. Grants are only available when necessary to keep user costs to reasonable levels (very similar to BO/IFA threshold rate). Loans can be made with repayment periods up to 40 years. Interest rates vary but often are around 4% for design/construction loans. Environmental reporting is required similar to that for the SDWRLF but with slightly different criteria.

10.3.4 Bond Sales

A brief summary of the two types of available bonds is presented below.

- General Obligation Bonds. General obligation or GO bonds are municipal bonds that are "backed" by the full faith and credit of the issuer. GO bonds are generally repaid through an increase in property taxes. For a community such as Lowell, the GO bonds can be an attractive option as the property tax payments are tax deductible, are not based on water use, and are collected whether a customer occupies the home full or part time. GO bonds guarantee a stable and consistent stream of revenue. As they are considered a lower risk investment, the interest rates on GO bond issues are generally lower than other alternatives. GO bonds require voter approval for issuance. The City of Lowell could benefit from getting a GO bond and raising the property taxes. As most property owners do not want to risk losing their property for unpaid tax bills, they will generally pay their increased taxes and the City will be able to pay back the GO bond. Additionally, the GO bond generally has a low interest rate so the cost of borrowing the money is lessened. A GO bond also does not consider the price of water within the City as compared to the State average.

- Revenue Bonds. Revenue bonds differ from GO bonds in that they are repaid through a municipality's revenue stream or by user rates. The full faith of the issuer is not behind revenue bonds; therefore, the interest rate on revenue bonds is generally higher than GO bonds. One advantage of revenue bonds is that they do not require voter approval.

  A revenue bond is supported by the revenue from a specific project. They are used to finance an income-producing project within a municipality. As most of the projects

recommended in Section 8.0 are not income-producing and general improvements to the water system, this source of funding may not be the best for the City of Lowell.

10.4 Potential Rate Increases

Because of the various options in funding programs and requirements for contact and communication with the Regional Coordinators prior to applications, the recommended first step in exploring funding options is to attend a "One-Stop" financing meeting. The One-Stop meeting is held in Salem once a month with the goal of gathering the State and federal funding agencies together at one time and one place to discuss all potential funding possibilities and issues. No funding commitments are made at the meeting, but probable funding sources and details are provided to enable the City to choose the best alternatives possible at that time and to initiate funding application steps.

To start this analysis, it was assumed that the existing water rates and the existing expenses are equal to each other. This analysis is only for the Capital Improvement Projects that are presented in this report and does not include any other factors.

Since Lowell's definition of an EDU uses 4,719 gallons per month per EDU, there are a total of 536 EDUs in the City of Lowell. To be conservative, the same number of EDU's was used throughout the planning period even though the number will likely increase as time passes. Based upon this information a total cost of $121.27 per EDU per month is needed to fund the entire CIP over a 20-year period.

However, we are recommending this work be done in phases, and the amount of work done in the first 20 years would likely be closer to $4.8M. This estimate removes much of the lower priority distribution system work and focuses on the reservoir and WTP projects. The monthly cost of this would be a payback of $28,000/month, which spread over the 536 EDUs would be an increase of $52.24 per month/EDU.

The City of Lowell would likely be categorized as disadvantaged and could perhaps have a large percentage of the loan forgiven, as well as qualifying for a much better than 3.5% interest rate on the loan.

Rather than raising water rates, a private option or GO bond sale may also be used by Lowell. With a GO bond, the City could keep water rates low, but raise property taxes instead to pay for the bond.

The City may also look to using SDCs to cover the costs of projects that increase the capacity of the system. SDC eligibility may be determined for each project, and in general, the SDC eligible amount is proportional to the amount of system capacity increase created by the project.

APPENDIX SRAMP
SEISMIC RISK ASSESSMENT & MITIGATION PLAN

TABLE OF CONTENTS

1 INTRODUCTION

The City of Lowell has been identified as having a moderate to moderate/heavy damage potential in the 2013 Oregon Resilience Plan. The City is within the Valley Impact Zone. It is likely that the City's existing water infrastructure would be heavily compromised in the event of an earthquake. This presents the need for the City of Lowell to identify, assess, and plan for upgrading facilities needed to supply the following critical community needs:

- Safe Drinking Water
- General Health and First Aid
- Emergency Response
- Fire Suppression

Based on the current condition and location of the existing infrastructure, the City of Lowell is vulnerable to seismic events, including subsidence, landslides, and power outages. Considerable work must be done to update the City's utility infrastructure to ensure it has the most seismically resilient systems possible. Modification, replacement, and/or relocation of existing infrastructure is critical to ensure that the City can continue to supply water and essential community needs after a major Cascadia Subduction Zone (CSZ) event.

The 2013 ORP has set a target 50-year planning goal for cities to attain the capability to restore critical services within a one-week period after an earthquake, and to be able to restore all services within six months. Valley communities were estimated to take up to a year to restore drinking water services after a major seismic event. By focusing capital improvement planning toward improving seismic resiliency, the recovery period after such an incident can be significantly reduced.

Although this report focuses primarily on water system resiliency, there are many other infrastructure considerations which should be reviewed by the City to develop a comprehensive resilience plan. Seismic risk and resiliency should be considered for the following infrastructure:

- Utilities
    - Water System
    - Wastewater System
    - Electricity
    - Communication
    - Natural Gas
- Transportation
    - Local (within the City)
    - Regional (access to the City)
- Administration Buildings
    - Public Safety
    - Fire Department
    - City Hall
    - Schools

2 GEOLOGIC AND SEISMIC SETTING

This section outlines the geologic conditions and the potential for seismic activity in the greater area around Lowell. Understanding the geology and seismic potential of the region coupled with the subsurface local conditions outlined in the next section helps to predict possible outcomes local to Lowell. Please see the graphic on the following page detailing fault boundaries.

The area around Lowell was formed by volcanic activity, which began 40 million years ago when the coast ran along what is now the Willamette Valley. Volcanism, caused by intensified subduction, ejected large volumes of ash and lava building up the Western Cascades. Continued volcanic activity occurred along with additional uplift and tilting in the Miocene and Pliocene. In addition, the area has been altered by minor glaciations in the western cascades during the Pleistocene.

Earthquakes in the Pacific Northwest occur in response to active convergence of the Juan de Fuca oceanic plate and the North American continental plate. Plate stresses build with friction between the plates as the Juan de Fuca plate is subducted beneath the continental plate in the Cascadia Subduction Zone (CSZ). Both plates move periodically along fault lines to relieve the stress. This seismic setting generates earthquakes from three primary sources:

- CSZ megathrust events generated along the boundary between the subducting Juan de Fuca plate and the overriding North American plate
- CSZ intraplate or intraslab sources the result of sources within the subducted portion of the Juan de Fuca plate
- Shallow crustal faults

Among these three primary sources, CSZ megathrust events are considered as having the most hazard potential. Recent studies indicate that the CSZ can potentially generate large earthquakes with magnitudes ranging from 8.0 to 9.2 depending on the rupture length. The recurrence intervals for the CSZ events are estimated at approximately 500 years for the mega-magnitude full rupture events (magnitude 9.0 to 9.2), and 200 to 300 years for the large-magnitude partial rupture events (magnitude 8.0 to 8.5).

Current research indicates the region is “past due” based on historic and prehistoric recurrence intervals documented in the ocean sediments. For example, the potential for a CSZ earthquake has an estimated probability of occurrence of 16 to 22 percent over the next 50 years (ORP, 2013).

2.1 Ground Shaking

Ground shaking is a hazard created by earthquakes. If the vibrations are strong enough, they may cause damage to buildings, roads, or other structures.

Liquefaction and landslides can be triggered by ground shaking. The rapid and extreme shaking during an earthquake can cause stress and strain in pipelines that can be damaging if the pipe material and joints are not strong enough to withstand the transient ground deformations. Damage from ground shaking occurs even when there is no peak ground displacement (PGD). The intensity of ground shaking can be quantified by measuring the peak ground velocity (PGV) at a site because of an earthquake.

Ground shaking varies depending on the soil, the topography, and the location and orientation of the rupture. Ground shaking is one hazard that causes damage to buried pipes. Most of the City lies on silty clay loams. During an earthquake the City will experience amplified ground shaking due to these soft soils. Soft soil amplifies shear waves, making reservoirs and pipelines at a higher risk for failure. Many pipelines throughout the City are at high risk of damage due to ground shaking.

2.2 Liquefaction

Liquefaction during the 1964 Niigata M7.6 earthquake, Honshu, Japan caused major foundation failure in these apartment blocks.
Image from WikiCommons.

Liquefaction occurs in loose, saturated, granular soils during strong, prolonged seismic shaking. During this phenomenon the strength and stiffness of the soil decreases and may cause infrastructure to sink and collapse due to the lack of soil stability. The results of soil liquefaction include loss of shear strength, loss of soil materials through sand boils or flow, flotation of buried chambers/pipes, and post-liquefaction reconsolidation (settlement). During liquefaction silt and sand is compacted and pore water is displaced, causing an upward force. If the soil is saturated this force can push buried pipe upwards out of the soil.

Lateral spreading typically follows liquefaction and causes permanent soil deformation. In combination, these two hazards may push the pipeline upwards while sliding down a slope causing multiple points of failure. It is likely the City will see severe destruction to buried pipes if liquefaction and lateral spreading were to occur.

All water infrastructure in these liquefiable zones are vulnerable to damage resulting from displacement caused by liquefaction. Most of the City is in the highest risk zone for liquefaction, please see Figure 2.2 on the following page.

The burial depth of pipes can also affect how pipes react to hazards in an earthquake situation. The shallower the burial, the less overburdened it is, lowering the frictional resistance from the soil on the pipe. Burial depth should be a factor in any new construction of water mains or water lines in the City to minimize this risk.

DATE:6/20/22 FILE:O:\CW_Projects\2101 Lowell\2101-020 Water Master Plan\04 Study\Drawings\Dwg\SRAMP FIGURES.dwg

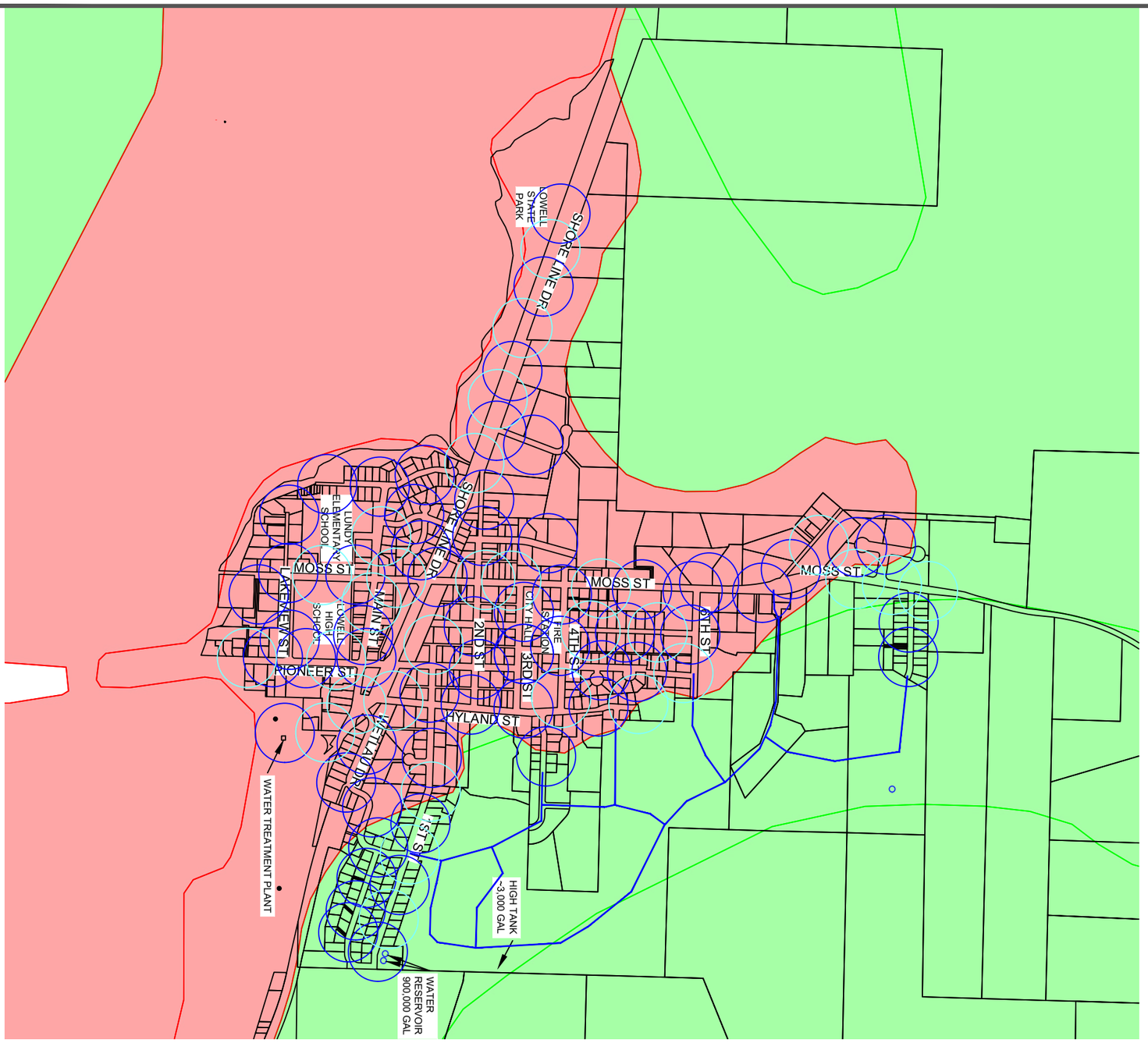


FIGURE 2.2	0 1" NTS DRAWN BY: ERM DATE: XX 2022	LIQUEFACTION SUSCEPTIBILITY 2022 WATER MASTER PLAN	CITY OF LOWELL LANE COUNTY, OR

Civil West Engineering Services, Inc.

2.3 Landslides

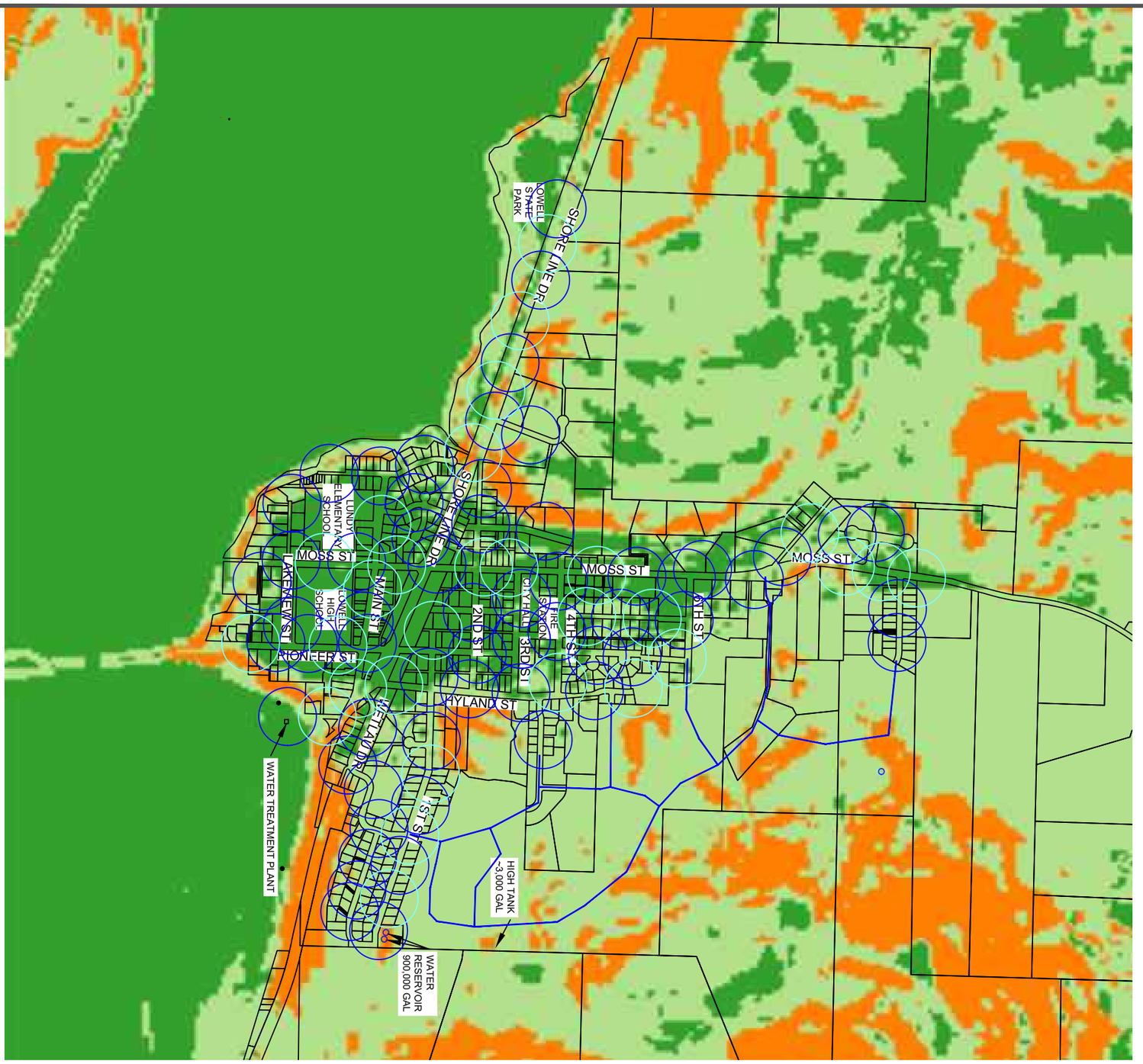
Residents of Oregon are familiar with the existing roadway hazards due to rockfalls and landslides. The sheer number of landslides and rockfalls that will be triggered by the strong ground shaking that a M 9.0 seismic event will generate are unimaginable. Landslides permanently deform soil mass, causing severe damage to buried pipes. Most of the City is in a low to moderate landslide hazard area. However, the hills around the City range from moderate to very high.

Landslides occur when ground shaking destabilizes cliffs or slopes causing rock, soil, and any existing infrastructure on the slopes to fall. Earthquake-induced landslides can occur on slopes when inertial forces from an earthquake add dynamic loading to a slope. The ground movement caused by landslides can be extremely large and damaging to pipelines, reservoirs, and other facilities. The areas that are at the highest risk within the City are along the edge of the reservoir to the South and West and the neighborhoods constructed along the hillsides to the East.

2.4 Lateral Spread

During earthquake shaking, the ground may move laterally causing blocks of land to move in the same direction. Generally, this occurs near a slope but can occur anywhere there are soils underlain with a weak foundation. Lateral spreading will crack and stretches the ground surface. Liquefaction can result in progressive deformation of the ground known as lateral spreading. The lateral movement of liquefied soil breaks the non-liquefied soil crust into blocks that progressively move downslope or toward a free face in response to the earthquake-generated ground accelerations. Ground accelerations incrementally push these blocks downslope, accumulating displacement with each seismic shear pulse that is large enough to overcome the strength of the liquefied soil column. The potential for lateral spreading depends on the liquefaction potential of the soil, magnitude and duration of earthquake ground accelerations, post-liquefaction or strain softened shear strength of the soil, and site topography. Most of the

lateral spreading hazard exists along the lower laying areas in town. The potential for significant lateral spreading displacements in this zone is due primarily to the ground consisting of liquefiable, finer-grained soils.



HIGH - LANDSLIDING LIKELY

MODERATE - LANDSLIDING POSSIBLE

LOW - LANDSLIDING UNLIKELY

FIGURE 2.4

0 1"

NTS

DRAWN BY: ERM

DATE: JAN. 2022

LANDSLIDE SUSCEPTIBILITY

2022 WATER MASTER PLAN

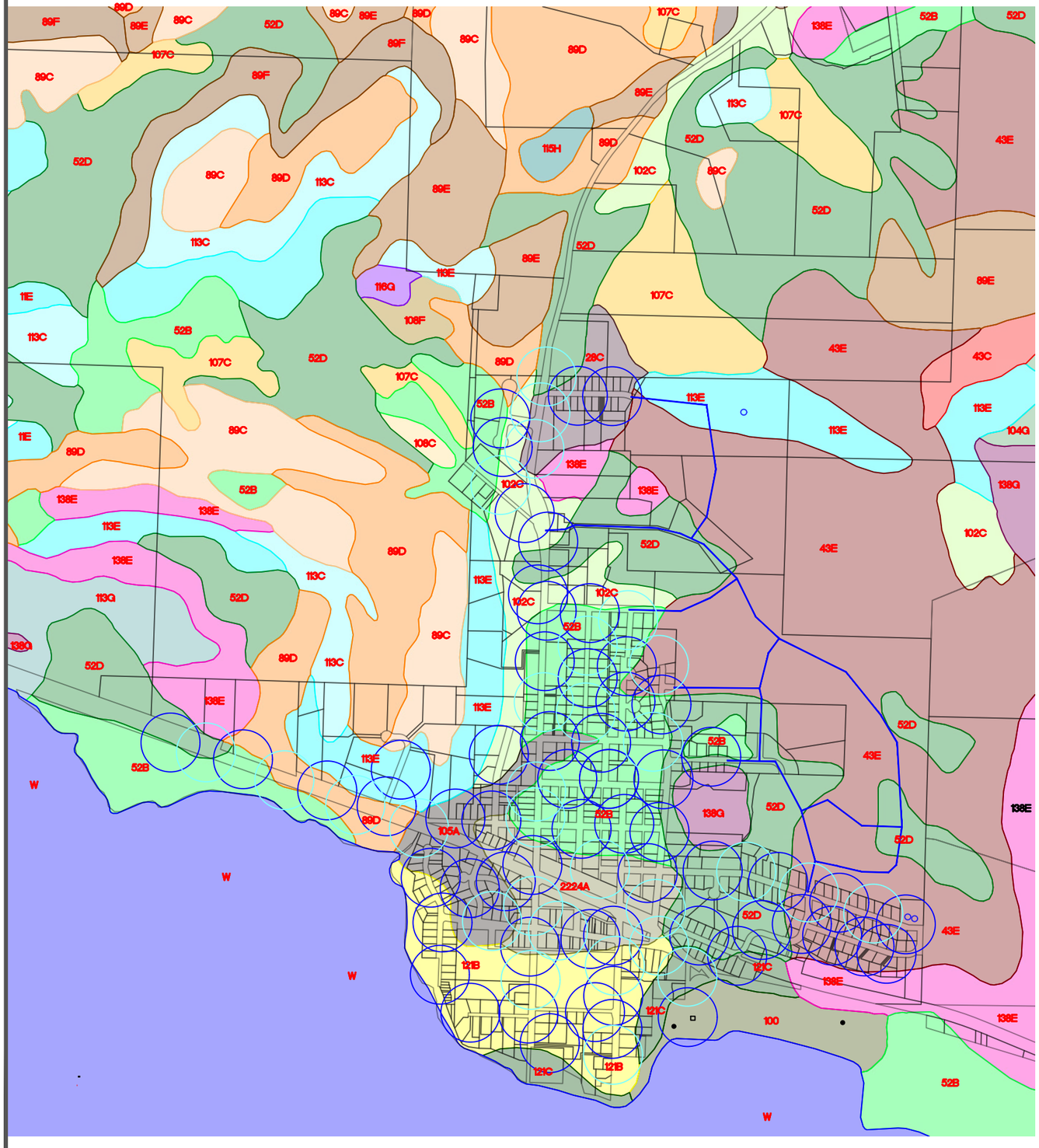
CITY OF LOWELL
LANE COUNTY, OR

Civil West Engineering Services, Inc.

3 SUBSURFACE CONDITIONS

The NRCS Soil Survey shows that the predominant soils in the study area are Dixonville Philomath Hazelhair complex, Hazelhair silty loam, and Nekia Silty clay loam. The subsurface conditions may vary across the alignment of the distribution system but can be grouped into four generalized zones based on the prominent geologic conditions. Groundwater levels are variable and change with the seasons and rainfall. Please see the map and legend on the following pages detailing soil types throughout the City.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11E	BELLPINE SILTY CLAY LOAM, 20 TO 30 PERCENT SLOPES	5	0.2%
28C	CHEHULPUM SILT LOAM, 3 TO 12 PERCENT SLOPES	16	0.8%
43C	DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 3 TO 12 PERCENT SLOPES	10	0.5%
43E	DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 12 TO 35 PERCENT SLOPES	286	13.4%
52B	HAZELAIR SILTY CLAY LOAM, 2 TO 7 PERCENT SLOPES	150	7.0%
52D	HAZELAIR SILTY CLAY LOAM, 7 TO 20 PERCENT SLOPES	298	13.9%
89C	NEKIA SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	91	4.2%
89D	NEKIA SILTY CLAY LOAM, 12 TO 20 PERCENT SLOPES	130	6.1%
89E	NEKIA SILTY CLAY LOAM, 20 TO 30 PERCENT SLOPES	72	3.3%
89F	NEKIA SILTY CLAY LOAM, 30 TO 50 PERCENT SLOPES	59	2.7%
100	OXLEY GRAVELLY SILT LOAM	18	0.9%
102C	PANTHER SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	52	2.4%
104G	PEAVINE SILTY CLAY LOAM, 30 TO 60 PERCENT SLOPES	2	0.1%
105A	PENGRA SILT LOAM, 1 TO 4 PERCENT SLOPES	23	1.1%
107C	PHILOMATH SILTY CLAY, 3 TO 12 PERCENT SLOPES	64	3.0%
108C	PHILOMATH COBBLY SILTY CLAY, 3 TO 12 PERCENT SLOPES	3	0.1%
108F	PHILOMATH COBBLY SILTY CLAY, 12 TO 45 PERCENT SLOPES	6	0.3%
113C	RITNER COBBLY SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	59	2.7%
113E	RITNER COBBLY SILTY CLAY LOAM, 12 TO 30 PERCENT SLOPES	98	4.6%
113G	RITNER COBBLY SILTY CLAY LOAM, 30 TO 60 PERCENT SLOPES	219	10.2%
115H	ROCK OUTCROP-KILCHIS COMPLEX, 30 TO 90 PERCENT SLOPES	5	0.2%
116G	ROCK OUTCROP-WITZEL COMPLEX, 10 TO 70 PERCENT SLOPES	3	0.1%
121B	SALKUM SILTY CLAY LOAM, 2 TO 8 PERCENT SLOPES	47	2.2%
121C	SALKUM SILTY CLAY LOAM, 8 TO 16 PERCENT SLOPES	16	0.7%
138E	WITZEL VERY COBBLY LOAM, 3 TO 30 PERCENT SLOPES	78	3.6%
138G	WITZEL VERY COBBLY LOAM, 30 TO 75 PERCENT SLOPES	18	0.8%
2224A	COURTNEY GRAVELLY SILTY CLAY LOAM, 0 TO 3 PERCENT SLOPES	29	1.3%
W	WATER	288	13.4%



11E	BELLPINE SILTY CLAY LOAM, 20 TO 30 PERCENT SLOPES	107C	PHILOMATH SILTY CLAY, 3 TO 12 PERCENT SLOPES
28C	CHEHULPUM SILT LOAM, 3 TO 12 PERCENT SLOPES	108C	PHILOMATH COBBLY SILTY CLAY, 3 TO 12 PERCENT SLOPES
43C	DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 3 TO 12 PERCENT SLOPES	108F	PHILOMATH COBBLY SILTY CLAY, 12 TO 45 PERCENT SLOPES
43E	DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 12 TO 35 PERCENT SLOPES	113C	RITNER COBBLY SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES
52B	HAZELAIR SILTY CLAY LOAM, 2 TO 7 PERCENT SLOPES	113E	RITNER COBBLY SILTY CLAY LOAM, 12 TO 30 PERCENT SLOPES
52D	HAZELAIR SILTY CLAY LOAM, 7 TO 20 PERCENT SLOPES	113Q	RITNER COBBLY SILTY CLAY LOAM, 30 TO 60 PERCENT SLOPES
89C	NEKIA SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	115H	ROCK OUTCROP-KILCHIS COMPLEX, 30 TO 90 PERCENT SLOPES
89D	NEKIA SILTY CLAY LOAM, 12 TO 20 PERCENT SLOPES	116Q	ROCK OUTCROP-WITZEL COMPLEX, 10 TO 70 PERCENT SLOPES
89E	NEKIA SILTY CLAY LOAM, 20 TO 30 PERCENT SLOPES	121B	SALKUM SILTY CLAY LOAM, 2 TO 8 PERCENT SLOPES
89F	NEKIA SILTY CLAY LOAM, 30 TO 50 PERCENT SLOPES	121C	SALKUM SILTY CLAY LOAM, 8 TO 16 PERCENT SLOPES
100	OXLEY GRAVELLY SILT LOAM	138E	WITZEL VERY COBBLY LOAM, 3 TO 30 PERCENT SLOPES
102C	PANTHER SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	138Q	WITZEL VERY COBBLY LOAM, 30 TO 75 PERCENT SLOPES
104Q	PEAVINE SILTY CLAY LOAM, 30 TO 60 PERCENT SLOPES	2224A	COURTNEY GRAVELLY SILTY CLAY LOAM, 0 TO 3 PERCENT SLOPES
105A	PENGRA SILT LOAM, 1 TO 4 PERCENT SLOPES	W	WATER

MAP UNIT SYMBOL	MAP UNIT NAME	ACRES IN AOI	PERCENT OF AOI
11E	BELLPINE SILTY CLAY LOAM, 20 TO 30 PERCENT SLOPES	5	0.2%
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89D	NEKIA SILTY CLAY LOAM, 12 TO 20 PERCENT SLOPES	130	6.1%
89E	NEKIA SILTY CLAY LOAM, 20 TO 30 PERCENT SLOPES	72	3.3%
89F	NEKIA SILTY CLAY LOAM, 30 TO 50 PERCENT SLOPES	59	2.7%
100	OXLEY GRAVELLY SILT LOAM	18	0.9%
102C	PANTHER SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	52	2.4%
104G	PEAVINE SILTY CLAY LOAM, 30 TO 60 PERCENT SLOPES	2	0.1%
105A	PENGRA SILT LOAM, 1 TO 4 PERCENT SLOPES	23	1.1%
107C	PHILOMATH SILTY CLAY, 3 TO 12 PERCENT SLOPES	64	3.0%
108C	PHILOMATH COBBLY SILTY CLAY, 3 TO 12 PERCENT SLOPES	3	0.1%
108F	PHILOMATH COBBLY SILTY CLAY, 12 TO 45 PERCENT SLOPES	6	0.3%
113C	RITNER COBBLY SILTY CLAY LOAM, 2 TO 12 PERCENT SLOPES	59	2.7%
113E	RITNER COBBLY SILTY CLAY LOAM, 12 TO 30 PERCENT SLOPES	98	4.6%
113G	RITNER COBBLY SILTY CLAY LOAM, 30 TO 60 PERCENT SLOPES	219	10.2%
115H	ROCK OUTCROP-KILCHIS COMPLEX, 30 TO 90 PERCENT SLOPES	5	0.2%
116G	ROCK OUTCROP-WITZEL COMPLEX, 10 TO 70 PERCENT SLOPES	3	0.1%
121B	SALKUM SILTY CLAY LOAM, 2 TO 8 PERCENT SLOPES	47	2.2%
121C	SALKUM SILTY CLAY LOAM, 8 TO 16 PERCENT SLOPES	16	0.7%
138E	WITZEL VERY COBBLY LOAM, 3 TO 30 PERCENT SLOPES	78	3.6%
138G	WITZEL VERY COBBLY LOAM, 30 TO 75 PERCENT SLOPES	18	0.8%
2224A	COURTNEY GRAVELLY SILTY CLAY LOAM, 0 TO 3 PERCENT SLOPES	29	1.3%
W	WATER	288	13.4%

Civil West Engineering Services, Inc.

CITY OF LOWELL
LANE COUNTY, OR

SOIL TYPE MAP

2022 WATER MASTER PLAN

0 1" NTS

DRAWN BY: ERM
DATE: JAN. 2022

FIGURE
3

4 PLANNING CRITERIA

Planning criteria was based on the Oregon Resilience Plan Target States of Recovery: Water & Wastewater Sector of the Valley and are as follows:

DOMESTIC WATER SUPPLY	EVENT OCCURS	0-24 HOURS	1-3 DAYS	3-7 DAYS	1-2 WEEKS	2 WEEKS-1 MONTH	1-3 MONTHS	3-6 MONTHS	6 MONTHS - 1 YEAR	1-3 YEARS	3 + YEARS
POTABLE WATER AVAILABLE AT SOURCE (WTP, WELLS, IMPOUNDMENT)		R	Y		G			X			
MAIN TRANSMISSION FACILITIES, PIPE, PUMP STATIONS, AND RESERVOIRS (BACKBONE) OPERATIONAL		G					X				
WATER SUPPLY TO CRITICAL FACILITIES AVAILABLE		Y	G				X				
WATER FOR FIRE SUPPRESSION AT KEY SUPPLY POINTS		G									
WATER FOR FIRE SUPPRESSION AT FIRE HYDRANTS				R	Y	G			X		
WATER AVAILABLE AT COMMUNITY DISTRIBUTION CENTERS/POINTS			Y	G							
DISTRIBUTION SYSTEM OPERATIONAL			R	Y	G				X		

WASTEWATER SYSTEMS	EVENT OCCURS	0-24 HOURS	1-3 DAYS	3-7 DAYS	1-2 WEEKS	2 WEEKS-1 MONTH	1-3 MONTHS	3-6 MONTHS	6 MONTHS - 1 YEAR	1-3 YEARS	3 + YEARS
THREATS TO PUBLIC HEALTH & SAFETY CONTROLLED			R	Y		G			X		
RAW SEWAGE CONTAINED & ROUTED AWAY FROM POPULATION		R		Y			G		X		
TREATMENT PLANTS OPERATIONAL TO MEET REGULATORY REQUIREMENTS					R			Y	G		X
MAJOR TRUNK LINES AND PUMP STATIONS OPERATIONAL					R		Y	G			X
COLLECTION SYSTEM OPERATIONAL							R	Y	G	X	

DESIRED TIME TO RESTORE COMPONENT TO 80-90% OPERATIONAL	G
DESIRED TIME TO RESTORE COMPONENT TO 50-60% OPERATIONAL	Y
DESIRED TIME TO RESTORE COMPOENT TO 20-30% OPERATIONAL	R
CURRENT STATE (90% OPERATIONAL)	X

FIGURE 4 - ORP TARGET STATES OF RECOVERY

From the 2013 ORP:

"Re-establishing water and wastewater service will be a crucial element in the overall recovery of communities after a Cascadia subduction zone earthquake.

Water for fire suppression, first aid, emergency response, and community use, as well as water for normal health and hygiene, will be required soon after the event.

The time required to re-establish water and wastewater services will depend largely on the pre-event condition of the systems, the actual intensity and duration of the event, the size and complexity of the systems, and the availability of staff and the financial and material resources needed to complete repairs.

In addition, damage to other infrastructure, such as transportation, communications, fuel, and power systems, may control the time required to restore water and wastewater facilities."

As stated, the timeline to restore facilities depends on the condition and complexity of the existing system as well as the impact of the seismic event. No amount of preparation or planning can change the characteristics of the seismic event, so every effort must be made to develop infrastructure to be as resilient to the design event (Cascadia subduction zone event) as is feasibly possible. Doing so will address current deficiencies and upgrade the system components to be better able withstand the design event.

5 SEISMIC RISK ASSESSMENT AND MITIGATION

The intent of this document is to identify, assess, and plan to upgrade or relocate the existing critical facilities and infrastructure necessary to supply the City post-Cascadia Subduction Zone (CSZ) 9.0 event with:

- Clean Drinking Water
- Fire Suppression
- Health Care and Fire Aid
- Emergency Response

The goal of the risk assessment recommendations is to both maintain the above services and to create a disaster resilient water system infrastructure backbone including:

- Water Supply
- Water Treatment
- Water Distribution
- Water Storage

The backbone components listed above shall be capable of supplying water for essential needs to residents after a seismic event while the larger (non-backbone) system is being addressed. This section will also evaluate the likelihood and consequences of seismic induced failures for critical facilities.

5.1 Water System Distribution System Assessment

The water system backbone consists of system components required to provide the most basic of services identified above. For the City, the backbone of the existing water system includes:

- Water Treatment Plant
- Pipeline from the WTP to the Reservoirs
- Reservoirs

- Pipeline from the Reservoirs to Hyland Ln. and north to 4th St.
- Pipeline from Hyland Ln. to Pioneer St. and south to Lakeview St.
- Supply lines to critical service centers, such as City Hall, the Fire Station, and the Elementary School and High School

The backbone infrastructure is highlighted on the water system map at the end of this section. This section will analyze the ability of the existing backbone infrastructure to withstand a CSZ event. The capacity to withstand a CSZ event is dependent on the system attributes, including:

- Pipeline Material
- Pipeline Diameter
- Pipeline Joint Type
- Depth of bury
- Location and type of valves
- Type of Soil
- Reservoir Size, Shape, and Construction Methods

5.1.1 Transmission Pipeline Backbone

The existing water system backbone pipeline is approximately 2 miles long and consists of multiple pipe diameters and materials.

5.1.1.1 Transmission Pipeline Vulnerabilities

Pipe materials used in the current water distribution system include Asbestos Cement (AC) Pipe, multiple classes of Polyvinyl Chloride (PVC) pipe, cast iron, steel and High-Density Polyethylene (HDPE). Different pipe materials have varying abilities to withstand seismic events. AC pipe is considered a rigid pipe. Rigid pipes are better able to handle loading without deforming, but do not have the capability to flex during ground movement. PVC, while considered a flexible pipe, is generally installed with non-restrained joints, meaning it is susceptible to pulling apart during ground movement. HDPE is the most flexible pipe material commonly used for water transmission and distribution, and is generally welded together, meaning it is a fully restrained pipe. HPDE is widely recognized as the most resistant to ground movement.

Unfortunately, the existing backbone consists of PVC and AC pipe. Both PVC and AC pipe are considered among the least seismically-resistant materials used for transmission pipelines. Some characteristics of a successful and reliable backbone pipeline system include having larger diameters and fewer interconnections (fewer laterals and fewer service connections). The identified backbone does not necessarily reflect these attributes, as many lateral connections and services are connected to the backbone. The current route of the backbone is vulnerable to damage due to its location in the City. The development of the backbone was built as the City grew, and winds through residential areas.

5.1.2 Water Sources

The sole source of water for the City is the Middle Fork Willamette River. Water is drawn from the Dexter Reservoir. The water intake pipe is approximately 2500' feet of 10-in PVC and is included as a portion of the backbone for the purposes of this analysis. This the sole source currently being used by the City. The City also has several wells that are not currently used.

5.1.2.1 Source Vulnerabilities

The water intake is within the original flowline of the river, such that if the reservoir drained the intake should still be able to draw water. However, the intake pipe is 10" PVC and there is a risk that the intake pipe itself could fail.

5.1.3 Treatment

The Lowell Water Treatment Plant is a conventional rapid media filter plant. The basic plant processes include chemical coagulation, mechanical flocculation, tube-settler sedimentation, dual-media filtration, and chemical disinfection and conditioning.

5.1.3.1 Treatment Vulnerabilities

The Water Treatment Plant media filter is a large concrete structure. Since concrete is a rigid structure, it is susceptible to damage during an earthquake and could break apart. Depending on the level of damage, this could render the water treatment plant inoperable. The WTP uses pumps for both water intake and sending water to the reservoirs. These pumps, are vulnerable to electricity loss. The Water Treatment Plant has an onsite generator, but the finite supply of

fuel for the generator is not likely to be enough to last until roads are open enough for fuel delivery.

5.1.4 Treated Water Storage

The City has two storage tanks as reservoirs for treated water, which have a combined capacity of 0.9 MG. These reservoirs are considered part of the water system backbone.

5.1.4.1 Treated Water Storage Vulnerabilities

Water from the reservoirs flows via gravity to the distribution system via PVC pipe. If the reservoir supply line was damaged due to a seismic event the reservoirs would drain completely. There are currently no seismically activated shut-off valves on either of the reservoirs to limit water loss.

5.1.4.1.1 Reservoirs

The City currently uses a 440,000-gallon glass-fused to steel tank, and an older 460,000-gallon concrete tank for water storage. The two tanks sit adjacent to each other on a lot north of the intersection of East 1st Street and Sunridge Lane. The tanks share a base elevation of ~922'. The tanks can both be filled to approximately 952' while leaving two feet available for freeboard.

Neither tank has a seismically activated shut off valve and they are built in an area that was identified to have a high landslide risk.

5.1.5 Distribution

Distribution main line pipes range in size from 2-inches to 12-inches in diameter. See the tables below for the various diameters of pipe and the total length of each pipe size in the distribution system. Most of the distribution mainlines are 6-inch diameter pipe or greater.

Approximately 65% of pipes in the distribution system are made of PVC. The remaining 35% of the distribution mains are made up of AC and steel pipe. The AC pipe sections have likely reached the end of their service life, 60 years. Compounding the service life issue, both AC and PVC, even when new, are among the least seismically-resistant piping materials. The table below provides a summary broken down by size and percent of distribution mains composed of the referenced material.

Table 5.1.5 - Pipe *DISTRIBUTION BY* material *AND SIZE* in distribution system

		DIAMETER (IN)						
		2	**4**	**6**	**8**	**10**	**12**	**TOTAL**
PIPE MATERIAL	**PVC**	2,645	1,380	10,345	4,305	-	9,240	**27,915**
	STEEL	-	1,830	510	1,710	-	-	**4,050**
	AC	-	-	9,595	-	1,745	-	**11,340**
	TOTAL	**2,645**	**3,210**	**20,450**	**6,015**	**1,745**	**9,240**	**43,305**

		DIAMETER (IN)						
		2	**4**	**6**	**8**	**10**	**12**	**TOTAL**
PIPE MATERIAL	**PVC**	6.1%	3.2%	23.9%	9.9%	-	21.3%	**64.5%**
	STEEL	-	4.2%	1.2%	3.9%	-	-	**9.4%**
	AC	-	-	22.2%	-	4.0%	-	**26.2%**
	TOTAL	**6.1%**	**7.4%**	**47.2%**	**13.9%**	**4.0%**	**21.3%**	**100%**

5.1.5.1 Distribution System Vulnerabilities

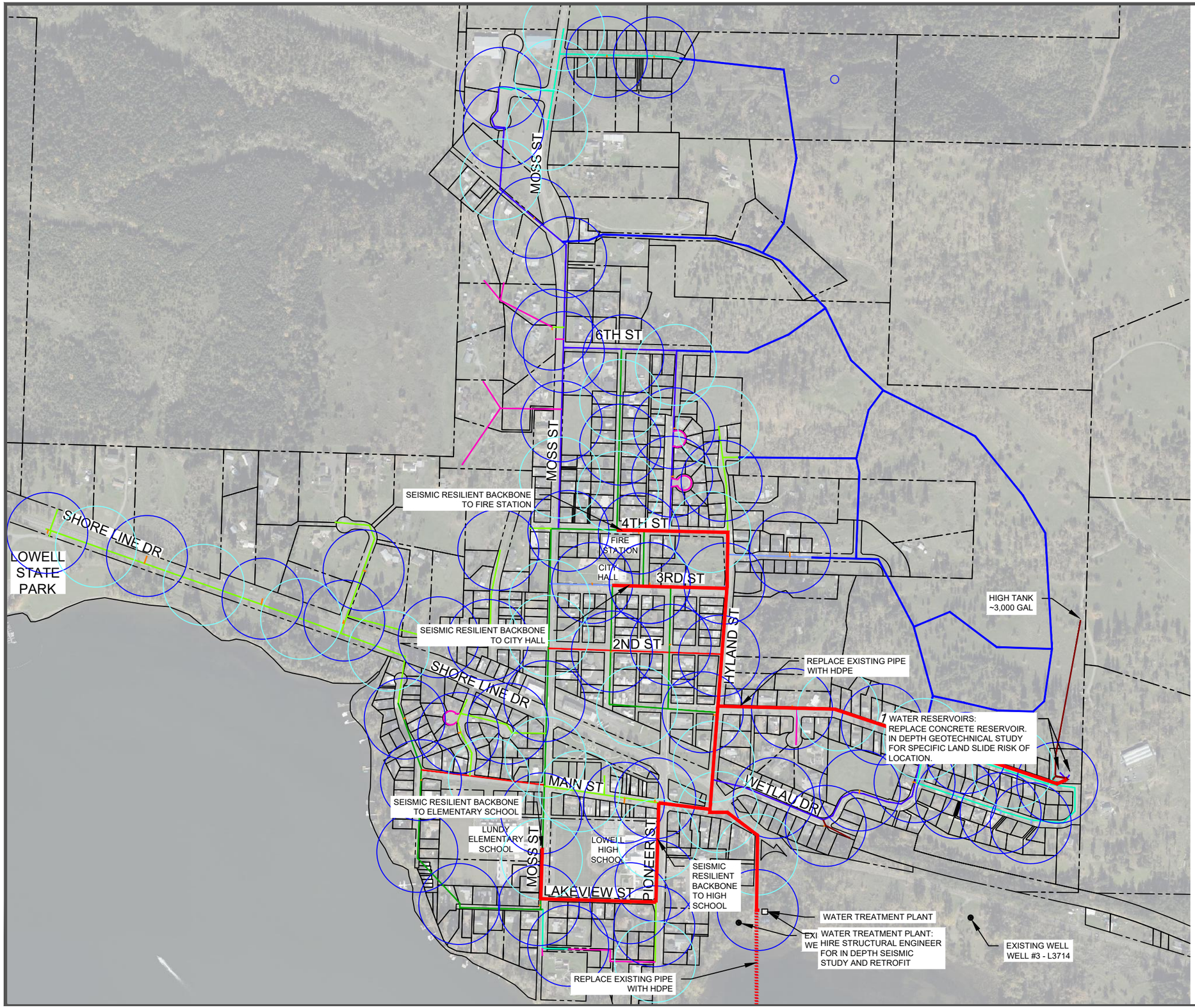
Distribution system vulnerabilities are the same as transmission system vulnerabilities in that rigid or unrestrained pipes are particularly vulnerable to ground movement. Compounding the concern with pipe material is that smaller pipes are more likely to fail during ground movement.

5.2 Backbone Risk

The existing backbone has several significant risks. The existing backbone is constructed of AC and PVC pipe, which are both known to be very susceptible to damage in a seismic event. The sole water storage tanks are constructed in or downslope of an area that has been identified as having a high risk of landslide. In addition, the core of the town has a high risk of liquefaction, leading to increased risk and severity of ground displacement, pipe breakage, and general damage.

5.3 Fire and EMT Services

The fire station at 389 N Pioneer St. The fire station is in an area with high liquefaction susceptibility and low landslide risk.



2 IN GALVANIZED STEEL
2 IN PVC
4 IN CAST IRON
4 IN PVC
6 IN AC
6 IN STEEL
8 IN PVC
8 IN STEEL
10 IN AC
12 IN PVC
HDPE BACKBONE
HDPE SOURCE WATER INTAKE

HDPE PIPE REPLACEMENT

DESCRIPTION	APPROX. LENGTH (ft)
HDPE SOURCE WATER INTAKE	2500
HDPE BACKBONE	8500

Civil West Engineering Services, Inc.

CITY OF LOWELL
LANE COUNTY, OR

SRAMP CIP

2022 WATER MASTER PLAN

0 1" 600'

DRAWN BY: ERM
DATE: JAN. 2022

FIGURE
5.1

6 MITIGATION PLAN

This Mitigation Plan is an effort to reduce loss of life and property by lessening the impact of a seismic disaster. To be effective, mitigation must address difficult realities, and invest in long-term goals. Taking action prior to an event will ensure the community will be safer, financially secure and self-reliant.

This section discusses considerations for mitigating risks of water system damage. Various strategies for mitigating the risks in the water system can be considered. An effort should be made to examine and align strategies with long-term asset management, Capital Improvement Plan (CIP) development, future growth plans, and operations and maintenance.

The goal of mitigation planning should be to:

- Protect life and reduce injuries resulting from natural hazards.
- Minimize public and private property damages and the disruption of essential infrastructure and services from natural hazards.
- Identify capital improvement projects.
- Give recommendations for further study or analysis.
- Schedule when mitigation efforts will be completed.
- Document and evaluate the City's progress in achieving hazard mitigation.

Per OHA requirements, this mitigation plan consists of projects that are recommended to be completed over the next 50 years to upgrade, retrofit, and rebuild facilities so that they will continue to provide water following a Cascadia subduction zone earthquake.

6.1 Backbone Pipeline Mitigation

As identified in Section 5.1.1 the existing pipeline backbone is vulnerable due to pipeline materials, connections, and location. To mitigate these vulnerabilities, it is recommended to construct a new backbone pipeline system using HPDE pipe.

The backbone pipeline should have valving strategically placed to allow area isolation in the event of a break. Connections to the distribution system should also be valved. Figure 6, at the

end of this section, shows a map of the City with this new backbone identified. Capital Improvement #1, described in additional detail in Section 7.1, facilitates this mitigation recommendation.

6.2 Water Source Mitigation

As identified in section 5.1.2 the City has a single water source, the Willamette River within Dexter Reservoir. It is recommended that the city replace the existing intake pipeline with HDPE.

6.3 Water Treatment Plant Mitigation

The Water Treatment Plant was constructed in 1969. It is recommended that the City hire a structural engineer to assess the water treatment plant and recommend seismic retrofits. Any further expansion or construction at the Water Treatment Plant should be constructed to seismic code, and include disaster resilience and recovery in the design and construction.

6.4 Water Storage Mitigation

Currently only one of the two reservoirs is compliant with seismic code, the newer glass-fused steel reservoir was constructed in 2012, the older concrete reservoir was constructed in 1992. Both reservoirs are considered part of the backbone and are required for storage during and after seismic event. Due to the age and construction of the concrete reservoir, it is unlikely to withstand a minor seismic event let alone the CSZ event. It is recommended that the older concrete reservoir be replaced with a seismic code compliant reservoir. Both reservoirs are sited in a location that is either on or immediately below an area that has been identified as having a high landslide risk. It is recommended that a geotechnical investigation of the tank location be conducted to determine the specific risk. A new water reservoir is recommended in the WMP Capital Improvements Plan. It is recommended that this new tank be constructed and sited with a CSZ level seismic event in mind.

6.5 Distribution System Mitigation

Other than infrastructure serving critical facilities, much of the periphery of the distribution system is not identified as part of the backbone of the water system. However, mitigation of non-critical distribution system vulnerabilities will reduce the cost and time to return the full

system to full operation. We recommend that non-critical distribution system line replacements be made with seismically resilient materials, such as HDPE.

6.6 System redundancy

Redundancy, whether it be parallel water transmission mains, or multiple water sources, has the potential to significantly increase the resiliency of the system. In some cases, it may be beneficial to increase water system reliability by building system redundancy. When future growth may be anticipated, creating parallel pipelines and system "looping" to provide additional pathways around high-hazard areas may provide benefits in planning areas. Redundant, and strategically located valves will allow the City the ability to isolate section of the system where pipe breaks may occur to minimize water loss while also minimizing the services without water.

6.7 Repair capability

In cases/areas where pipeline damage is likely, enhancing pipeline repair capabilities will be beneficial to recover efficiently and get critical portions of the water system back in operation quickly. This includes the stockpiling of pipelines, repair clamps, and appurtenances in various sizes, and needed equipment and materials. It is further recommended that the City stock approximately 3% of each size pipe and enough adaptors and repair clamps to repair 30 pipe breaks. This stock can be cycled through the annual pipe replacement as identified above, but additional pipe should be purchased so that there is always approximately 3% of the entire system ready for emergency pipe repairs and replacements.

6.8 Geotechnical study

More detailed and localized geotechnical study may help confirm and validate the seismic hazards assumed in this evaluation. High peak ground displacements (PGD), up to 24 inches, are estimated and assumed in some areas. More information on the severity of seismic-related hazards may yield more beneficial mitigation planning.

6.9 Critical Services

In previous sections, it was identified that water service which serves critical infrastructure should be as seismically resilient as feasible and included as "backbone" infrastructure. The critical facilities themselves should be improved to increase seismic resiliency.

6.10 Earthquake Recovery Operations, Plans, and Procedures

The City of Lowell does not currently have a Natural Hazards Mitigation Plan or an Emergency Management Plan to outline pre-event planning and after-event actions. It is recommended that the City assemble and adopt these planning documents.

6.11 Emergency training and exercises

Emergency training and exercises focused on earthquake scenarios may enhance the City's emergency preparedness. Training on National Incident Management System (NIMS) and the Incident Command System (ICS) help ensure compliance with Federal Emergency Management Agency (FEMA) directives. While a range of exercises, from workshops to tabletop exercises to full scale exercises provide forums for staff to share insight, endorse co-ordination, practice emergency response. It is recommended that exercises adhere to the Department of Homeland Security Exercise and Evaluation Guide.

APPENDIX WMCP
WATER MANAGEMENT AND CONSERVATION PLAN

DRAFT FOR OWRD REVIEW

Water Management and Conservation Plan

City of Lowell

Septembe 2022

Prepared by:
GSI Water Solutions, Inc.
1600 SW Western Boulevard, Suite 240, Corvallis, OR 97333

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Contents

Index of Exhibits

Appendices

1. Municipal Water Supplier Plan Elements

This section satisfies the requirements of Oregon Administrative Rules (OAR) 690-086-0125.

This rule requires a list of affected local government to whom the plan was made available, and a proposed date for submittal of an updated plan.

1.1 Introduction

The City of Lowell (City) is located on the north shore of Dexter Reservoir on the Middle Fork Willamette River in Lane County, Oregon. The City provides public utility services to residents and businesses including the provision of drinking water. The City's Public Water System Identification number is 41-00492.

The purpose of this Water Management and Conservation Plan (WMCP) is to describe the development and implementation of water management and conservation policies and programs that ensure sustainable water use. This Plan also discusses the City's future water needs.

1.2 Plan Requirement

This is the City's second WMCP. For the City's first WMCP, the Oregon Water Resources Department (OWRD) required the City to submit a work plan to fully meet the WMCP rule requirements. Following review of the work plan, OWRD issued a final order approving the City's WMCP and associated work plan on December 29, 2004. The final order included a requirement for the City to submit an updated WMCP by October 1, 2009, incorporating the results of the activities in the work plan. This WMCP fulfills the requirement for the City to submit an update of the City's 2004 WMCP.

1.3 Plan Organization

This WMCP describes water management, water conservation, and curtailment programs to guide the efficient development and use of the City's water supply to meet its customers' needs. The plan is organized into the following sections, each addressing specific sections of OAR Chapter 690, Division 86. Section 2 is an evaluation of the City's water supply, water use, water rights, and water system. The information developed and provided in Section 2 forms the foundation for the sections that follow. Section 3 discusses the City's current water conservation measures and presents benchmarks for future efforts. Section 4 describes the City's curtailment history and guides future actions when curtailment is necessary. Section 5 draws on information in the preceding sections to outline the City's future water supply needs and how it intends to use available water sources to meet future demand.

This WMCP was developed in tandem with the City's 2022 Water System Master Plan (WSMP) and draws relevant information from the WSMP, in addition to other sources provided or referenced by the City.

Section	Requirement
Section 1 – Municipal Water Supplier Plan Elements	*OAR 690-086-0125*
Section 2 – Municipal Water Suppliers Descriptions	*OAR 690-086-0140*
Section 3 – Municipal Water Conservation Element	*OAR 690-086-0150*
Section 4 – Municipal Water Curtailment Element	*OAR 690-086-0160*
Section 5 – Municipal Water Supply Element	*OAR 690-086-0170*

1.4 Affected Local Governments

OAR 690-086-0125(5)

The following governmental agencies may be affected by this WMCP:

- Lane County

The letter requesting comments from the local government agency and any response is found in Appendix A.

1.5 Plan Update Schedule

OAR 690-086-1025(6)

The City anticipates submitting an update of this WMCP within 10 years of OWRD's final order approving the plan. As required by OAR Chapter 690, Division 86, a progress report will be submitted within 5 years of the final order.

1.6 Time Extension

OAR 690-086-0125(7)

The City is not requesting an extension of time to implement metering or a benchmark established in a previously approved WMCP.

2. Municipal Water Supplier Description

This section satisfies the requirements of OAR 690-086-0140.

This rule requires descriptions of the water supplier's water sources, service area and population, water rights, and adequacy and reliability of the existing water supply. The rule also requires descriptions of the water supplier's customers and their water use, the water system, interconnections with other water suppliers, and quantification of water loss.

2.1 Terminology

The following terminology is used in this WMCP.

Consumption is equal to metered water use and unmetered, authorized water uses (e.g. system flushing).

Demand or System Demand refers to the quantity of treated water produced at the City's water treatment plant (WTP). Production is equivalent to "demand". Demand includes the sum total of metered consumption (for example, residential, commercial, industrial, public, and irrigation customers), unmetered public uses (firefighting, hydrant flushing, other), and water lost to leakage, reservoir overflow, evaporation, and other factors.

Generally, production and consumption in municipal and quasi-municipal systems are expressed in units of mgd, but also may be expressed in cubic feet per second (cfs) or gallons per minute (gpm). One mgd is equivalent to 1.55 cfs or 694 gpm. For annual or monthly values, a quantity of water is typically reported in million gallons (MG). Water use per person (per capita use) is expressed in gallons per capita per day (gpcd).

The following terms are used to describe specific values of system demands:

- Average day demand (ADD) equals the total annual production divided by 365 days.
- Maximum day demand (MDD) equals the highest system demand that occurs on any single day during a calendar year. It is also called the one-day MDD or peak day demand.
- Peaking factors are the ratios of one demand value to another. The most common and important peaking factors are the ratio of the MDD to the ADD and the ratio of peak hour demand to MDD.

2.2 Water Sources

OAR 690-086-0140(1)

To meet demand, the City has historically relied on the use of groundwater and surface water. Following a multi-year period in which the City relied on its wells to meet demand, the City discontinued use of these wells in approximately 2008 due to water quality issues and transitioned to the use of surface water from the Middle Fork Willamette River to meet demands. The City has continued to utilize this source to present and the City's wells serve as emergency supply.

2.3 Interconnections with Other Systems

OAR 690-086-0140(7)

The City does not have any interconnections with other water systems.

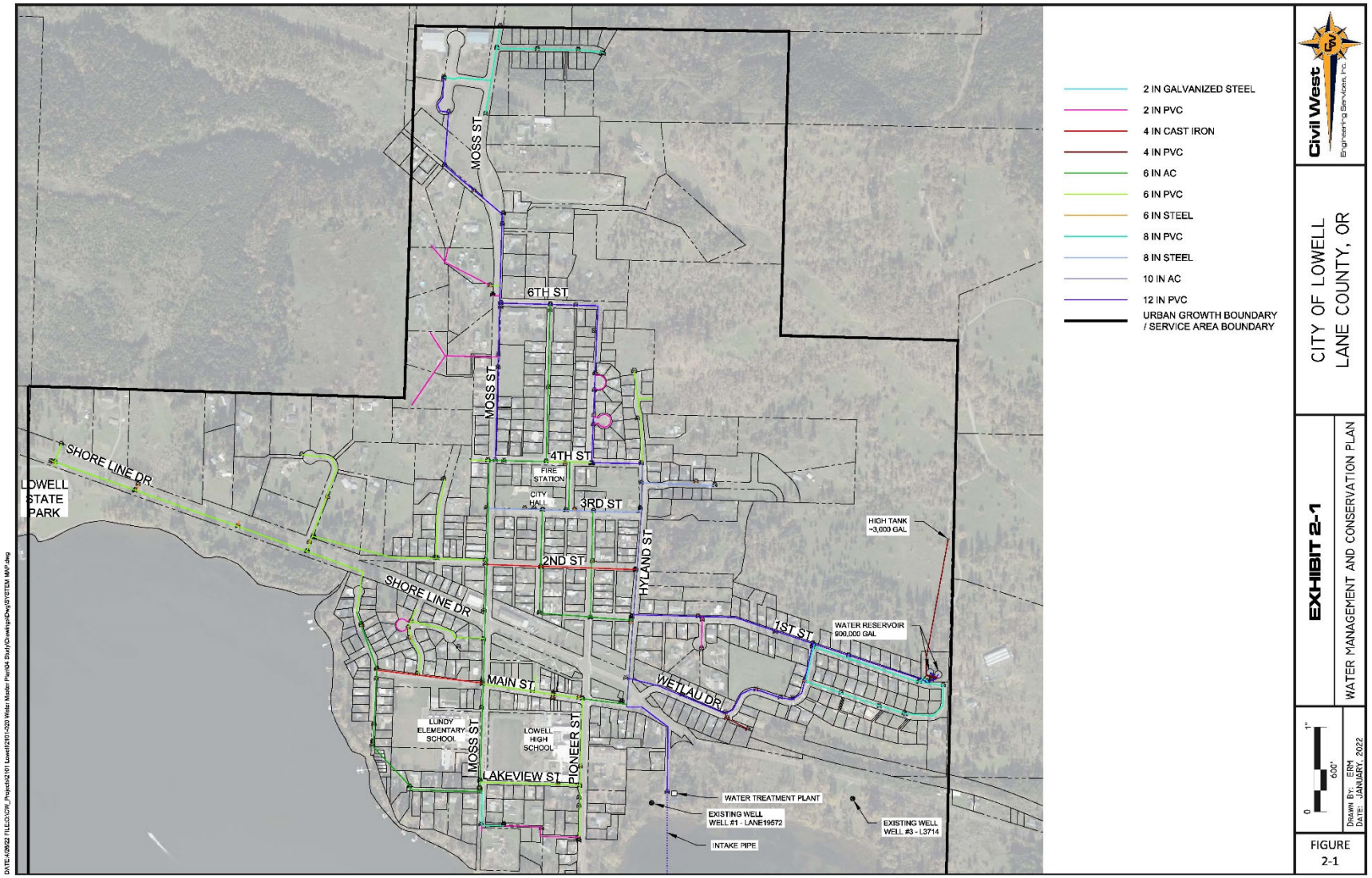
2.4 Intergovernmental Agreements

The City does not have any intergovernmental agreements for water supply, exchanges, or delivery.

2.5 Water Service Area and Population

Exhibit 2-1 shows the City's water service area. The service area is contiguous with the City's urban growth boundary (UGB). Density of development for residential and commercial customers is greatest in the south central portion of the City, generally surrounding Moss Street, which roughly bisects the City. In 2021, the City served 454 customer accounts and a population of approximately 1,211.

Exhibit 2-1. City of Lowell Service Area



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2.6 Historical Water Demand

OAR 690-086-0140(4)

2.6.1 Historical Demand

Historical water demand from 2011 through 2021 is presented in Exhibit 2-2. During this time period, demand was met entirely by the City's surface water source, the Middle Fork Willamette River. Daily production volumes of water treated at the WTP were used to identify the following demand values.

Exhibit 2-2. Historical Water Demand, Calendar Years 2011 to 2021

	Total Demand (MG)	ADD (mgd)	MDD (mgd)	MDD Day	Peaking Factor
2011	28.9	0.08	0.29	8/17/2011	3.62
2012	32.7	0.09	0.85	7/13/2012	9.54
2013	31.1	0.09	0.25	7/25/2013	2.88
2014	34.2	0.10	0.21	9/2/2014	2.21
2015	52.5	0.15	0.22	10/6/2016	1.52
2016	44.5	0.12	0.21	8/16/2016	1.71
2017	43.9	0.12	0.22	3/14/2017	1.86
2018	44.4	0.12	0.21	8/6/2018	1.76
2019	47.7	0.13	0.22	7/25/2019	1.67
2020	50.7	0.14	0.24	9/1/2020	1.71
2021	51.9	0.14	0.24	6/27/2021	1.67
2017-21 Average	**47.7**	**0.13**	**0.23**	**-**	**1.74**

Historical total demand for Lowell is characterized by an increasing trend, averaging 31 million gallons from 2011 to 2013 and reaching an average of 50 MG from 2019 to 2021, a 62 percent increase. Total demand and average and maximum day demands (ADD and MDD) are presented graphically in Exhibit 2-3 and 2-4, respectively.

Exhibit 2-3. Total Demand, 2011-2021

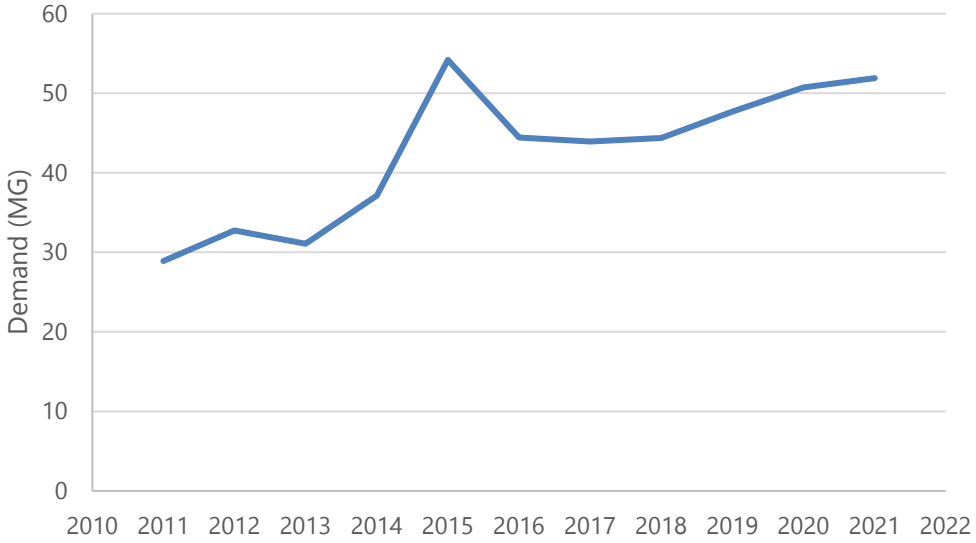
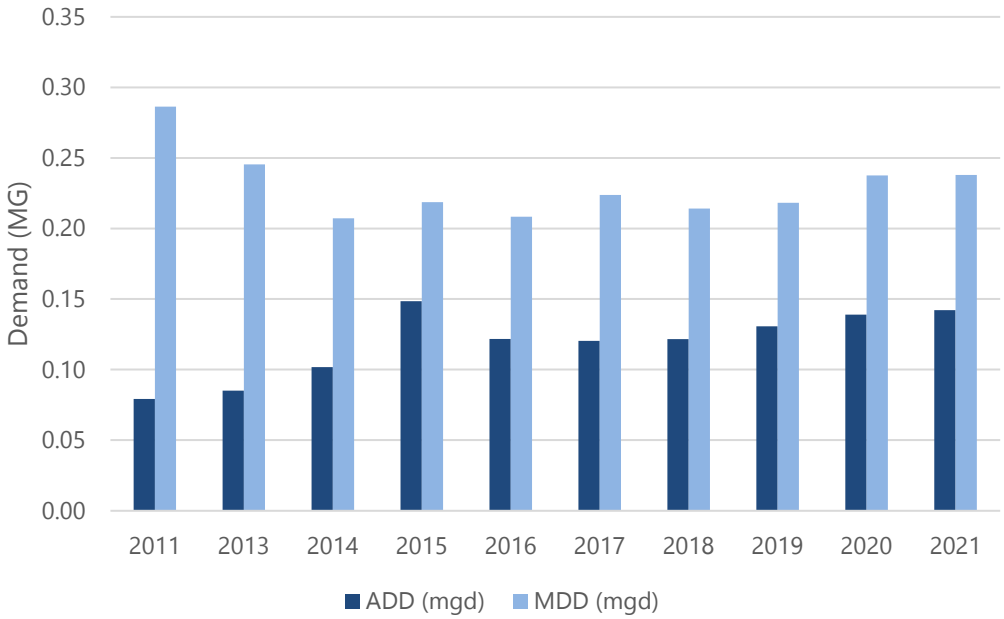


Exhibit 2-4. ADD and MDD, 2011, 2013-2021[1]



[1] Data for 2012 was removed because the 2012 MDD was a significant outlier, occurring in March and three to four times greater than any other MDD value, suggesting an error in measurement.

The City explored its demand data to identify potential reasons for the observed increase in annual demand of 62 percent over the ten year period. The City noticed a marked increase in demand starting in 2015, suggesting that one specific factor (versus the aggregation of multiple factors over time) may have elevated demand volumes at that time and helped keep them elevated to present. Population growth, and in turn consumption, will account for some of the increase in total demand, though

population increased approximately 4 percent over this period, and therefore was likely a minor contributor. A noticeable increase in water loss occurred starting in 2015 and continued through 2021. The increase in water loss is thought to be attributable to an improved method by which staff track demand.

2.7 Customer Characteristics and Use Patterns

OAR 690-086-0140(6)

2.7.1 Customer Types

As of December 2021, the City had 457 metered customer accounts. The City's customer categories are residential, commercial, and industrial. The residential category includes single family and multi-family residences, and it accounts for approximately 93 percent of customer accounts. Most of the remaining accounts fall into the commercial category, serving business establishments, schools, churches, and public buildings and parks. The industrial category includes a small number of industrial customers served by City water connections. Exhibit 2-6 presents the number of accounts by customer category as of December 31, 2021.

Exhibit 2-5. Number of Accounts by Customer Category, as of December 31, 2021

Customer Category	Number of Accounts
Residential	423
Commercial	31
Industrial	3
Total	**457**

The City's 2004 WMCP included only two customer categories, with residential customers accounting for 89 percent of total water demand and commercial customers comprising the remaining 11 percent. The 2004 WMCP did not list the number of customers in each category.

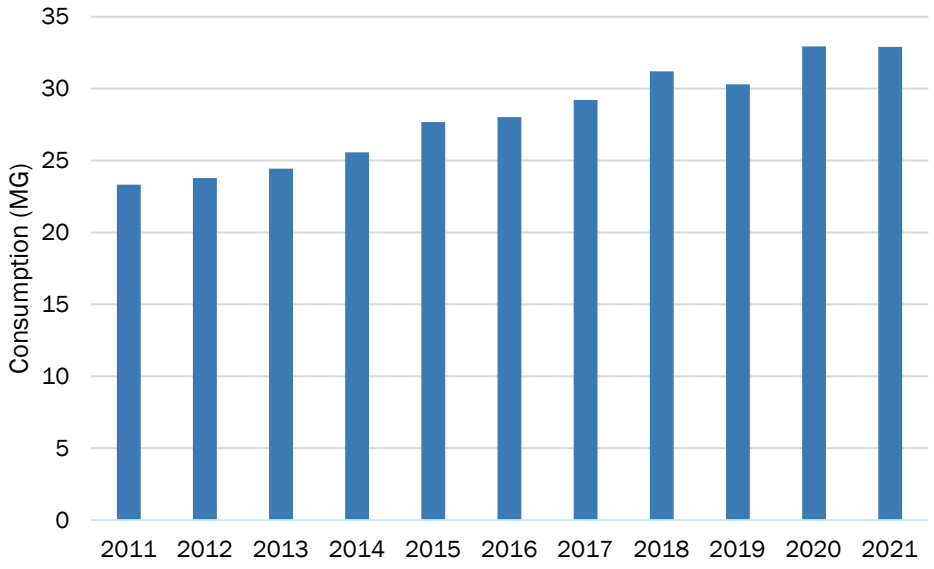
2.7.2 Annual Consumption

Total annual billed consumption has gradually risen since 2011, as shown in tabular and graphical form in Exhibits 2-7 and 2-8. This increase coincides with the City's expansion of its customer meter replacement project (which was referenced in the City's 2004 WMCP) to increase the rate of replacement. By 2021, approximately half of the City's customer meters had been replaced. The City estimates that most of these meters were over 20 years old and under-registering usage. As these older meters have been replaced with new meters that are accurately calibrated, the City's observed annual consumption increases are likely explained by the progress made in replacing these meters.

Exhibit 2-6. Annual Consumption, 2011-2021

	Consumption Total (MG)
2011	23.3
2012	23.8
2013	24.4
2014	25.6
2015	27.7
2016	28.0
2017	29.2
2018	31.2
2019	30.3
2020	32.9
2021	32.9

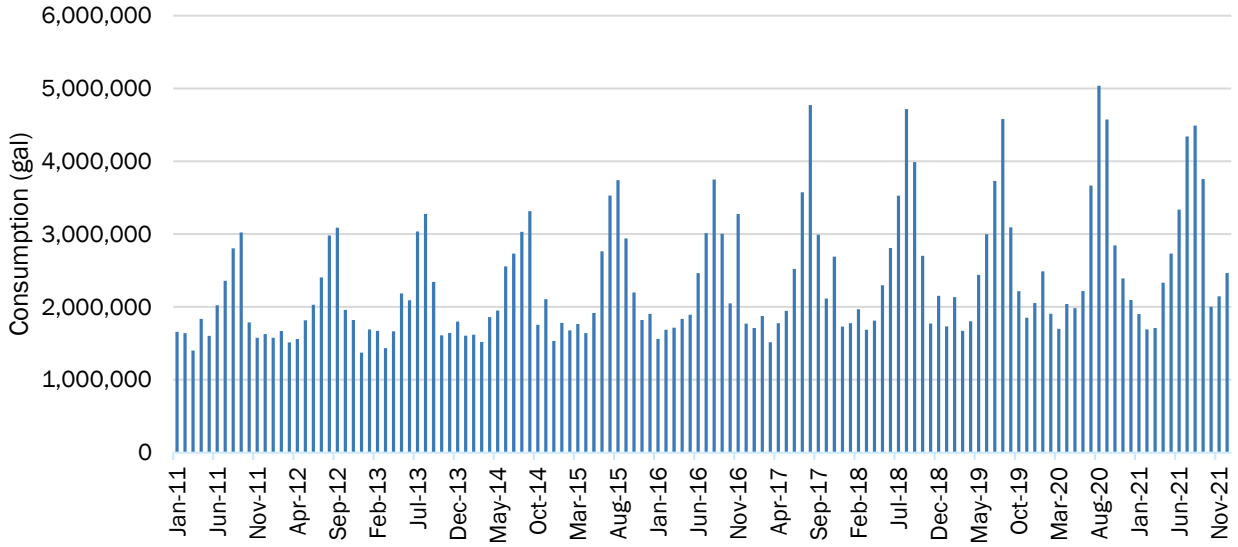
Exhibit 2-7. Annual Consumption, 2011-2021



2.7.3 Monthly Consumption

Consumption patterns over time show a pronounced seasonal pattern of increasing water use during the warm summer months, much of which may be attributed to increased outdoor use. As the population has grown over time, peak season water use has increased more than winter water use, as shown in Exhibit 2-9.

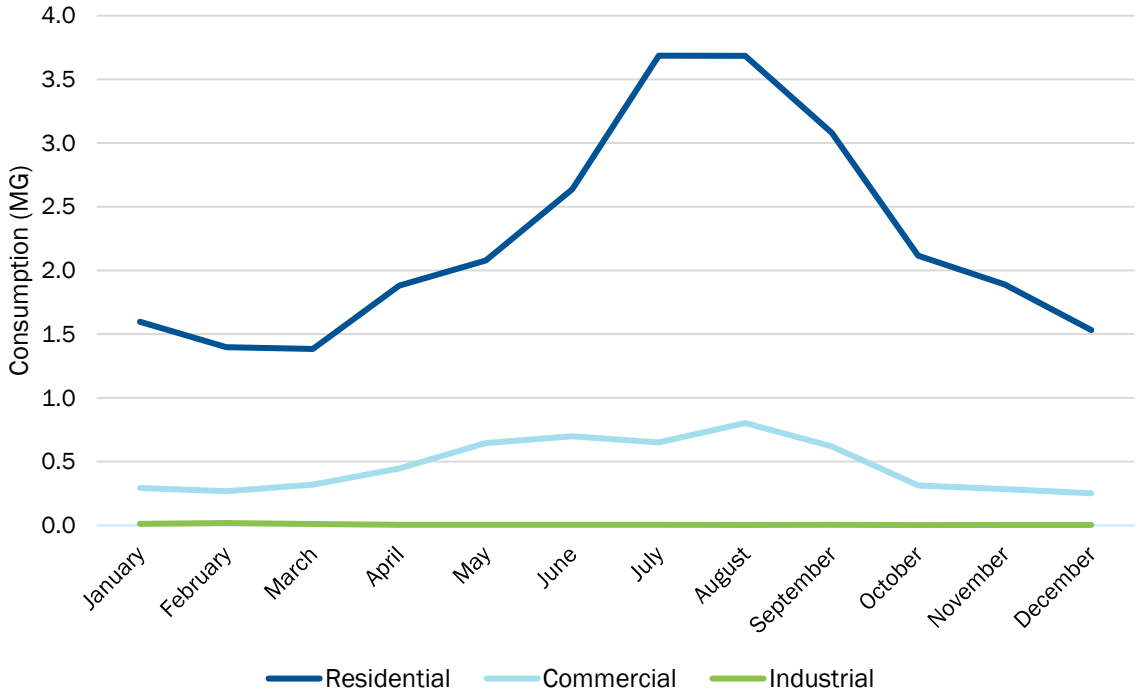
Exhibit 2-8. Total Monthly Consumption, 2011-2021



The City's previous WMCP included a graph of water sold monthly from 1997 through 2000, ranging from roughly 1.5 MG per month to nearly 4 MG per month. From 2011 through 2014, monthly consumption fell within this range as well. Increases in consumption starting in 2017 are likely the result of the City's meter replacement program mentioned above and in Section 3.

Monthly consumption by customer class is not available prior to May 2019 due to a change in billing software. Consumption by customer class for 2021 is presented in Exhibit 2-10 and shows increased summer water use for residential customers, with more moderate spring-summer increases for commercial customers. Water conservation programs aimed at reducing outdoor water use in the summer by residential customers could provide substantial reductions in peak day demands. Industrial customers account for a much smaller proportion of total consumption.

Exhibit 2-9. Monthly Billed Consumption by Customer Category, 2021



2.7.4 Largest Customers

The City identified the ten customers with the highest water consumption during fiscal year 2021, a 12 month period from July 2020 through June 2021. These water users are identified in Exhibit 2-11 by customer class. The City's sewer plant uses significantly more water annually than other user types. As described further in Section 3, the City is evaluating the potential for using reuse water for equipment wash-down operations to reduce the use of treated potable water in this process.

Exhibit 2-10. Annual Consumption, July 2020–June 2021

Customer Category	Annual Consumption, FY 2021 (Gal)
Public (Sewer Plant)	3,352,635
Residential (Multifamily)	630,043
Public (School)	593,300
Public (School)	579,700
Residential (Single Family)	373,060
Residential (Multifamily)	356,400
Residential (Single Family)	332,392
Residential (Single Family)	273,158
Commercial	249,400
Public (Library/City Hall)	239,610
Total	**6,979,698**

Overall, the top water users accounted for 20.3 percent of total billed consumption throughout fiscal year 2021. Excluding the wastewater treatment plant, the remaining nine largest water users accounted for 10.6 percent of total billed consumption.

2.8 Water Loss

OAR 690-086-0140(9)

The City calculates water loss as the difference between total annual water demand and the combined value for metered, billed water consumption and other unbilled, authorized consumption. Unbilled authorized consumption includes metered backwash process water generated at the WTP, unmetered distribution system flushing, and estimates of unmetered use by the Lowell Rural Fire Protection District. The City estimates unmetered monthly quantities of water used by its crews for flushing. Exhibit 2-12 shows the City's calculations of water loss from 2011 through 2021.

Loss averaged 29.3 percent of demand over the 11 year period, with the greatest loss occurring in 2015. Since 2015, the City's water losses have remained more consistent year to year as compared to water loss estimates for 2011 through 2014. The City attributes the recent consistency in water loss estimates to the City's improved methods by which demand is calculated. These new methods ensure a consistent approach in measuring the full volume of demand. In turn, the increased volumes of demand translated into higher water losses starting in 2015 since there was not a commensurate increase in water consumption.

Exhibit 2-11. Water Loss, 2011-2021

	Total Production (MG)	Consumption (MG)			Water Loss (MG)	Water Loss (%)
		Billed Consumption	Other Authorized Consumption	Total		
2011	28.9	23.3	0.8	24.1	4.8	16.5%
2012	32.7	23.8	1.2	25.0	7.8	23.7%
2013	31.1	24.4	0.9	25.3	5.7	18.4%
2014	34.2	25.6	1.5	27.1	7.1	20.7%
2015	52.5	27.7	2.0	29.7	22.8	43.5%
2016	44.5	28.0	1.9	29.9	14.6	32.8%
2017	43.9	29.2	2.3	31.5	12.5	28.3%
2018	44.4	31.2	1.7	32.9	11.5	25.9%
2019	47.7	30.3	1.4	31.7	16.0	33.5%
2020	50.7	32.9	1.4	34.3	16.4	32.4%
2021	51.9	32.9	2.2	35.1	16.8	32.3%
Average	**41.1**	**27.6**	**1.5**	**29.7**	**12.4**	**29.3%**

The City's 2004 WMCP indicated that water loss from October 1998 through December 2000 averaged approximately 42 percent, suggesting that the City's efforts to reduce water loss since that time has been successful.

The City's current water losses include both apparent and real losses. Apparent losses include meter inaccuracies and data entry errors. Real losses include system leakage from damaged pipes, valves, service connections, and other infrastructure. Details on the City's efforts to reduce apparent losses through its meter replacement program and real losses in the form of leak detection and line repair are provided in Section 3.

2.9 Water Rights

OAR 690-086-0140(5)

2.9.1 Summary of Water Rights

Lowell has two groundwater rights and one surface water right.[1] Groundwater Certificate 46884 authorizes up to 0.44 cfs appropriated from a well (Well No. 1) and groundwater Permit G-13499 authorizes the City to appropriate up to 0.45 cfs from a well (Well No. 3). Due to water quality concerns, these wells are held in reserve for emergency use. The City relies wholly on surface water Certificate

[1] The City had an additional water right permit G-8386 that was cancelled in 1983.

23721 to meet demand which authorizes diversions of up to 1.0 cfs from the Middle Fork Willamette River. The City's point of diversion is located within the City on the north shore of Dexter Reservoir. The City's water rights are detailed in Exhibit 2-13.

2.9.2 Aquatic Resource Concerns

OAR 690-086-140(5) requires the City to identify the following for each of these water sources: 1) any listing of the source as water quality limited (and the water quality parameters for which the source was listed); 2) any streamflow-dependent species listed by a state or federal agency as sensitive, threatened or endangered that are present in the source; and 3) any designation of the source as being in a critical groundwater area.

Lowell's surface water right authorize diversion from the Middle Fork Willamette River between miles 16 and 17 and groundwater rights authorize appropriation from two wells: Well No. 1, located within City limits and Well No. 3 which is located immediately outside of the City's northern boundary along the shore of Dexter Reservoir (see Exhibit 2-1). The river may support listed streamflow dependent fish species, however the presence of Dexter Dam creates a natural barrier and prevents fish passage above the dam. Note that the Hills Creek Dam is located 26 miles upstream of Dexter Dam and the Hills Creek reservoir (above Hills Creek Dam) was historically stocked with spring Chinook salmon, suggesting some federally-listed species of salmon and other listed fish species may be present in Dexter Reservoir.[2] The species generally thought to occur in the upper Willamette River and their state and federal listing statuses are provided in Exhibit 2-14.

As part of a federal and state effort to protect Oregon streams from pollutants, every two years the Clean Water Act requires Oregon Department of Environmental Quality's (DEQ) to assess or re-assess water quality and report to the Environmental Protection Agency on the condition of Oregon's waters. The Clean Water Act Section 303(d) requires the DEQ to identify waters that do not meet water quality standards and where a Total Maximum Daily Load (TMDL) pollutant load limit needs to be developed for additional regulation.

In 2010, Dexter Reservoir, Assessment Unit OR_SR_1709000107_02_100699, was placed on DEQ's 303(d) list as an impaired water body (for some water quality parameters). In DEQ's 2018/2020 Integrated Report, DEQ categorized this segment as a Category 5 water quality limited stream due to harmful algal blooms.[3]

The City's wells are not located in a critical groundwater area.

[2] Letter from U.S. Department of the Army, Corps of Engineers, Engineering and Construction Division, to the National Marine Fisheries Service, Habitat Conservation Division (approx. September 21, 1999) regarding the City of Lowell's water treatment plant rehabilitation project.

[3] Source: Oregon Department of Environmental Quality's (DEQ) Assessment Database from DEQ's 2018/20 Integrated Report

Exhibit 2-12. Listed Fish That May Be Present in Dexter Reservoir

Listed Fish Species	State Status	Federal Status
Upper Willamette and Lower Columbia Rivers Fall Chinook salmon	Sensitive Critical	Threatened
Upper Willamette and Lower Columbia Rivers Spring Chinook salmon	Sensitive Critical	Threatened
Lower Columbia River Coho salmon	-	Threatened
Steelhead - Winter / Coastal Rainbow Trout	Sensitive Critical (Lower Columbia R.)/Sensitive (Willamette/ Upper Willamette)	-
Steelhead - Summer / Coastal Rainbow Trout	Sensitive Critical	-
Lower Columbia River Steelhead	-	Threatened
Pacific Brook Lamprey	Sensitive	-
Pacific Lamprey	Sensitive	-
Western Brook Lamprey	Sensitive	-
Western River Lamprey	Sensitive	-
Columbia River Chum Salmon	Sensitive Critical	Threatened
Coastal Cutthroat Trout	Sensitive	-
Bull Trout	Sensitive	-
Oregon Chub	Sensitive	-
White Sturgeon	Sensitive	-

Exhibit 2-13. Water Rights

Common Name	Source(s)	Appl./ Claim/ Limited License	Permit	Certificate	Priority Date	Type of Beneficial Use	Authorized Rate (cfs)	Maximum Rate Diverted to Date (cfs)	Maximum Annual Quantity Diverted to Date (MG)[2]	Completion Date	Average Monthly Diversions 2021 (MG)	Average Daily Diversions 2021 (mgd)	Average Monthly Diversions 2017-2021 (MG)	Average Daily Diversions 2017-2021 (mgd)
Well 3	A well in Middle Fork Willamette R.	G-14204	G-13499	-	11/20/1995	Municipal	0.45	0.116[1]	0[3]	10/1/2003	0	0	0	0
Well 1	A well	G-5520	G-5408	46884	5/19/1971	Municipal	0.44	0.44	29.1	-	0	0	0	0
-	Middle Fork Willamette River	S-30077	S-23705	23721	6/20/1955	Municipal	1.0	1.0	54.2	-	4.32	0.14	3.98	0.13

[1] The City submitted a claim of beneficial use to OWRD in 2008 for 0.116 cfs; this claim is pending review.
[2] Based on a review of available water use reports on OWRD's website which start in 1988.
[3] The City was unable to find historical records of annual volume earlier than 1988.

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2.9.3 Assessment of Water Supply

OAR 690-086-0140(3)

Lowell performed an assessment of its water supplies, evaluating the adequacy and reliability of these supplies. The City has used its groundwater supplies to meet demand periodically. Currently, the City relies groundwater on surface water as its source of supply. The City's surface water has proven to be an adequate source of supply. Certificate 23721 authorizes diversions from the Middle Fork of the Willamette River of up to 1.0 cfs, exceeding the City's historical average MDD. With respect to the security of this water right during periods of low flow, the certificate is senior to instream water rights and, due to the abundant flow of the North Fork Willamette River and its tributaries upstream of the City's point of diversion, the City has not experienced and does not anticipate experiencing restrictions on the rate of diversion associated with this certificate.

Combined, the City's two groundwater rights, Permit G-13499 (0.45 cfs) and Certificate 46884 (0.44 cfs), authorize appropriation up to 0.89 cfs. These rights are adequate to meet the City's average MDD of 0.34 cfs (0.22 mgd), however, water quality issues currently prevent the City from utilizing this source. Concentrations of arsenic exceed the Environmental Protection Agency's maximum contaminant level allowable in drinking water. The City's WTP was not designed to treat for arsenic to meet this standard. Because of this constraint, the City has relied on its surface water source to meet demand. However, the City recently determined that blending of the surface and groundwater sources may reduce arsenic levels below maximum levels. The City would only consider this blending option if its surface water source was not able to fully meet demand.

2.10 System Description

OAR 690-086-0140(8)

The City's water system infrastructure includes a surface water intake structure transmission and distribution lines, a WTP, three inline reservoirs, and pump stations.

The City's diverts water from Middle Fork Willamette River via an intake located on the north shore of Dexter Reservoir. Diverted water is pumped to the City's WTP where water is treated prior to distribution. The WTP is located within a quarter mile of the intake and can currently treat up to 160 gallons per minute (gpm). The City uses three distribution system inline reservoirs to store a total of 902,500 gallons and also has a 35,000 clear well below the WTP. Treated water is pumped from the WTP into the distribution system via a distribution system pump station. The City also operates a booster pump used to serve customers located at higher elevations. The City has approximately 30,000 feet of distribution and transmission piping.

The City also has two operable wells, Wells 1 and 3 that are currently capable of producing approximately 100 gpm total.

3. Water Conservation Element

This section addresses the requirements of OAR 690-086-0150(1) – (5). This rule requires a description of specific required conservation measures and benchmarks, and additional conservation measures implemented by the District.

3.1 Progress Report

OAR 690-086-0150(1)

Following submission of the City's first WMCP in 2001, OWRD required the City to develop a work plan to complete the City's Water Conservation and Curtailment Elements. OWRD approved the WMCP and associated work plan in 2004. The work plan identified a date of October 1, 2009 for the City to submit a revised WMCP to OWRD. Intermediate milestones in the work plan included completing revisions to the Water Conservation Element by October 1, 2006 and completing revisions to the Water Curtailment Element by October 1, 2007.

Due to staff turnover and loss of institutional knowledge the City is unable to find records regarding work plan implementation. However, this WMCP fully meets the work plan requirements and latest administrative rule requirements and serves as a fresh start to the City's water management and conservation efforts. Exhibit 3-1 presents a progress report on the benchmarks included in the 2001 WMCP.

3.2 Use and Reporting Program

OAR 690-086-0150(2)

The City's water measurement and reporting program complies with the requirements in OAR Chapter 690, Division 85. Flow meters are installed immediately upstream and downstream of the WTP to measure diversions of raw water from Dexter Lake and finished water leaving the plant, respectively. Flow meters are also installed on the City's wells. Monthly water use measurements are compiled and submitted to OWRD on an annual basis. Reporting is for the previous water year (October 1 to September 30). The City's water use records can be found at http://apps.wrd.state.or.us/apps/wr/wateruse_report/.

3.3 Required Conservation Measures

OAR 690-086-0150(4)(a-f)

OAR 690-086-050(4) requires that all water suppliers establish 5-year benchmarks for implementing the following water management and conservation measures:

1. Annual water audit
2. System-wide metering
3. Meter testing and maintenance
4. Unit-based billing

5. Water loss analysis
6. Public education

Exhibit 3-1. 2004 WMPC Conservation Measure Benchmarks Progress

Conservation Measure	2004 WMCP Benchmarks[1]	Benchmark Progress
Annual water audit	During the annual reporting of consumption to the State, the City calculates the extent of system leakage.	This is completed each year in December.
System metering	The City is fully metered at the groundwater pumping sources and records the water use on a daily basis. All customers using City water are metered.	Although the City does not currently use the wells, the wells have functional flow meters. In addition, the City meters diversions from its surface water source at its water treatment plant (WTP). All customers are metered.
Meter testing and maintenance	The City hires a consultant to test a representative portion of the City's meters each year. Where required, the City replaces or maintains the meter. For the past four years, the City's ongoing maintenance program has included the replacement of old meters. According to staff, the city replaces an average of ten meters per month.	In 2014 the City moved to a meter replacement program. The City currently is changing out all meters at service connections; roughly 250 of the 454 of customers' meters have been replaced since 2014.
Rate structure	To encourage water conservation, the City implemented in 1998 a block water rate structure, which was used to encourage water conservation.	The City continues to use a block rate structure as a means to encourage water conservation.
Water loss	A significant increase in pump run time is a reliable indicator of a new leak in the system. When an increase is detected, the leak is located by using a sounding device on randomly selected points on the system. The City's goal is to reduce their leakage to the state's standard of 15% of total consumption through maintenance programs which identify old, leaking pipes and valves.	The City has adopted a more refined tool to identify leaks in the system. Specifically, the City performs system-wide periodic leak detection surveys. In 2015 and in 2021, the City hired a company to perform a leak survey of the entire distribution system. Minor leaks were discovered during these surveys and the City repaired those that more significantly contributed to water loss.
Public education	Citizens are notified of the City's water policies by including notices inserted into the monthly water bill.	New residents are given the utility policy when they sign up for service. In addition, the City includes water conservation information on its Consumer Confidence Report annually. Prior to the pandemic, the City provided outreach to third grade students.

Conservation Measure	2004 WMCP Benchmarks[1]	Benchmark Progress
Leak repair or line replacement	It is the City's goal to reduce the average leakage to less than 15% of the total water consumed from the source. This should be achieved by annually replacing old service lines, AC mains, meters, and valves, and discontinuing the City's regular use of the groundwater pumps and associated piping.	The City tested mains, valves, hydrants, lines, and service laterals for leaks in 2015 and 2021. In November 2021, the City fixed three significant leaks detected.
Supplier financed retrofit or replacement of fixtures	No benchmark was provided for supplier financed retrofit or replacement of fixtures.	The City is currently in the progress of a meter replacement CIP.
Programs that support and encourage water conservation	The City has implemented programs that encourage low water use landscaping by providing water troughs filled with non-potable water for landscaping as well as alternating allowable landscape-watering days.	The City has not continued these programs.
Water reuse, recycling, and non-potable water	Within the next five years, the City should review their opportunities to implement a water reuse plan. For example, the City may use untreated water to backwash their potable water filters and discontinue the use of potable water at the sewage treatment plant for equipment wash-down operations.	The City has not developed a water reuse plan.

[1] The City's previous WMCP was written in 2001 and received final approval from OWRD in 2004. The City did not provide benchmarks for all the conservation measures required in the current rule.

The following sub-sections describe the City's plans during the next five years to initiate, continue, or expand its conservation measures to meet these requirements.

3.3.1 Annual Water Audit

OWRD defines a water audit as an analysis of the water system that includes a thorough accounting of all water entering and leaving the system. Section 2 describes the City's water loss methodology calculation and historical results. In summary, the City calculates water loss by comparing demand (treated water leaving the WTP) to consumption to determine water loss on a monthly and annual basis. The Lowell Rural Fire Protection District provides the Public Works Department with estimates of their monthly water use. As shown in Exhibit 2-8, the City's water loss in 2021 was 32.3 percent. The City attributes losses to real and apparent losses, that is, primarily a combination of losses due to distribution system leakage and meter errors, respectively.

Five-Year Benchmark

- Continue to conduct an annual water audit using a systematic and documented methodology that includes estimating unmetered authorized use.

3.3.2 System-wide Metering

The City's water system is fully metered, and new meters are installed at all new water service connections.

Five-Year Benchmark

- Continue to require installation of meters on all new water connections.

3.3.3 Meter Testing and Maintenance

Routine testing of customer meters and staff observations of meter inaccuracies have led the City to begin implementing a customer meter replacement program. In some cases, testing showed that meters that had been in place for over 20 years were under-registering use by up to 75 percent. This program has already resulted in more accurate data collection and billing, and the City anticipates that its water losses will decrease as the meter testing and replacement program continues. Currently, approximately 250 of the 454 customer meters have been replaced and the City will endeavor to replace the remainder over the next five years, averaging approximately 40 meter replacements per year. Following replacement of all targeted meters, the City intends to test a portion of customer meters annually to ensure that inaccuracies are quickly detected and addressed through maintenance or replacement.

In addition to its proactive approach to meter maintenance, the City is alerted to failed or potentially failed customer meters through its billing system or directly from customers. Upon alert, the City inspects these meters and replaces or repairs them immediately, as needed. Inspection may include a test for accuracy relative to the manufacturer's recommended specifications or the City may determine meter failure without a meter test through observation (i.e. the register does not measure any use).

The City has water system master meters at the Dexter Reservoir intake, at the WTP, and on each production well. The meters measuring volumes of untreated and treated water located at the WTP were installed in 2012 and the accuracy of these was verified by an outside contractor in 2016 and 2021.

Five-Year Benchmarks

- Continue the meter replacement program, replacing any meters older than 20 years of age within the next five years.
- The City will test approximately 5 percent of customer meters for accuracy annually and replace or repair faulty meters following replacement of all meters over 20 years of age.
- Upon alert of a potentially failed meter, the City will inspect meters in question and repair or replace the meters if needed immediately.
- Every 5 years, the City will verify the accuracy of the master meters located at the WTP and repair or replace the meters as needed.

3.3.4 Water Rate Structure

The City's water rate structure consists of a Basic Service Charge of $26.87 per month assessed per equivalent dwelling unit (EDU), plus a variable rate based on the quantity of water used.

Single family homes, individual units of a duplex, and multi-family units with three or more bedrooms are considered single EDUs. In all other multi-family residential complexes, each unit is counted as two-thirds of an EDU, and the total EDUs for the complex are calculated by multiplying the number of units by 0.67 and rounding up to the next whole EDU. For commercial and industrial accounts with meters ¾ inches or smaller, monthly water use over a 12-month period is averaged, and each 6,000 gallons of monthly use is considered one EDU. For commercial and industrial accounts with larger meters, the EDU calculations in Exhibit 3-2 apply.

Exhibit 3-2. Calculation of Commercial and Industrial Equivalent Dwelling Units (EDUs)

Meter Size	EDUs
1 inch	2.0
1 ½ inch	5.0
2 inch	8.0
3 inch	15.0
4 inch	25.0
6 inch	50.0

The quantity-based variable water rate for all customer classes is designed to encourage water conservation by using a tiered volume charge, as shown in Exhibit 3-3.

Exhibit 3-3. Variable Water Rate Based on Volume Metered

Quantity Metered	Charge
0-5,000 gallons per EDU	$5.39 per 1,000 gallons
Over 5,000 gallons per EDU	$6.79 per 1,000 gallons

Within the next two years, the City intends to conduct a rate study to assess whether current rates are appropriate and sufficient to meet the operational, maintenance, and repair costs of the water system.

Five-Year Benchmarks

- The City will continue to bill customers based, in part, on the volume of water consumed.
- Within the next two years, the City will conduct a water rate study.

3.3.5 Water Loss Analysis

As discussed in Section 2.8, the City's water loss in 2021 was 32.3 percent. Because this water loss is greater than 10 percent, OAR 690-086-0150(4)(e)(A) requires the City to provide OWRD with an analysis of potential water loss factors and proposed corrective actions within two years of approval of this WMCP. (The City's analysis and corrective actions are outlined below). If the designated actions do not reduce water loss to less than 10 percent within five years of WMCP approval, OWRD requires the City to develop and implement a regularly scheduled and systematic program to detect and repair leaks in the transmission and distribution system using methods and technology appropriate to the size and capabilities of the water supplier, a line replacement program listing the size and length of pipe to be replaced annually, or to develop and implement a water loss control program consistent with the American Water Works Association's standards.

The City has determined that losses due to inaccurate customer meters and distribution system leakage are the primary contributors to water losses. In response, the City has an ongoing meter replacement program and performs periodic leak detection surveys followed by leak repair. The meter replacement program is described above. Leak detection surveys were conducted by a third party contractor in 2015 and 2021 in the entire distribution system using a sounding device. Based on the results of the surveys, the City has been actively working to repair and replace lines and valves with identified leaks and to upgrade older distribution infrastructure that is more prone to developing leaks over time. In November 2021, the City fixed three significant leaks that were detected during the most recent survey. The City will continue this program in the future, performing line leak detection and repairing leaks as they are discovered. The City's meter replacement program in combination with the leak detection and repair program are anticipated to reduce water loss to 10 percent or less over the next five years.

Five-Year Benchmark

- Within 5 years of WMCP approval, if water loss still exceeds 10 percent the City will select and implement the required measures consistent with the OWRD rule requirements.

3.3.6 Public Education

OWRD requires the City to establish a public education program to encourage efficient indoor and outdoor water use that includes regular communication of the supplier's water conservation activities to its customers. As part of its conservation education program, the City includes information on its annual Consumer Confidence Report (CCR) describing the community's water source and the importance of conservation. The City intends to expand its outreach to include articles on indoor and outdoor water conservation topics in the City newsletter at least twice per year and to post water-saving tips and information on its website. Prior to the pandemic, the City Public Works Department conducted outreach about the water system and conservation to third grade students, including a guided field trip of the water treatment plant. When public health conditions allow, the City intends to continue providing this educational program once per year.

Five-Year Benchmarks

- The City will continue including water conservation information in its annual Consumer Confidence Report.
- When conditions allow, the City will conduct annual educational programs and field trips relating to the water system and water conservation for elementary school students.
- Within the next five years, the City will begin including up to two articles on indoor and outdoor water conservation topics in the City newsletter.
- Within the next five years, the City will add a page on its website providing information on efficient indoor and outdoor water uses.

3.4 Additional Conservation Measures

OAR 690-086-0150(6)

OAR 690-086-0150(6) requires municipal water suppliers that either: (a) serve a population greater than 1,000 and propose to expand or initiate diversion of water under an extended permit for which resource issues have been identified, or (b) serve a population greater than 7,500, to provide a description of the specific activities, along with a five-year schedule to implement several additional conservation measures. This rule does not apply to the City given that it serves a population of less than 7,500 and is not requesting access to an extended permit within the 20-year planning period of this WMCP. However, the City intends to expand its conservation program to include the following measures as a means to help its customers and the City reduce use of water.

Five-Year Benchmarks

- Within the next five years, the City will begin providing leak detection dye tablets to customers upon request so customers can identify leaking toilet tanks.
- Within the next five years, the City will provide 25 low-flow showerheads and 25 faucet aerators annually to customers.
- Within the next five years, the City will explore the potential for using reclaimed water for equipment wash-down operations at the WTP.

4. Water Curtailment Element

This section satisfies the requirements of OAR 690-086-0160. This rule requires a description of past supply deficiencies and current capacity limitation. It also requires inclusion of stages of alert and the associated triggers and curtailment actions for each stage.

4.1 Introduction

Curtailment planning is the development of proactive measures to reduce demand during supply shortages as the result of prolonged drought, or partial or full system failure from unanticipated events including catastrophic events, mechanical or electrical equipment failure, or events not under control of the City.

4.2 History of System Curtailment Episodes

OAR 690-086-0160(1)

The City staff are not aware of any system curtailment episodes within the last 10 years.

4.3 Capability Assessment

Lowell evaluated its ability to continue to provide water during four emergency events that could cause a supply shortage: a drought, source contamination, power failure, and earthquake. Given the abundant flows of the Middle Fork Willamette River and its tributaries and the priority date of its surface water Certificate 46884 of June 20, 1955, the City does not anticipate a drought impacting the City's ability to divert surface water. Contamination of the river (or reservoir from which the City diverts water) could impair the City's ability to meet demand. The City's WTP can treat for some types of pollutants, however others, such as toxic algae blooms, would prevent the City from using this source. In the event of a power failure the City has the option to utilize auxiliary power from generators located at the WTP (and booster pump station) that will enable the City to operate key water system infrastructure, such as the WTP and pump used for diversion of surface water. Finally, an earthquake could limit the City's ability to meet demand, but the severity of the resulting damage to the City's infrastructure would dictate the City's need to implement curtailment.

During any of these events, the City's two distribution system reservoirs may be able to provide up to six days-worth of water to the City's customers based on historical ADD of 140,000 gpd, assuming the reservoirs are full. The City may also elect to blend surface and groundwater during events in which surface water is still available, but not in the quantities necessary to meet demand. Severe limitations to the City's ability to produce surface water could require the City to seek delivery of water in tanker trucks as a short-term measure to help meet the City's customers' health and safety needs.

If the City cannot produce enough water to meet demand, caused by any of these or other events, the City would rely on its water curtailment plan to stretch supply as long as possible while the City worked to restore normal supply capacities.

While the City does not have capacity constraints at this time to meet demand, the City recognizes that its WTP is at capacity and additional demands originating from growth could exceed WTP capacity. The City is actively studying options to address the future constraint, including expansion of the WTP.

4.4 Curtailment Stages and Initiating Conditions

OAR 690-086-0160(2) and (3)

The City's water curtailment ordinance, Ordinance 172, describes three orders of restrictions to be invoked in the event of a water supply shortage. These restrictions are of increasing severity and could be initiated and implemented in progressive steps or a later stage could be implemented directly. The plan includes both voluntary and mandatory measures, depending upon the cause, severity, and anticipated duration of the shortage. This ordinance does not specify initiating conditions. Therefore, the City developed these for this WMCP. The City also added a voluntary stage to the City's three orders of mandatory restrictions found in the ordinance.

Exhibit 4-1 presents the four curtailment stages, as well as their initiating conditions. While initiation of a curtailment stage is based on the specific circumstances of the actual event, the City has established initiating conditions based on demand relative to available system capacity. System capacity is defined as the sum of the capacities of the WTP of 200 gpm and distribution system reservoirs of 935,000 gallons.

The decision to implement curtailment will also consider the knowledge and judgment of City staff members familiar with the water system. Staff members may evaluate the extent of system damage or contamination, duration of repair, costs, fire hazards, and weather forecasts to make this determination.

Exhibit 4-1. Curtailment Stages of Alert and Initiating Conditions

Curtailment Stages	Potential Initiating Conditions
Stage 1 (Voluntary)	System demand reaches or expected to reach 90 percent of available capacity.
Stage 2	System demand reaches or is expected to reach 91-100 percent of available capacity for 3 consecutive days.
Stage 3	System demand exceeds or is expected to exceed available capacity and the City anticipates a declining trend in available storage for no more than 3 days.
Stage 4	System demand exceeds or is expected to exceed available capacity and the City anticipates a declining trend in available storage for more than 3 consecutive days.

4.5 Authority and Enforcement

The City Administrator has the authority to order the first or second stages of restrictions of use, as described in Ordinance 172 and the City Council has the authority to declare enactment of any of the stages. The ordinance gives the City Administrator the authority to enforce the last stage by discontinuing use of those customers who do not meet the last stage's curtailment restrictions and Class B violations may be issued by the City.

4.6 Curtailment Plan Implementation

OAR 690-086-0160(4)

4.6.1 Stage 1 (Voluntary)

The City will issue a general request for a voluntary reduction in water use by all users. The request will include a summary of the current water situation, the reason for the requested reduction in use, suggestions for conserving water, and a warning that mandatory cutbacks will be required if the voluntary measures do not sufficiently reduce water usage. Examples of voluntary reductions include reductions to outdoor water use and/or limiting irrigation of landscape and lawns to specific night and early morning hours and implementation of water conservation measures promoted by the City's conservation program.

4.6.2 Stage 2 (Mandatory)

1. Allow irrigation of landscaping and lawns between the hours of 8 PM and 6 AM.
2. Prohibit the use of water for washing motorbikes, motor vehicles, boat trailers, or other vehicles except at a commercial washing facility that recycles wash water.
3. Limit City uses of water and discontinue hydrant flushing, reduce nonessential cleaning using water, and curtail temporary access (e.g., for construction-related activities) to water at hydrants.
4. Prohibit the use of water to wash sidewalks, walkways, driveways, parking lots, tennis court, and other hard-surfaced areas.
5. Prohibit the use of water to wash buildings and structures, except as needed for painting or construction.
6. Prohibit the use of water to fill or top-off a fountain or pond for aesthetic or scenic purposes, except for recalculating systems and where necessary to support fish life.
7. Prohibit the use of water to fill, refill, or add to any indoor or outdoor swimming pools or hot tubs, except if one of the following conditions is met: the pool is used for a neighborhood fire control supply, the pool has a recycling water system, the pool has an evaporative cover, or the pool's use is required by a medical doctor's prescription.
8. Prohibit the use of water for dust control unless absolutely necessary.

4.6.3 Stage 3 (Mandatory)

1. Continue activities initiated under Stage 2.

2. Prohibit all outdoor watering (exceptions include new lawn, grass or turf planted after March 1 of the calendar year in which restrictions are imposed, or park and recreation areas specifically designated by the City).
3. Prohibit the use of water from hydrants for construction-related activities (except on a case-by-case basis), fire drills, or any purpose other than firefighting.

4.6.4 Stage 4 (Mandatory)

1. Prohibit all outside water use. The only exceptions will be those specifically identified by the City.
2. Prohibit all nonessential water use that does not maintain the health and safety of the public.

Exceptions to these mandatory measures will be authorized by specific consent from the City.

4.7 Notifications of Curtailment

The District has several communication channels that it can use to relay important information about a supply shortage, including voluntary or mandatory measures. The District may rely on local media, mailers, bill stuffers, door hangers, social media, strategically-located sandwich boards, and the web sites of the Property Owners' Association of Units 1 and 2 and the Wonderland Water Sanitary District to communicate with its customers on an ongoing basis about a supply shortage. Notices and other forms of communication may include a description of the current water situation, the reason for the requested conservation measures, and a warning that mandatory restrictions will be implemented if voluntary measures are not sufficient to achieve water use reduction goals.

4.8 Drought Declaration

If a declaration of a severe drought in Lane County is declared by the Governor per ORS 536.720, the Oregon Water Resources Commission may order political subdivisions within any drainage basin or subbasin to implement a water conservation or curtailment plan or both, approved under ORS 536.780. The conservation and curtailment elements of this WMCP meet these requirements. If the City falls within a severe drought area declared by the Governor, such as Lane County, the City will consider whether curtailment measures are needed to meet system demands. Regardless of whether curtailment is needed, the City will continue to encourage customers to conserve water.

5. Municipal Water Supply Element

This section satisfies the requirements of OAR 690-086-0170.

This rule requires descriptions of the City's current and future service area and population projections, demand projections for 10 and 20 years, and the schedule for when the City expects to fully exercise their water rights. The rule also requires comparison of the City's projected water needs and the available sources of supply, an analysis of alternative sources of water, and a description of required mitigation actions.

5.1 Delineation of Service Area

OAR 690-086-0170(1)

Lowell's current service area is shown in Exhibit 2-1. Growth is anticipated to occur in within this service area as infill and as development of vacant land occurs. This growth over the 20 year planning period will add new customers to the City's existing water system. The City's municipal code prohibits expansion of the City's water system to areas beyond city limits, therefore, the City's service area will only grow as a result of annexations of land within the UGB.

5.2 Population Projections

OAR 690-086-0170(1)

The City's population is projected to increase from 1,196 in 2020 to 1,408 in 2032 and 1,513 in 2042 as shown in Exhibit 5-1. These future estimates are based on a forecast conducted by PSU's Population Research Center (PRC) and modified by the City to account for population growth resulting from a recently completed large residential development. This development added 94 persons to the City and was not included in PSU's forecast. These additional residents were added to PSU's population forecast starting in 2021 and had the effect of increasing the average annual growth rate (AAGR) relative to the growth rate in PSU's forecast and the AAGR between 2032 and 2042. The methodology and the basis for these population projections are found in an excerpt from the City's 2022 WSMP in Appendix B.

Exhibit 5-1. Projected Population, 2032 and 2042

Year	Population	AAGR
2020	1,196	-
2032	1,502	1.9%
2042	1,525	0.2%

5.4 Demand Forecast

OAR 690-086-0170(3)

As part of its WSMP, the City conducted a demand forecast for its 2022 WSMP to estimate ADD and MDD by 2042. To project the City's ADDs, the City relied on a per capita water use factor and multiplied this factor by the future populations for 2032 and 2042 (see Section 5.2). The water use factor was estimated to be 103 gallons per capita per day (gpcd) and calculated by dividing the historical average ADD for treated water from 2016 to 2020 by the City's 2020 population of 1,196. MDD was calculated by multiplying ADDs by a peaking factor of two. The City selected this factor based on the historical peaking factor, which trended down from 3.6 in 2011 to 1.7 in 2020 as shown in Section 2.

The City conducted a demand forecast for the WSMP based on water produced at the WTP. However, this WMCP considers the projected rate of water diverted from the Middle Fork Willamette River. As a result, the City refined the WSMP forecast for this WMCP to include water use during the WTP treatment process. This "process water" includes water used to backwash the WTP filters to remove particles that become trapped in the filter media and reduce the filter's effectiveness over time. Incorporating this process water into the demand forecast captures the full amount e of water diverted by the City under its surface water right. The City measures the volume of process water at the WTP via master meters and determined that total process water accounted for 2.8 percent of total diverted water from 2016 to 2020. Therefore, the City increased the forecasts of water demand calculated for the WSMP by 2.8 percent. The resulting future demands are shown in Exhibit 5-2.

MDD is forecast to reach 322,946 gallons per day or 0.50 cfs, an increase of approximately 36 percent from 2020. As previously noted, a majority of this increase is due to the addition of the 94 persons added to the system by 2021.

Exhibit 5-2. Demand Forecast, 2020-2042

	ADD (gal/cfs)	MDD (gal/cfs)
2020 (Actual)	138,928 / 0.21	237,580 / 0.37
2032	159,038 / 0.25	318,076 / 0.49
2042	161,473 / 0.25	322,946 / 0.50

5.5 Schedule to Exercise Permits and Comparison of Projected Need to Available Sources

OAR 690-086-0170(2) and (4)

To meet the City's 20 year projected demand of 0.5 cfs, the City will rely on Certificate 46884 (1.0 cfs) which authorizes diversions from the Middle Fork Willamette River as its primary source of supply over this period. Historically, this surface water source has proven to be reliable and available and the City foresees that this source will remain a stable source of supply into the future. Certificate 23721 (0.44 cfs)

and Permit G-13499 (0.45 cfs) authorize appropriation from two wells. Due to current water quality constraints these groundwater rights are held in reserve for emergency use when blended with surface water.

The City has developed 0.116 cfs of 0.45 cfs of Permit G-13499 and has a claim of beneficial use and certificate request pending with OWRD. The City intends to submit a request to extend the time line to develop the remaining portion of Permit G-13499; the City understands that following the extension of time, access to water beyond 0.116 cfs will need to be addressed in a subsequent WMCP.

5.6 Alternative Sources of Water

OAR 690-086-0170(5)

OAR 690-086-0170(5) requires an analysis of alternative sources of water if any expansion or initial diversion of water allocated under existing permits is necessary to meet future water demand. Expansion of water use under the City's permit will need to be addressed following an extension of time and a subsequent WMCP.

5.7 Quantification of Maximum Rate and Monthly Volume

OAR 690-086-0170(6)

OAR 690-086-0170(6) requires a quantification of the maximum rate and maximum monthly volume of water to be diverted if expansion or initial diversion of water allocated under an existing permit is necessary to meet demands in the 20-year planning horizon. Expansion of water use under the City's permit will need to be addressed following an extension of time and a subsequent WMCP.

5.8 Mitigation Actions under State and Federal Law

OAR 690-086-0170(7)

Under OAR 690-086-0170(7), for expanded or initial diversion of water under an existing permit, the water supplier is to describe mitigation actions it is taking to comply with legal requirements of the Endangered Species Act (ESA), Clean Water Act, and other applicable state or federal environmental regulations. Expansion of water use under the City's permit will need to be addressed following an extension of time and a subsequent WMCP.

5.9 New Water Rights

OAR 690-086-0170(8)

Under OAR 690-086-0170(8), an analysis of alternative sources of additional water is required if acquisition of new water rights will be necessary within the next 20 years to meet the projected water demands. The City does not intend to acquire new water rights to meet its demands within the next 20 years, so the provisions of this section are not applicable.

Appendix A

Letter to Affected Local Government

GSI Water Solutions, Inc.

August 19, 2022

Ms. Amber Bell, Planning Director
Lane County
3050 N. Delta Highway
Eugene, OR 97408
Amber.Bell@lanecountyor.gov

Subject: Water Management and Conservation Plan for Lowell

Dear Ms. Bell,

The City of Lowell (City) has developed a draft Water Management and Conservation Plan (WMCP) to fulfill the requirements of Oregon Administrative Rules Chapter 690, Division 86 of the Oregon Water Resources Department.

Under these rules, the water supplier will make its draft WMCP available for review by any affected local government and seek comments related to consistency with the local governments' comprehensive land use plans. We have provided you with an electronic version by email of the City's draft WMCP for your review.

Please provide any comments to me by September 19, 2022. If the WMCP appears consistent with your Comprehensive Land Use Plan, a letter or email response to that effect would be appreciated. You may send your comments to me at thenkle@gsiws.com.

If you have any questions, please feel free to contact me at 971-235-2550. Thank you for your interest.

Sincerely,
GSI Water Solutions Inc.

Tim Henkle
Water Resources Consultant

Enclosure

Tim Henkle

From: MILLER Keir C <Keir.MILLER@lanecountyor.gov>
Sent: Tuesday, August 23, 2022 10:57 AM
To: Tim Henkle
Cc: BELL Amber R; EICHNER Lindsey A
Subject: RE: City of Lowell Draft WMCP for Review

Hi Tim,

I've reviewed the Draft WMCP for the City of Lowell to assess consistency with the Lane County Rural Comprehensive Plan (RCP). I find no conflicts between the Draft WMCP and the RCP and the plan, as proposed, appears consistent with the polices of the RCP.

Please let me know if you have any additional questions.

Keir

Keir Miller | **Manager**
Lane County | Land Management Division
3050 North Delta Hwy | Eugene, OR 97408
Office: 541-682-4631 | Fax: 541-682-3947
keir.miller@lanecountyor.gov | www.lanecounty.org/lmd

From: Tim Henkle <thenkle@gsiws.com>
Sent: Friday, August 19, 2022 10:01 AM
To: MILLER Keir C <Keir.MILLER@lanecountyor.gov>
Subject: FW: City of Lowell Draft WMCP for Review

[EXTERNAL ⚠]

Hi Keir,

In Amber's and Lindsey's absences, please see below and find the attached documents.

Thank you,

Tim

From: Tim Henkle
Sent: Friday, August 19, 2022 9:49 AM
To: Amber.Bell@lanecountyor.gov
Cc: Max Baker <mbaker@ci.lowell.or.us>
Subject: City of Lowell Draft WMCP for Review

Hello Ms. Bell,

Please find a cover letter and draft Water Management and Conservation Plan for the City of Lowell. The City is requesting your review of the WMCP and response. Please note the 30 day requested response time.

Thanks,

Tim

Tim Henkle
Water Resources Consultant
phone: 971-236-2550
1600 SW Western Boulevard, Suite 240, Corvallis, OR 97333
GSI Water Solutions, Inc. | www.gsiws.com

Appendix B

Population Projection, Excerpt from Draft 2022 Water System Master Plan

City of Lowell

LANE COUNTY, OREGON

Water Master Plan

September 2022

Civil West Engineering Services, Inc.

www.civilwest.com | Willamette Valley | North Coast | South Coast | Rogue Valley

TABLE OF CONTENTS

3.3 Population

3.3.1 Historical and Existing Population

A population analysis for Lowell was completed using data from the US Census, and PSU Population Resource Center (PRC) on past, present, and projected future population growth for cities within Lane County.

TABLE 3.3.1 – LANE COUNTY HISTORICAL AND FORECAST POPULATIONS

Figure 1. Lane County and Sub-Areas—Historical and Forecast Populations, and Average Annual Growth Rates (AAGR)

	Historical			Forecast					
	2000	2010	AAGR (2000-2010)	2019	2044	2069	AAGR (2010-2019)	AAGR (2019-2044)	AAGR (2044-2069)
Lane County	**322,959**	**351,715**	***0.9%***	**371,361**	**426,041**	**480,634**	***0.6%***	***0.6%***	***0.5%***
Coburg	969	1,032	*0.6%*	1,308	1,687	1,955	*2.6%*	*1.0%*	*0.6%*
Cottage Grove	8,952	10,164	*1.3%*	10,284	11,677	13,172	*0.1%*	*0.5%*	*0.5%*
Creswell	3,959	5,333	*3.0%*	5,663	7,573	9,813	*0.7%*	*1.2%*	*1.0%*
Dunes City	1,229	1,303	*0.6%*	1,292	1,474	1,665	*-0.1%*	*0.5%*	*0.5%*
Eugene	160,551	177,369	*1.0%*	192,607	232,099	273,794	*0.9%*	*0.7%*	*0.7%*
Florence	8,783	10,230	*1.5%*	10,579	12,518	14,635	*0.4%*	*0.7%*	*0.6%*
Junction City	5,942	6,100	*0.3%*	6,919	9,080	11,328	*1.4%*	*1.1%*	*0.9%*
Lowell	857	1,045	*2.0%*	1,108	1,352	1,620	*0.6%*	*0.8%*	*0.7%*
Oakridge	3,239	3,308	*0.2%*	3,278	3,344	3,320	*-0.1%*	*0.1%*	*0.0%*
Springfield	61,910	67,738	*0.9%*	70,278	76,443	81,677	*0.4%*	*0.3%*	*0.3%*
Veneta	2,737	4,561	*5.2%*	4,767	6,591	8,662	*0.5%*	*1.3%*	*1.1%*
Westfir	287	255	*-1.2%*	254	272	288	*0.0%*	*0.3%*	*0.2%*
Outside UGBs	63,544	63,277	*0.0%*	63,023	61,930	58,707	*0.0%*	*-0.1%*	*-0.2%*

Sources: U.S. Census Bureau, 2000 and 2010 Censuses; Forecast by Population Research Center (PRC).

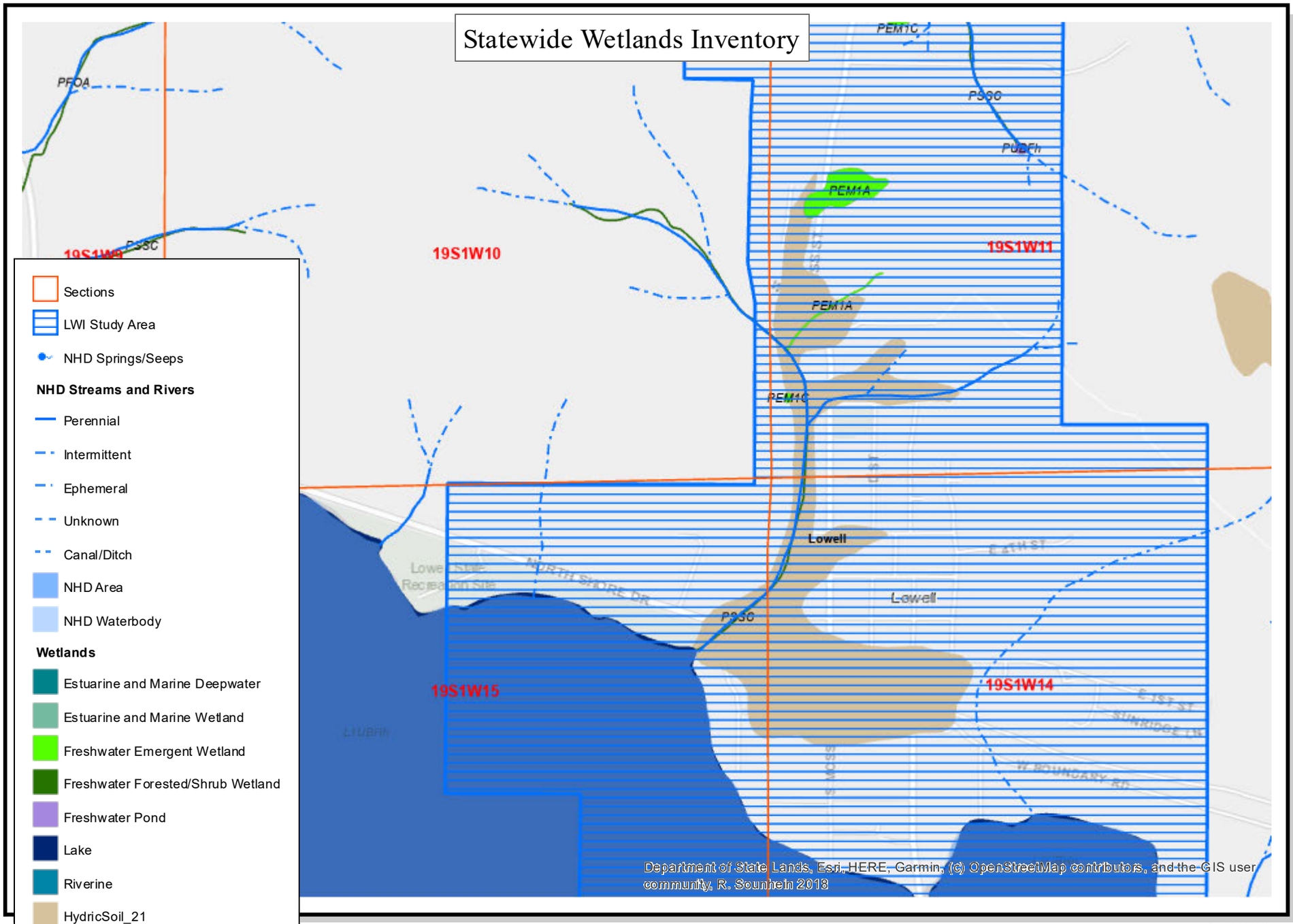
Note: For simplicity each UGB is referred to by its primary city's name.

3.3.2 Projected Population

According to the 2020 US Census, the population of Lowell was 1,196. Since 2020, there have been several new developments in town that were not accounted for in the PSU estimate. These developments are adding approximately 35 EDUs to the system, which will add approximately 94 persons to the 2020 census number, pushing the population to 1,290. Using the AAGRs (from the table above) beyond this slated bump in population from 2021 onward, the population at the end of this planning period (2045) is projected to be 1,560.

APPENDIX DAWM
DEPATMENT OF STATE LANDS
APPROVED WETLANDS MAP

Statewide Wetlands Inventory



- Sections
- LWI Study Area
- NHD Springs/Seeps

NHD Streams and Rivers

- Perennial
- Intermittent
- Ephemeral
- Unknown
- Canal/Ditch
- NHD Area
- NHD Waterbody

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine
- HydricSoil_21
- AgateWinlo_21

1 inch = 0.28 miles

0 0.1 0.2 0.4 0.6 0.8 mi

The Statewide Wetlands Inventory (SWI) represents the best data available at the time this map was published and is updated as new data becomes available. In all cases, actual field conditions determine the presence, absence and boundaries of wetlands and waters (such as creeks and ponds). An onsite investigation by a wetland professional can verify actual field conditions.

https://www.oregon.gov/dsl/WW/Pages/SWI.aspx

Date: 6/27/2022

State of Oregon
Department of State Lands
775 Summer Street, NE, Ste 100
Salem, OR. 97301-1279
(503) 986-5200

APPENDIX WCM
WATERCAD MODELING
FIRE FLOW DATA OUTPUT

ID	Label	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)	Fire Flow (Needed) (gpm)	Fire Flow (Available) (gpm)
416	1	724.16	949.7	98	1500	1222
417	9	728.3	949.71	96	1500	1381
418	11	730	949.71	95	1500	1790
419	13	727.17	949.72	96	1500	2188
420	16	765.93	949.71	80	1500	1761
421	22	803.61	950.46	64	1500	2327
422	23	792	950.46	69	1500	2395
423	28	832.95	950.41	51	1500	1597
424	33	866.82	950.41	36	1500	1471
425	39	781.85	950.47	73	1500	2557
426	44	776.78	950.48	75	1500	2655
427	48	756	950.49	84	1500	2844
428	55	769	950.5	79	1500	2904
429	56	759.13	950.48	83	1500	2801
430	58	759.38	950.5	83	1500	2974
431	60	755.82	950.59	84	1500	3146
432	64	781.3	950.55	73	1500	3004
433	65	765.77	950.58	80	1500	3053
434	70	740.78	950.49	91	1500	2942
435	80	811.11	950.72	60	1500	3267
436	82	775.25	950.83	76	1500	3419
437	88	769.18	951.24	79	1500	3500
438	94	756.04	951.66	85	1500	3500
439	97	757.96	950.87	83	1500	3500
440	99	748.19	950.64	88	1500	3500
441	106	745.61	950.54	89	1500	3413
442	112	758.7	950.71	83	1500	3409
443	120	926.57	957.95	14	1500	3328
444	122	900.95	957.92	25	1500	2595
445	128	841.35	952.27	48	1500	3500
446	129	865.41	957.91	40	1500	2937
447	133	891.12	957.92	29	1500	3062
448	139	881.68	957.92	33	1500	3192
449	149	827.13	952.21	54	1500	3500
450	151	770.36	951.91	79	1500	3500
451	156	725.5	949.86	97	1500	2008
452	161	727.48	949.87	96	1500	2992
453	162	715	949.8	102	1500	2599
454	165	729.08	949.74	95	1500	2712
455	168	716.59	949.77	101	1500	2703
456	173	714.19	949.71	102	1500	2630

457	182	738.48	949.96	91	1500	3040
458	183	732.93	949.91	94	1500	2809
459	190	740	950.05	91	1500	3318
460	195	740.57	950.01	91	1500	3259
461	199	729.43	949.84	95	1500	2736
462	201	732.43	950.01	94	1500	2914
463	203	731.3	950.02	95	1500	2767
464	204	749.19	950.11	87	1500	2959
465	210	753.82	950.11	85	1500	2870
466	212	750.38	950.24	86	1500	3182
467	216	746.03	950.58	88	1500	3500
468	219	745.09	950.4	89	1500	3456
470	227	799.1	952.09	66	1500	3500
471	230	758.57	951.97	84	1500	3500
472	233	753.22	951.87	86	1500	3500
473	236	745.03	950.05	89	1500	3473
475	361	750.87	950.49	86	1500	2875
476	437	783.16	950.64	72	1500	2431

Agenda Item Sheet

City of Lowell City Council

Type of item:	Contract

Item title/recommended action:

Motion to approve the September 15, 2022 "Engineering scope of services" from Civil West Engineering Services, Inc. in the amount not to exceed $11,486 to update water and parks system development charges and to authorize the City Administrator to sign. – Discussion/ Possible action

Justification or background:

The City Engineer reported at your September 6 meeting that one of the next steps in implementing the master plan is updating the SDC fee schedule to ensure that future development pays for the planned capacity upgrades. Staff also asked the City Engineer to include an update to the parks SDC, since current park SDC fees do not reflect the capital improvements plan listed in the 2019 "Parks master plan." The scope of work here includes all steps to update the fees, including preparing a resolution for approval by City Council. Staff propose that we pay for the engineering services through the water and parks SDC funds, as opposed to the water and general funds.

Budget impact:

Expenditures not to exceed $11,486, to be paid out of the water and parks SDC funds

Department or Council sponsor:

Public Works

Attachments:

September 15, 2022 "Engineering scope of services" from Civil West Engineering Services, Inc.

Meeting date:	09/20/2022

Civil West Engineering Services, Inc.

South Coast Office
PO Box 1589
Coos Bay, OR 97420

Willamette Valley Office
200 Ferry Street SW
Albany, OR 97321

Rogue Valley Office
830 O'Hare Parkway, Suite 102
Medford, OR 97501

North Coast Office
609 SW Hurbert Street
Newport, OR 97365

ENGINEERING SCOPE OF SERVICES

Date: September 15, 2022 Work Order Number:

To: Mr. Jeremy Caudle, City Administrator – City of Lowell

From: Matt Wadlington, Regional Manager – Civil West Engineering Services, Inc.

RE: **City of Lowell: Water and Parks SDC Update**
Civil West Project Number: TBD

The purpose of this scope of services is to describe the proposed approach, costs, and schedule that Civil West will follow to update the System Development Charge (SDC) project list and eligibility for the City of Lowell.

BACKGROUND:

The City of Lowell provides services to the residents of the City. These services include potable water, wastewater, stormwater, transportation, and City park facilities. In order to not burden existing residents with the costs of infrastructure growth necessary to serve new developments, SDCs are charged for any new development to cover those infrastructure costs. The City's current SDC methodology was prepared in 2004.

Oregon Revised Statutes (ORS) 223.297 through 223.314 authorizes local governments and service districts to assess SDCs for various infrastructure sectors, including: A) Water supply, treatment, and distribution; B) Wastewater collection, transmission, treatment and disposal; C) Drainage and flood control; D) Transportation; E) Parks and recreation.

Although the methodology prepared in 2004 is sound, the projects relied on to develop the SDC values have changed. Since the SDC Methodology was prepared, the City has completed several planning documents which have identified capital improvement projects (CIPs) that are necessary to service future growth. At this point, it is our understanding that the City is interested in updating SDC Methodology to account for the CIPs and adjusted population growth rates for the water and parks systems only.

GOALS FOR THE PROJECT:

Recommend revisions to the City's SDC water and parks fees based on updated CIP costs and population estimates.

The existing Methodology framework will be maintained, but the projects, costs, and population data will be updated to establish the allowable SDC fee. Often, the allowable SDC fee is higher than the market will bear, and a lower rate will be implemented by the City in an effort not to stifle growth within the City. To help guide the City, the proposed work will include an analysis of regional cities current SDCs for reference by the City Council and administration in determining the appropriate values to assign.

SCOPE OF WORK:

The following scope of work describes the tasks, activities, and work that will take place to complete the above noted phases of the project. Each task will be assigned a certain number of engineering hours for completion. The description of each task below is a summary of the estimated process, steps, and procedures that will be required for completion of the work.

Task 1 – Project Management and Administration

This task includes administrative and project management efforts related to the management of this project. This shall include processing of paperwork and correspondence between Civil West and the City, coordination on financial matters, directing resources internally, and meeting with staff on routine issues.

Task 2 – Kick-off Meeting and Data Acquisition

Once the City authorizes us to proceed, we will schedule a kickoff meeting to visit with the City and to review the requirements and goals. This will likely be an on-line meeting to save time and resources.

Task 3 – Population Analysis

This task will update the population projections identified in the existing SDC Methodology. This information will be substantially similar to the data provided in the recent Water Master Plan.

Task 4 – Water System SDC Analysis

Using information in the recently developed Water Master Plan and Water Management and Conservation Plan, Civil West will develop a list and cost of capital improvements needed to provide for growth. We will then determine the appropriate SDC charge for water infrastructure.

Task 5 – City Parks SDC Analysis

Using data generated in the 2019 Parks Master Plan, prepared by the University of Oregon School of Planning, Public Policy and Management, we will determine the appropriate SDC charge for parks infrastructure.

Task 6 – SDC Methodology Update Report

This task will generate an update document to the existing Water and Parks SDC Methodology to include the summary of the SDC components organized in an intuitive and practical manner.

Task 7 – Development of a new SDC Resolution

Under this task Civil West will prepare a draft SDC Resolution for review by the City. The resolution will update the SDC Methodology and fees to those calculated in the analysis above.

Task 8 – Reimbursables

This task will cover direct reimbursable expenses anticipated for the project. These include travel and per diem costs, reproduction and office expenses, and other reimbursable costs.

Part B: Project Fee Proposal

A summary of the proposed fee schedule is provided below:

Task #	Task Description	Budget
1	Project Management and Administration	$1,640.00
2	Kickoff and Data Acquisition	$320.00
3	Population Analysis	$916.00
4	Water System SDC Analysis	$1,576.00
5	City Parks SDC Analysis	$2,364.00
6	SDC Methodology Report	$3,448.00
7	Develop SDC Resolution	$1,022.00
8	Reimbursables	$200.00
	Project Total	**$11,486.00**

The above budget is considered as a not-to-exceed maximum for the scope of work described and will be billed on a time and materials basis to a maximum. Civil West reserves the right to alter distribution of compensation between individual phases of the work noted herein to be consistent with services actually rendered but shall not exceed the total estimated compensation amount unless approved in writing by owner.

Part C: Project Schedule

We anticipate this project will be delivered within 6 weeks of authorization to proceed.

We are grateful for this opportunity to provide these services to the City of Lowell. We are prepared to begin work on this important project as soon as we are authorized to do so. Please let me know if you have any questions, or if you wish to see any alterations to our proposed approach. If this proposed approach is acceptable, please sign below and return a copy to our office for our records.

Sincerely,
Civil West Engineering Services, Inc.

Matt Wadlington, PE
Willamette Valley Regional Manager

Authorized Representative Signature Acceptance

Agenda Item Sheet

City of Lowell City Council

Type of item:	Contract

Item title/recommended action:

Review quotations for replacement HVAC unit at 70 N. Pioneer St. – Discussion/ Possi-ble action

a. Priority One b. Innovative Air c. Harvey and Price d. Alpine Heating and Air Conditioning

Justification or background:

This is to follow up on City Council's direction from the September 6 meeting to obtain competitive quotes for a replacement HVAC unit for 70 N. Pioneer St. Staff obtained product specifications from Wilson Architecture and Colbreit Engineering. With these specifications, staff solicited quotations from the following firms.

BID TABULATION AND EXPLANATION OF PROPOSALS

a. Priority One. $13,787. Called on 9/13. Received proposal on 9/15. This would require the city to hire an electrician and work with Lane Electric to install 3-phase electric service to the building. The vendor stated that they are currently out of stock of single phase equipment. As of the date of this report, staff have not had the opportunity to obtain a verbal quote from an electrician on what it would cost to install 3-phase service to the building.

b. Innovative Air. $11,455. Called on 9/13. Received proposal on 9/16. The vendor stated that the unit quoted would require additional work from an electrician to connect to electrical service at the building. The vendor included a submittal for us to provide the electrician. As of the date of this report, staff have not had the opportunity to obtain a verbal quote from an electrician to connect the unit. The vendor stated that availability is first-come, first-served with the delivery date provided once an order is placed.

c. Harvey and Price. $16,142. Subcontractor with Bridgeway. Quote provided with change order presented at last council meeting. On September 15, staff verfified that the price is the same. UPDATE: 09/20/2022. Lead time on Carrier unit is late October to early November.

Agenda Item Sheet

City of Lowell City Council

Type of item:	Contract

d. Alpine Heating and Air. UPDATED 09/20/2022. $12,511 with option to add economizer for $2,050. Called on 9/15. Proposal received 9/19. Can install within 3 to 5 weeks, but need to order ASAP as there is one unit left in stock.

e. James Heating and Air. Emailed on 9/13. No response received as of this report date.

f. Comfort Flow Heating. Called on 9/13 and left message. No response received as of this report date.

Staff request a decision from City Council on 9/20. The HVAC contractor on this project needs to balance the ventilation air distribution system, which they cannot do until the new unit is installed. Northwest Code Professionals informed me that they can't finalized the mechanical inspection until the new unit is installed and balancing complete. UPDATE 09/20/2022: I received clarification on 9/19/22 from Northwest Building Code that the city could obtain a certificate of occupancy without the new unit installed and balancing complete, as this is not a life or safety issue.

By soliciting multiple quotes, we have satisified the city's procurement code. This means we can contract directly with a vendor and avoid the $2,000+ mark-up that we would have incurred through the change order process with Bridgeway.

Budget impact:

To be determined based on which vendor City Council selects

Department or Council sponsor:

Administration

Agenda Item Sheet

City of Lowell City Council

Type of item:	Contract

Attachments:

Quotes from vendors listed above

Meeting date:	09/20/2022

Priority One
HEATING & AIR CONDITIONING

Custom proposal for:

City Of Lowell

Site Address

Maggie Osgood Library Renovation
541-359-8768 Jeremy Caudle

September 15, 2022

Estimator: Phillip Babcock

4232 W 7th Avenue Eugene, OR 97402 541-689-1004 www.prioritytoneheating.com CCB#154686

Thank you for allowing Priority One Heating & Air Conditioning to assist you with all of your heating and/or cooling needs. Priority One was founded in 1998 by the local industry's leading experts. Our office staff, service experts, installation technicians, and in home estimators all have thorough knowledge of the heating and air conditioning field and are happy and eager to assist you in any way they can. Priority One employees can also boast about an average of fifteen years of experience in the field.

Priority One stands behind each installation and every service with guarantees that exceed our industry's standards. We provide customer service that you will be excited to tell your friends, family and co-workers about. We provide top quality equipment and the industry's very best materials to complete a quality job. We will help protect your investment by using proper service and installation techniques, and by performing regular maintenance.

We understand that choosing a company to come into your home is a big decision, and we want to reassure and assist you in making your decision an easier one. Please feel free to call if you have any questions or concerns you would like to discuss. We look forward to earning your business.

Thank you,

Phillip Babcock
541-232-0198 Cell (Feel free to call in the evenings and on weekends)

Priority One
HEATING & AIR CONDITIONING

City Of Lowell

Site Address
Maggie Osgood Library
Renovation
541-359-8768 Jeremy Caudle

4232 W 7th Avenue Eugene, OR 97402 541-689-1004 www.prioritynoheating.com CCB#154686

4 Ton Heat Pump Package Unit System

Description of Work to be performed

- ✓ **Supply and install (outdoor) condensing unit installed on the side of your business. (All new systems will use the Carrier developed R-410 earth friendly refrigerant).**
- ✓ **Re-use existing filter systems.**
- ✓ **Adapt existing outside sheet metal transitions at the condensing unit leaving existing ductwork. Any new transitional ductwork will be installed to PTCS Standards**
- ✓ **Supply and install condensate drain systems of ¾" PVC.**
- ✓ **Supply and Install new Seismic hold down clips.**
- ✓ **Provide system startup and customer walk through.**
- ✓ **Excludes all High Voltage electrical and permit**
- ✓ **Recycle existing outside unit.**
- ✓ **Bid subject to final site review.**

Priority One
HEATING & AIR CONDITIONING

4232 W 7th Avenue Eugene, OR 97402 CCB# 154686
541-689-1004 www.priorityoneheating.com

City Of Lowell

Site Address
Maggie Osgood Library Renovation
541-359-8768 Jeremy Caudle

Carrier Three Phase 4.0 Ton Heat Pump Package Unit	Net Investment 13,787.00
Carrier Three Phase 4.0 Ton Heat Pump package unit	**12,187.00**
Labor, Materials **7-year parts warranty included** **Priority One's 1 Year Labor Warranty included**	**1,600.00**

Accepted by_____ **Date**___

Total Due at Install 13,787.00

INNOVATIVE AIR, INC CCB# 161742

5120 FRANKLIN BLVD SUITE 7 EUGENE, OR 97403
PHONE (541) 746-1040 FAX (541) 746-4099

September 16, 2022

City of Lowell
375 Merrimack Street

Attention: Jeremy Caudle

RE: Lowell Library Package Heat Pump Change Out Proposal

Innovative Air is pleased to provide the following proposal for your review and consideration.

Includes:

- Remove and dispose of one (1) existing ground mounted package heat pump unit.
- Provide and install one (1) Trane 4 ton package heat pump with 7.5/10kw heat kit and manual fresh air damper. Unit will ground mount in the existing units location.
- Ductwork transitions to connect to existing air distribution.
- New wall mounted programmable controller.
- Startup, warranty and O&M documents.

The above for the sum of: $10,976.00

Drawings and documentation for permits $479.00

* Electrical work is not included in quote price. We will coordinate work with your preferred electrician; you will just be billed directly from them for services.

Exclusions:
Line voltage electrical work (Electrician)
Permit fees
Painting of duct or any mechanical components
Prevailing Wage

Submitted by: Chris Anderson • canderson@innovative-air.com • Thank you for the opportunity.

"LEADING HVAC SOLUTIONS"

Submittal

Prepared For:
All Bidders

Date: September 15, 2022

Job Name:
Lowell Library RTU

Trane U.S. Inc. is pleased to provide the following submittal for your review and approval.

Product Summary

Qty	Product
1	1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A (13WC)

David Strasser
Trane U.S. Inc.
7257 SW Kable Lane
Portland, OR 97224
Office Phone: (503) 620-8031

The attached information describes the equipment we propose to furnish for this project and is submitted for your approval.

Submittal acceptance and return is a critical step, so please ensure submittals are returned with approval to release to production within 14 days of submittal date.

Product performance and submittal data is valid for a period of 6 months from the date of submittal generation. If six months or more has elapsed between submittal generation and equipment release, the product performance and submittal data will need to be verified. It is the customer's responsibility to obtain such verification.

Table of Contents

Tag Data - 1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A (13WC) (Qty: 1)

Item	Tag(s)	Qty	Description	Model Number
A1	4 Ton	1	1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A	4WCC4048*1000

Product Data - 1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A (13WC)
Item: A1 Qty: 1 Tag(s): 4 Ton

R-410A convertible heat pump 14 SEER
4Tons, 14 /16 SEER
208-230/1/60
7.5/10.0kw 208/240/1 (Field Installed)
Single power entry kit (Field Installed)
1-2" Filter frame (Field Installed)
Manual fresh air damper (Field Installed)
Crankcase heater (Field Installed)
1st yr Labor warranty whole unit

Mechanical Specifications - 1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A
Item: A1 Qty: 1 Tag(s): 4 Ton

Single Source Power Entry
This accessory when used with electric heat accessory shall allow single source power connection to unit and heater combination. Single source power entry kits shall have specific matching heaters(s). Kit shall include high voltage terminal blocks, fuse blocks and fuses, cut-to-length interconnecting wiring, and junction box (if required) to provide power sources with fuse protection as required for both the unit and accessory heater. Kit components shall install within the unit cabinet in the heater access section. Single source branch power circuit shall be protected and wired in accordance with local codes.

Manual Outside Air Dampers
Rain hood and screen shall be field installed. Suitable for up to 25% outside air.

Electric Heaters
Each heater assembly shall include power supply fusing if over 48 amps, automatic resetting limit switches and heat limiter for thermal protection. Heaters shall be provided with polarized plugs for quick connection to unit low voltage wiring. Electric heat modules shall be UL listed.

4WCC4 - General
The units shall be horizontal airflow as shipped and convertible to downflow. All units shall be factory assembled, piped, internally wired and fully charged with refrigerant. Units shall be certified to UL Standard 1995. All units shall be factory run tested to check cooling operation, fan and blower rotation and control or TXV sequence. Units shall be designed to operate at ambient temperatures between 115°F and 55°F in cooling as manufactured. Cooling performance shall be rated in accordance with AHRI standards.

4WCC4 - Unit Casing
All components shall be mounted in a weather-resistant steel cabinet with an enamel finish. Access panels shall be provided for unit controls and indoor coil and fans. Indoor air section compartment shall be completely insulated with fireproof, permanent, odorless fiber material. Knockouts shall be provided for utility and control connections. Drain connections shall be provided to accommodate indoor water runoff.

4WCC4 - Compressor
The compressor shall be hermetically sealed, high efficiency scroll compressors. Internal over current and over temperature protection, internal pressure relief shall be standard. Other features include centrifugal oil pump, low vibration and noise.

4WCC4 - Refrigeration System
All units shall have refrigerant control. Service pressure tap ports and a refrigerant line filter shall be standard.

4WCC4 - Evaporator Coil
Internally enhanced 3/8"OD seamless copper tubing mechanically bonded to aluminum fins, factory pressure and leak tested at 480 - 650 psig. All units have TXV to control refrigerant flow.

4WCC4 - Condenser Coil
The Spine Fin condenser coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is 3/8¿ OD seamless aluminum tubing glued to a continuous aluminum fin. Coils are lab tested to withstand 2.000 pounds of pressure per square inch. The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

4WCC4 - Indoor Air Fan
Constant Torgue, forward-curved, centrifugal wheel in a Composite Vortica ® Blower housing. Motor shall have thermal overload protection and permanently lubricated motor bearings. Motor/blower assembly isolated from unit with rubber mounts.

4WCC4 - Outdoor Fan
One direct-drive, statically and dynamically balanced propeller fan shall be used in a draw through vertical discharge configuration. Permanently lubricated weather proof motor shall have built-in thermal overload protection.

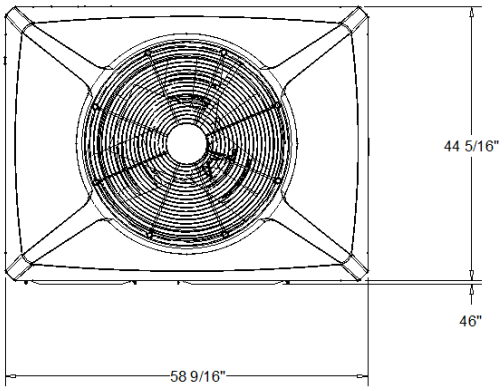
4WCC4 - System Controls
System controls include condenser fan, evaporator fan and compressor contactors.

4WCC4 - Electric Heaters
Each heater assembly shall include power supply fusing if over 48 amps, automatic resetting limit switches and heat limiters for thermal protection. Heaters shall be provided with polarized plugs for quick connection to unit low voltage wiring. Electric heat modules shall be UL listed.

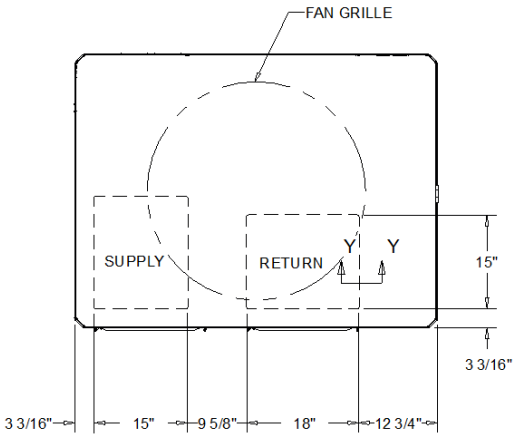
4WCC4 - Single Source Power Entry
This accessory when used with electric heat accessory shall allow single source power connection to unit and heater combination. Single source power entry kits shall have specific matching heater(s). Kit shall include high voltage terminal blocks, fuse blocks and fuses, cut-tolength interconnecting wiring, and junction box (if required) to provide power sources with fuse protection as required for both the unit and accessory heater. Kit components shall install within the heater cabinet in the heater access section. Single source branch power circuit shall be protected and wired in accordance with local codes.

4WCC4 - Manual Outside Air Dampers
Rain hood and screen shall be field installed. Suitable for up to 25% outside air.

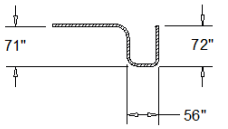
Dimensional Drawings - 1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A
Item: A1 Qty: 1 Tag(s): 4 Ton



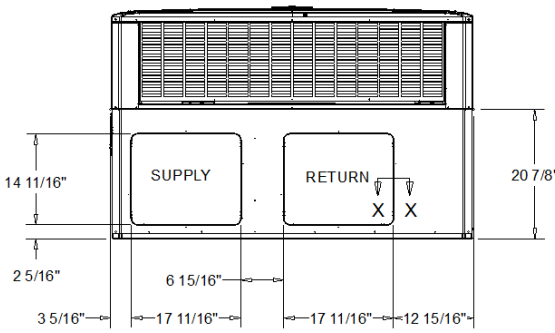
UNIT - TOP VIEW

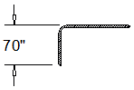


UNIT - BOTTOM PENETRATION VIEW



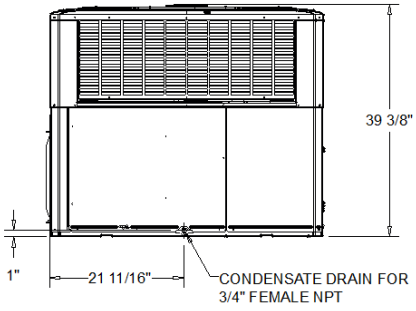
SECTION Y-Y
TYPICAL (8) SIDES OF
DOWNFLOW DUCT OPENINGS



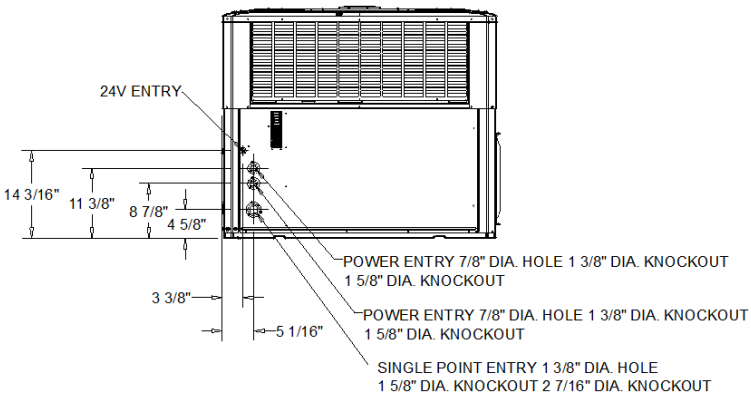


SECTION X-X
TYPICAL (8) SIDES OF
SIDEFLOW DUCT OPENINGS

UNIT - BACK AND PENETRATION VIEW



UNIT - LEFT SIDE VIEW



UNIT - RIGHT SIDE VIEW

Dimensional Drawings - 1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A
Item: A1 Qty: 1 Tag(s): 4 Ton

ELECTRICAL / GENERAL DATA

POWER CONNECTION

Model:	4WCC4048A1
Voltage Range:	208-230/1/60
Min. Circuit Ampacity:	31.9
Max. Circuit Breaker:	50.0
Prot. Rtg. Recmd:	50.0
EER/SEER	12.00/14.00
Noise Rating # :	72.5

COMPRESSOR

Number:	1
Phase:	1
Rated Load Amps:	19.6
Locked Rotor Amps:	130.0

OUTDOOR MOTOR

Number:	1
Horsepower:	.25
Phase	1
Full Load Amps:	1.51
Locked Rotor Amps:	3.07

INDOOR MOTOR

Number:	1
Horsepower:	0.75
Motor Speed (RPM):	1050
Phase	1
Full Load Amps:	6.0
Locked Rotor Amps:	-

REFRIGERANT

Type:	R-410A
Factory Charge Circuit #1:	8.4 lb

HEATER

Model:	BAYHTRV110
Voltage:	208/240
Phase:	1
Heater Capacity (Kw):	7.50/10.0
Heater (Btu):	25600/34100
# of Stages:	1
Stage # 1:	7.50/10.0
Stage # 2:	N/A
MCA:	45.0/52.0
MBS:	45.0/60.0

SINGLE CIRCUIT POWER AMPACITY AND OVER CURRENT PROTECTION

Single Power Entry Kit
Minimum Circuit Ampacity
Maximum Over-Current Device

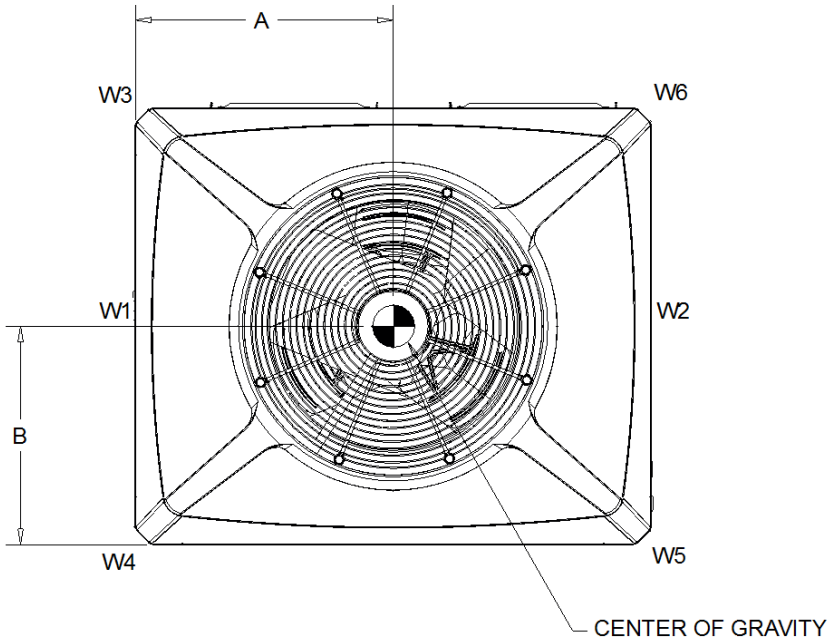
1. Single Circuit Power fuses are supplied if required for unit and / or heater.
2. Wiring requirements if unit and electric heaters are operated from a single circuit using a single power entry kit.

NOTES:

UNIT ONLY
1. Rated in accordance with A.H.R.I. Standard 210/240.
2. Rated in accordance with D.O.E. test procedure.
3. Rated in accordance with A.H.R.I. Standard 270.

ELECTRIC HEATER ACCESSORY ONLY
4. Any power supply and circuits must be wired and protected in accordance with local electrical codes.
5. The MCA values listed are for electric heater only.
6. The MCA values listed are for electric heater only.
7. Field wire must be rated at least 75 C.
8. The HACR circuit breaker is for U.S.A. installations only.
9. For Canada installations reference only.

Weight, Clearance & Rigging - 1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A
Item: A1 Qty: 1 Tag(s): 4 Ton

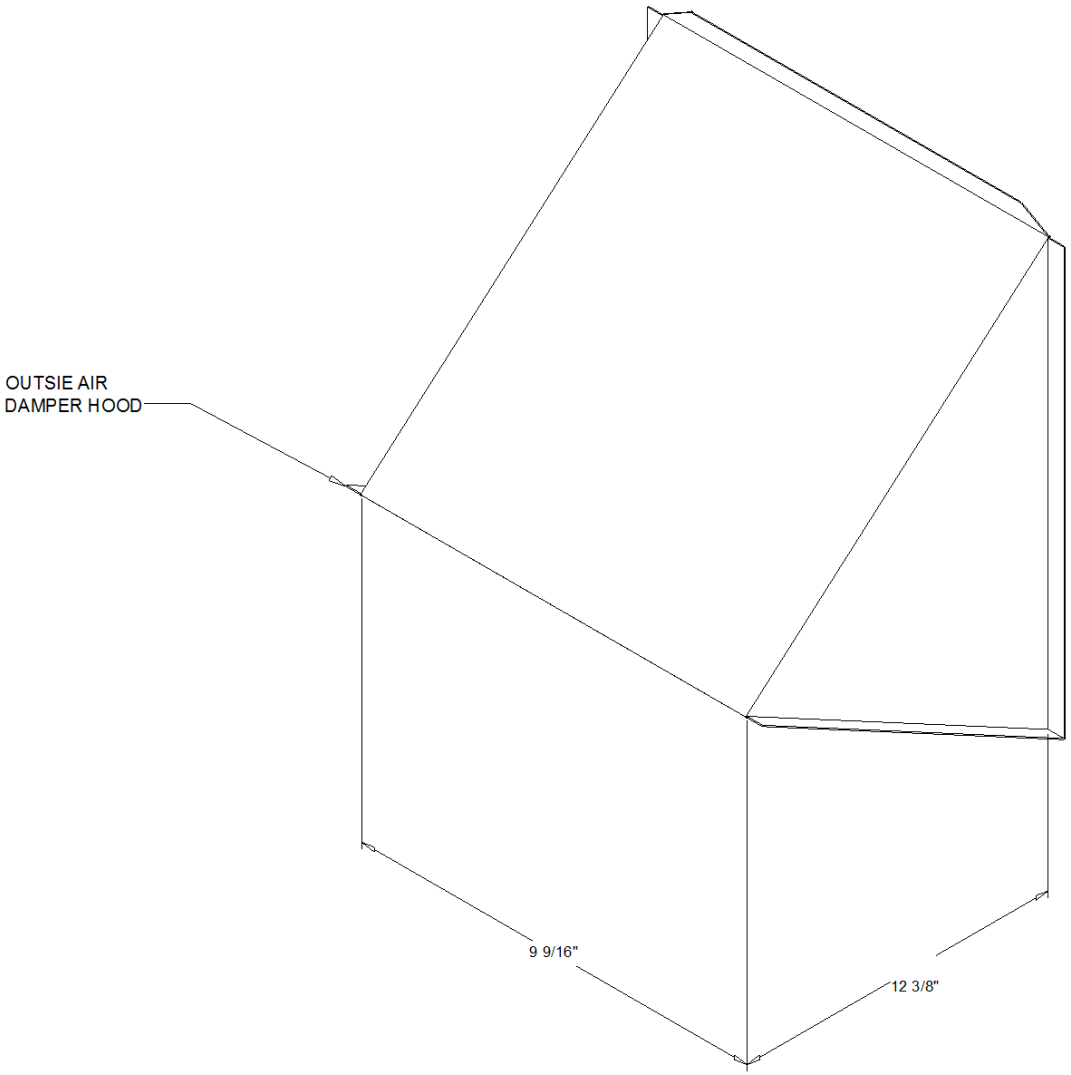


UNIT WEIGHT		CORNER WEIGHT					CENTER OF GRAVITY	
SHIPPING	NET	W1	W2	W3	W4		A	B
529.0 lb	425.0 lb	152"	90"	68.0 lb	115.0 lb		25"	16 5/16"

CLEARANCE TO COMBUSTIBLE MATERIAL		RECOMMENDED SERVICE CLEARANCE			
BOTTOM	0	UNIT		WITH O.A. DAMPER/ECON.	WITH 2 POS. DAMPER
BACK SIDE	1"	BACK SIDE	12"		30"
LEFT SIDE	6"	LEFT SIDE	36"	42"	
RIGHT SIDE	6"	RIGHT SIDE	24"		
FRONT SIDE	12"	FRONT SIDE	42"		
TOP	36"				

LIFTING LUG KITS
FOUR REUSABLE LUGS IN EACH KIT ALLOW UNITS TO BE EASILY LIFTED TO ROOFTOP INSTALLATIONS.
THESE LUGS SNAP (NO SCREWS REQUIRED) INTO SLOTS IN THE UNIT DRIP LIP CHANNEL.

Accessory - 1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A
Item: A1 Qty: 1 Tag(s): 4 Ton



MANUAL OUTSIDE AIR- HOOD

Field Installed Options - Part/Order Number Summary

This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material for the job.

Product Family - 1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A

Item	Tag(s)	Qty	Description	Model Number
A1	4 Ton	1	1.5-5 Ton Pkgd. Heat Pump Rooftop R-410A	4WCC4048*1000

Field Installed Option Description	Part/Ordering Number
7.5/10.0kw 208/240/1	BAYHTRV110F
Single power entry kit	BAYSPEK062F
1-2" Filter frame	BAYFLTR201C
Manual fresh air damper	BAYOSAH002A
Crankcase heater	BAYCCHT102A

HVAC Proposal for

Maggie Osgood Library
70 N Pioneer St
Lowell, Oregon 97452

Harvey And Price Contact:
Si Lister: slister@harveyandprice.com
Jeremy VanOrdstrand: jeremyv@harveyandprice.com
Mark Mudder: mmudder@harveyandprice.com

Date: August 30, 2022
To: Bridgeway Construction
Attn: Melissa
Phone: 541-632-2659
E-Mail: melissao@bridgewaycontracting.com

We are pleased to provide a quote for the above listed project, subject to the following as noted.

Description of work:

- Remove and dispose of existing York BAUA-F048AB S#NKHM132057
- Provide and install new heat pump in same location
- Disconnect and reconnect existing thermostat
- Disconnect, reconnect, and modify existing ductwork
- Disconnect and reconnect existing electrical

Exclusions:

- Concrete equipment pad modification
- Plumbing
- New Electrical
- Ductwork Cleaning/Repair
- Painting and patch work
- Fire prevention and suppression systems
- BAS or Building Automated System
- After-hours and weekend labor

Goodman 14 SEER Heat Pump $13,980.00

Lead time estimate is February

Trane 14 SEER Heat Pump $14,832.00

Lead time estimate is late October to early November

Carrier 14 SEER Heat Pump $16,142.00

Lead time estimate is mid-October

NOTICE:

- Materials are not guaranteed to be available until ordered; lead times could affect construction schedule. Materials are only ordered after awarding of project and return of an approved submittal package. If materials are unavailable after approval of submittals, substitutions will be recommended.
- All quotes are subject to manufacture price increases at time of order.
- Health regulations and advisories may impact schedule, labor, and availability of product.
- Coordination required due to location conflicts and resulting changes to HVAC systems, or appurtenances not included.
- We reserve the right to revise our proposal and request any change order if needed for situations occurring beyond our control.

Quote expires in 30 days without receipt of contract. To accept this proposal in its entirety and the price stated for described work, please sign and date below.

Printed name: _____ **Signature:** _____ **Date:** _____

Jeremy Caudle

From: Lucas Ferguson [redacted]
Sent: Monday, September 19, 2022 6:07 PM
To: Jeremy Caudle
Subject: Alpine Heating and Air Conditioning Proposal: City of Lowell Package HP
Attachments: Proposal City of Lowell 4 ton Trane Package HP 9-19-22.pdf

Hi Jamie,

Thank you for the opportunity to assist you at the new public office in Lowell. I have digitized the proposals and attached it below to this email for your review. The main thing about this project is lead time. My owner did some digging with the supply teams and we were able to find ONE Trane model that is available in Tacoma. So, we would need to know ASAP, to get you guys on the schedule. Upon signing, my team would order this ONE unit they have, and we would guarantee install with-in 3-5 weeks. Our schedule is somewhat liquid with all the new construction projects we are working on, because they are also delayed on their side. So, we should be able to turn this around very quickly for you. Just need to know ASAP, if you would like us to get that ordered.

Next, I have included an option on this proposal- fresh air economizer. This is to increase efficiency of the unit during the winter season. What it will do is bring in outside cold air in during the morning of the summer seasons, and most of the time in the winter seasons to the ductwork. This means that it will not need to use the system to create cooling if the temperatures are below 60 degrees outside. Most of the time, because there are so many people inside these public buildings, you need to cool in the winter season. Instead of running the heat-pump to create cooling, the system will bring in that 40-60 degree air and then distribute that throughout the vents. This $2000 option will easily pay for itself, and would be highly recommended. These fresh air economizers are a code requirement for installation on 5-ton units and larger. This is a 4 ton unit, so it is not required.

Technical data:
https://www.ferguson.com/product/trane-4wcc4-xb13c-4-ton-14-seer-convertible-r-410a-packaged-heat-pump-t4wcc4048a1000a/_/R-5054706

Please let me know if you have any further questions before moving forward, and I will be happy to assist you throughout the process. Keep in mind, the most important day of any HVAC system is the day it is installed. We do not disappoint on that day, and maintain our service after the fact. Alpine provides the best value and the most affordable costs to our clients. I look forward to proving to you first hand what we have to offer.

--
Thank you,

Lucas Ferguson
Comfort Advisor

[redacted]
541-688-0426 Eugene

541-942-8577 Cottage Grove
alpineheating.org

CCB# 193586

4747 W 11th Ave. Eugene, OR 97402
P.O. Box 251 Creswell, OR 97426
www.AlpineHeating.org
alpineheatingandair@yahoo.com

Eugene/ Springfield **541-686-0426**
Cottage Grove/ Creswell **541-942-8577**

MITSUBISHI ELECTRIC
Cooling and Heating Solutions

LENNOX

Owner Information: **Date: 9/19/2022**

Name	City of Lowell	Phone	541-359-8768
Address	70 N Pioneer St	Email	jcaudle@ci.lowell.or.us
City, State ZIP	Lowell, OR 97452		

WE HEREBY SUBMIT SPECIFICATIONS AND ESTIMATES FOR THE FOLLOWING:

All labor of 4 ton Trane 4WCC4048A100A Package electric Heatpump system 208/ 230V 1 phase
SEER: 14 (Cooling) HSPF: 8.0 (heating)

ALL LABOR OF INSTALLATION BY ALPINE HEATING & AIR SHALL INCLUDE:

Removal of current system
Set refrigerant charge per manufacturer specifications charge with R410 A
Properly sized refrigerant line set with armaflex insulation
All insulated ductwork and sheet metal transitions
Outdoor unit pad with vibration isolation absorbers
Reconnect condensate drain line
Filter rack in unit
single entry power point and 10/15kw heat kit
Re-use honeywell thermostat
High voltage wiring by licensed electrician
5 year manufacture warranty
1 year labor warranty
1 year satisfaction guarantee
Clean up and Start up
Mechanical Permit
Electrical Permit
SEE OPTIONS

NOTE: Alpine Heating & Air Conditioning is NOT responsible for any existing code violations or pre-existing conditions of any duct work, piping, electrical supplies or equipment NOT being replaced at this time. If additional work is required, it will be the Consumer's responsibility. Any additional charges will be quoted by Alpine Heating & Air Conditiong OR any other sub-contractor prior to the start of said additional work. At that time the customer will either approve or decline the additional recommended work prior to that work being started.

Sub-total for all items above:		**$12,511**
option:	Fresh Air Economizer (improves cooling efficiency)	**$2,050**
option:		
option:		
Total Investment:		**$14,561**

TERMS: Client is to pay Alpine cash/check $12511 upon Completion of project client initial_____
OR Pay Alpine Cash/check $14561 w/economizer upon completion of the installation -----client initial_____

Acceptance of Proposal

The above investment, specification and conditions are hereby accepted. Buyer (1) authorizes Alpine Heating & Air Conditioning to do the work as specified, (2) will make a payment for the job as outlined under TERMS, and (3) acknowledges that Buyer has read the "INFORMATION NOTICE TO OWNER ABOUT CONSTRUCTION LIENS" asOR 87.093. There is no agreement, verbal or otherwise, which is NOT written in this proposal.

Buyer's Acceptance Signature: **Date**

Comfort Advisor Acceptance Signature: **Date**

Agenda Item Sheet

City of Lowell City Council

Type of item:	Other

Item title/recommended action:

Receive resignation letter from Planning Commissioner William D. Priser – Discussion/ Possible action

Justification or background:

Planning Commissioner William Priser has submitted a resignation letter. Priser's letter indicates that he is resigning from the Planning Commission with immediate effect. Staff recommend that City Council pass a motion to accept Priser's resignation so that the resignation is reflected in the city's official records.

Budget impact:

N/A

Department or Council sponsor:

Planning Commission

Attachments:

Email and resignation letter

Meeting date:	09/20/2022

Jeremy Caudle

From: William Priser [redacted]
Sent: Tuesday, September 13, 2022 10:28 AM
To: Jeremy Caudle
Subject: Resignation Letter
Attachments: resgination letter.docx

Good Morning Jeremy,

Please find attached my resignation letter re: Planning Commission. Thank you for the opportunity and will miss you, and everyone else I have come to know in our community.

Sincerely,

Bill Priser

To whom it may concern,

Please find this letter as a notice of my resignation from the City of Lowell Planning Commission effective immediately, September 13, 2022. I have received a job opportunity out of the area which will require me to move away from our community. I thank you for the opportunity to serve our community and will miss this city and it's people.

Sincerely,

William D. Priser

Agenda Item Sheet

City of Lowell City Council

Type of item:	Appointment

Item title/recommended action:

Review volunteer application from Lloyd Hall for Planning Commissioner vacancy – Discussion/ Possible action

Justification or background:

The Planning Commission has had a vacancy since March when Michael Galvin resigned. With the resignation of William Priser, the Commission is now down to 3 members.

Staff reported on the vacancy in an edition of "The Bridge," where we also encouraged interested members of the public to apply to fill the vacancy. Local citizen Lloyd Hall submitted an application, which is on the agenda for your review. At this meeting, you may vote to appoint Hall, leave the position open, or take any further action.

Budget impact:

N/A

Department or Council sponsor:

Planning Commission

Attachments:

Volunteer application

Meeting date:	09/20/2022

SEP 12 2022

BY:

VOLUNTEER APPLICATION

BOARDS, COMMISSIONS, AND COMMITTEES

Contact Information	
Name:	Lloyd Hall
Street Address:	[redacted]
Mailing Address:	
City/State/Zip Code:	
Home Phone:	
Work Phone:	
E-Mail Address:	

Background	
Years of Residence in Lowell:	2009 - 2014-5yr 2016-2022-6yr
Place of Employment:	Lowell Fire District
Occupation:	Firefighter / EMT
Educational Background:	Some college
Prior Civic Activities:	Helped Public Works set up for BBJ in years past. Code committee

Boards, Commissions, or Committees of Interest

Please check all of the following Boards, Commissions, or Committees that interest you:

- ☐ **City Council**
- ☐ **Budget Committee**
- ☒ **Planning Commission**
- ☐ **Parks and Recreation Committee**
- ☐ **Economic Development Committee**
- ☐ **Library Committee**
- ☐ **Blackberry Jam Festival Committee**
- ☐ **Other short-term task groups**

Special Skills or Qualifications

Summarize any special training, skills or experience you may have pertinent to the Board, Commission, or Committee to which you are applying.

willingness to learn, Limited Knowledge of fire Codes

Motivation

Discuss your motivation for serving on this Board, Commission, or Committee.

I have been Lived in Lowell for 11 years and i want to give Back and helpa Out. Helping to give my thoughts and Ideas to the plannin Commissier

Special Notice

Please be advised that members of the City Council and Planning Commission are required to file an annual **Statement of Economic Interest** with the State of Oregon.

Agreement and Signature

By submitting this application, I affirm that the facts set forth in it are true and complete. I understand that if I am accepted as a volunteer, any false statements, omissions, or other misrepresentations made by me on this application may result in my immediate dismissal.

Name (printed)	Lloyd Hall
Signature	Lloyd Hall
Date	9/12/2022

Our Policy

It is the policy of the City of Lowell to provide equal opportunities without regard to race, color, religion, national origin, gender, sexual preference, age, or disability. The City of Lowell accepts applications from potential volunteers throughout the year and will hold applications until vacancies exist on specific boards, commissions, or committees. Thank you for completing this application form and for your interest in volunteering with us.

Applications may be submitted by mail, in person, or email to:

City of Lowell
P.O. Box 490
107 East Third Street
Lowell, OR 97452
volunteer@ci.lowell.or.us

Agenda Item Sheet

City of Lowell City Council

Type of item:	Discussion

Item title/recommended action:

Discussion on holiday programming and Christmas tree lighting – Discussion

Justification or background:

With the holiday season approaching, staff are placing a discussion item on the agenda for holiday programming and Christmas tree lighting.

This is to gain input from City Council on the types of programing you want to see this year, along with tentative dates for holding events and performing other related tasks.

Budget impact:

N/A

Department or Council sponsor:

Administration

Attachments:

N/A

Meeting date:	09/20/2022