Tentative Agenda for Committee of Council Agenda

Tuesday, April 23, 2019 @ 6:30 PM

55 Victoria Street
Kensington, PEI
C0B 1M0
Phone: (902) 836-3781
Fax: (902) 836-3741
Email: mail@townofkensington.com
Web Site: www.kensington.ca

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Town of Kensington
Committee of Council Meeting
Tuesday – April 23, 2019 – 6:30 PM

1. **Call to Order**

2. **Adoption of Agenda (Additions/Deletions)**

3. **Declaration of Conflict of Interest**

4. **Delegations, Special Speakers and Public Input**

5. **Adoption of Previous Meeting Minutes –** March 25, 2019

6. **Business Arising from Minutes –** March 25, 2019

7. **Staff Reports**

    a. Chief Administrative Officer's Report
    b. Fire Department Statistical Report
    c. Police Department Statistical Report
    d. Development Permit Summary Report
    e. Bills List – Town
    f. Bills List – Water and Pollution Control Corporation
    g. Summary Income Statement
    h. Credit Union Centre Report

8. **New Business**

    a. COC Memo - Cable Crossover Machine Replacement – Fitplex
    b. COC Memo - Don Clark Ballfield Upgrades
    c. COC Memo - Draft Wellfield Protection Plan
    d. COC Memo - Police Vehicle Proposal Consideration

9. **Councillor Issues/Inquiries**

10. **Correspondence**

11. **In-Camera (Closed Session)**

12. **Adjournment**

Town of Kensington
Committee of Council Meeting
Monday, March 25, 2019
6:30 PM

Council Members Present:	Mayor, Rowan Caseley; Deputy Mayor, Coreen Pickering; Councillors: Spencer, Gallant, Bernard, Toombs and Mann.
Staff Members Present:	Chief Administrative Officer, Geoff Baker; Deputy Administrator, Wendy MacKinnon; Administrative Assistant, Kim Caseley
Visitors:	Shelley Tamtom – Kensington Heritage Library

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1. Calling of Meeting to Order

1.1 Mayor Caseley called the meeting to order at 6:30 pm and welcomed Council members and staff.

2. Adoption of Agenda

2.1 ***Moved by Councillor Toombs, seconded by Councillor Spencer to approve the agenda for the March 2019 Committee of Council meeting. Unanimously carried.***

3. Declaration of Conflict of Interest

3.1 Mayor Caseley discussed that Members of Committee of Council or staff who believe they may have a conflict of interest on any matter that will be discussed at this meeting should declare that potential conflict at this time, withdraw at the time of discussion and vacate the Council Chambers during deliberation and decision.

3.2 Deputy Mayor Pickering declared a conflict with item 8.c

Shelley Tamtom joined the Council Chamber at 6:38 pm

4. Delegations, Special Speakers and Public Input

4.1 Shelley Tamtom, Librarian at the Kensington Heritage Library provided a review of library programs/operations for the 2018 year.

Shelley Tamtom excused herself from the Council Chamber at 6:56 pm.

5. Adoption of Previous Meeting Minutes

5.1 ***Moved by Deputy Mayor Pickering, seconded by Councillor Spencer to approve the Committee of Council meeting minutes from February 25, 2019. Unanimously carried.***

6. Business Arising from Minutes

6.1 *Nil.*

7. Staff Reports

7.1 CAO's Report

7.1.1 ***Moved by Councillor Gallant, seconded by Councillor Toombs to receive the March 2019 CAO's Report as prepared by CAO, Geoff Baker. Unanimously carried.***

7.2 Fire Department Statistical Report

7.2.1 ***Moved by Councillor Bernard, seconded by Councillor Spencer to recommend to Town Council the adoption of the February 2019 Fire Chief's Report as prepared by Fire Chief Hickey. Unanimously carried.***

7.3 Police Department Statistical Report

7.3.1 ***Moved by Councillor Spencer, seconded by Councillor Toombs to recommend to Town Council the adoption of the February 2019 Police Statistical Report as prepared by Chief Sutherland. Unanimously carried.***

7.4 Development Permit Summary Report

7.4.1 ***Moved by Deputy Mayor Pickering, seconded by Councillor Spencer to recommended to Town Council the adoption of the March 2019 Development Permit Summary Report as prepared by Administrative Assistant, Kim Caseley. Unanimously carried.***

7.5 Financial Report (Summary Income Statement & Bills List)

7.5.1 ***Moved by Deputy Mayor Pickering, seconded by Councillor Toombs to recommend to Town Council the approval of the General Bills List for February 2019 in the amount of $216,558.84. Unanimously carried.***

7.5.2 ***Moved by Councillor Spencer, seconded by Councillor Gallant to recommend to Town Council the approval of the Water & Pollution Control Corporation Bills List for February 2019 in the amount of $3,847.59. Unanimously carried.***

7.6 Summary Income Statement

7.6.1 ***Moved by Councillor Gallant, seconded by Deputy Mayor Pickering to recommend to Town Council the adoption of the Summary Income Statements for February 2019, as prepared by Deputy Administrator, Wendy MacKinnon. Unanimously carried.***

7.7 Credit Union Centre Report

7.7.1 ***Moved by Councillor Bernard, seconded by Councillor Toombs to recommend to Town Council the adoption of the Credit Union Centre Report for February 2019, as prepared by CUC Manager, Robert Wood. Unanimously carried.***

8. New Business

8.1 2019-2020 Financial Plan

8.1.1 ***Moved by Deputy Mayor Pickering, seconded by Councillor Bernard***

To recommend that Town Council approve the Town of Kensington 2019/20 Financial Plan with operational revenue estimates projected at $2,946,283 and operational expenditure estimates projected at $2,942,263.

Unanimously carried.

8.1.2 Councillor Bernard addressed the Committee her concerns regarding the elimination of the Water & Pollution Control Director's honorarium. She felt that Council was not given the information in advance of being requested to make a decision which did not give them enough time to fully evaluate and make an informed decision. Councillor Bernard requested available options should Council decide to reconsider their vote.

8.1.3 Mayor Caseley responded to Councillor Bernard's concerns and explained that the Water & Pollution Control Corporation is no longer a requirement under the Municipal Government Act. Council can give direction to complete an evaluation to make an informed decision whether or not to consider eliminating the Water & Pollution Control Corporation and to assume the operation of the Water and Sewer systems under town operations.

8.1.4 Councillor Gallant spoke regarding the elimination of the honorarium and that he supported Councillor Bernard's concerns. Councillor Gallant noted that as long as the Water & Pollution Control Corporation is still active, he feels that the honorarium should remain in place.

8.1.5 Mayor Caseley and CAO, Geoff Baker provided Council the available options should they decide to re-consider the motion previously approved by Town Council.

Councillor Mann joined the Council Chamber at 8:03 pm.

Deputy Mayor Pickering excused herself from the Council Chamber at 8:16 pm and returned at 8:17 pm.

Councillor Gallant left the Council Chamber at 8:32 and returned at 8:33 pm.

8.2 Snow and Ice Control Policy (amended)

8.2.1 ***Moved by Deputy Mayor Pickering, seconded by Councillor Toombs***

THAT Committee of Council recommend that Town Council approve the proposed Snow and Ice Control Policy Amendment and include the request to move the section of School Street sidewalk between Broadway Street N to North Street to priority No. 3.

Unanimously carried.

Councillor Bernard excused herself from the Council Chamber at 8:40 pm and returned at 8:43 pm.

Deputy Mayor Pickering declared a conflict and excused herself from the Council Chamber at 8:46 pm.

8.3 EMO Coordinator Appointment

8.3.1 ***Moved by Councillor Spencer, seconded by Councillor Toombs to recommend that Town Council appoint Patrick Kelly as the Emergency Measures Coordinator for the Town of Kensington; and***

An annual honourarium be established for the Emergency Measures Coordinator position as follows: Year 1 - $2,000.00, Year 2 - $1,500.00, Thereafter - $1,000.00 per year.

Unanimously carried.

Deputy Mayor Pickering returned to the Council Chamber at 8:56 pm.

9. Councillor Issues/Inquiries

9.1 Mayor Caseley reminded Council of the Welcome Home Celebration for Special Olympian, Roy Paynter will be held at the Murray Christian Centre on Saturday, April 6, 2019 at 2:00 pm.

9.2 The Annual Town Clean up Day will be held on Saturday, May 11 at 9:00 am. Deputy Mayor Pickering will speak to the Kensington Girl Guides and invite them to participate.

9.3 Councillor Spencer noted that there are many Town streets that are in need of repairs. Staff will follow-up with the Department of Transportation.

10. Correspondence

10.1 An invitation to the 2019 Kensington Area Chamber of Commerce Presidents Dinner on April 25, 2019. Those wishing to attend are requested to RSVP with Deputy CAO, Wendy MacKinnon.

11. In-Camera (Closed Session)

11.1 ***Moved by Councillor Spencer, seconded by Councillor Toombs to commence into a Committee of the Whole meeting, according to Section 119(1)(h) of the Municipal Government Act. at 9:03 pm. Unanimously carried.***

11.2 ***Move by Councillor Toombs, seconded by Councillor Spencer to come out of the Committee of the Whole meeting at 9:34 pm. Unanimously carried.***

12. Adjournment

12.1 ***Moved by Councillor Spencer, seconded by Councillor Toombs to adjourn the meeting at 9:34 pm. Unanimously carried.***

_____ _____

Geoff Baker,
CAO

Rowan Caseley,
Mayor

Town of Kensington		
CAO Monthly Report for Committee of Council - April 2019		
Item #	**Project/Task**	**Status**
1	Emergency Measures Organization	Patrick Kelly has been appointed as the EMO Coordinator. We are attempting to schedule a meeting over the next week to discuss expectations, deliverable, etc.
2	Exempt Staffing Policy	We have contacted an HR consultant to provide budget pricing to create an exempt staffing policy and job descriptions for those positions that don't currently have descriptions. This will likely include a review of existing descriptions as well. Further information will be brought forward to Town Council as prices are received.
3	Financial Policy Development	A Tangible Capital Asset Policy was approved by Town Council at their Regular March meeting. Further policy development will be undertaken as required and as time permits.
4	Access to Information and Protection of Privacy Bylaw, Records Retention and Disposition Bylaw, Procurement Bylaw	In discussing these bylaw requirements with Municipal Affairs I am informed that the Province is still in the process of developing the regulations. As such, the deadline for the creation of the bylaws is likely to be extended.
5	Wellfield Protection Plan	A memo has been circulated with the tentative agenda package requesting Committee of Council to review the Plan and to recommend its approval to Town Council.
6	Strategic Plan Development	The Strategic Plan has been formally approved by Town Council. A "Launch and Social" has been scheduled for May 23rd, 2019 (with MRSB) to present the plan to the public. Staff will provide formal invitations/advertising of the public presentation as we get closer to the date.
7	Victoria Street West Sidewalk Replacement	The project has been deferred to 2020. The Province has agreed to include the sidewalk replacement project with their storm sewer replacement project and as such will provide design/tender services for the project and no additional cost to the town.
8	Official Plan and Zoning Bylaw 5 Year Review	Work continues on this project. The project remains on schedule. Further information will be brought to Town Council as available.
9	Asset Management	Staff continue to participate in the Provincial cohort program to gain the knowledge to operationalize the Plan and to ensure its effectiveness. Currently staff are working to complete an Asset Management Committee terms of reference and an Asset Management Policy. Further work will be required to provide other deliverables associated with the project, i.e. asset conditions, etc. Public Sector Partners (asset Management Consultant) continues to work on the formal development of the Town's Asset Management Plan.
10	Ballfield Batting/Pitching Cages	It is understood that the minor ball association will be coming forward with a proposal to Town Council to replace the batting/pitching cages. They have been advised of the potential to have the cages relocated to a different part of the property.
11	Snow and Ice Control Policy	The amended Snow and Ice Control Policy was approved by Town Council at their regular March meeting.
12	Island Stone Pub Lease Extension - 10 Years	The lease has been drafted and signed by the Town and the owners of the Island Stone Pub.
13	Re-profiling of Gas Tax Funds	Staff are currently waiting to hear from the Infrastructure Secretariat whether or not the re-profiling applications have been approved for the Train Station/Boardwalk Upgrades project and the Wellfield Emergency Back-Up Power project.
14	Investing in Canada Infrastructure Program (ICIP)	Staff met with WSP in regards to the three projects approved by Town Council at their regular March meeting. The three applications will be submitted within the required deadline.
15	2019/20 Town of Kensington Financial Plan	The financial plan has been filed with the Province as required.
16	Zoning of PID No 747790 - MS Woodsides Ltd.	A Request for Decision will be brought forward to the regular May meeting of Town Council to give the Bylaw amendment second reading and formal adoption and to formally approve the Official Plan amendment.
17	Disposal of 20 Stewart Street	The Fire Department have looked at the 20 Stewart Street property and have indicated that they can do a controlled burn of the structure on the property if the shingles and siding are first removed. I will speak with the Public Works Supervisor to determine whether or not they have the time to complete this and move forward accordingly. Public Works have indicated a desire to remove the windows from the structure for use at the maintenance building. The appliances in the structure have all be removed and sold.
18	Re- Zoning of PID No 801500 - Rocky Arsenault	Staff are in the process of scheduling a public meeting to hear public comments on the proposed re-zoning application. The meeting is tentatively scheduled for May 8, 2019 at 6:00 PM however this date has not been confirmed. Town Councillors should confirm whether or not they are available on the proposed date. Ads/notification letters will be provided as the date is confirmed.
19	Don Clark Ballfield Upgrades	A memo has been circulated with the tentative agenda package requesting consideration and a recommendation to Town Council.

Item #	Project/Task	Status
20	Fitplex Equipment Replacement	A memo has been circulated with the tentative agenda package requesting consideration and a recommendation to Town Council.
21	Train Station Electrical Upgrades	The electrical upgrade at the train station was completed on April 16, 2019.

Kensington Fire Department
Occurrence Report 2019

Description	January	February	March	April	May	June	July	August	September	October	November	December	YTD total	% Total
Medical First Responder	2		1										3	**11.54%**
Motor Vehicle Accident	5	5	2										12	**46.15%**
Emergency Response - Fuel Spill, etc													0	**0.00%**
Fire Related														
Smoke Investigation													0	**0%**
Outside Fire - Brush, Grass, Utility Pole, etc.													0	**0%**
Structure Fire - House, Building, Vehicle, etc.	2		3										5	**19%**
Alarms	2	1	2										5	**19%**
Total Fire Related	**4**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	10	
Total Incidents	**11**	**6**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	25	
Mutual Aid Call Out		1											1	**4%**
Total Incidents (Inclduding Mutual Aid Provided by KFD)	**11**	**7**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**26**	**100%**
Mutual Aid Call in														
Firefighter Attendance	15	15	17										16	15.67
Regular Monthly Training - No. of Firefighters	13	18	18										16	16
Training School - Level 1, etc. - No. of Firefighters	11	11	11										11	11
Call Area														
Kensington	4	2	2										8	**30.77%**
Malpeque CIC	1	1	1										3	**11.54%**
Zone's 1 to 5	6	3	5										14	**53.85%**
Other		1											1	**3.85%**

MARCH 2019

The Kensington Fire Department responded to 8 calls during the month of March and the average attendance for the fire calls was 17 men. Following is the breakdown of calls:

1. **March 4 – MVC – Rte. 1A in North Bedeque; 16 firefighters & 2 trucks**
2. **March 7 – MVC – Rte. 2 in Norboro; 17 firefighters & 2 trucks**
3. **March 13 – Fire alarm on Victoria St. – false alarm, stand down**
4. **March 15 – Flue Fire at White Rd. in Wilmot Valley; 18 firefighters & 2 trucks**
5. **March 17 – Residential Fire Alarm at Taylor Rd. In Malpeque; 15 firefighters and 1 truck – false alarm**
6. **March 17 – Structure Fire on Wilmot Valley Rd.; 24 firefighters & 4 trucks**
7. **March 19 – Flue Fire in Springfield; 14 firefighters & 2 trucks**
8. **March 22 – MFR to Rte 20 in Kensington; 15 firefighters & 1 truck**

Training was held with 18 firefighters present.

The 'new truck committee' continues to meet with suppliers on a regular basis.

Rodney Hickey
Chief

Police Department Occurrence Report Summary 2019														
Description	Jan	Feb	**Mar**	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	% Total
911 Act	2		**4**										6	3.31%
Abandon Vehicle			**1**										1	0.55%
Abduction													0	0.00%
Alarms	2	1											3	1.66%
Animal Calls	1		**1**										2	1.10%
Arson													0	0.00%
Assault PO													0	0.00%
Assault with Weapon													0	0.00%
Assaults (Level 1)		2											2	1.10%
Assistance Calls	17	14	**11**										42	23.20%
Breach of Peace	1		**1**										2	1.10%
Breach of Recognizance													0	0.00%
Break and Enter (business)													0	0.00%
Break and Enter (other)													0	0.00%
Break and Enter (residence)		1											1	0.55%
Carry concealed weapon													0	0.00%
Child Pornography													0	0.00%
Child Welfare													0	0.00%
Coroner's Act	1		**1**										2	1.10%
Crime Prevention													0	0.00%
Criminal Harassment	1												1	0.55%
Dangerous Driving			**2**										2	1.10%
Disturbing the Peace			**1**										1	0.55%
Dog Act			**1**										1	0.55%
Driving while disqualified			**1**										1	0.55%
Drug Charges			**2**										2	1.10%
Excise Act													0	0.00%
Fail to Comply Probation	1												1	0.55%
Fail to comply undertaking													0	0.00%
Fail to remain at scene of accident													0	0.00%
Family Relations Act													0	0.00%
Fingerprints taken													0	0.00%
Fire Prevention Act	1												1	0.55%

Police Department Occurrence Report Summary 2019														
Description	Jan	Feb	**Mar**	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	% Total
Firearm Act													0	0.00%
Forcible confinement													0	0.00%
Fraud	1		**1**										2	1.10%
Harrassing Phone Calls	1		**1**										2	1.10%
Impaired Driver	1												1	0.55%
Information Files													0	0.00%
Injury Accidents													0	0.00%
Liquor Offences													0	0.00%
Litter Act													0	0.00%
Lost and Found	1		**2**										3	1.66%
Luring Minors													0	0.00%
Mental Health Act	2	2											4	2.21%
Mischief	1		**3**										4	2.21%
Motor Vehicle Accidents	3	3											6	3.31%
Motor Vehicle Act	7	4	**6**										17	9.39%
Municipal Bylaws	2	1											3	1.66%
Off Road Vehicle Act	5		**1**										6	3.31%
Other Criminal Code													0	0.00%
Person Reported Missing		1											1	0.55%
Possession of restricted weapon													0	0.00%
Property Check			**1**										1	0.55%
Resist Arrest													0	0.00%
Roadside Suspensions													0	0.00%
Robbery													0	0.00%
Sexual Assaults / Interference													0	0.00%
STEP (Integrated Traffic Enforcement)													0	0.00%
Sudden Death													0	0.00%
Suspicious Persons / Vehicle	1	1	**1**										3	1.66%
Theft Of Motor Vehicle													0	0.00%
Theft Over $5000													0	0.00%
Theft Under $5000	1	2	**4**										7	3.87%
Traffic Offences													0	0.00%
Trespass Act	1	1	**1**										3	1.66%

Police Department Occurrence Report Summary 2019														
Description	Jan	Feb	**Mar**	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD	% Total
Trespass at Night													0	0.00%
Uttering Threats	2	1											3	1.66%
SOTS Issued	15	12	**17**										44	24%
Total Incidents	71	46	**64**										181	100%
HTA Warnings	2		**5**										7	
Fine Revenue	$3,010.00	$1,800	**$3,420.00**										**8,230.00**	
Foot Patrols in hours	2	2	**2**										6	
Community policing school	5.5	6.5	**3**											
Record Checks A (BC)	11,236	10,609	**14,338**										36,183	
Record Checks B (NB)	330	361	**501**										1192	
Record Checks C (KPS)	16	7	**9**										32	

Year To Date Approved Development Permits Summary Report
2019

Development Permit Category	January	February	March	April	May	June	July	August	September	October	November	December	Total
New Industrial				1									1
Renovation Residential additions/alterations			1										1
Total:													2

Total Estimated Construction Value
$250,000.00
$60,000.00
$310,000.00

Town of Kensington Bills List Mar 2019

A1 - Vacuums	362362	$201.15
Amalgamated Dairies Limited	4919067019	$70.88
Amalgamated Dairies Limited	4919060021	$14.67
Amalgamated Dairies Limited	4919081019	$33.44
ADL Foods	2375838	$835.38
ADL Foods	2376221	$253.27
ADL Foods	2376759	$399.40
ADL Foods	2376223	$333.70
ADL Foods	2375115	$476.90
ADL Foods	2375553	$193.90
Aliant	6787894	$236.99
Aliant	6790675	$30.48
Andrew Griffin	MARCH 2019 RRSP	$486.68
Auto Trim Design of PEI	1598	$377.20
Barry Donald	DRIVERS MED MAR 19	$75.00
Bell Mobility	2-384873	$201.25
Bev Semple	MAR 2019	$60.00
Biggar Overhead Doors	6215	$547.40
Brad Hickey	MAR 3, 19 MILEAGE	$65.12
Brenda MacIsaac	MARCH 2019 RRSP	$286.88
Caitlyn Pocock	MAR 2019	$30.00
Campbell's Plumbing and Heating	10205	$86.25
Canadian Tire	27	$247.15
Capital "T" Electric	650	$49.50
Combat Computer Inc	49897	$575.00
Commercial Construction	MARCH 2019	$3,588.50
Canadian Union of Public Employees	MARCH 2019 DUES	$514.65
David Elliott	MAR 3, 19 TRAINING	$16.08
DV8 Consulting	DV8-19-K03	$172.50
Eastlink	08138683	$89.64
Eastlink	08138964	$23.00
Eastlink	08138370	$785.33

Elizabeth Hubley	MARCH 2019 RENT	$805.00
Flags & Banners	2402	$3,119.93
Frito Lay Canada	43753873	$232.82
Geoff Baker	MARCH 2019 MILEAGE	$307.85
Irving Oil	32839792	$379.64
Irving Oil	0009500	$11.50
Irving Oil	32845849	$327.39
Irving Oil	32833705	$117.68
Irving Oil	32827195	$329.55
Irving Oil	32805257	$149.22
Irving Oil	928170	$312.86
Irving Oil	449302	$373.97
Irving Oil	153254	$290.19
Irving Oil	18307	$730.37
Irving Oil	154135	$514.41
Irving Oil	658044	$445.34
Irving Oil	940087	$199.70
Irving Oil	851777	$604.63
Irving Oil	444902	$610.62
Irving Oil	417763	$323.56
Irving Oil	623900	$547.84
Irving Oil	623286	$554.87
Irving Oil	863438	$208.23
Irving Oil	220168	$412.72
Irving Oil	361494	$194.65
Island Petroleum	9521	$302.11
Island Petroleum	9522	$468.93
Island Petroleum	9523	$509.37
Island Petroleum	9526	$246.92
Island Petroleum	9525	$613.01
Island Petroleum	9524	$375.28
Island Petroleum	9527	$507.98
Island Technology Professionals	967	$140.00
Jack Spencer	MAR 2019	$50.00

Jamie Perry	MARCH 2019	$100.00
K&D Pratt Group Inc	171095	$552.00
Kays Wholesale	Z02619	$350.72
Kays Wholesale	Z02636	$535.73
Kensington Agricultural Services	23516	$6.69
Kensington Agricultural Services	23172	$125.47
Kent Building Supplies	1132726	$30.39
Kent Building Supplies	1134780	$13.42
Kent Building Supplies	1136006	$50.11
Kent Building Supplies	1131827	$26.67
Kevin Stewart	MAR 3, 19 TRAINING	$16.08
Kim Mullett	12MAR2019	$15.98
Kensington Metal Products Inc	45990	$562.85
K'Town Auto Parts	16978/5	$28.67
K'Town Auto Parts	17022/5	$57.34
Langille Sharpening Service Inc	62417	$201.25
Lewis Sutherland	MAR 19 MILEAGE	$126.43
Lewis Sutherland	MARCH 2019 RRSP	$628.20
Linkletter's Welding Ltd	403673	$7.02
Maritime Electric	TRAIN STN MAR 19	$604.75
Maritime Electric	EVK POOL MAR 19	$65.24
Maritime Electric	SPEED RADAR MAR 19	$105.13
Maritime Electric	CAR CHARGER MAR 19	$40.04
Maritime Electric	STREET LIGHTS MAR 19	$2,912.82
Maritime Electric	FIRE HALL MAR 19	$371.06
Maritime Electric	ART CO-OP MAR 19	$222.11
Maritime Electric	LIBRARY MAR 19	$239.38
Maritime Electric	TOWN HALL MAR 19	$1,467.52
Maritime Electric	SENIOR CO-OP MAR 19	$55.28
Maritime Electric	CUC SIGN MAR 19	$102.83
Maritime Electric	CUC RINK MAR 19	$8,232.59
Maritime Electric	CUC BALLFIELD MAR 19	$30.29
Maritime Electric	PW SHOP MAR 19	$244.87
Maritime Electric	20 STEWART MAR 19	$35.03

Malpeque Bay Credit Union	MARCH 2019 RRSP	$1,602.58
Medacom Atlantic Inc	010678	$251.16
Mid Isle Electric	7871	$55.20
Minister of Finance	307890	$843.31
MJS Marketing & Promotions	2662032	$287.50
MJS Marketing & Promotions	2662018	$115.00
MJS Marketing & Promotions	2662006	$51.75
Moase Plumbing & Heating	29603	$637.12
Orkin Canada	9182632	$40.25
Orkin Canada	9182124	$67.28
Orkin Canada	918912	$28.75
PEI Chiefs of Police	2018-6	$100.00
PEI Firefighters Association	C2-3469	$10,165.99
PEI Firefighters Association	C2-3470	$268.46
PEI Firefighters Association	MAR 2 ICE RESCUE COR	$518.88
PEI Womens Institute	GALA DINNER 19 MAYOR	$75.00
Pepsico	70962702	$1,172.07
Petty Cash	MARCH 2019	$90.48
Pitney Bowes	3201060144	$161.01
Pitney Bowes	3201065084	$33.53
Princess Auto	775141	$440.91
Robert Wood	MARCH 19 MILEAGE	$168.80
Rogers Electrical Wholesale Ltd	257593	$295.07
Rogers Electrical Wholesale Ltd	257160	$148.44
Saltwire Network	19325	$182.85
Saltwire Network	19736	$401.06
Saunders Equipment Ltd	75589	$464.66
Mikes Independent	01 2849	$34.14
Mikes Independent	01 1429	$128.56
Mikes Independent	01 2965	$51.43
Mikes Independent	01 1017	$47.81
Mikes Independent	01 5048	$58.74
Mikes Independent	01 6881	$15.00
Mikes Independent	01 9500	$31.02

Scotia Securities	D KILLAM MAR 19 RRSP	$390.68
Scotiabank Visa	TIM HORTONS	$21.84
Scotiabank Visa	MY SAFETY SIGN FEB19	$201.50
Scotiabank Visa	WALMART	$34.48
Spring Valley Building Centre Ltd	201801	$83.49
Spring Valley Building Centre Ltd	201640	$41.75
Spring Valley Building Centre Ltd	202126	$109.25
Spring Valley Building Centre Ltd	202327	$83.49
Spring Valley Building Centre Ltd	773732	$37.95
Spring Valley Building Centre Ltd	773337	$86.43
Spring Valley Building Centre Ltd	201968	$41.75
Staples	550328-0646	$430.10
Summerside Chrysler Dodge (1984) Ltd	22537	$833.46
Summerside Chrysler Dodge (1984) Ltd	22342	$149.44
Suncor Energy Products Partnership	MAR 2019	$520.53
Superior Sanitation	670293	$207.00
Superior Sanitation	670292	$230.00
Superior Sanitation	670291	$184.00
Superior Sanitation	670290	$80.50
T & K Fire Safety Equipment Ltd	244532	$101.20
T & K Fire Safety Equipment Ltd	244442	$335.34
Telus	MARCH 2019	$743.03
TnT... Marketing Inc	2687	$282.67
Vail's Fabric Services Ltd	324853	$104.42
Vicki MacEachern	MAR 27, 2019 MILEAGE	$47.00
Water & Pollution Control Corporation	MARCH 2019	$237.37
Wet n' Wild Car Wash	292998	$90.00
Yellow Pages Group	19-7038378	$22.08
Subtotal		$69,603.95
Mar Payroll		$78,578.52
Capital Purchases		
DV8 Consulting	DV8-19-K04	$3,532.14
Kent Building Supplies	2635569	$2,176.32

T & K Fire Safety Equipment Ltd	244641	$13,431.00
Subtotal Capital		$19,139.46
Total Mar Bills		**$167,321.93**

Water and Pollution Control Corporation Bills List Mar 2019

Aliant	6790110	$123.28
Aliant	6753526	$138.46
Capital "T" Electric	650	$139.80
Maritime Electric	WELL #3 MAR 19	$596.94
Maritime Electric	WATER TOWER MAR 19	$161.76
Maritime Electric	PUMP WEST #1 MAR 19	$427.56
Maritime Electric	PUMP CNT BLDG MAR 19	$209.10
Maritime Electric	PUMP EAST 2 MAR 19	$284.50
Maritime Electric	LIFT STN MAR 19	$268.85
Maritime Electric	SEWER TREAT MAR 19	$151.81
Minister of Finance	190301051	$460.00
Minister of Finance	190330060	$539.35
Scotiabank Visa	W&S TRAINING DOUG K	$3,780.00
Total W&S Bills		**$7,281.41**

TOWN OF KENSINGTON

Income Statement Comparison of Actual to Budget for Mar 2019

	Current Month			Year to Date				
GENERAL REVENUE								
	Actual	**Budget**	**Variance**	**Actual**	**YTD Budget**	**Variance**	**Annual Budget**	**% Full Year**
General Revenues	$109,090.10	$85,633.00	$23,457.10	$1,398,901.18	$1,316,202.00	$82,699.18	$1,316,202.00	106%
Police Service	$3,494.85	$4,000.00	-$505.15	$36,154.30	$60,000.00	-$23,845.70	$60,000.00	60%
Town Hall Rent	$7,147.06	$7,842.00	-$694.94	$119,958.86	$117,630.00	$2,328.86	$117,630.00	102%
Recreation	$0.00	$0.00	$0.00	$3,885.00	$2,250.00	$1,635.00	$2,250.00	173%
Sales of Service	$38,822.20	$37,000.00	$1,822.20	$526,532.10	$548,900.00	-$22,367.90	$548,900.00	96%
Subtotal Revenue	$158,554.21	$134,475.00	$24,079.21	$2,085,431.44	$2,044,982.00	$40,449.44	$2,044,982.00	102%
GENERAL EXPENSES								
Town Hall	-$8,603.41	$11,300.00	-$19,903.41	$187,722.25	$181,802.00	$5,920.25	$181,802.00	103%
General Town	-$43,963.37	$43,627.00	-$87,590.37	$546,979.08	$642,995.00	-$96,015.92	$642,995.00	85%
Police Department	$19,585.90	$36,716.00	-$17,130.10	$608,716.14	$553,994.00	$54,722.14	$553,994.00	110%
Public Works	$10,252.23	$14,389.00	-$4,136.77	$215,816.50	$246,897.00	-$31,080.50	$246,897.00	87%
Train Station	$1,794.13	$2,685.00	-$890.87	$39,464.30	$35,700.00	$3,764.30	$35,700.00	111%
Recreation & Park	$5,131.69	$7,025.00	-$1,893.31	$82,460.90	$81,825.00	$635.90	$81,825.00	101%
Sales of Service	$17,433.00	$13,723.00	$3,710.00	$249,028.00	$233,563.00	$15,465.00	$233,563.00	107%
Subtotal Expenses	$1,630.17	$129,465.00	-$127,834.83	$1,930,187.17	$1,976,776.00	-$46,588.83	$1,976,776.00	**101%**
Net Income (Deficit)	$156,924.04	$5,010.00	$151,914.04	$155,244.27	$68,206.00	$87,038.27		
Credit Union Centre								
Credit Union Centre Revenue	$46,800.27	$50,600.00	-$3,799.73	$506,425.85	$510,700.00	-$4,274.15	$510,700.00	99%
Credit Union Centre Expenses	$44,516.52	$39,685.00	$4,831.52	$491,626.50	$479,186.00	$12,440.50	$479,186.00	103%
Net Income (Deficit)	$2,283.75	$10,915.00	-$8,631.25	$14,799.35	$31,514.00	-$16,714.65		
Fire Department								
Fire Revenues	$20,770.33	$20,613.00	$157.33	$311,555.00	$309,195.00	$2,360.00	$309,195.00	101%
Fire Department Expenses	-$20,130.17	$20,131.00	-$40,261.17	$267,396.93	$309,195.00	-$41,798.07	$309,195.00	86%
Net Income (Deficit)	$40,900.50	$482.00	$40,418.50	$44,158.07	$0.00	$44,158.07		
Consolidated Net Income (Deficit)	**$200,108.29**	**$16,407.00**	**$183,701.29**	**$214,201.69**	**$99,720.00**	**$114,481.69**		
							$99,720.00	
Water and Pollution Control Corporation								
Water & Sewer Revenue	$48,342.05	$47,762.00	$580.05	$725,004.56	$716,503.00	$8,501.56	$716,503.00	101%
Water & Sewer Expenses	$20,874.58	$46,440.00	-$25,565.42	$707,279.70	$712,537.00	-$5,257.30	$712,537.00	99%
Water & Sewer Net Income (Deficit)	**$27,467.47**	**$1,322.00**	**$26,145.47**	**$17,724.86**	**$3,966.00**	**$13,758.86**		
							$3,966.00	

TOWN OF KENSINGTON – MEMORANDUM

TO: MAYOR AND TOWN COUNCIL, CAO
FROM: ROBERT WOOD, CUC MANAGER
SUBJECT: MARCH 2019 CREDIT UNION CENTRE REPORT
DATE:
ATTACHMENT: STATISTICAL REPORT

March 2019

Fitplex

Programming: Aerobics Programming

Tuesday	6.30pm	Hi Lo	Traci Campbell
Thursday	6.30pm	Boxer Fit	Traci Campbell
Saturday	8.30am	Multi Fit	Traci Campbell
Saturday	10:00am	Kids Yoga	

Mondays and Wednesdays Kensington Wild off Ice training 6.00-7.00pm

Hours

Key FOB Entry	5:45 AM – 12:00 Midnight Daily
Staffed	4:00 PM – 8:00 PM Monday – Thursday

Emergency exit door with crash bar installed.

Arena

-One storm day in March that the arena was not opened.
-Kensington Wild played 2 playoff home games in March
-Kensington Vipers played 3 regular season games and 3 playoff home games in March
-Kensington Figure Skating ice show was in March
-Minor Hockey ended its regular season March 16, 2019
-Aaron Doyle Mardi Gras Rec Tournament was held March 2019

Kensington Cash

March, 2019	$200.00
	$200.00
	$200.00
	$210.00
Total	$810.00

Ball Fields

Minor Ball Pitching cage was discussed at the Minor ball meeting and will they will be submitting proposals on rebuilding the pitching cage to Town Council

Owen Simpson has been contacted to put ball safety netting back up and repair holes.

Tournaments booked to date:

- Mosquito July 5-6-7
- Danny Hughes Memorial July 12-13-14
- Steve Noonan Eastern Canadians Sept 6-7-8

Senior Center

Activities at the senior center on a weekly basis

- Exercise classes
- Story Board
- Leather working
- Meetings
- Painting
- Touch therapy

Upcoming Events

- Playoffs for Vipers April, 2019

- Novice A Tournament Booked for April 2019

- Atom A Tournament Booked for April, 2019
- Atlantic Hockey Group Booked April 2019
- Kensington Vipers Jr b Team will be hosting the Don Johnson Memorial Cup Atlantics in April 23-28, 2019.
- Fishing Derby, 2019
- Bike Rodeo,2019
- Canada Day, 2019
- Lady Slipper Dog Show July,2019
- Harvest Festival, 2019

Town of Kensington
Credit Union Centre Monthly Statistical Data
2019

Category	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Fitplex													
Total Members	270	262	258										790
Attendance	1525	1420	1200										4145
Day Passes Sold	26	18	20										64
Memberships Sold	44	32	25										101
Monthly Payment Memberships	54	53	52										159
Arena													
Hours Rented	149	144	135										428
Preschool (Free)	4	4	3										11
Adult Skate	4	4	3										11
Donated Ice Time	0	10	0										10
Total Hours Rented	157	162	141										460
Storm Days (no rentals)	2.5	2	1										5.5

2018

Category	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Fitplex													
Total Members	265	270	267	265	260	240	230	225	232	240	265	270	3029
Attendance	1620	1450	1400	1200	1100	920	800	810	975	1200	1380	1250	14105
Day Passes Sold	30	25	22	20	22	15	16	12	15	25	26	20	248
Memberships Sold	40	30	25	25	40	23	22	20	24	30	40	22	341
Monthly Payment Memberships	53	54	54	54	55	55	54	53	54	55	59	59	659
Arena													
Hours Rented	150	152	130	48	0	0	0	0	104	140	153	145	1022
Preschool (Free)	4	4	2	0	0	0	0	0	0	0	4	4	18
Adult Skate	4	4	2	0	0	0	0	0	0	0	4	4	18
Donated Ice Time	0	10	4	5	0	0	0	0	0	0	0	1	20
Total Hours Rented	158	170	138	53	0	0	0	0	104	140	161	154	1078
Storm Days (no rentals)	3	1	3	0	0	0	0	0	0	0	2	2	11

TOWN OF KENSINGTON - MEMORANDUM

TO: COMMITTEE OF COUNCIL

FROM: GEOFF BAKER, CHIEF ADMINISTRATIVE OFFICER

SUBJECT: CABLE CROSSOVER MACHINE REPLACEMENT - FITPLEX

DATE: 2019-04-16

ATTACHMENTS: QUOTATION FROM SPARTAN FITNESS

Introduction

Included in the 2019/20 Capital Plan was the replacement of the Cable Crossover Machine (Commercial Multi Jungle System) at the Fitplex. A quote was requested from Spartan Fitness to replace the machine.

Background

According to Credit Union Centre Manager, Robert Wood, the current machine is over thirty years old and was bought used when the Fitplex was first established. It is a widely used piece of equipment and has reached the end of its useful life. To continue to attract and maintain Fitplex members it is essential that the town continue to replace and upgrade equipment as required.

The proposed machine expands the crossover machine from its current 4-station configuration to a 14-station configuration. The quotation from Spartan Fitness states that "The Jungle System keeps users interested by offering the ability to work their entire body and the flexibility to define their own exercises."

Policy Implications

It is proposed that Town Council proceed with the sole source procurement of the crossover machine from Spartan Fitness given that the equipment currently housed in the Fitplex is of the same commercial quality and brand and has been provided by Spartan Fitness. It is apparent that Spartan Fitness are the only supplier of the Hoist Brand on the Island.

The Town's Procurement Policy states that purchases may be made from a single source without quotations or tenders where the compatibility of a purchase with existing equipment and/or facilities is of paramount consideration and that purchase must be made from a single source. All equipment replaced at the Fitplex since at least 2014 has been replaced with the Hoist brand.

Financial Implications

- Source of Funds – Malpeque Bay Credit Union 50/50 Fund (Balance as of March 31, 2019 was $32,889.04)

- Total Purchase Price = ***$5,119.20 + applicable taxes.***

- Fitplex Equipment is depreciated over a 10-year period (straight line).

- Based on the proposed purchase price of $5,119.20, annual depreciation in the Credit Union Centre will increase by approximately $511.92.

Recommendation

It is recommended that Committee of Council review the preceding information and provide a recommendation to Town Council to proceed with the purchase of a Hoist Fitness CMD Cable Crossover Machine from Spartan Fitness at a cost of $5,119.20 plus applicable taxes as per their quote dated January 22, 2019.

spartan fitness
The Right Gear. The Right Fit.

FROM
Chris Moore
Spartan Fitness
321 Cityview Blvd.
Vaughan ON L4H 3S7
www.spartanfitness.ca

PHONE
647-874-1426

FOR
Kensington Fitplex

TO
Robert Woods

QUOTE NUMBER
2910

DATE
January 22, 2019

VALID UNTIL
February 21, 2019 at 3:51pm

Bikes & Cable Machine (Option 2)

HFCMD6180

Hoist Fitness CMD Cable Crossover

The NEW HOIST Commercial Multi Jungle System can be configured to meet both the needs of your facility and the fitness requirements of your members. Expand the jungle from the standard (4) station pod to a (9) station or (14) station with the additions of the Crossover Pull-up Bar (CMJ-OPT-01). The Jungle System keeps users interested by offering the ability to work their entire body and the flexibility to define their own exercises.

Unique one-handed Hi-Lo Station adjuster
Integrated rock climbing holds bring an exciting exercise variation
Includes the following stations: (2) CMS-6175 Adjustable Hi-Lo Pulleys, (1) CMJ-OPT-01 Cross Over Pull Up Station

cmd-6180_cablecrossover

6,399.00
20% discount
5,119.20

CABLE CROSSOVER

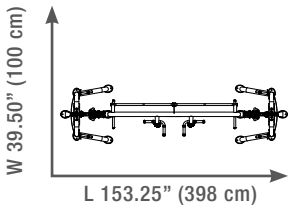
CMD-6180

FEATURES

- **Unique one-handed Hi-Lo Station adjuster**
- **Angled, neutral, rock climbing and extra wide straight gripping options allow for exciting exercise variation**
- **Stablizing hand grips on both sides of pulley**
- **Includes: (2) Aluminum Curl Bars, (2) Padded Ankle Straps, (2) Single Aluminum D Handles, (2) CMS-6175 Adjustable Hi-Lo Pulleys (195 lbs. per weight stack), (1) CMJ-OPT-01 Cross Over Pull Up Station**

SPECS

- **Product Dimensions L x W x H 153.25" x 39.50" x 92.50" (398 cm x 100 cm x 235 cm)**
- **Product Weight 839 lbs. (381 kg)**



HOIST® offers one of the best warranty policies in the industry, reaffirming our commitment to quality and customer satisfaction. HOIST warranties this product to the original purchaser only. HOIST guarantees this product to be free from defects in workmanship and/or materials under normal use or service.

For complete Warranty Information, visit www.hoistfitness.com and click on the "Support" link.

Warranty policy applies to defects from the manufacturer only. HOIST reserves the right to change product specifications, design, and function at any time.

GSA Contract # GS-07F-0322K
Gene Bruton 866.488.6853

TOWN OF KENSINGTON - MEMORANDUM

TO: COMMITTEE OF COUNCIL

FROM: GEOFF BAKER, CHIEF ADMINISTRATIVE OFFICER

SUBJECT: DON CLARK BALLFIELD UPGRADES

DATE: 2019-04-17

ATTACHMENTS: CONTRACTOR QUOTATIONS

Introduction

Included in the 2019/20 Capital Plan was the upgrade of the Don Clark Ballfield. For clarity, the Don Clark Ballfield is the field with the lights located at the northern end of the Credit Union Centre property. Quotes were requested from three contractors to complete the required work with two quotes being received from Curran and Briggs Ltd. and Island Coastal Services Ltd.

Discussion

The work required to complete the ball field upgrade generally includes the re-grading of the field and the addition of rock dust as required.

The two quotes received came in as follows:

Curran and Briggs - $5,800 plus HST
Island Coastal Services Ltd - $29,479.22 plus HST

Given the significant difference in the quoted amounts, staff have contacted Island Coastal Services to ensure that they understand the proposed scope of work and if not, to provide them with an opportunity to amend their bid accordingly. As of the writing of this memorandum, no response has been received. Once/if an amended quote is received it will be brought forward for consideration.

It is likely worth noting that Curran and Briggs upgraded the Lion's Field in 2014 under the same scope of work as what is proposed for the Don Clark field.

The 2019/20 Capital Budget approved by Town Council for this project is $6,000.00.

Recommendation

It is recommended that Committee of Council review the preceding information and provide a recommendation to Town Council to award a contract to the lowest bidder to effectively complete the required upgrades to the Don Clark Ballfield.

PROPOSAL FORM

Curran & Briggs LIMITED
BOX 1625, 40 ALLWEATHER HIGHWAY
SUMMERSIDE, PEI, C1N 2V5
TEL: (902) 436-2163 FAX: (902) 436-1528
WWW.CURRANANDBRIGGS.COM

PROUD MEMBER OF

SUBMITTED TO Credit Union Place Kensington	PHONE	DATE April 4,2019
STREET	FAX	JOB LOCATION Kensington
CITY, PROVINCE, POASTAL CODE	ATTENTION Robert Wood	

WE HEREBY SUBMIT SPECIFICATIONS AND ESTIMATES FOR:

Pricing for regrading and spreading 1/4 minus
Price includes 64 tonne of 1/4 minus gravel
Price includes leveling up any really low areas with fine sandstone. Total 5800.00 +HST

SPECIAL NOTES / CONDITIONS

PAYMENT SHALL BE MADE AS FOLLOWS 30 DAYS FROM COMPLETION _____ SPECIAL _____

ALL WORK SHALL BE COMPLETED IN A WORKMANLIKE MANNER AND IN ACCORDANCE WITH STANDARD INDUSTRIAL PRACTICE, ANY ALTERATION OR DEVIATION FROM THE ABOVE SPECIFICATIONS INVOLVING EXTRA COSTS OVER THE CONTAINED ESTIMATE SHALL BE EXECUTED BY CURRAN & BRIGGS LIMITED, BUT ONLY UPON THE WRITTEN AND SIGNED AUTHORIZATION OF THE CUSTOMER AND SHALL BECOME AN EXTRA CHARGE OVER AND ABOVE THE CONTAINED ESTIMATE. THE CUSTOMER SHALL MAINTAIN FIRE AND ALL OTHER INSURANCE COVERAGE ON THE PROJECT. CURRAN & BRIGGS LIMITED ACCEPTS NO LIABILITY FOR DELAYS IN PROJECT COMPLETION AS A RESULT OF STRIKES, ACCIDENTS OR DELAYS BEYOND OUR CONTROL. CURRAN & BRIGGS LIMITED'S WORKERS ARE FULLY COVERED BY WORKERS' COMPENSATION INSURANCE.

AUTHORIZED SIGNATURE :

NOTE:
THIS PROPOSAL MAY BE WITHDRAWN BY US IF NOT ACCEPTED WITHIN 30 DAYS OF THE DATE OF THIS PROPOSAL

ACCEPTANCE OF PROPOSAL:
THE AFFORMENTIONED PRICE, SPECIFICATIONS AND CONDITIONS ARE SATISFACTORY AND ARE HEREBY ACCEPTED. YOU ARE AUTHORIZED TO DO WORK AS SPECIFIED. PAYMENT WILL BE MADE AS OUTLINED ABOVE.

SIGNATURE: _____

DATE OF ACCEPTANCE: _____

Island Coastal Services LTD.
P.O. Box 151
155 Belvedere Ave.
Charlottetown, PEI C1A 7K4
Office: (902) 892-1062
Fax: (902) 368-3754
E-mail: adminoffice@islandcoastal.ca

To:	Town Of Kensington	**Contact:**	Robert Wood
Address:	Kensington	**Phone:**	
		Fax:	
Project Name:	Town Of Kensington Baseball Field Improvements 2019	**Bid Number:**	
Project Location:	Lowther Drive, Kensington	**Bid Date:**	4/16/2019

Item #	Item Description
1	Excavate And Remove 450mm Of Built Up Material Where Infield Meets Outfield
2	Build Up Infield With Rock Dust Average Depth 200mm Thick
3	Topsoil And Hydroseed All Disturbed Areas

Total Bid Price: $29,479.22

Payment Terms:

- Quotes are valid for 30 days and might be subject to change after 30 days from date issued.
- Total price above does NOT include HST.

ACCEPTED:	**CONFIRMED:**
The above prices, specifications and conditions are satisfactory and are hereby accepted.	**Island Coastal Services, LTD.**
Buyer: _____	
Signature: _____	**Authorized Signature:** _____
Date of Acceptance: _____	**Estimator:** Jason MacDonald 902-892-1062 jasonm@islandcoastal.ca

TOWN OF KENSINGTON - MEMORANDUM

TO: COMMITTEE OF COUNCIL

FROM: GEOFF BAKER, CHIEF ADMINISTRATIVE OFFICER

SUBJECT: WELLFIELD PROTECTION PLAN

DATE: 2019-04-17

ATTACHMENTS: DRAFT WELLFIELD PROTECTION PLAN

Introduction

In April of 2018, Committee of Council recommended the establishment of a contract with the Kensington North Watersheds Association (KNWSA) to develop a Wellfield Protection Plan for Kensington. A Wellfield Protection Plan is required under the Environment Protection Act, Drinking Water and Wastewater Facility Operating Regulations and is expected to be a requirement under the new Water Act when it is operationalised.

A copy of the draft Plan is attached and is being circulated with this memo.

Current Legislative Framework

The Environment Protection Act, Drinking Water and Wastewater Facility Operating Regulations states:

WELL FIELD PROTECTION REQUIREMENTS

Submission of well field protection plan

20. (1) Where a municipality is the owner of a public drinking water supply facility, the municipality shall, on or before January 1, 2006, develop and submit to the Minister for approval, a well field protection plan for the protection of the principal sources of drinking water supply of the municipality, including any well fields or wells that collectively provide two-thirds or more of the overall drinking water demand of the serviced area of the municipality.

Capture zones

(2) For the purposes of subsection (3), the Department

(a) may identify any areas of a municipality or the province as a 250-day, 5-year or 25-year capture zone of the well field of a municipality;

(b) shall advise the municipality of any capture zones the Minister identifies pursuant to clause (a); and

(c) may direct the municipality to take into consideration in the development of its well field protection plan such potential sources of contamination as the Minister considers appropriate.

Contents of plan

(3) A well field protection plan shall include

(a) a description of the proposed measures, including zoning bylaws, legally binding agreements, or the purchase or lease of sensitive lands, that the municipality intends to implement to prevent the contamination of ground water within any capture zone that has been identified by the Minister for the well field;

(b) an emergency response plan or contingency plan to address accidental releases of contaminants or other unplanned events that may threaten the quality of ground water within any capture zone that has been identified by the Minister for the well field;

(c) a copy of a map describing the area that includes the capture zones that have been identified by the Minister and that shows the boundaries of any land use control zones proposed for the protection of ground water quality;

(d) an inventory of all non-conforming land uses or activities identified within any capture zone that has been identified by the Minister for the well field;

(e) a description of measures and time frames proposed to address existing non-conforming land uses or activities within any capture zone that has been identified by the Minister for the well field;

(f) a description of any present or future bylaws intended for the control, restriction or elimination of future non-conforming land uses or activities within any capture zone of the well field that has been identified by the Minister for the well field.

Discussion

Municipal Wellfield Protection Plan requirements will ultimately be addressed through the new *Water Act. The Act* was passed in the PEI legislature in the fall of 2017. It is anticipated that the Act will be implemented once appropriate regulations have been drafted and passed. No timeline currently exists as to when the Act will be implemented however it is anticipated that it will occur throughout 2019.

A discussion was held with George Somers (Manager of Drinking Water and Wastewater Management, Department of Communities, Land and Environment) and we are informed that Kensington's draft wellfield protection plan will generally comply with any new regulations as there are not expected to be significant changes from the existing regulation as it relates to wellfield protection specifically.

Recommendation

It is recommended that Committee of Council review the attached draft Wellfield Protection Plan and recommend its approval to Town council.

A WELL FIELD PROTECTION PLAN FOR THE TOWN OF KENSINGTON, PRINCE EDWARD ISLAND

Prepared by:

Kensington North Watersheds Association

Authors:

Barry Murray, Gordon Jenkins, David Cody

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

We would like to thank the residents and businesses of Kensington and the following agencies for their input and help in developing the Kensington Well Field Protection Plan, especially:

- The staff of the Ministries of Communities Land and Environment, Transportation Infrastructure and Energy, Agriculture and Fisheries for their input in developing the plan. Chief contacts for this project were George Somers, Manager of Drinking Water and Wastewater Management, and Qing LI, Hydrogeologist.
- The staff and elected officials from the Town of Kensington for constant assistance in assembling information.
- Kensington North Watersheds Association staff member Heather Harris for her contributions.

ABOUT THE AUTHORS

Gordon Jenkins is a retired Groundwater Technologist. He worked for the PEI Dept. of Environment for 37 years, and lives in Irishtown, PEI.

David Cody is a Geomatics Specialist, and owner of IR Geomatics Services. He is also Administrative Assistant for the Kensington North Watersheds Association, and lives in Indian River, PEI.

Barry Murray is a Projects Advisor, and former Executive Director for the Kensington North Watersheds Association. He lives in Sea View, PEI.

THIS DOCUMENT

The Kensington Water Management Committee is made of representatives of the Kensington North Watersheds Association and the Town of Kensington. The committee is tasked with addressing issues concerning water conservation and water protection. The principal authors of this report are members of the Kensington Water Management Committee.

The authors have attempted to divide the task of analyzing the task at hand, preparing a Well Field Protection Plan, into parts that are easier to address and easier to read.

EXECUTIVE SUMMARY

The *Well Field Protection Plan for the Town of Kensington, Prince Edward Island* was developed in response to work that had been previously carried out by the Kensington Water Management Committee.

In 2015, the committee was tasked to assess the quantity and quality of the water supply for the Town and to promote water conservation and safety. At that time, it was concluded that the extraction rate from the Town's four wells was well within sustainable limits. It was also noted that there is a wide range of human activities in proximity to the Town's wells. This helped emphasize the importance of creating a Well Field Protection Plan.

PART 1: INTRODUCTION

PROJECT BEGINNINGS

In the spring of 2018, the Town of Kensington contracted the Kensington North Watersheds Association to create a plan that takes a practical approach towards protection of the town's well field.

The well field protection plan takes a constructive and practical approach to groundwater protection, focusing on prevention activities and offering practical solutions to current concerns. The objective of the well field protection plan is to bring the community together to protect their drinking water supplies. The authors of this Plan have identified contaminant sources most likely to pose a risk to the water supply and has prepared strategies to reduce the risk of groundwater contamination. Contingency plans have also been developed to minimize the impacts of an unexpected contamination event.

A strong program is currently in place to monitor water quality on a regular basis. The water supply system is regulated by the Prince Edward Island Municipal Water and Sewage Utilities General Rules and Regulations[1].

WHY WELL FIELD PROTECTION PLANS ARE CREATED

The basis for the implementation of a well field protection plan is the perpetual maintenance of water quality to meet health and aesthetic standards. A well field is a high-risk venture where even relatively small risks concerning water protection may not be acceptable.

LAND USE

[1] http://www.irac.pe.ca/document.aspx?file=utilities/wsrandr.asp

In general, the costs and difficulty of preventing contamination are less than those of rehabilitation after contamination has occurred in the water supply area. Following this assumption, the objective of the development of a management plan and protection strategy is to minimize alienation of lands from normal uses and activities. The objective is to eliminate potential sources of contamination which would impair the quality of water extracted for supply and allow the continued use of the area for non-contaminating activities and land uses.

The probability of an accident occurring versus the cost of cleanup and the implications attached to contamination is a good guide in setting priorities.

FINANCIAL IMPLICATIONS

An interesting perspective when attaching value to a Well Field Protection Plan is to look at the capital cost and the book value of existing infrastructure. This helps create a perspective on what amounts of money are at risk. For example, the City of Charlottetown has put a value of $250,000 on each of their wells. A good plan protects the financial value of infrastructure as well as the environment.

PRACTICAL LIMITATIONS

The whole recharge area for the town's well field could be given the same level of protection; however, this is unnecessary to ensure the safety of a drinking water supply for two reasons:

1. The further the source of a contaminant is from the well field, the more dilute the solute will be when it reaches the well. The exclusion of all dissolved material from water supplies is neither necessary nor possible.
2. For reactive and biological contaminants, the time available for reducing the threat of contamination is proportional to the distance of travel. The processes at work to reduce contamination risk (attenuation) include absorption on bedrock and soil materials, biochemical decomposition and, in the case of pathogens, death. Contaminants may enter the aquifer, but attenuation may be sufficient to prevent the substance from reaching the well, or these processes may bring concentrations safely below drinking water quality maximum acceptable concentrations.

Therefore, the farther a contaminant is released from a well field the less likely it is to pose a hazard to the supply. Thus, the premise for most groundwater protection is the definition of protection zone boundaries on the basis of **delay times** or travel times for groundwater in roughly circular areas around the well field as depicted in the Well Field Protection Zone.

In general, delay times are directly based on the velocity of groundwater. Groundwater velocity can be calculated from obtainable information such as conductivity, hydraulic gradient and hydraulic porosity [2](Porter Dillon).

It is the hope of the Water Management Committee that the results of the well protection plan will be evaluated annually, and the plan will be updated to reflect changing community needs and available funding.

TOWN OF KENSINGTON'S WATER SUPPLY

Kensington, Prince Edward Island, is a town in Prince County, with a population of 1619 residents (Canada Census, 2016). Kensington extracts water from four wells within Town limits. The wells are connected with a manifold that supplies a water tower on the south end of Town.

Figure 1. Pump house, containing main manifold, electronic controls, chlorine equipment and manifold inside the pumphouse

As required by the Environmental Protection Act, Kensington's drinking water is tested regularly for bacteria, and chemistry. The record of the town's drinking water is exceptional, with no boil orders or other contamination issues in the recent history.

The central water supply was first created in 1977 in response to complications with private wells on each property, and intense urban activity.

Contamination incidents of a well field can be sorted into two basic types of occurrences: fast, and slow. Fast contamination occurs after a spill of hydrocarbons, chemicals, milk, or other pollutant which may have been travelling along a road in or close proximity to the well field protection zone or stored in or close to the zone. A "fast" spill could potentially be captured, and

[2] Porter Dillon Limited. 1991. Town of Amherst Framework for Groundwater Management Plan and Protection Strategy, North Tyndal Area. Halifax Nova Scotia, Canada

the contaminant cleaned up without causing harm to the groundwater in the capture zone of the wells.

"Slow" contamination occurs when a product gradually seeps into the ground and makes its way to the well field. It may contaminate a larger volume of the groundwater and be very difficult to mitigate.

Measures can be taken to reduce the possibility of both fast and slow contamination incidents.

THE WELL FIELD PROTECTION ZONE

PEI relies 100% on groundwater as a source of drinking water. This is not typical for Canadians. For example, Alberta relies on groundwater for 26% of its drinking water.

Prince Edward Island is fortunate that our groundwater resources are generally of good quality. While groundwater typically is less vulnerable to contamination than surface water, it can contain chemical or microbiological contaminants that are hazardous to public health. Furthermore, whereas water from surface supplies always receives extensive treatment to remove contaminants from the water prior to distribution, groundwater supplies in PEI do not typically require such treatment. With these factors in mind, it is vitally important to protect the source of supply (i.e. groundwater) to minimize the potential for contamination.

DEFINING A WELL FIELD PROTECTION ZONE

The Province has constructed groundwater flow models for each municipal well field and delineated time dependant capture zones for time periods of 250 days, 5 years and 25 years. These zones form concentric areas around the wells with the recommended degree of protection decreasing with distance from the well. The 250-day zone is primarily intended to provide protection from bacteria and viruses, and because it is the zone closest to the well, it requires the greatest protective measures. The 5-year zone is intended to provide protection from moderately persistent or moderate risk contaminants, such as petroleum products, and requires less protection than the 250-day zone. Finally, the 25-year zone provides protection from highly persistent or toxic compounds that have the potential to affect groundwater quality over significant portions of the aquifer for long periods of time.[3]

The Well Field Protection Zone varies slightly from the Capture Area[4], and from watersheds boundaries. The Well Field Protection Zones for Kensington's well field were last modified by the Provincial Hydrogeologist in the spring of 2018.

[3] Guidance Manual for Well Field Protection Planning on PEI, PEI Dept. of Communities, Land and Environment, 2006

[4] See Capture Area Map in Appendix

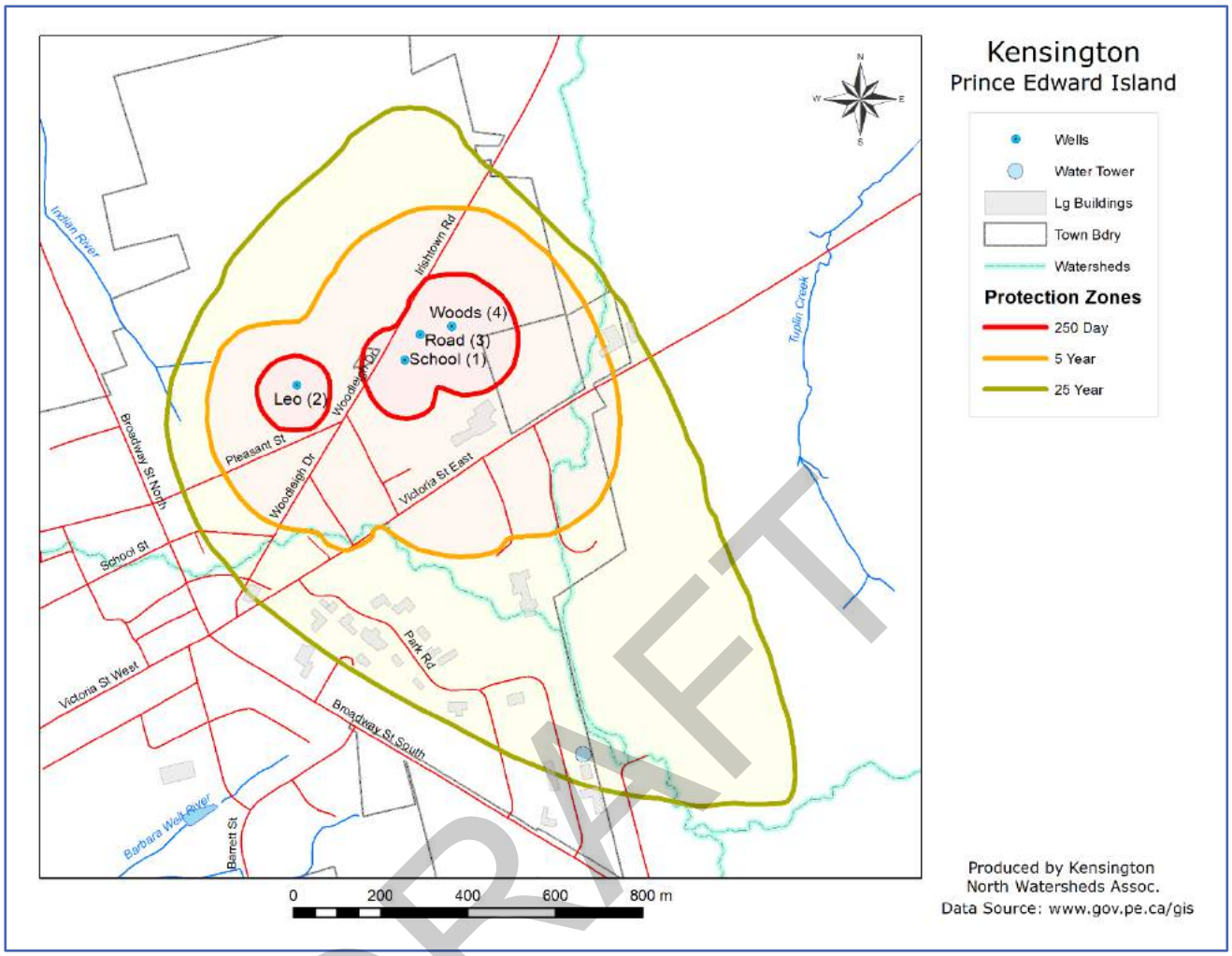


Figure 2. Well Field Protection Zones, Town of Kensington Wells

GROUNDWATER MOVEMENT, AND THE CLAY LAYER IN KENSINGTON'S LITHOLOGY

The movement of groundwater in the vicinity of the protection zones in the Kensington area is complicated by a layer of clay at 20 – 40 ft. This layer, once laid down by water, is very flat. Areas of higher relief (hills) are sediments that have been deposited on top of this clay layer. The clay layer is less permeable than the soil above and below it. This causes more rapid horizontal movement of groundwater above the clay layer. The difficulties of predicting the movement of contaminants due to this clay layer is well described in the "Callan report"[5]. "The temporary well installed at the post office lies immediately adjacent to the large gasoline contamination and has not seen any decrease in quality in the first six months of operation." This demonstrates the

[5] Feasibility of Groundwater Supply for Kensington Central Water System. D.M. Callan, consulting Hydrogeologist,

unpredictable nature of horizontal movement of groundwater underneath the Town. This well is no longer in operation.

The clay layer may cause the effectiveness of the protection zones to be more complicated than illustrated. For this reason, and to maintain a degree of caution and safety with the Town's drinking water, we have examined potential sources of contamination beyond the borders of the Well Field Protection Zones. The clay layer may cause groundwater movement to become less predictable, especially in a year when the water table is low. Therefore, the gas stations, the Boat Shop and other businesses along Broadway St. (Route 2) and to the west of Broadway Street, cannot be ruled out as possible contamination sources for the well field, even though they are beyond the Well Field Protection Zones. The erratic weather patterns that are predicted with climate change models may in fact increase the probability of this scenario.

The clay layer has been penetrated repeatedly by drilled wells and construction. The permeability of this layer is less intact than it would have been in its pristine condition. The perforations of this clay layer increase the possibility that contaminants that could be present in the groundwater above this clay layer may reach the cleaner, slower cycling deep reserves below more rapidly.

RESTRICTED AREA

The Well Field Protection Zones are further complicated by a restricted area that has been put in place by the province for well construction purposes, which is in the immediate vicinity of the Well Field Protection Zone.[6] This restricted area has been put in place due to incidents where contaminations of groundwater occurred in the centre of town.

PART 2: POTENTIAL SOURCES OF CONTAMINATION

The Well Field Protection Zones and the immediate areas adjacent to them were examined closely for potential sources of contamination. Maps of known wells and septic systems were obtained from the Province. Visual surveys were conducted to record bulk oil storage systems and other potential hazards. The Storm Sewer system was mapped, to understand surface water drainage. The four wells and accompanying infrastructure that service the town were studied. Water test results were reviewed. Town of Kensington staff, the Kensington Fire Chief, the Chief of Police, and several provincial Civil Servants from several departments were interviewed and consulted. Private companies were consulted regarding equipment functions and costs. Private companies were consulted regarding equipment functions and costs.

In general, groundwater contamination stems from:

- Misuse and improper disposal of liquid and solid wastes;

[6] See Restricted Area Map in Appendix.

- Illegal dumping or abandonment of household, commercial, or industrial chemicals;
- Accidental spilling of chemicals from trucks, railways, aircraft, handling facilities, and storage tanks; or
- Improper siting, design, construction, operation, or maintenance of agricultural, residential, municipal (liquid and solid waste), commercial, and industrial facilities.

The following potential sources of contamination were noted.

ROADWAYS

Figure 3. Traffic analysis of major roads in the Town of Kensington in 2015 and 2016. This graph illustrates significant traffic along route 101.[7]

The route 101 (Irishtown Road) corridor transects the 250-day zone and has the potential to be a site of a serious contamination incident in the future. The permeable shale used in the construction of shoulders and ditches, the frequent use of this route by fuel trucks, farm sprayers,

farm trucks with crop protection chemicals, bulk milk carriers, and other vehicles transporting material that could contaminate the 250-day zone, make this an area of significant concern. Winter weather in this stretch of road often results in white-out conditions, adding further risk.

[7] https://www.princeedwardisland.ca/en/service/view-pei-traffic-volumes

Figure 4. Route 101, Irishtown Road, beside the well field.

Victoria Street East and the residential roads also carry some risk, but the road conditions are generally better, they are within speed zones, and have curbing to help prevent spills from entering the groundwater in the well field. These other roads are within the 5 year and 25-year zones.

STORM SEWERS AND SURFACE RUNOFF

Surface runoff of rainwater and snow melt is concentrated by storm sewers and ditches, especially along Victoria Street East in the Well Field Protection Zone. This surface water could potentially contain levels of bacteria, petroleum products, road salt, and a wide range of hazardous chemicals, due to the proximity of human activity.

While carrying out surveying and mapping of the storm sewers in the Well Field Protection Area, it became apparent that there are many lines, drainage catchments and connections that are unclear. The lack of clarity includes the possibility that the storm sewer may be connected to domestic sewers in the area. Such a connection would carry a high risk and would require rapid attention.

Figure 5. Storm sewer drain at Victoria St. E. and Davison St.

The presence of standing water at some of the storm sewer catch basins obscures the connections and is a risk for contaminating groundwater with slow leakage. The standing water may indicate low points due to construction, sagging pipes, or blockages due to debris.

A basic survey by our team has revealed several locations where there is standing water in the storm sewers by the catch basins in several locations. These locations of standing water likely gradually seep into the ground and eventually become groundwater, possibly carrying contaminants. Inquiries to the Town and the Province revealed a lack of mapping and understanding of the storm sewer system in Kensington. The project team prepared maps of the storm system. This map will be available as a layer for mapping technology currently in use by the Town[8].

[8] See Stormwater Drainage (KISH) Map in Appendix

Also, during our survey of the storm sewer system in the vicinity of the Well Field Protection Zones, there were several locations where the connectivity was uncertain or seemed illogical. Potential hazards in the system include:

1. All of the surface water and some of the storm sewer drainage passes over the 250-day zone on the north side of Kensington Intermediate Senior High (K.I.S.H.), causing a risk of contamination to wells 2, 3 and 4;
2. Unknown plumbing/connections for the storm sewer drainage from the Queen Elizabeth Elementary School (Q.E.E.S.) property;
3. Unknown plumbing/connections for the storm sewer drainage between the south side of the K.I.S.H. and Victoria St. E.;
4. Uneven elevations in the drainage pipes, resulting in improper drainage of the system causing pools of standing water in several locations that is likely high in contaminants, which have a high probability of gradually leaking into the groundwater;
5. Park Road, where an undersized culvert at intersection of Park and Victoria East does not permit water to drain properly, complicating road passage.

WATER INFRASTRUCTURE

Team members have noted several issues concerning the water infrastructure that could be addressed to improve water safety. Many of the recommendations made below can be achieved with minimal investment.

The current combined system of hand recording and complicated electronic board information has resulted in:

1. Lack of clarity on the volume of water being pumped from the well field. Intermittent readings can at best give an estimate;
2. Lack of clarity in the Residual Chlorine Log.

   Chlorine is injected into the water main at the pumphouse. Appropriate levels of chlorine keep drinking water safe and, in the right amounts, the chlorine is relatively tasteless. The system is checked at two sites further down the line. Marked decreases in chlorine levels indicate potential bacterial presence, and calls for investigation and adjustments. It is difficult to observe trends and make appropriate adjustments to chlorine content with the current method of recording chlorine levels at the three chlorine detection centres. A method of recording and reading results could be designed to monitor the comparative levels more appropriately, thus making it easier to detect crucial fluctuations in the bacterial levels. Eventually a digital system could be incorporated at the three chlorine detection locations. The automatic equipment would eliminate the

need for precise, timely manual recording, which is difficult to achieve, further reducing the potential of missing fluctuations, resulting in safer drinking water.

The cost of not improving the current system fluctuations is depreciated water quality due to the presence of either aesthetically unpleasant excessive chlorine or illness-causing bacteria.

3. There have been repeated incidents where both Town staff and management have experienced confusion over translating to metric measurements from Imperial gallons and American gallons. Confusion from trying to work simultaneously with several measurement systems without a systematic approach could end up being costly;
4. Lack of clarity on which wells are pumping. This is important in order to blend water from multiple wells, in order to dilute the slightly elevated manganese level in well number 3 (Road);
5. Without extremely diligent and regular interpretation of the hand recorded data and the current electronic board, it is difficult to notice when a pump is not working;
6. Without low flow indicators in Wells 1 (School) and 2 (Leo), as is currently the situation, the likelihood increases of damage to the pumps by pumping air. In addition, low water level of the water table would go unnoticed;
7. Repeated high bacteria levels in Well 1 (School). This well has had repeated instances of bacterial contamination;
8. Aging plumbing fixtures and piping are experiencing occasional failure.

WASTE WATER SEWERS

The construction history and current condition of waste water sewers is not well known. Old or improperly constructed waste water sewer lines have the potential to leak bacteria and viruses into groundwater. Although there are no known waste water sewer lines within the 250-day zone, there are several lines in the 5-year zone, namely those along Pleasant Street, Davison Street, Russel Street, Victoria Street West, Brookins Drive, and Saunders Lane. Due to the high potential of horizontal groundwater movement in the lithology of the Kensington area, the potential of a leak in these sewer lines should be recognized as a potential risk.

PETROLEUM STORAGE

Within the 5-year zone, there are three large above ground oil storage tanks, plus approximately 65 private dwellings, the majority of whom have furnace oil storage tanks. The contours within this zone direct surface runoff directly toward the Town wells. There are also dwellings within

the 250-day zones that may have petroleum storage tanks that put the well field at even greater risk.

Oil tank storage regulations have raised the bar on storage tanks in recent years. However, the protection of the town's water supply requires an even higher standard of protection. In particular, the location of the large, institutional and commercial storage tanks has caused repeated concern. There are guidelines in place for the 5 year Well Field Protection Zone that are currently not being met, even by the Department of Education.

An arrangement was negotiated by the Town of Montague a few years ago to have protection measures at a bulk petroleum tank installed that surpassed regulation requirements. A similar arrangement should be explored with the bulk petroleum storage tank owners within the 5-year zone in Kensington's Well Field Protection zones.

PRIVATE WELLS AND SEPTIC SYSTEMS

There is one private well and septic system in the 250-day zone, and several wells and septic systems within the 5-year zone that are a threat to the groundwater. Any of these wells are at a higher risk of contaminating the groundwater, by means of an oil spill, hazardous chemical spill or even bacteria. The casing of a well is like a wick, allowing rapid vertical movement of water and contaminants.

There are records from the Province on wells and septic systems however, the information concerning the exact numbers and locations of these wells and septic systems is incomplete. Many of these wells are not essential, as the Town's central water system passes by the properties.

COMMERCIAL BUSINESSES AND INSTITUTIONS

Virtually all the businesses of the Kensington Industrial Park lie in the Well Field 25-year Protection Zone. There is a wide range of activity that requires a wide range of potential threats to the integrity of the Town's water. It is well understood that these commercial activities are being carried out in a regulated fashion. The Workers Compensation Board, the Department of Environment, and the ever-higher standards of environmental stewardship demanded by the market place are propelling commercial activities and practices to ever higher levels environmental safety.

In addition to these good measures that are in place, there are justifiable reasons for the Town of Kensington to also understand the activities and practices that occur within the town, especially within the Well Field Protection Zone.

Fires and spills have been the part of the history of many communities, including Kensington. It would be naive to think that catastrophe could not happen again. Logically, the better we plan

and prepare to avoid such industrial accidents, the less likely they are to cause groundwater contamination.

Q.E.E.S. currently has its own well and is connected to the Town's domestic sewer system. K.I.S.H. is connected to both the Town's water supply and domestic sewer system. Both institutions use large volumes of cleaning and disinfectant products, paints, de-icing salt, and have parking lots that may be sources of leaked oil, gasoline, antifreeze, brake fluid, etc.

The following is a summary of the risks of contamination that exist in the industrial park and other close-by locations. These locations may have sound practices in place, but the Town needs better knowledge of the management practices that occur, and to be able to influence those management practices, in order to reduce the possibility of contamination of groundwater and, from the Fire Department's perspective, to be able to respond to an emergency situation and manage the release of harmful products.

- Paints and solvents from autobody shops, repair shops;
- Grease, lubricants, brake fluids, antifreeze, from multiple equipment dealers, repair shops;
- Pharmaceuticals from the vet clinic;
- Petroleum and chemical leakage from out door storage of tractors, used tractors, used equipment, parked vehicles, from multiple locations;
- Strong cleaning products, from multiple locations;
- Acetone, resins, gelcoats, solvents, from boat shops, autobody shops;
- Storage of disinfection chemicals, Crop insurance building;
- Petroleum storage, bulk petroleum storage at multiple locations.

FIRE DEPARTMENT

The current procedures for fighting industrial fires have served the Kensington Community well. The changing complexity of the nature of businesses and industry requires an updating in the way the fire department deals with future fires or emergencies.

Different hazards presented by different commercial activities may require specific fire fighting response practices. A particular chemical or solvent may require a specific response by the fire department during a spill or fire. Reducing the impact of water used on fires from specific commercial locations could be crucial to minimize the risk of contaminating groundwater with surface water from the fire fighting efforts. Are there commercial properties that warrant capturing the water used in a three-hour fire due to chemical contamination, so that it does not

drain toward the well field and contaminate the groundwater? If so, how can that contaminated water be contained?

RESIDENTIAL PROPERTIES, HOUSEHOLD HAZARDOUS WASTE

The average household possesses a wide range of products that, if permitted to enter the groundwater, pose a threat to groundwater security. These small quantities of gasoline, solvents, brake fluid, cleaners, etc., can threaten groundwater via spills, leakage, improper storage and handling. These small household risks are compounded in Kensington by the sheer number of residences within the well field protection zone. Regulating the storage and use of these products is difficult.

AGRICULTURE

Sustainable agricultural practices have reduced the risk of groundwater contamination through crop protection practices. The groundwater supply in Kensington has had one detection of crop protection products, a slight amount of the fungicide Thiabendazole (commercial name Mertect) in early 2016.

The use of manure as a soil amendment and fertilizer is also a frequent local practice.

Current regulations regarding crop protection products require meticulous record keeping of the weather conditions, date and time, the type and amount of crop protection product used, etc. This high level of record keeping is accompanied by management practices and new technology that, combined, greatly reduce the risk of groundwater being contaminated by these chemicals.

Manure is often stored in piles for more than one season in fields. The proximity of these manure piles to the well field protection area has varied in the past.

A small portion of the 250-day zone and a significant portion of the 5 and 25-year zones include agricultural land use. It is in the best interest of the town to become familiar with the agricultural practices in the vicinity of the well field protection area and the capture area, and for farmers to understand the level of risk that are under consideration.

GROUNDWATER OBSERVATION WELL

The original plan for the Kensington well field in the Callan report[9] called for an observation well to monitor groundwater levels. That well was installed, however it was subsequently brought into production to supplement the existing supply wells but was not replaced with an additional observation well. An observation well will greatly improve the understanding of the effects of withdrawal on the immediate well field area, and perhaps provide critical early warning

[9] See page 33 of Callan Report

information on over-withdrawal and avoid damaging the well field, and/or give advance notice for the need to put a second well field into service.

Examples of existing similar observation wells maintained by the province for monitoring groundwater levels are available[10].

SECURITY

There exists an imbalance of security around the four wells. Wells 3 and 4 have modern chain link fence surrounding the well fields and fixtures. Wells 1 and 2 have small plywood structures.

Figure 6. Well 3 (Woods) in the Well Field.

There is no fencing around the Water Tower on Gerald McCarville Dr.

PART 3: CONTINGENCY PLAN

Contamination of the wells or well field may put a series of actions into play. A local bacteria contamination of one the wells can be handled with isolation and disinfection processes that are

[10] http://www.gov.pe.ca/groundwater/app.php

known, as this type of contamination can occur once or twice a year. The protocol is well established, and the water supply has been kept safe.

A more serious long-term contamination, such as from a major spill, that contaminates the groundwater of the well field, will require a more complicated process.

Another scenario is a spill that requires excavation of contaminated soil and subsoil that is successfully cleaned up before groundwater contamination occurs.

In order to minimize repetition, a worst-case scenario of rapid, permanent contamination of groundwater in the well field will be used as an example. Actions for less serious cases of temporary closure of the well field can be extrapolated from the worst-case scenario.

BOIL ORDER

Regular testing for bacteria is performed by the Town under the direction of the Environmental Protection Act. The samples are interpreted at the PEI Analytical Laboratories in Charlottetown. In the event that bacteria levels are found, the following procedures are followed by the Public Health Office:

1. Flushing of part of the water system;
2. Shocking the infected wells;
3. Putting one or more wells out of service;
4. Increasing the rate of chlorination.

In the case where test results pass a threshold, a multi-department panel reviews the laboratory results. If the sample results warrant further action, the panel will make a recommendation to the Chief Public Health Officer that Boil Water Order be issued. The Town is immediately advised of the decision and is responsible for disseminating the Boil Water Order to the users of the Town's central water supply. The residents of Kensington may then be notified of the boil water order via:

1. Press release to local media outlets;
2. Social Media.

Boil water orders do not happen frequently. The last Boil Water Order on PEI was issued in 2005.

SERIOUS GROUNDWATER CONTAMINATION

In the event of a serious contamination of groundwater that cannot be resolved with a boil order, a larger crisis exists that requires a more expansive and intensive response. If the water in the water tower and the groundwater are contaminated and determined to be unsafe, an entire new supply of water will be required. A procedure, such as the steps listed below will be required.

1. A press release and social media announcement should occur, as described in the Boil Order section above, advising that the water supply for the town has been turned off, or may only be used for bathing, washing clothes, fighting fires, and other non-potable activities;
2. Bottled water can be brought in by the pallet load for immediate public distribution. Bulk water may also be distributed by a food grade tanker, or other means. Bulk water may or may not be potable. Emergency drinking water requirements are in the order of 7 litres per person per day. The current population of Kensington is 1619 (2016 census). Total emergency drinking requirements for Kensington are in the order of 11,300 litres per day;
3. The immediate needs of drinking water, water to cook and clean dishes, small amounts of hand washing can be supplied through a distribution centre. The total needs of maintenance water requirements are in the order of 20 litres per person. The total emergency maintenance water requirements for Kensington is in the order of 32,500 litres per day. This does not include showering or toilet flushing;
4. Showering will require a greater degree of planning. Showering may be provided by the athletic dressing rooms in the Kensington Community Gardens. Water by the tanker load may be able to be directly connected to the Community Gardens water supply for showering. The capacity of the Community Gardens to provide this service would be expedited if appropriate plumbing connections are installed prior to a potential crisis;
5. The water tower may be able to be recharged with a high capacity irrigation well in the vicinity. The details of procuring and acquiring permission from the Chief Public Health Officer for such a recharge operation is unknown, but current legislation does not rule out the possibility of it occurring;
6. The parking lot of the Town Hall may be the best location for a distribution centre for bottled and bulk water, for the following reasons:
    a. It is close to the centre of local government, where key people work and govern, where information is available;
    b. The Kensington Police Office, on this location, will be vital in an emergency such as this. Having their office close by is an asset;
    c. There is room to park bulk trucks, pitch support tents, and for the public to enter, park, and turn around (in moderate numbers);
    d. The location is close to seniors housing, facilitating aiding that sector of the population.

7. The water tower may be recharged by water brought in by food grade transfer trucks. An emergency chlorination system may be required to be installed at the recharge point. These ideas are new concepts for many levels of government. A more complete development of this extreme contingency situation requires discussion and development. It is not a conversation that can be put off indefinitely without risk;
8. A catastrophic contamination of the well field will require the immediate development of a new well field for the town. The time period for the development of a new well field, without warning, is likely in the order of three to six months. This period will be reduced accordingly to the amount of preparation the town has in place before this theoretical scenario. The costs of maintaining the citizens of Kensington with water will be considerable and will increase and accumulate with each passing hour;
9. Refining the fine points of a more complete contingency plan is a strong recommendation of this Well Field Protection Plan.

PART 4: SECOND WELL FIELD

The challenges that the Town of Kensington faces to maintain a safe water supply have been examined. It is possible that all the reasonable mitigation measures cannot be achieved before a major contamination incident occurs. An unforeseen crisis may take place that causes catastrophic damage to the water supply.

Contamination incidents of a well field can be sorted into two basic types of occurrences: fast, and slow. Fast contamination occurs after a spill of hydrocarbons, chemicals, milk, or other pollutant which may have been travelling along a road in or close to the well field protection zone or stored in or close to the zone (i.e. chlorine). A “fast” spill could potentially be captured, and the contaminant cleaned up without causing harm to the groundwater in the capture zone of the wells.

“Slow” contamination occurs when a product gradually seeps into the ground over time and makes its way to the well field. It may contaminate a larger volume of the groundwater and be very difficult to mitigate.

Measures can be taken to reduce the possibility of both fast and slow contamination incidents. If due diligence to protect the current wells fails and the wells become contaminated, or if the demand for water exceeds the current capacity of the wells, a second well field will be required.

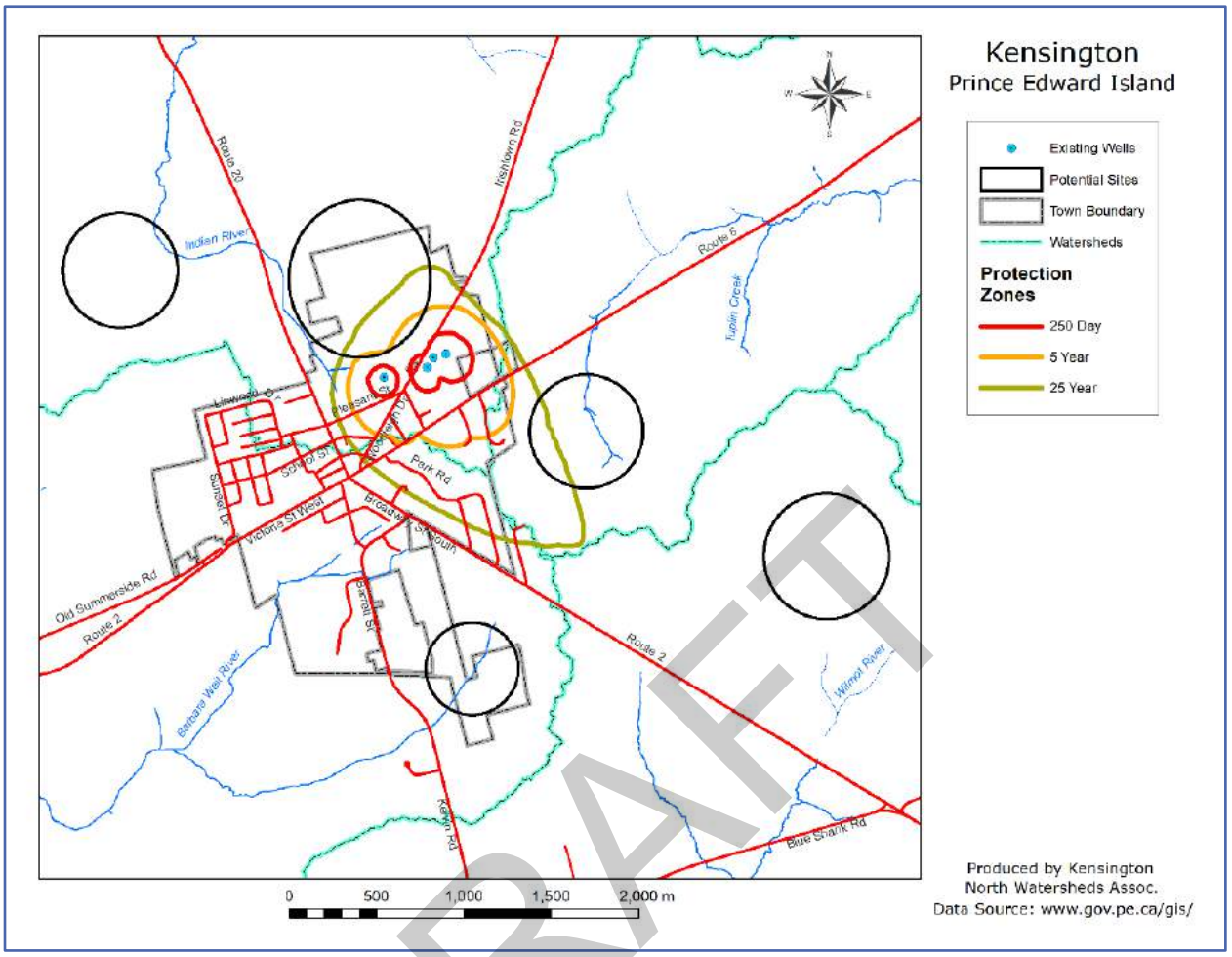


Figure 7. A map of potential well field sites with the existing wells, well field protection zones, Town and watershed boundaries

The process for selecting a new well field will be an undertaking similar to the Callan Report. Under the supervision of a Hydrogeologist, a series of test wells at the desired test sites would be drilled and their pumping potential analyzed. A map has been attached that provides suggested sites where a new well field may be located.

It is a task that should not be postponed indefinitely. The selection of a future well field will require planning and zoning activities that will provide an adequate protection zone, free from conflicting land use. A properly planned second well field could be brought on line quickly if required.

PART 5: RECOMMENDATIONS

1. UPDATING AND AUTOMATING THE RECORDING OF WELL FIELD DATA.

There are multiple gains to be achieved by installing a more automatic system for recording key outputs from the wells. It is strongly recommended that the town introduce a more automated, online system for enhanced decision making. A system could be selected and incorporated that rapidly provides clear data in accessible formats at any time, that automatically calls specific contact numbers when alarms are triggered, and much more. There is a competitive industry for this type of technology that will cater to Kensington's specific needs.

Improvements should be made to the current system of manually recording of data, such as eliminating the use of paper forms and using tablets to record data on spreadsheet format, that will help staff more rapidly recognize changing trends in pumping data, residual chlorine counts, and bacteria sampling information.

An upgraded automated system will result in:

a. Better blending and dilution of the water from the different wells;

b. More accurate detection and reporting of start/stop time date for all pumps, reducing likelihood of bacteria establishing, equipment deteriorating during prolonged downtimes;

c. Much easier to detect faulty pumps. A failure of one or two pumps at critical times may result in a water deficit occurring during a period of high-water demand, such as a fire. Likewise, a period of low water levels can be detected, and better managed;

d. Data being automatically stored in tables, spreadsheets, and thus much easier to detect problems, avoid problems, detect mechanical issues, reduce human error.

2. PROTECTING WELL 1 (SCHOOL) FROM BACTERIAL CONTAMINATION

A **thorough examination** of the cause of occasional but repeated incidents of bacteria entering well 1, and a **mitigation strategy is required**. A provincial expert could perform an examination of the pumping infrastructure and provide recommendations or suggestions.

The surface at the well head of wells 1 and 2 need to be graded to direct surface water away from the well.

3. REDESIGN THE BACTERIA AND RESIDUAL CHLORINE LOG TO IMPROVE DETECTION OF POTENTIAL PROBLEMS

An electronic log should be designed that would be more user friendly and would result in **easier and quicker detection** of unwanted trends. The paper log could be redesigned to be easier to use until an electronic log is in place.

4. MAINTAIN A REGULAR WATER SAMPLING SCHEDULE

Kensington is required by the Environmental Protection Act to sample for the following:

a) a coliform bacteria and *E. coli* analysis three times per month,

b) a minimum of one measurement per week of the disinfection residue at representative points within the distribution system to determine that free chlorine residue of 0.2 milligrams per litre or more is maintained

c) a general chemical analysis annually,

d) and a detailed chemical analysis once every three years[11]

These tests help detect changes or trends that could compromise the quality of drinking water. It is strongly recommended that this sampling schedule be regularly performed and a review of the distribution of the sampling points with the regulating body be undertaken.

5. CREATE MAINTENANCE SCHEDULE FOR CRUCIAL COMPONENTS

A maintenance schedule should be created for replacement of key plumbing components, in order **to avoid system** failure, or compromised service by failure of a similar component on several occasions.

6. USE THE METRIC SYSTEM FOR SYSTEM MEASUREMENT

Shifting measurement to the metric **system** whenever possible is the logical choice for the future.

7. GROUNDWATER OBSERVATION WELL

Drill a new **observation well** to monitor groundwater levels in the well field, such as the observation wells operated by the Department of Environment throughout the province.

8. INSTALL FENCING AROUND WATER TOWER AND WELLS 3 AND 4

This added **layer of security** will deter vandalism and accidents that could be costly.

[11] Drinking Water and Wastewater Facility Operating Regulations, Environmental Protection Act

9. ROUTE 101 – SPEED ZONE

The speed limit on Route 101 through of the 250-day Protection Zone is currently 80 km/hr. Reducing **the speed limit to 70 km/hr from the 80 km zone** for 0.7 km NE along Route 101 to the edge of the Well Field Protection Zone will reduce the possibility of an accident that could cause spillage of hazardous products. The Town should request the Province of PEI to modify the speed limit in this area.

10. POST SIGNAGE

Post signage indicating **"Now Entering the Town of Kensington's Well Field** Protection **Zone",** or similar, on Route 101 and Victoria St. W. This will inform the general public of the existence and importance of Kensington's Well Field Protection Zone.

11. INSTALL IMPERMEABLE SPILL COLLECTION INFRASTRUCTURE ON ROUTE 101

In the event of a hazardous product spill, the collection and removal of the product will be improved with impermeable surfaces along the edge of the road. This could be in the form of **paved shoulders with concrete ditches, or paved shoulders with a concrete curb**, that will direct hazardous product to low points on that section of road. These catch basins would need to be big enough to hold the largest currently possible spill, which is the 33,000-litre milk truck. A means of releasing surface water runoff from the catch basin could be designed and constructed, leaving the vessel of the structure intact for hazardous spills.

12. CREATE A COMMERCIAL AND INDUSTRIAL ACTIVITY INVENTORY

An inventory of the products and management practices being used by companies and institutions in the vicinity of the Well Field Protection Zone is required to understand **the potential risks** that our groundwater is facing. Occupational Health and Safety and Environmental Protection Act standards are high, but until practices are understood by the Town, the risks of contamination remain uncertain.

13. FIRE DEPARTMENT RESPONSE

A **strategy to create the most appropriate fire responses** is required. This can only be created once an inventory of the potential hazards in businesses and institutions in the Well Field Protection Area is completed. A second, equally important function of the Kensington Fire Department is responding to major spills, such as those that could occur on Route 101 in the Well Field Protection Zone. The Fire Department must be **trained to respond to such spills with the priority of protecting the well field asset**.

14. AGRICULTURE

A **discussion with local farmers** who are active in the Well Field Protection Area will help create better understanding of the risks and lead to an even higher level of management

practices for handling crop protection products and manure. Kensington North Watersheds Association may be able to facilitate this discussion.

15. RESIDENTIAL AREAS AND HOUSEHOLD HAZARDOUS WASTE

The **implementation of education and awareness** efforts can reduce the threat of these household hazardous wastes. Currently, the Kensington North Watersheds Association has a project in place that will promote the proper storage, use, and disposal of household hazardous waste. The support of the Town has already been established for this project. The results, in the form of before and after surveys of residents, will be an indicator of the relative success of this project.

16. PETROLEUM STORAGE

Incentives can be created to assist homeowners to switch to non-furnace oil home heating source, or upgrade their existing petroleum storage and associated plumbing with an alarm system, or some other advanced mechanism to quickly detect leakage.

Bulk oil tanks need to be relocated out of the protection zone where possible, and if it is not possible to relocate a bulk tank, that the tank be supported with redundant **protection devices to reduce the possibility of spillage and groundwater contamination, beyond regulation requirements**, such as additional containment or an alarm system for detecting leakage.

The **regulations for residential petroleum storage need to be reviewed**, and the Town must decide if they are comfortable with the current regulations, or if additional local regulation is required.

17. STORM SEWERS

There were questions raised during the survey of the Town's storm sewer system that resulted in the creation of detailed maps by our team. This survey and mapping project have revealed several points of interest that have not been resolved by the conclusion of the Well Field Protection Plan.

A **complete study of the storm sewer system** in the vicinity of the well field protection area is required to fully understand the risk posed by this standing water, and the measures that will be required to mitigate these problems.

18. PROCEDURES FOR HANDLING CHLORINE

The handling of chorine by Town Staff is a high-risk procedure. **A review of the** procedures used in handling chlorine is a simple and wise safety precaution. Improved procedures may include the use of additional protection clothing and equipment and documentation of handling procedures.

19. DOMESTIC SEWERS

A survey including **new mapping** of the domestic sewer system within the Town, especially within the Well Field Protection Zone, is required to identify potential deficiencies and to apply mitigation measures.

20. PRIVATE WELLS AND SEPTIC SYSTEMS

A **thorough survey of** private **wells and septic systems** within the Well Field Protection Zone is required. Some private wells and septic systems may be able to be eliminated and incorporated quite easily with the Town's systems, as infrastructure passes close by. **Incentives could be provided** to convert to the Town's central systems. The Town may want to consider a Mandatory Connection Bylaw.

Decommissioned **wells should be properly sealed** to prevent future contamination.

21. NEW WELL FIELD

There may come a time when the current well field does not have sufficient capacity to supply the growing needs of the Town of Kensington, or that a serious contamination incident renders the well field too contaminated to supply the Town's needs.

Having that necessary long-range view requires work which needs to begin soon. A hydrological **project,** similar to the Callan report, needs to be commissioned to select the location of a new well field. **Zoning by-laws** need to be created to protect the well field from human activity. It is strongly recommended that this task of selecting and protecting a new well field be addressed in a timely fashion. It may seem like lavish expense, until the time comes when a second well field may be needed, perhaps on short notice, whence those who planned ahead will be rewarded for their vision.

22. CONTINGENCY PLAN

There must be thought given to the potential scenarios where the well water is temporarily or permanently rendered unpotable. A contingency plan will help make the job of keeping Kensington residents supplied with water more efficient during such a crisis. **Reviewing, adopting, and revising the proposed plan** is recommended. The proposed Contingency Plan in this document is a starting point that requires review by Kensington's Staff and Council.

Regular revisions to this Contingency Plan can be made with the help of the Kensington Fire Department, Police Department, Council and Staff. In the unwanted moment of crisis, time and resources will be saved with an up to date contingency plan in place.

23. BY-LAW CREATION

FUTURE GROWTH CORRECT SPACING

The capture zone of the current well field includes farm land to the west of Route 101. This land performs a critical service to the Town by being an undeveloped capture area. If, at some point in the future, this land is developed for residential or commercial activity, its role as a capture area will remain and will need to be protected by additional by-laws.

The contamination dangers of additional development in the Well Field Protection Zone and the capture zone are discussed at length in this document. The introduction of traditional hard surfaces such as rooves, pavement and sidewalks will create rapid surface runoff that is drained away from the capture zone, reducing the amount of water available for recharging the well field. Storage of petroleum products, or heating methods, can be highly controlled from day 1 in a new development. Other well field protection measures could be put in place.

It is recommended that by-laws be created to carefully manage development in the capture zones of the current and any future well field. Modern technology provides options such as water absorbing pavement, and drainage wells that return uncontaminated eavestrough water to the water table. A review of modern water-saving architectural and construction techniques, plus discussions with developers/builders and other experts will provide guidance.

PROTECTING A NEW WELL FIELD

The importance of **protecting a future second** well field with bylaws that restrict activity within the capture zone has been previously discussed.

EXTENDED USE OF BYLAWS

An interesting approach to creating a Well field Protection Plan was created by the municipality of Digby, Nova Scotia [12]. Protection measures, items referred to as recommendations in this document, were written as by-laws for the local government and staff to abide to. It is worthy of reviewing, especially for Town of Kensington Councillors.

[12] Digby Wellfield Protection Area, Municipal Planning Strategy, Municipality of the District of Digby, October 2015.

PART 6: WELL ASSESSMENT FORMS

The well assessment form is used to record basic information about the location of, the construction and capacity, the lithology information, the hydrogeology and capture zone (see Capture Zone Map) as well as providing an assessment of water quality and likelihood of contamination.

The well assessment form was used to find deficiencies in the information know about the wells. Over the course of the project, as more information became available, the forms were updated. It is expected that over time more information can be added to build a good history of each well. These forms are modelled after forms in the Government of British Columbia's Well Protection Toolkit Files. Please refer to Well Assessment Forms in the Appendix.

PART 7: REFERENCES

Government of British Columbia, Ministry of the Environment, Water Stewardship. *Well Protection Toolkit Files.* Accessed October 31, 2018. http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/wells/well_protection/acrobat.html

Government of Prince Edward Island. 2015. *Environmental Protection Act, Drinking Water and Wastewater Facility Operating Regulations.* Accessed October 31, 2018. https://www.princeedwardisland.ca/sites/default/files/legislation/E%2609-04-Environmental%20Protection%20Act%20Drinking%20Water%20and%20Wastewater%20Facility%20Operating%20Regulations.pdf

Municipality of the District of Digby. 2015. *Digby Wellfield Protection Area, Municipal Planning Strategy.* Digby Nova Scotia, Canada.

PEI Dept. of Environment, Water Management *Section. Guidance Manual for Well Field Protection Planning on PEI.*

PEI Dept. of Environment, Water Resources Brand. 1989. *Hydrology of the Winter River Basin, Prince Edward Island*. Prince Edward Island, Canada.

Porter Dillon Limited. 1991. *Town of Amherst Framework for Groundwater Management Plan and Protection Strategy, North Tyndal Area.* Halifax Nova Scotia, Canada.

The Council of Canadian Academies. 2009. *The Sustainable Management of Groundwater in Canada Report of the Expert Panel on Groundwater*. Ottawa ON, Canada.

Thomas E. Harland Inc, Engineering Consultants, in association with Donald M. Callan, Consulting Hydrogeologist. 1978. *Kensington Central Water System, Feasibility of Groundwater Supply (Vol.2)*

APPENDIX A: RECOMMENDATION TABLE

Reference number	Category	Issue	Current Potential risks	Potential action items	Benefits	Costs	Responsibility	Priority Level[13]
1	Town water management	Lack of clarity regarding regular readings from wells There are two operations: Sampling and documentation of pumping and pump use. These need to be separated into two sets of documents Lack of, or confusing, inappropriate data being recorded for residual chlorine counts, pumping volumes, and pumping starts/stops may result in lack of, or faulty corrective actions.	Contamination of water supply, water supply interruption	Redesign recording logs a) Redesign procedures and manual recording to improve clarity. b) Systems could be automated to store and access data in tables, spreadsheets, resulting in volumes being recorded more appropriately,	Easier to detect problems, avoid problems, detect mechanical issues, reduce human error Makes decision making much better. Actually know how much water is being used. Know which pump will need maintenance. Can better track faults in the system.	Redesigning recording methods, logs require time, upgrade to more digital system quote vary according to level of sophistication, savings to be had in reduced staff time. Benefits include safer, more dependable water supply	Town	part a) 1 part b) 2

[13] 1 = 90 days 2 = 1 year, 3 = 3 years

Reference number	Category	Issue	Current Potential risks	Potential action items	Benefits	Costs	Responsibility	Priority Level[13]
2	Town Water Management	Repeated bacterial contamination occurrences with well #1.	Heightened risk of contamination from bacterial	A thorough examination of the cause, and a mitigation strategy is required. Grade surface around well heads to direct surface water away from wells	Reduced risk of contamination to well # 1.	To be determined	Town	1
3	Town Water Management	Manually recording chlorination residual logs from each of 3 sample locations.	Bacterial contamination or insufficient/ over sufficient application of chlorine. Manual record is susceptible to human error and makes it difficult for statistical determination of what is happening, and what mediation actions should be instigated.	Update recording devices to automatically collect data in a timely and consistent manner. Redesign the paper log to be easier to use, until an electronic log is in place	More accurate picture of chlorine activity, resulting in better chlorine management, reduced bacterial presence, fewer occurrences of over-chlorination and off-tasting water. Safer water.	Additional hardware costs, offset by decreased staff requirements, reduced risk, higher quality water.	Town	2

Reference number	Category	Issue	Current Potential risks	Potential action items	Benefits	Costs	Responsibility	Priority Level[13]
4	Town Water Management	Water sampling schedule	Without regular sampling, harmful anomalies may not be detected	Maintain a regular water sampling schedule as required by the Environmental Protection Act, Drinking Water and Wastewater Facility Operating Regulations, Schedule C[14]. Review the sampling point locations with the regulating body	Safe drinking water	Marginal cost	Town	1
5	Town Water Management	Crucial plumbing and other system components wearing out intermittently and inconveniently	Avoidable equipment failure	Create a schedule of regular maintenance and replacement of specific system components	More dependable water supply, less inconvenient interruptions	Undetermined	Town	2
6	Measurement	Lack of clarity on measurement systems.	Confusion on multiple occasions	Shift as much data recording and computations as possible to metric, i.e. litres, or cubic metres. Assist in leading the way to better communication	Reduction of confusion on every front	Negligible	Industry leadership by the Town of K	2

[14] Drinking Water and Wastewater Facility Operating Regulations, Environmental Protection Act

Reference number	Category	Issue	Current Potential risks	Potential action items	Benefits	Costs	Responsibility	Priority Level[13]
7	Observation well	Groundwater levels in the Well Field are not well understood	Increasing withdrawal rates, changing climate could cause excessively low groundwater levels	Dig an observation well in the vicinity of the well field and install automatic groundwater observation equipment	Better understanding of the effects of withdrawal and changing season rainfall on well field's ability to provide sufficient and safe water	New well plus accompanying technology, cost uncertain	Province or Town	2
8	Security fencing	Fencing around tower and Leo and school	Vandalism, accidents	Construct fences accordingly	Increased security levels	To be tendered	Town	2
9	Route 101 Speed Hazard	Precarious stretch of route 101 is frequented by large traffic volumes, hazardous products, at a high speed through the Well Field.	Excessive speed increases the potential of a spill of hazardous material into the 250-day zone.	Reduce speed limit in approach to town.	Reduced risk of major spills.	Very low.	Department of T.I.E.	2
10	Town Water Management	Protection Zone. Raising awareness of the Well Field Protection Zone	Unengaged residents in Well Field Protection Zone.	Post signs on Route 101, Victoria East, "Now Entering Kensington Well Field Protection Zone", or similar.	Increased awareness of the Well Field Protection Zone, and the protection work being done.	Four signs, less than $1000	Town/Province	

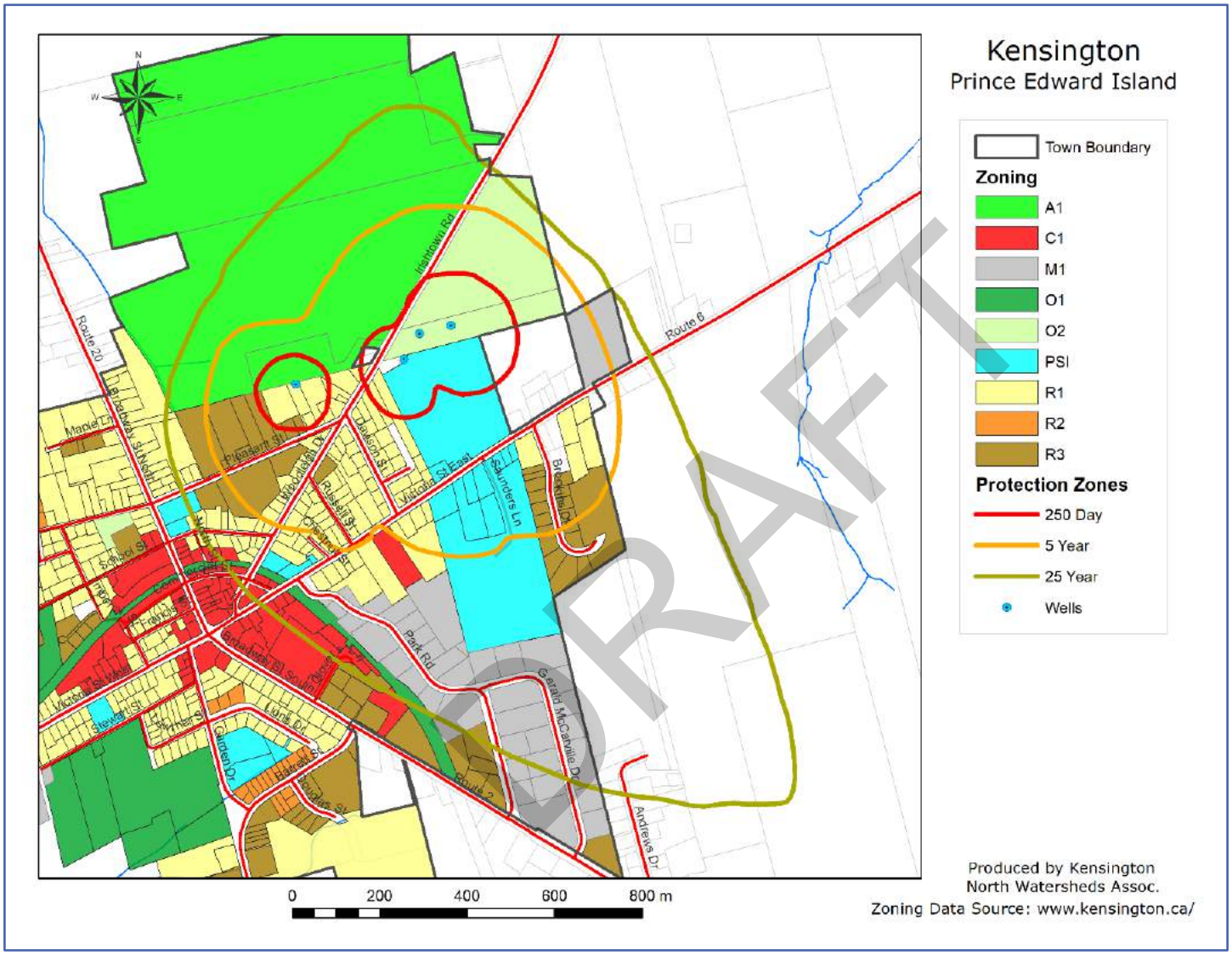
Reference number	Category	Issue	Current Potential risks	Potential action items	Benefits	Costs	Responsibility	Priority Level[13]
11	Install Impermeable Spill Collection Infra-structure on Rte. 101	Contamination of groundwater spills	Contamination of groundwater	Construct curbs, lined ditches, catchment areas, other means to concentrate and collect spillage	Reduced risk of contaminating groundwater due to spillage of hazardous products	Moderate infrastructure design and construction costs	Dept. of T.I.E.	3
12	Commercial Activity	A wide range of commercial activity presents a wide range of unknown contamination risks exist in the industrial park and surrounding area.	Although regulation and best management practices are in place, the potential hazards to the Town's groundwater is unknown.	Conduct a survey of the activities that occur in the commercial and industrial areas, to determine what risk levels exist.	Better understanding of existing risks will help the Town and Fire Dept. manage those risks	The cost of performing a survey/inventory of activities, products, management practices, and risks	Town	2
13	Fire Department	A great deal of uncertainty exists in the hazards and appropriate emergency responses for within the Well Field Protection Zone	There is a risk of responding with a less than ideal response to a specific emergency, which could cause undue groundwater contamination.	Using the inventory of commercial and industrial activities, appropriate emergency response measures can be established. Risks associated with spills along roadways should be considered, appropriate response measures prepared.	Reduced risk of groundwater contamination due to inappropriate response, reduced risk of contamination with water from fighting a fire. Risk of a spill causing contamination.	Costs would be associated with the Commercial and Industrial survey mentioned above, plus additional analysis, training, equipment	Town	1
14	Agriculture	Ag chem spills in fields, accidents on route 101, management of manure	Contamination by biologicals, long term contamination by chemicals,	Dialogue with farmers, promote best practices, special attention to 250-day zone and future development	reduced risk of hazardous chemicals, manure	Very low cost, a discussion of mutual interest	Town, appropriate farmers	1

Reference number	Category	Issue	Current Potential risks	Potential action items	Benefits	Costs	Responsibility	Priority Level[13]
15	Household Hazardous Waste	Wide range of hazardous products, in mostly small quantities, being handled without regulation within the protection zone	Contamination of groundwater through improper storage, handling, disposal	Very hard to regulate. Raising awareness and public education the best option	A successful education and awareness project, such as the one currently underway with Kensington North, will reduce associated risks.	Current project is being funded by EcoAction, Env. & Climate Change Canada	Kensington North Water-sheds Association in conjunction with the Town of K	1
16	Petroleum storage in 5-year zone	Contamination of well field by petroleum	Long term damage to well field.	Create strategy considering zoning, lobbying province, incentives to phase out petroleum heating, improve security on bulk tanks	Reduced risk of petroleum contamination	Varies greatly depending on strategy	Town, Province, property owners	1
17	Improve Storm Sewers	Some connections unclear, some areas with standing water	Leakage of contaminated standing water in protection zone	Survey of storm sewers in capture zone, perform appropriate repairs	Reduced risk of contamination from standing water in storm sewers	Unknown, potentially significant	Uncertain	3
18	Chlorine	Handling of chlorine procedures	Workplace hazard	Refine procedures, ensure employee safety	Safer work environment	Negligible	Town	1
19	Domestic sewers	Uncertainty of condition of the lines, connections.	Risk potential increases with age, lack of certainty	Thorough examination of the system, including new mapping	Either reassurance that risk level is acceptable, or new knowledge that amendments are required	Cost of study is low. Cost of repairs is unknown	Uncertain	3

Reference number	Category	Issue	Current Potential risks	Potential action items	Benefits	Costs	Responsibility	Priority Level[13]
20	Private Wells and Septic Systems	Risk of contamination of groundwater in the protection zones	Introduction of bacteria close to well fields	Create incentives to close up wells, get homes onto central system	Reduced risk of contamination	Unknown	Town	1
21	New Well field Selection	Preparedness for the possibility, eventuality, of requiring to relocate well field	Extended period without water supply in the situation of contamination	With the aid of a hydrogeologist, survey surrounding area, dig test wells, analyze, make a selection	Less disruption, better assurance of water supply	Significant	Town	3
22	Contingency Plan	Preparedness for the possibility of contamination of wells, short term and long term	Delay of getting potable and non-potable water to residents	Town council and staff review contingency plan, discuss, refine, adopt	Rapid response to an emergency situation	Insignificant, or if not completed, potentially astronomical	Town	1
23	Regulatory Work, new development	Create regulations, by-laws to require water recovery engineering, water protection in new development in the capture area	New subdivision construction could redirect water from hard surfaces away from capture area, create water deficit	Review water capture engineering and technology options for new construction, put requirements in place	Less loss of water in capture zone, safe water for well field.	Moderate time requirement by staff and council	Town	3 must proceed development
	Regulatory work, new well field	Zoning for new well field	Capture area of new well field could become contaminated	Zone development and activity in new well field in interest of protecting resource	Less risk to water in capture area, more trouble-free access to clean water in the future	Time of staff, councillors	Town	3

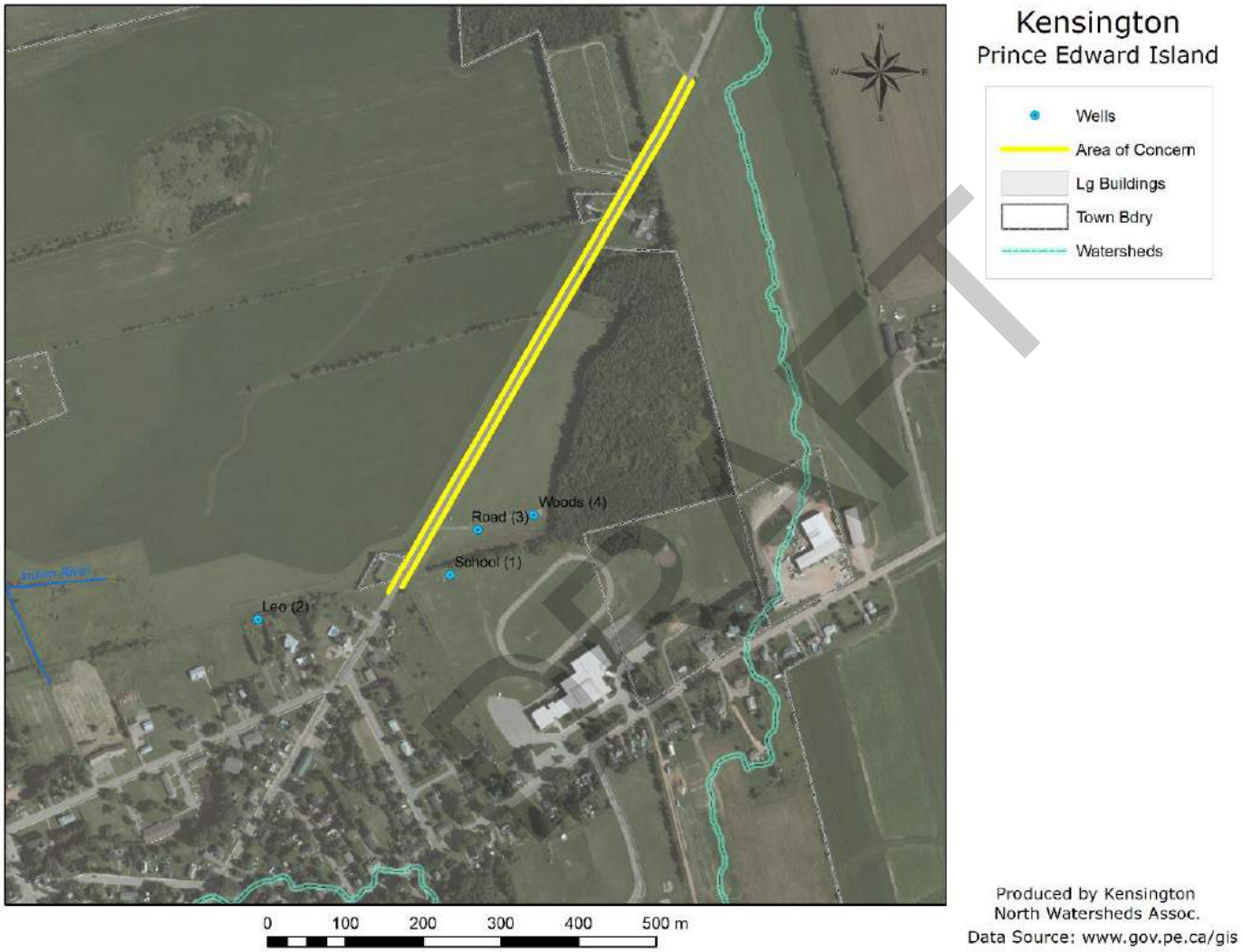
Reference number	Category	Issue	Current Potential risks	Potential action items	Benefits	Costs	Responsibility	Priority Level[13]
	Regulatory work, Review of Similar Works	Variety of approaches to WPP, i.e. Digby passed multiple bylaws				Time of staff and councillors	Town	3

APPENDIX B: MAPS



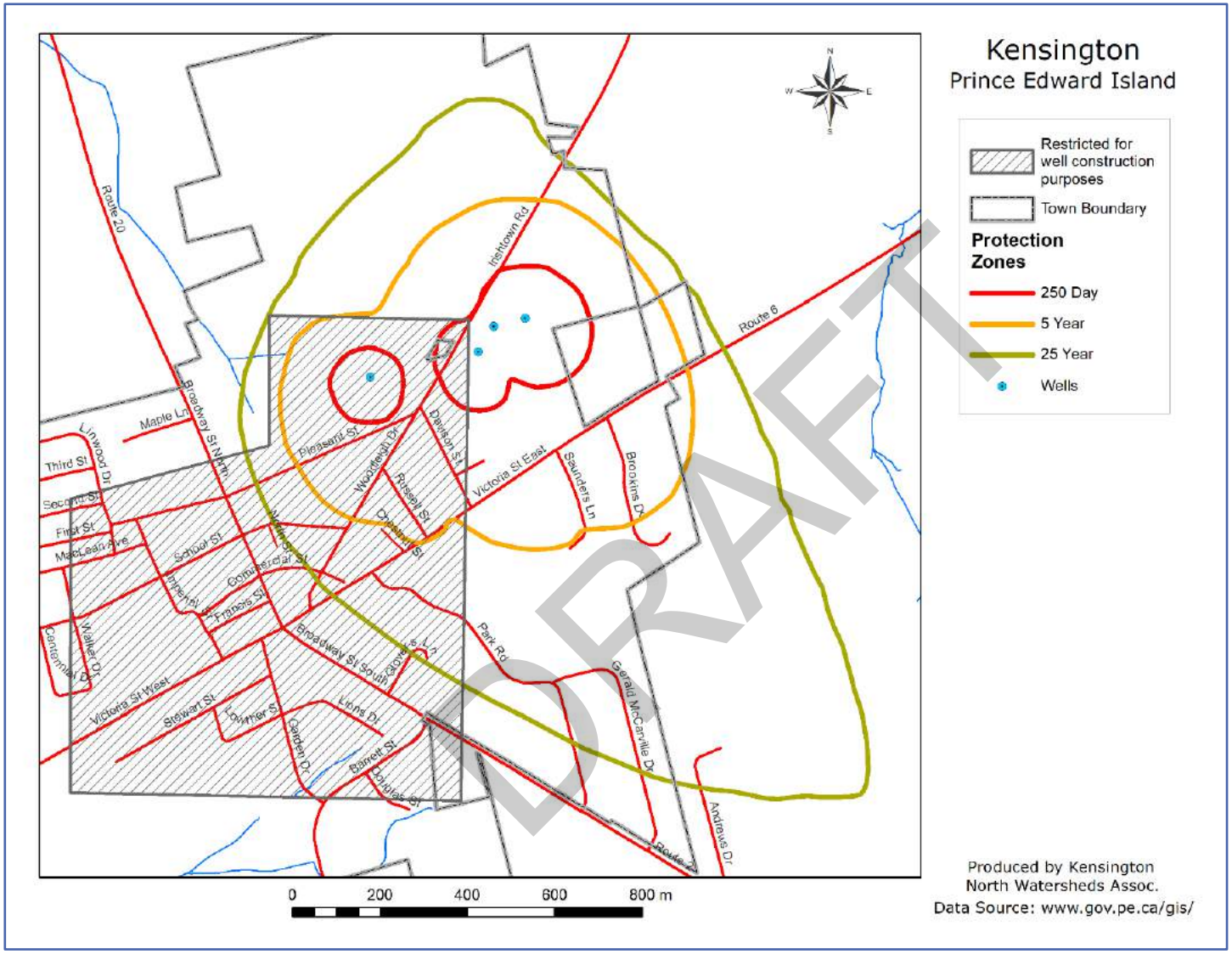
ZONING

A map of the well field protection zones showing the development zones found on the *Official Zoning Map* (Appendix A of the Town's *Zoning and Subdivision Control (Development) Bylaw, 2013*).



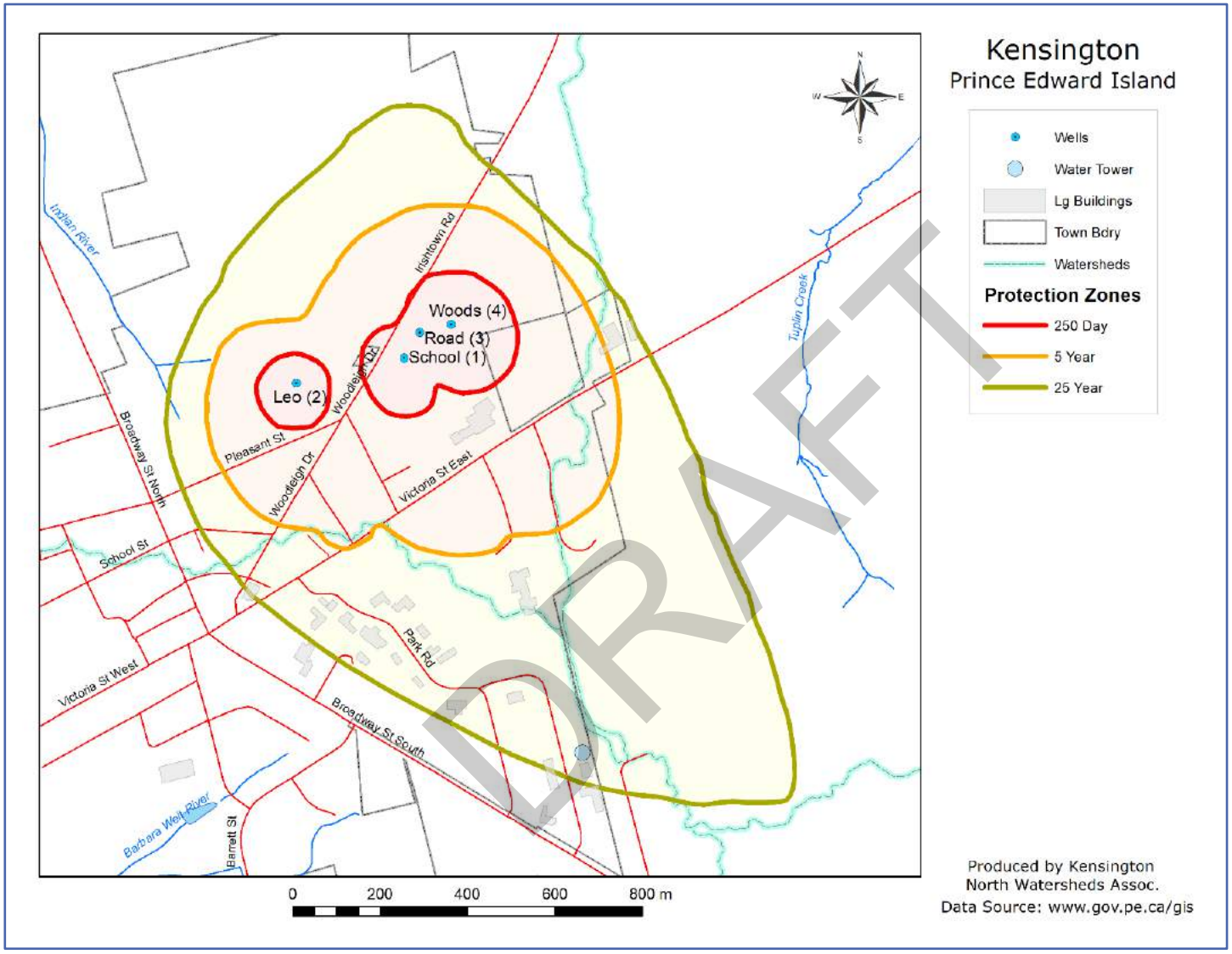
AREA OF CONCERN

A map showing the area of concern along Route 101 adjacent to the existing wells.



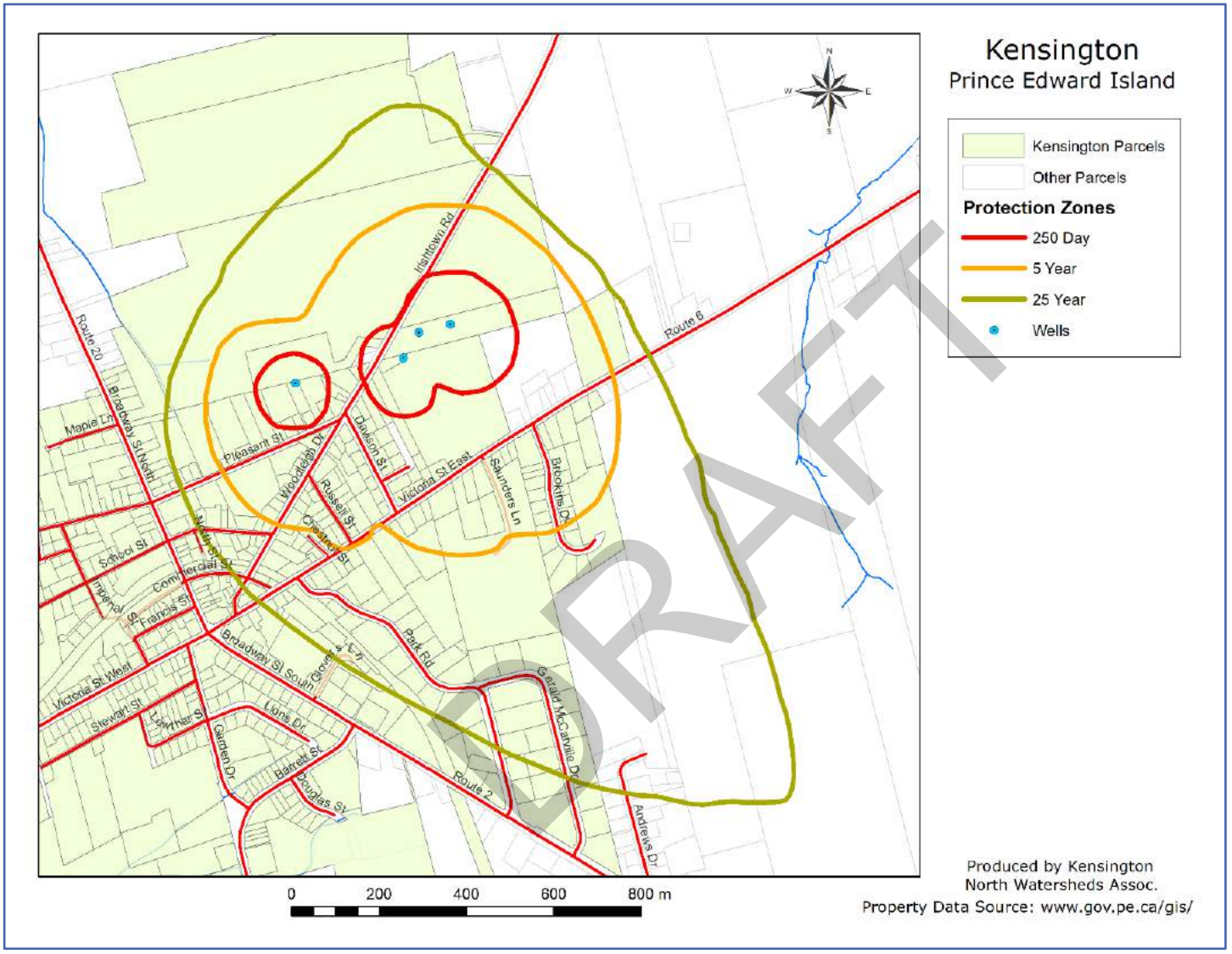
RESTRICTED AREA

The area in Town that is restricted for well construction purposes as designated in Schedule A of the PEI Environmental Protection Act Water Well Regulations.



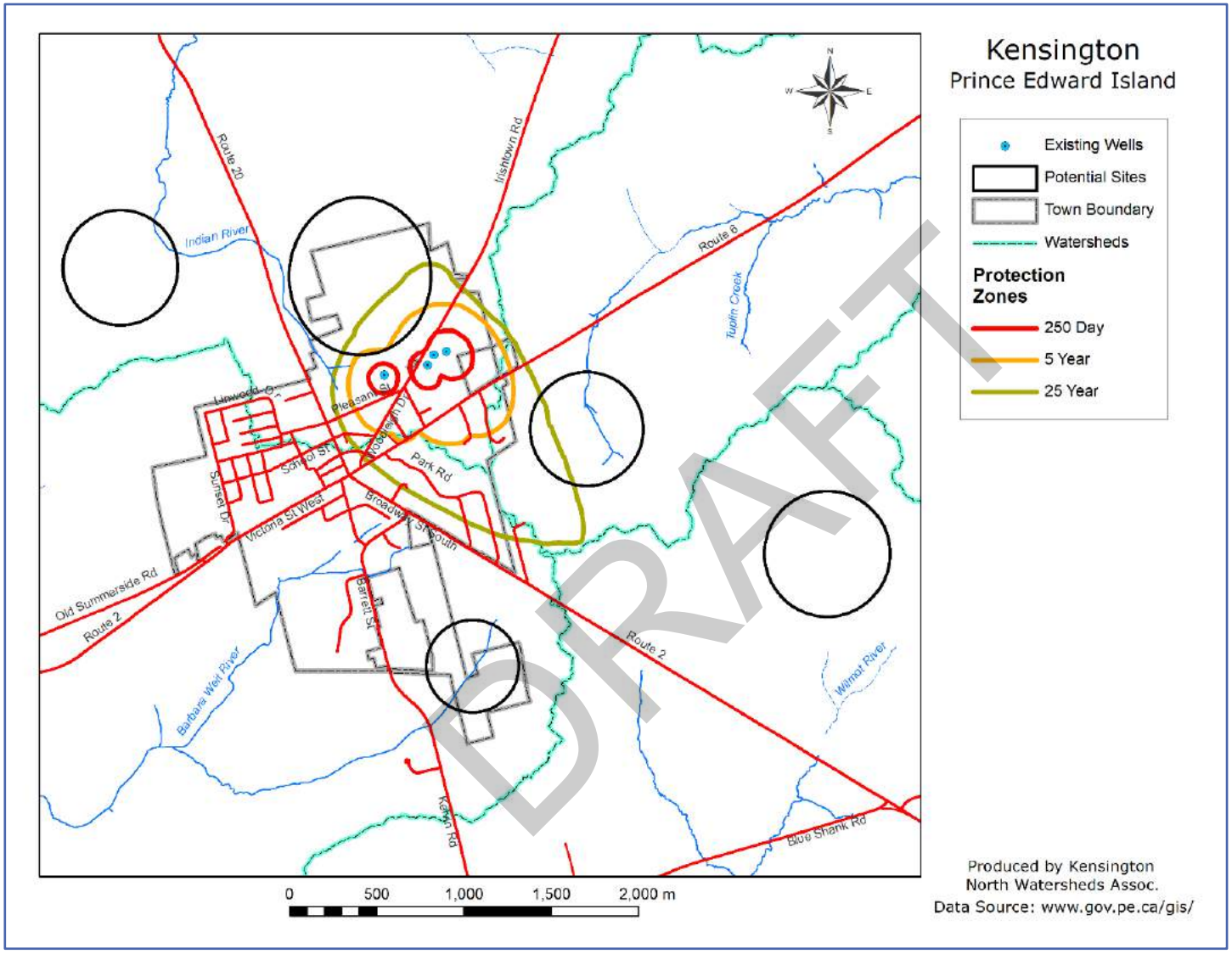
PROTECTION ZONES

A map of the well field protection zones for the Town with wells, large buildings, water tower with Town and watershed boundaries.



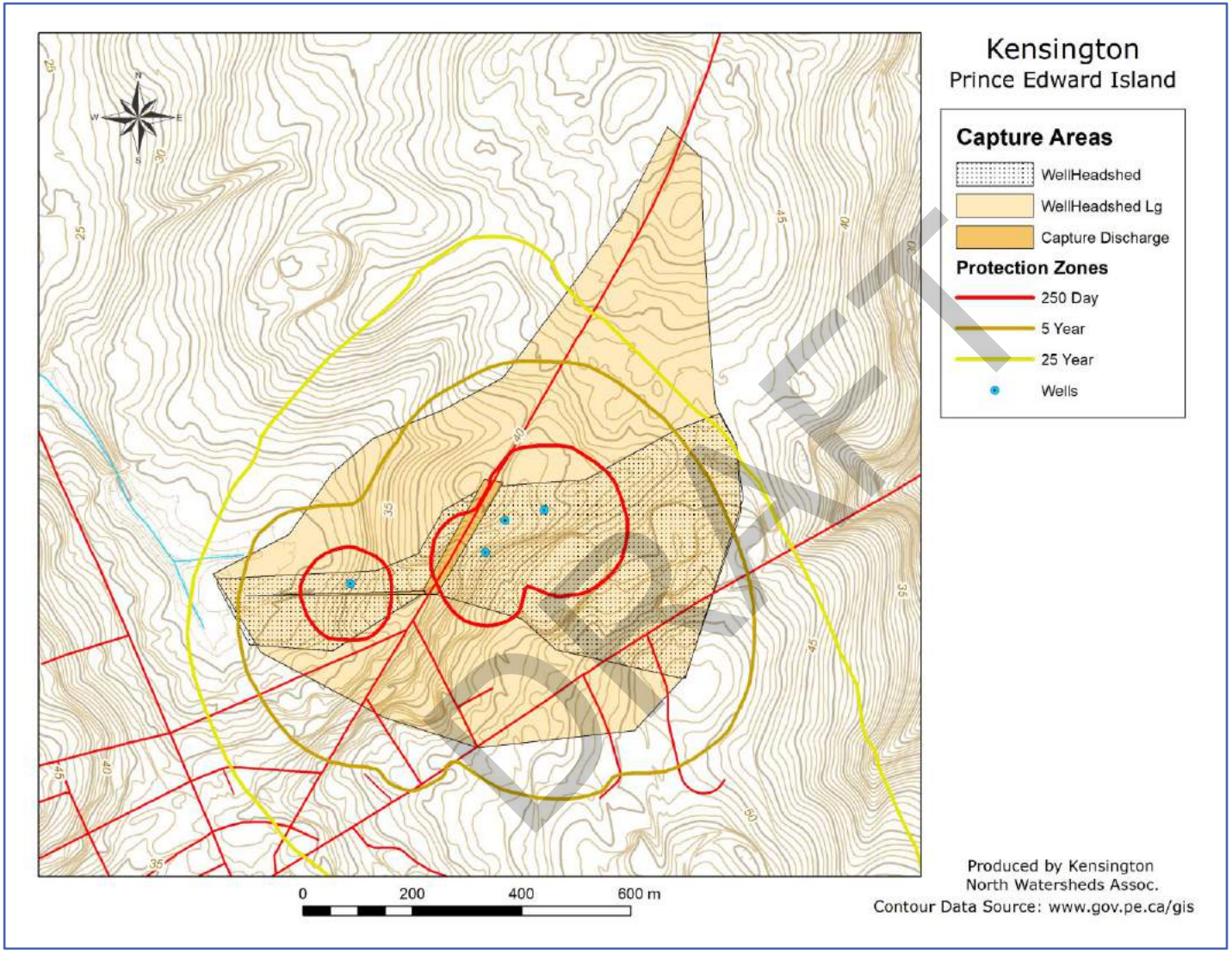
PROPERTY

A map of property parcels in and around the well field protection zones with those within the Town boundary highlighted.



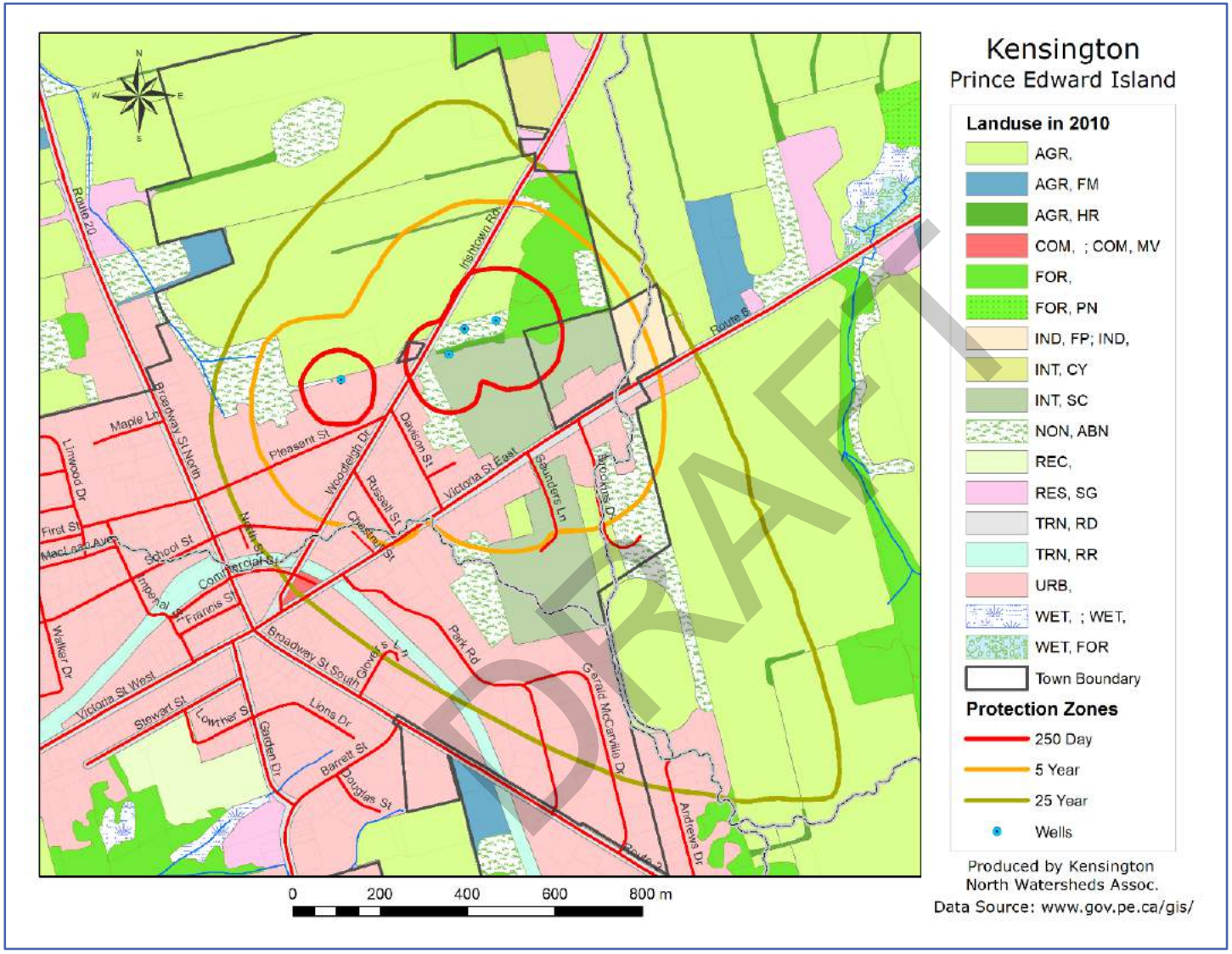
POSSIBLE LOCATIONS FOR NEW WELL SITES

A map of potential well field sites with the existing wells, well field protection zones, Town and watershed boundaries.



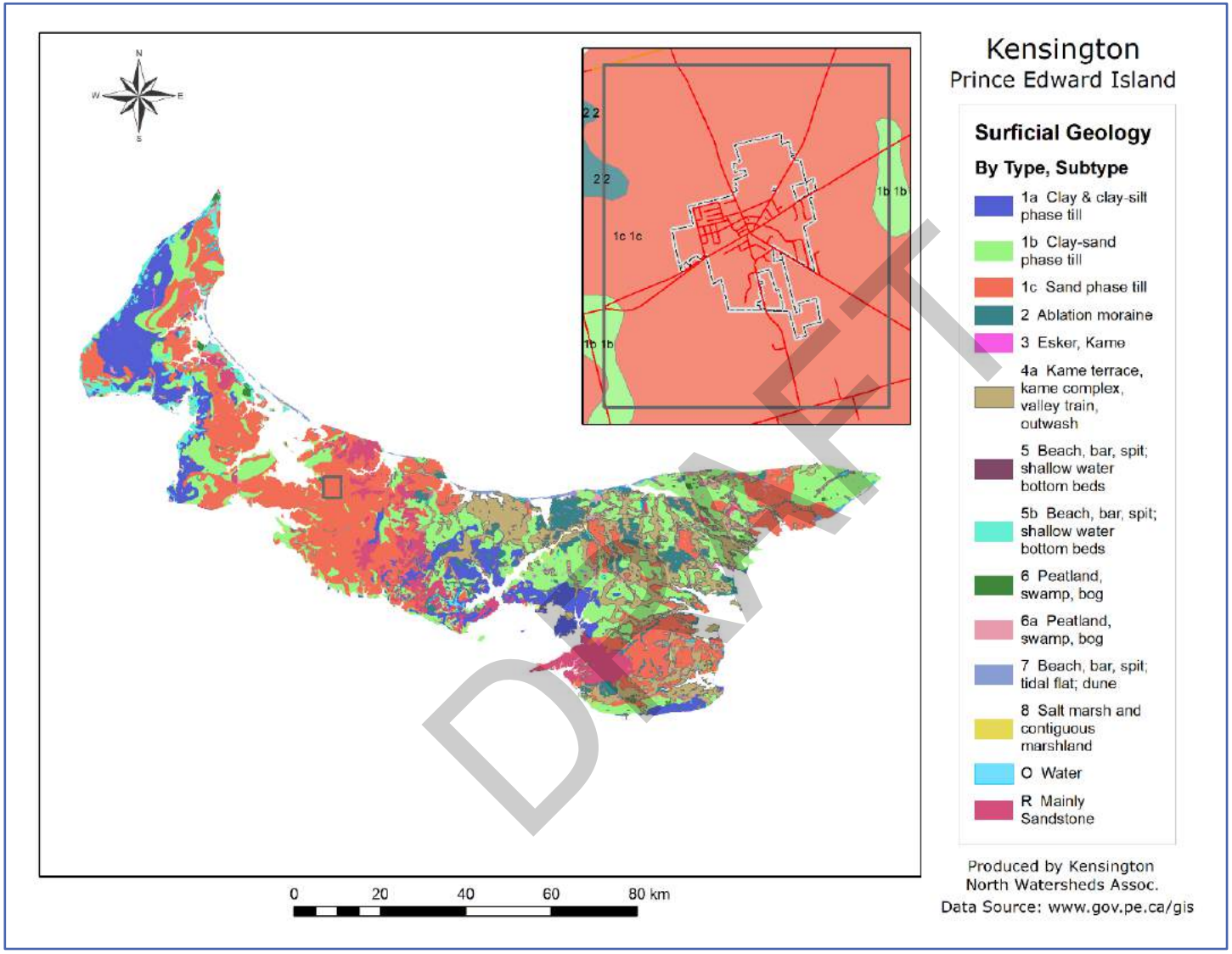
CAPTURE AREAS

A map showing the capture areas of the existing wells with contours and the well protections zones.



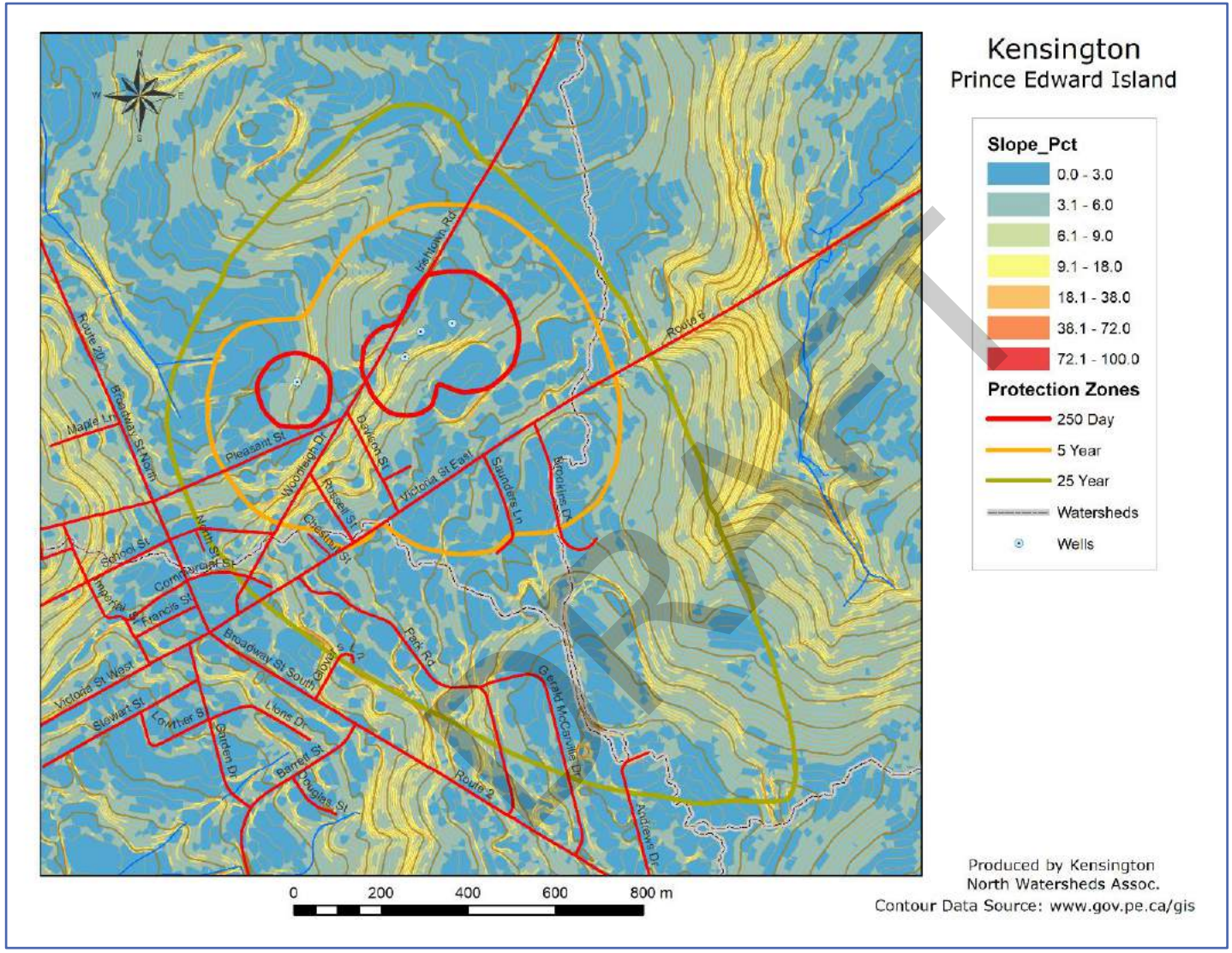
LAND USE 2010

A map of general land use in and around the well field protection zones in 2010.



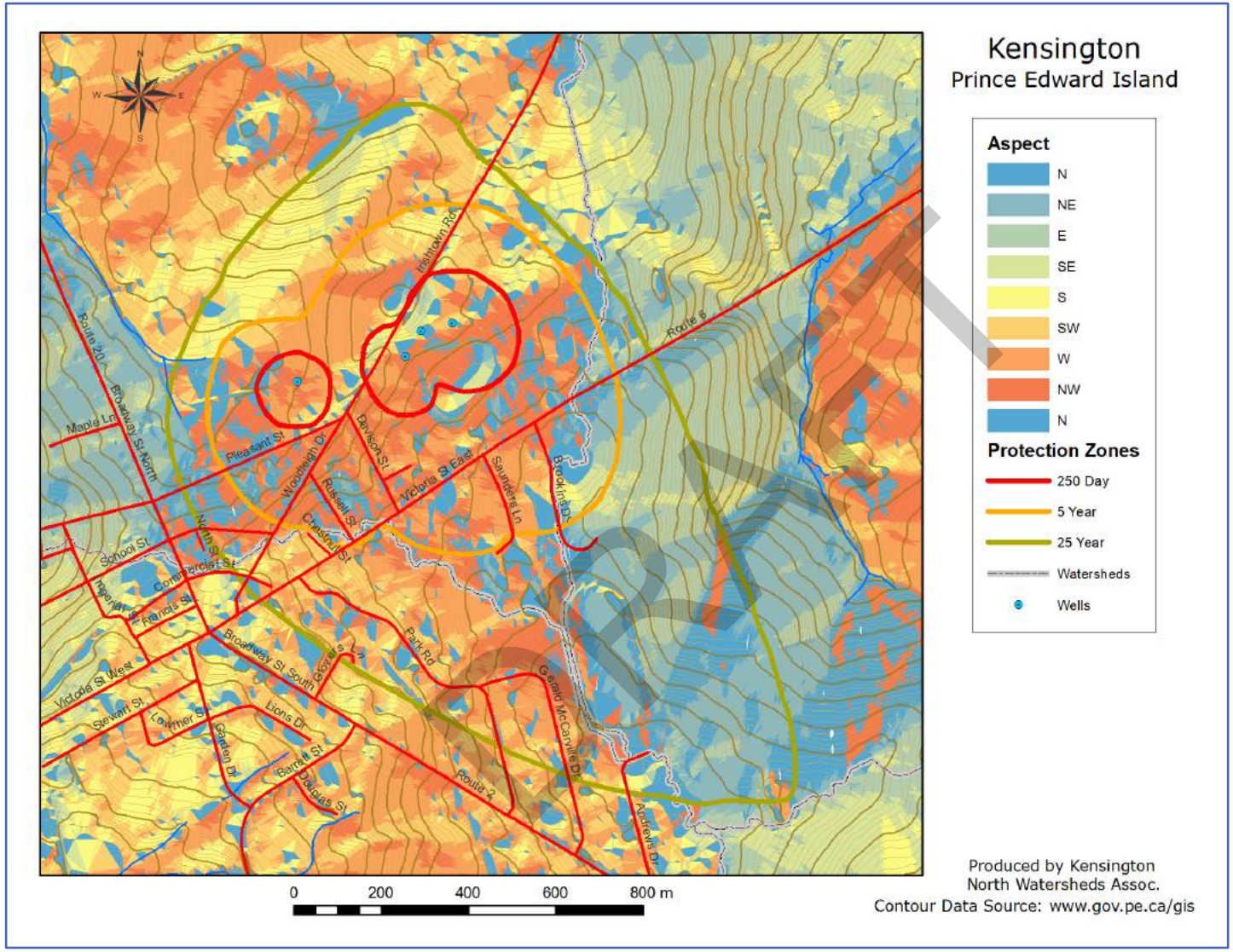
GEOLOGY

A map of the surficial geology of PEI with an inset showing the geology of the Kensington area.



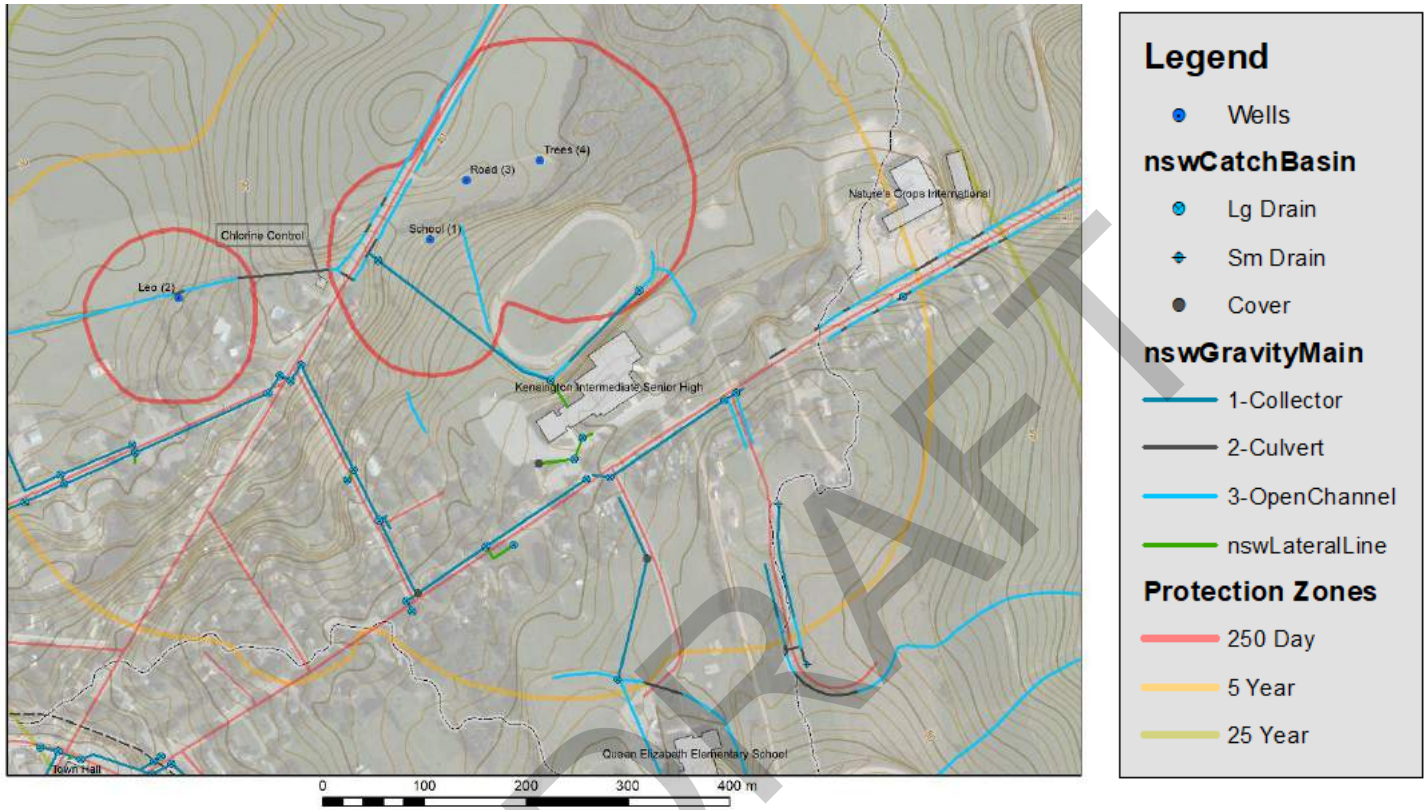
SLOPES

The gradient of sloped land expressed as a percentage, i.e. the difference in elevation between two points divided by the distance between the points. Often used in conjunction with *Aspect* map.



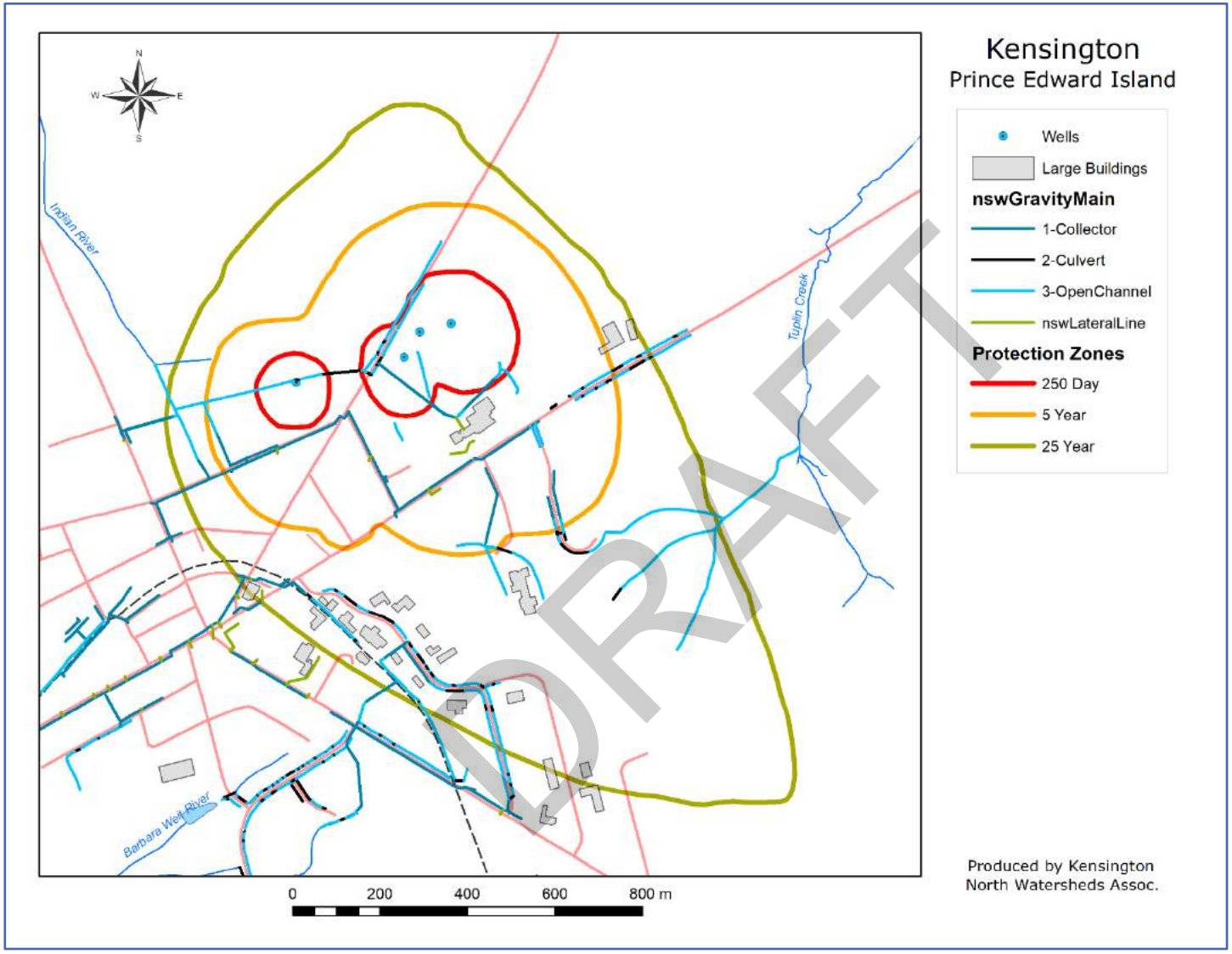
ASPECT

The direction of sloped land from a higher elevation to a lower elevation. Often used in conjunction with *Slopes* map.



STORMWATER DRAINAGE (KISH)

A map of the storm-water drainage system around the high school showing catch basins, manholes and connectivity with existing wells and large buildings, 0.5m contours, well field protection zones on the 2010 orthophoto image. Note: some open channels are surveyed while others have been constructed to show network connectivity. Surface and subsurface drainage in the vicinity of the elementary and high school is not fully understood and is a concern.



STORMWATER DRAINAGE

A map of the storm-water drainage system in and around the well field protection zones with existing wells and large buildings. Note: some open channels are surveyed while others have been constructed to show network connectivity.

APPENDIX C: WELL LOCATION DATA

Well No	*Well Name*	*Zone*	*Easting (m)*	*Northing (m)*	*Lon DD*	*Lat DD*	*Lon DDM*	*Lat DDM*
1	School	20	451488	5143396	-63.63156°	46.44240°	-63°37.89370'	46°26.54390'
2	Leo	20	451240	5143339	-63.63478°	46.44186°	-63°38.08649'	46°26.51179'
3	Road	20	451523	5143454	-63.63111°	46.44292°	-63°37.86643'	46°26.57545'
4	Woods	20	451595	5143473	-63.63017°	46.44310°	-63°37.81023'	46°26.58611'

APPENDIX D: WELL ASSESSMENT FORM

KENSINGTON NORTH WATERSHEDS ASSOCIATION

1

WELL ASSESSMENT FORM

TO BE USED WITH THE WELL PROTECTION TOOLKIT

IMPORTANT! Please complete one form for each ground water source used in your water system. Fill in available information. If missing information, it may be advisable to contact the Department of Environment, Office, or the local driller who drilled the well, to assist. Photocopy this form as necessary.

PART I: WELL SYSTEM INFORMATION (Refer to Step 1)

WATER SYSTEM LEGAL NAME Town of Kensington	LEGAL DESCRIPTION OF WELL LOCATION Town Well No 1 School
WATER SYSTEM LEGAL ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	
LATITUDE / LONGITUDE N46.442398°E-63.631561°	HOW WERE LOCATION COORDINATES DETERMINED? ☐ GPS____ (specify accuracy) ☐ survey ☒ digitized from 1200 map (specify scale)
UTM COORDINATES Zone 20 E451488 N5143396	HOW MANY OTHER WELLS MAKE UP THE WATER SYSTEM? 3 DOES THE WATER SYSTEM ALSO USE A SURFACE WATER SOURCE? (describe) No

NUMBER OF CONNECTIONS Maximum ____ Actual 650	POPULATION SERVED 1600	WATER USE ☒ industrial ☒ commercial ☐ irrigation ☒ domestic	other (specify)

Well Identification Plate No. (If available) Nil	CHEMISTRY NO.	WELL TAG NO. (If available)

Contact Department of Environment office for the following information:

Well Identification No. = DOE's metal tag affixed to the well for on-site identification.	Chemistry No. = DOE's site number for the water chemistry on their database.	WELL TAG NO. = DOE's computer number for the well.

Bulk supply ☒ yes ☐ no	Back-up supply ☐ yes ☒ no	Emergency supply ☐ yes ☒ no	See Note Metered ☒ yes ☐ no

WELL OWNER / OPERATOR INFORMATION

WELL OPERATOR Geoff Baker	WELL OPERATOR'S PHONE NO. (902)836-3781
WELL OPERATOR'S ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	
WELL OPERATOR Doug Killam	WELL OPERATOR'S PHONE NO. (902)439-5202
WELL OPERATOR'S ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	

NOTES

Commercial connections are metered and municipal residential unites

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KENSINGTON NORTH WATERSHEDS ASSOCIATION

1

WELL ASSESSMENT FORM

TO BE USED WITH THE WELL PROTECTION TOOLKIT

IMPORTANT! Please complete one form for each ground water source used in your water system. Fill in available information. If missing information, it may be advisable to contact the Department of Environment, Office, or the local driller who drilled the well, to assist. Photocopy this form as necessary.

PART II: WELL CONSTRUCTION INFORMATION (Refer to Step 1)

WELL-DRILLER'S NAME, COMPANY AND ADDRESS Unknown	POSTAL CODE	DATE WELL ORIGINALLY CONSTRUCTED YYYY MM DD Unknown
	WELL-DRILLER'S TELEPHONE NO. ( )	DATE OF LAST RECONSTRUCTION YYYY MM DD

TYPE OF WELL [X] drilled [ ] dug [ ] other (specify)	METHOD OF DRILLING [ ] rotary [X] cable tool [ ] driven [ ] jetted [ ] other (specify)	WELL LOG AVAILABLE? [ ] yes (attach) [X] no

DEPTH OF WELL m or 450 ft.	DIAMETER OF WELL m or 8 in.	SCREEN LENGTH N/A m or ft.	DEPTH TO TOP OF SCREEN N/A m or ft.

WELL CAPACITY See note below L/s or 524 m³ /day	LOCATION OF WATER-BEARING FRACTION(S) (for bedrock wells): Unknown	YIELD OF WATER-BEARING FRACTION(S) Unknown L/s or m³

WELLHEAD ENCLOSURE Well is pitiless with an adjacent manhole and power panel above ground	SURFACE SANITARY SEAL grouted to m or ft. [X] no surface seal [ ] pitless adapter

AVERAGE PUMPING RATE 86,400 igpd or 393 m³ /day	HOW WAS PUMPING RATE DETERMINED? Approximation do to incomplete data collection	DEPTH OF INTAKE SETTING Unknown	PUMP AGE ?

ANNUAL VOLUME OF WATER PUMPED 3.16E+7 igpy or 143,461 m³ /yr	HOW WAS VOLUME PUMPED DETERMINED? Approximation do to incomplete data collection
PUMPING CAPACITY 80 igpm or 524 m³ /day	ANY CHANGES OR REPAIRS MADE TO THE PUMPING EQUIPMENT? (specify) Recent leak manifold in pump building Aug 2018, due to corrosion

TYPE OF STORAGE [X] tank(s) [ ] reservoir [ ] other (specify) Water Tower	STORAGE CAPACITY 300,000 ig or 1,364 m³	COMMON INLET OR OUTLET? [X] yes [ ] no
ATTACHED INFORMATION [X] well log [X] drawings [X] reports [X] pump test data [X] water quality data	***NOTE:*** *If no well log is available, please attach any other records documenting well construction (i.e., "as built" drawings, engineering reports).*	

NOTES WITH ATTACHED INFORMATION

Well Capacity is the amount of water that can be pumped as per the Province of PEI permit issued in 2005.

PART III: HYDROGEOLOGIC INFORMATION (Refer to Steps 1 and 2)

DEPTH TO PUMPING WATER LEVEL * Unknown m or _____ ft.

DEPTH TO NON-PUMPING WATER LEVEL * Unknown m or _____ ft.

HOW WAS WATER LEVEL MEASURED? ☐ well log ☐ wetted tape ☐ probe ☐ transducer

WELLHEAD ELEVATION (height above mean sea level) 38 m

HOW WAS ELEVATION DETERMINED? ☐ survey ☐ altimeter ☒ topographic ☐ other (specify) _____

TYPE OF CONFINING LAYER FROM WELL LOG (e.g., clay, till) Typical Island lithology Sandstone and Shale

LOCATION OF CONFINING LAYER AT DEPTH FROM WELL LOG Unknown m or _____ ft.

THICKNESS OF CONFINING LAYER FROM WELL LOG There is no information on this well m or _____ ft.

HOW LATERALLY EXTENSIVE IS CONFINING LAYER?

ANNUAL RAINFALL 1200 mm or 47.24 in.

TYPE OF AQUIFER Unknown

☐ unconsolidated, confined ☐ unconsolidated, unconfined ☐ bedrock

ARE THERE OTHER HIGH-CAPACITY WELLS, 30 L/s OR 500 GAL./MIN. (agricultural, municipal and/or industrial), LOCATED WITHIN A 300-m RADIUS OF THE COMMUNITY WELL? ☒ yes How many? One ☐ no

AQUIFER TRANSMISSIVITY * _____ m^3/d or _____ Igpd/ft.

HOW WAS TRANSMISSIVITY DETERMINED? ☒ from pumping test ☐ from specific capacity ☐ other (specify) . . . . . .

HYDRAULIC GRADIENT *

HOW WAS HYDRAULIC GRADIENT DETERMINED? ☐ from well water levels ☐ from topography ☐ other *(specify)* . . . . . .

PLEASE IDENTIFY OR DESCRIBE ADDITIONAL HYDROLOGIC OR GEOGRAPHIC CONDITIONS THAT YOU BELIEVE MAY AFFECT THE SHAPE OF THE CAPTURE ZONE FOR THIS SOURCE. WHERE POSSIBLE, REFERENCE THEM TO LOCATIONS ON THE MAP PRODUCED IN PART IV.

* This well initially was an observation well which was used during the development of Well #3 and Well #4. It was realized that a third well would make a better choice of dividing the level of pumping required in 1978. (Callan Report on Kensington Water Supply 1978) There are several maps and diagrams attached to this document outlining benefits and deficience with the capture zone.

PART IV: ASSESSMENT OF WATER QUALITY (Refer to Step 1)

1 HOW LONG HAS THE WATER SYSTEM BEEN IN EXISTENCE?

39 to 40 years

2 HAS YOUR WELL EVER BEEN DEEPENED, CLEANED, NEW WELL CONSTRUCTED?

[X] yes — [X] Why? Deepened for volume [ ] no

3 IN THIS TIME, HAVE THERE BEEN ANY WATER QUALITY PROBLEMS?

[X] yes [ ] no [ ] don't know

IF YES, WHEN AND WHAT WAS THE CAUSE OF THESE PREVIOUS PROBLEMS (i.e., drought, pump failure, plugging, increased usage, interference, contamination)?

Bacteria due to poor well head construction. Other problem have occurred. See pumping log book.

IF CONTAMINATION:
- WHAT WATER QUALITY CHANGES WERE APPARENT (i.e., taste, colour, turbidity, other)?
- WHAT ACTION WAS TAKEN TO OVERCOME THIS PROBLEM?
- WHAT WERE THE EFFECTS OF THIS ACTION?

4 **BACTERIAL CONTAMINATION**

ANY BACTERIAL DETECTION(S) IN THE PAST 3 YEARS BASED ON SOURCE-MONITORING RECORDS?	[X] yes [ ] no	HAVE THERE BEEN SAMPLING PROTOCOLS OR QA/QC ESTABLISHED? Unknown	[ ] yes [ ] no
HAS SOURCE (IN PAST 3 YEARS) HAD A BACTERIOLOGICAL CONTAMINATION PROBLEM FOUND IN DISTRIBUTION SAMPLES THAT WAS ATTRIBUTED TO THE SOURCE?	[X] yes [ ] no	IF YES, WHAT ARE THEY?	
WAS THE BACTERIOLOGICAL CONTAMINATION DUE TO THE SOURCE?	[X] yes [ ] no		
WAS THE BACTERIOLOGICAL CONTAMINATION DUE TO CROSS-CONNECTIONS?	[ ] yes [X] no		
IS THE WELL AVAILABLE FOR DIRECT SAMPLING?	[X] yes [ ] no		

SOURCE-SPECIFIC WATER QUALITY RECORDS *(Refer to Step 1)*

Please indicate the occurrence of any test results in the last 10 years that meet the following conditions:

PARAMETER	RECURRING PROBLEMS	TEST RESULTS	EXCEEDENCES OF CDWQG[1]
Bacteriological Total/Faecal Coliforms Background Heterotrophic plate counts Iron and Sulphate Reducers	*Bacteria occurred in well Spring of 2018*	*After two clear samples well returned to use*	
Disinfection by-products Bromodichloromethane Dibromochloromethane Chloroform			
Physical Parameters pH, colour, alkalinity, specific conductance, hardness, total dissolved solids, total organic carbon, turbidity			
Inorganic Parameters Nitrates, fluoride, sulfate, sulphide, ammonia, chloride, nitrite, nitrogen (organic)			
Metals* Calcium, iron, magnesium, manganese, sodium			

[1] Canadian Drinking Water Quality Guidelines

* A metal scan is usually performed every 3 years at least, and includes aluminum, arsenic, barium, cadmium, chromium, copper, lead, molybdenum, nickel, phosphorus, silver and zinc.

Please sketch in the box below the location sampling point with respect to the well.

See maps attached

PART V: WATER TREATMENT INFORMATION (Refer to Step 1)

IS THIS SOURCE TREATED? [X] yes [ ] no

IF YES, TYPE OF TREATMENT [X] disinfection [ ] filtration [ ] carbon filter [ ] air stripper [ ] water softener [ ] other (specify) _____

PURPOSE OF TREATMENT
Chlorination is required in public distribution systems.

IF SOURCE IS CHLORINATED: IS A CHLORINE RESIDUAL MAINTAINED? *yes*
Total Chlorine — ppm
Free Chlorine — ppm

WHAT IS THE RESIDUAL LEVEL OF TREATMENT?
By guide lines should be .2 mg/l

IS THERE ANY WATER STORAGE IN THE SYSTEM? [X] yes [ ] no

IS THE WATER TREATMENT BEFORE OR AFTER THE STORAGE UNIT? [X] before [ ] after

WHAT IS THE TOTAL AND FREE CHLORINE IN THE DISTRIBUTION SYSTEM?
Total Chlorine — ppm
Free Chlorine — ppm

IS THERE ANY ADDITIONAL CHLORINE ADDED AFTER THE SOURCE (rechlorination)?
Total Chlorine *No* ppm
Free Chlorine _____ ppm

WHAT TYPE OF CHEMICALS ARE USED IN THIS PROCESS? *(specify)*

WHERE ARE CHEMICALS STORED?
In the Pump House

IS THERE PROPER STORAGE FOR THESE CHEMICALS? [ ] yes [ ] no
Unsure

IF STORED IN PUMP HOUSE, HOW ARE CHEMICALS ISOLATED FROM THE WELL?
Chemicals are stored at the distribution building

NOTES
There are four well in this system. All well are connected together in a distribution building where a metre is used to adjust the chorine which is injected into the distributed water. The Town custodian samples the distributed water at predetermined locations for residual chorine. At the same time water samples are taken in treated bottles and transferred the Provincial Lab to check for bacteria at these locations.

PART VI: MAPPING THE CAPTURE ZONE TO YOUR COMMUNITY WELL (Refer to Step 2)

A map (1:5000 to 1:20,000 are typical scales) will be needed to complete this section. Multiple wells in the same area can be plotted on one map.

CIRCULAR CAPTURE ZONE (refer to Appendix 2.1)

*attach calculation sheets		RADIUS (m)
Arbitrary Fixed Radius		
Calculated Fixed Radius	(250 day travel time)*	*See Maps*
	(5-year travel time)*	
	(25-year travel time)*	

PARABOLIC CAPTURE ZONE (refer to Appendix 2.2)*

Downgradient distance *10* m

Width of capture zone *~150* m

Is there a river, lake, pond, stream or other obvious surface water body within the 6-month time of travel boundary? [ ] yes *(identify on map)* [X] no

Is there a stormwater and/or wastewater facility, treatment lagoon or holding pond located within the 6-month time of travel boundary? [X] yes *(identify on map)* [ ] no

NOTES

PART VII: SOURCE SURVEY (Refer to Step 3)

4 REGIONAL SOURCES OF RISK TO GROUND WATER

Please indicate if any of the following potential sources of contamination within the capture zone.

ACTIVITY	T.O.T. NOT SPECIFIED	250-DAY	5-YEAR	25-YEAR	COMMENTS
Chemical Storage *(specify)*		X			Chorine in distribution building
Injection wells				X	Geothermal use
Abandoned wells					
Landfills, dumps, disposal areas					
Commercial/industrial sites					
Known hazardous materials clean-up site					
Household hazardous waste					
Population density > 2 houses per hectare					
On-site sewage treatment					
Wastewater treatment facility					
Sites used for land application of waste					
Golf course					
Dairy or beef farms					
Poultry barns					
Hobby farms					
Fields: vegetables, hay, fruit *(specify)*					
Mining operations					
Gravel pits					
Household well		X	X		One well within 50m Five well in 5 year zone
Household septic		X	X		

** Mark and identify on map any of the potential sources listed above which are located within the capture zone boundary.

SEPTIC FIELD SETBACK	GRADIENT TO SEPTIC FIELD	DENSITY OF ON-SITE SEWAGE DISPOSAL SYSTEMS	
—	☐ upgrade ☐ downgrade ☐ same grade	COMMUNITY SYSTEM	SYSTEM PER LOT
_____ m or _____ ft.	— _____ % _____ %	—	—

KENSINGTON NORTH WATERSHEDS ASSOCIATION

2

WELL ASSESSMENT FORM

TO BE USED WITH THE WELL PROTECTION TOOLKIT

IMPORTANT! Please complete one form for each ground water source used in your water system. Fill in available information. If missing information, it may be advisable to contact the Department of Environment, Office, or the local driller who drilled the well, to assist. Photocopy this form as necessary.

PART I: WELL SYSTEM INFORMATION (Refer to Step 1)

WATER SYSTEM LEGAL NAME Town of Kensington	LEGAL DESCRIPTION OF WELL LOCATION Town Well No 2 Leo

WATER SYSTEM LEGAL ADDRESS
Town of Kensington PO Box 418 Kensington PE C0B1M0

LATITUDE / LONGITUDE N46.441863°E-63.634775°	HOW WERE LOCATION COORDINATES DETERMINED? ☐ GPS_____ *(specify accuracy)* ☐ survey ☒ digitized from 1200 map *(specify scale)*

UTM COORDINATES Zone 20 E451240 N5143339	HOW MANY OTHER WELLS MAKE UP THE WATER SYSTEM? 3	DOES THE WATER SYSTEM ALSO USE A SURFACE WATER SOURCE? *(describe)* No

NUMBER OF CONNECTIONS Maximum ____ Actual 650	POPULATION SERVED 1600	WATER USE ☒ industrial ☒ commercial ☐ irrigation ☒ domestic	other *(specify)* _____

Well Identification Plate No. (If available) Nil	CHEMISTRY NO. Well No 2	WELL TAG NO. (If available)

Contact Department of Environment office for the following information:

Well Identification No. = DOE's metal tag affixed to the well for on-site identification.	Chemistry No. = DOE's site number for the water chemistry on their database.	WELL TAG NO. = DOE's computer number for the well.

Bulk supply ☒ yes ☐ no	Back-up supply ☐ yes ☒ no	Emergency supply ☐ yes ☒ no	See Note Metered ☒ yes ☐ no

WELL OWNER / OPERATOR INFORMATION

WELL OPERATOR Geoff Baker	WELL OPERATOR'S PHONE NO. (902)836-3781
WELL OPERATOR'S ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	
WELL OPERATOR Doug Killam	WELL OPERATOR'S PHONE NO. (902)439-5202
WELL OPERATOR'S ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	

NOTES

Commercial connections are metered and municipal residential unites

KENSINGTON NORTH WATERSHEDS ASSOCIATION

2

WELL ASSESSMENT FORM

TO BE USED WITH THE WELL PROTECTION TOOLKIT

IMPORTANT! Please complete one form for each ground water source used in your water system. Fill in available information. If missing information, it may be advisable to contact the Department of Environment, Office, or the local driller who drilled the well, to assist. Photocopy this form as necessary.

PART II: WELL CONSTRUCTION INFORMATION (Refer to Step 1)

WELL-DRILLER'S NAME, COMPANY AND ADDRESS: Unknown	POSTAL CODE	DATE WELL ORIGINALLY CONSTRUCTED (YYYY MM DD): Unknown
	WELL-DRILLER'S TELEPHONE NO. ( )	DATE OF LAST RECONSTRUCTION (YYYY MM DD):

TYPE OF WELL: [X] drilled [ ] dug [ ] other (specify)	METHOD OF DRILLING: [ ] rotary [X] cable tool [ ] driven [ ] jetted [ ] other (specify)	WELL LOG AVAILABLE? [ ] yes (attach) [X] no

DEPTH OF WELL: Unknown m or ft.	DIAMETER OF WELL: m or 6 in.	SCREEN LENGTH: N/a m or ft.	DEPTH TO TOP OF SCREEN: N/a m or ft.

WELL CAPACITY: See note below L/s or 524 m³ /day	LOCATION OF WATER-BEARING FRACTION(S) (for bedrock wells): Unknown	YIELD OF WATER-BEARING FRACTION(S): Unknown L/s or m³

WELLHEAD ENCLOSURE: Well is pitiless with an adjacent manhole and power panel above ground	SURFACE SANITARY SEAL: grouted to m or ft. [X] no surface seal [ ] pitless adapter

AVERAGE PUMPING RATE: Unknown igpd or m³ /day	HOW WAS PUMPING RATE DETERMINED? Approximation do to incomplete data collection	DEPTH OF INTAKE SETTING: Unknown	PUMP AGE: ?

ANNUAL VOLUME OF WATER PUMPED: igpy or m³ /yr	HOW WAS VOLUME PUMPED DETERMINED? Approximation do to incomplete data collection
PUMPING CAPACITY: 75 igpm or 491 m³ /day	ANY CHANGES OR REPAIRS MADE TO THE PUMPING EQUIPMENT? (specify)

TYPE OF STORAGE: [X] tank(s) [ ] reservoir [ ] other (specify) Water Tower	STORAGE CAPACITY: 300,000 ig or 1,364 m³	COMMON INLET OR OUTLET? [X] yes [ ] no

ATTACHED INFORMATION: [X] well log [X] drawings [X] reports [X] pump test data [X] water quality data	**NOTE:** If no well log is available, please attach any other records documenting well construction (i.e., "as built" drawings, engineering reports).

NOTES WITH ATTACHED INFORMATION

Well Capacity is the amount of water that can be pumped as per the Province of PEI permit issued in 1994. This is the oldest well in the system.

PART III: HYDROGEOLOGIC INFORMATION (Refer to Steps 1 and 2)

DEPTH TO PUMPING WATER LEVEL * Unknown m or _____ ft.

DEPTH TO NON-PUMPING WATER LEVEL * Unknown m or _____ ft.

HOW WAS WATER LEVEL MEASURED? ☐ well log ☐ wetted tape ☐ probe ☐ transducer

WELLHEAD ELEVATION (height above mean sea level) 38.5 m

HOW WAS ELEVATION DETERMINED? ☐ survey ☐ altimeter ☒ topographic ☐ other (specify) _____

TYPE OF CONFINING LAYER FROM WELL LOG (e.g., clay, till) Typical Island lithology Sandstone and Shale

LOCATION OF CONFINING LAYER AT DEPTH FROM WELL LOG Unknown m or _____ ft.

THICKNESS OF CONFINING LAYER FROM WELL LOG There is no information ~~on this well~~ m or _____ ft.

HOW LATERALLY EXTENSIVE IS CONFINING LAYER?

ANNUAL RAINFALL 1200 mm or 47.24 in.

TYPE OF AQUIFER Unknown

☐ unconsolidated, confined ☐ unconsolidated, unconfined ☐ bedrock

ARE THERE OTHER HIGH-CAPACITY WELLS, 30 L/s OR 500 GAL./MIN. (agricultural, municipal and/or industrial), LOCATED WITHIN A 300-m RADIUS OF THE COMMUNITY WELL? ☒ yes How many? One ☐ no

AQUIFER TRANSMISSIVITY * _____ m^3/d or _____ Igpd/ft.

HOW WAS TRANSMISSIVITY DETERMINED? ☒ from pumping test ☐ from specific capacity ☐ other (specify)

HYDRAULIC GRADIENT * 16 m

HOW WAS HYDRAULIC GRADIENT DETERMINED? ☐ from well water levels ☒ from topography ☐ other *(specify)*

PLEASE IDENTIFY OR DESCRIBE ADDITIONAL HYDROLOGIC OR GEOGRAPHIC CONDITIONS THAT YOU BELIEVE MAY AFFECT THE SHAPE OF THE CAPTURE ZONE FOR THIS SOURCE. WHERE POSSIBLE, REFERENCE THEM TO LOCATIONS ON THE MAP PRODUCED IN PART IV.

* This well is considered to be the oldest well in the system. Can not find much information about well.
There are several maps and diagrams attached to this document outlining benefits and deficience with the capture zone.

PART IV: ASSESSMENT OF WATER QUALITY (Refer to Step 1)

1 HOW LONG HAS THE WATER SYSTEM BEEN IN EXISTENCE?

39 to 40 years

2 HAS YOUR WELL EVER BEEN DEEPENED, CLEANED, NEW WELL CONSTRUCTED?

☐ yes — ☐ Why? _____ ☒ no

3 IN THIS TIME, HAVE THERE BEEN ANY WATER QUALITY PROBLEMS?

☐ yes ☐ no ☒ don't know

IF YES, WHEN AND WHAT WAS THE CAUSE OF THESE PREVIOUS PROBLEMS (i.e., drought, pump failure, plugging, increased usage, interference, contamination)?

IF CONTAMINATION:
- WHAT WATER QUALITY CHANGES WERE APPARENT (i.e., taste, colour, turbidity, other)?
- WHAT ACTION WAS TAKEN TO OVERCOME THIS PROBLEM?
- WHAT WERE THE EFFECTS OF THIS ACTION?

4 **BACTERIAL CONTAMINATION**

ANY BACTERIAL DETECTION(S) IN THE PAST 3 YEARS BASED ON SOURCE-MONITORING RECORDS?	☐ yes ☒ no	HAVE THERE BEEN SAMPLING PROTOCOLS OR QA/QC ESTABLISHED? Unknown	☐ yes ☐ no
HAS SOURCE (IN PAST 3 YEARS) HAD A BACTERIOLOGICAL CONTAMINATION PROBLEM FOUND IN DISTRIBUTION SAMPLES THAT WAS ATTRIBUTED TO THE SOURCE?	☐ yes ☒ no	IF YES, WHAT ARE THEY?	
WAS THE BACTERIOLOGICAL CONTAMINATION DUE TO THE SOURCE?	☐ yes ☒ no		
WAS THE BACTERIOLOGICAL CONTAMINATION DUE TO CROSS-CONNECTIONS?	☐ yes ☒ no		
IS THE WELL AVAILABLE FOR DIRECT SAMPLING?	☒ yes ☐ no		

SOURCE-SPECIFIC WATER QUALITY RECORDS *(Refer to Step 1)*

Please indicate the occurrence of any test results in the last 10 years that meet the following conditions:

PARAMETER	RECURRING PROBLEMS	TEST RESULTS	EXCEEDENCES OF CDWQG[1]
Bacteriological Total/Faecal Coliforms Background Heterotrophic plate counts Iron and Sulphate Reducers			
Disinfection by-products Bromodichloromethane Dibromochloromethane Chloroform			
Physical Parameters pH, colour, alkalinity, specific conductance, hardness, total dissolved solids, total organic carbon, turbidity			
Inorganic Parameters Nitrates, fluoride, sulfate, sulphide, ammonia, chloride, nitrite, nitrogen (organic)			
Metals* Calcium, iron, magnesium, manganese, sodium			

[1] Canadian Drinking Water Quality Guidelines

* A metal scan is usually performed every 3 years at least, and includes aluminum, arsenic, barium, cadmium, chromium, copper, lead, molybdenum, nickel, phosphorus, silver and zinc.

Please sketch in the box below the location sampling point with respect to the well.

See maps attached

PART V: WATER TREATMENT INFORMATION (Refer to Step 1)

IS THIS SOURCE TREATED? [X] yes [ ] no

IF YES, TYPE OF TREATMENT [X] disinfection [ ] filtration [ ] carbon filter [ ] air stripper [ ] water softener [ ] other (specify) _____

PURPOSE OF TREATMENT
Chlorination is required in public distribution systems.

IF SOURCE IS CHLORINATED: IS A CHLORINE RESIDUAL MAINTAINED? *yes*
Total Chlorine — ppm
Free Chlorine — ppm

WHAT IS THE RESIDUAL LEVEL OF TREATMENT?
By guide lines should be .2 mg/l

IS THERE ANY WATER STORAGE IN THE SYSTEM? [X] yes [ ] no

IS THE WATER TREATMENT BEFORE OR AFTER THE STORAGE UNIT? [X] before [ ] after

WHAT IS THE TOTAL AND FREE CHLORINE IN THE DISTRIBUTION SYSTEM?
Total Chlorine — ppm
Free Chlorine — ppm

IS THERE ANY ADDITIONAL CHLORINE ADDED AFTER THE SOURCE (rechlorination)?
Total Chlorine *No* ppm
Free Chlorine _____ ppm

WHAT TYPE OF CHEMICALS ARE USED IN THIS PROCESS? *(specify)*

WHERE ARE CHEMICALS STORED?
In the Pump House

IS THERE PROPER STORAGE FOR THESE CHEMICALS? [ ] yes [ ] no
Unsure

IF STORED IN PUMP HOUSE, HOW ARE CHEMICALS ISOLATED FROM THE WELL?
Chemicals are stored at the distribution building.
This well is down stream from this building.

NOTES
There are four well in this system. All well are connected together in a distribution building where a metre is used to adjust the chorine which is injected into the distributed water.
The Town custodian samples the distributed water at predetermined locations for residual chorine. At the same time water samples are taken in treated bottles and transferred the Provincial Lab to check for bacteria at these locations.

PART VI: MAPPING THE CAPTURE ZONE TO YOUR COMMUNITY WELL (Refer to Step 2)

A map (1:5000 to 1:20,000 are typical scales) will be needed to complete this section. Multiple wells in the same area can be plotted on one map.

CIRCULAR CAPTURE ZONE (refer to Appendix 2.1)

*attach calculation sheets		RADIUS (m)
Arbitrary Fixed Radius		
Calculated Fixed Radius	(250 day travel time)*	*See Maps*
	(5-year travel time)*	
	(25-year travel time)*	

PARABOLIC CAPTURE ZONE (refer to Appendix 2.2)*

Downgradient distance *16* m
Width of capture zone *~150* m

Is there a river, lake, pond, stream or other obvious surface water body within the 6-month time of travel boundary? [ ] yes *(identify on map)* [X] no

Is there a stormwater and/or wastewater facility, treatment lagoon or holding pond located within the 6-month time of travel boundary? [X] yes *(identify on map)* [ ] no

NOTES

PART VII: SOURCE SURVEY (Refer to Step 3)

4 REGIONAL SOURCES OF RISK TO GROUND WATER

Please indicate if any of the following potential sources of contamination within the capture zone.

ACTIVITY	T.O.T. NOT SPECIFIED	250-DAY	5-YEAR	25-YEAR	COMMENTS
Chemical Storage *(specify)*		X			Chorine in distribution building
Injection wells				X	Geothermal use
Abandoned wells					
Landfills, dumps, disposal areas					
Commercial/industrial sites					
Known hazardous materials clean-up site					
Household hazardous waste					
Population density > 2 houses per hectare					
On-site sewage treatment					
Wastewater treatment facility					
Sites used for land application of waste					
Golf course					
Dairy or beef farms					
Poultry barns					
Hobby farms					
Fields: vegetables, hay, fruit *(specify)*					
Mining operations					
Gravel pits					
Household well		X	X		One well within 50m Five well in 5 year zone
Household septic		X	X		One septic within 50m

** Mark and identify on map any of the potential sources listed above which are located within the capture zone boundary.

SEPTIC FIELD SETBACK	GRADIENT TO SEPTIC FIELD	DENSITY OF ON-SITE SEWAGE DISPOSAL SYSTEMS	
—	☐ upgrade ☐ downgrade ☐ same grade	COMMUNITY SYSTEM	SYSTEM PER LOT
_____ m or _____ ft.	— _____ % _____ %	—	—

KENSINGTON NORTH WATERSHEDS ASSOCIATION

3

WELL ASSESSMENT FORM

TO BE USED WITH THE WELL PROTECTION TOOLKIT

IMPORTANT! Please complete one form for each ground water source used in your water system. Fill in available information. If missing information, it may be advisable to contact the Department of Environment, Office, or the local driller who drilled the well, to assist. Photocopy this form as necessary.

PART I: WELL SYSTEM INFORMATION (Refer to Step 1)

WATER SYSTEM LEGAL NAME Town of Kensington	LEGAL DESCRIPTION OF WELL LOCATION Town Well No 3 Trees

WATER SYSTEM LEGAL ADDRESS
Town of Kensington PO Box 418 Kensington PE C0B1M0

LATITUDE / LONGITUDE N46.442924°E-63.631107°	HOW WERE LOCATION COORDINATES DETERMINED? ☐ GPS_____ *(specify accuracy)* ☐ survey ☒ digitized from 1200 map *(specify scale)*

UTM COORDINATES Zone 20 E451523 N5143454	HOW MANY OTHER WELLS MAKE UP THE WATER SYSTEM? 3	DOES THE WATER SYSTEM ALSO USE A SURFACE WATER SOURCE? *(describe)* No

NUMBER OF CONNECTIONS Maximum ____ Actual 650	POPULATION SERVED 1600	WATER USE ☒ industrial ☒ commercial ☐ irrigation ☒ domestic	other *(specify)* _____

Well Identification Plate No. (If available) Nil	CHEMISTRY NO.	WELL TAG NO. (If available)

Contact Department of Environment office for the following information:

Well Identification No. = DOE's metal tag affixed to the well for on-site identification.	Chemistry No. = DOE's site number for the water chemistry on their database.	WELL TAG NO. = DOE's computer number for the well.

Bulk supply ☒ yes ☐ no	Back-up supply ☐ yes ☒ no	Emergency supply ☐ yes ☒ no	See Note Metered ☒ yes ☐ no

WELL OWNER / OPERATOR INFORMATION

WELL OPERATOR Geoff Baker	WELL OPERATOR'S PHONE NO. (902)836-3781
WELL OPERATOR'S ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	
WELL OPERATOR Doug Killam	WELL OPERATOR'S PHONE NO. (902)439-5202
WELL OPERATOR'S ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	

NOTES

Commercial connections are metered and municipal residential unites

KENSINGTON NORTH WATERSHEDS ASSOCIATION

3

WELL ASSESSMENT FORM

TO BE USED WITH THE WELL PROTECTION TOOLKIT

IMPORTANT! Please complete one form for each ground water source used in your water system. Fill in available information. If missing information, it may be advisable to contact the Department of Environment, Office, or the local driller who drilled the well, to assist. Photocopy this form as necessary.

PART II: WELL CONSTRUCTION INFORMATION (Refer to Step 1)

WELL-DRILLER'S NAME, COMPANY AND ADDRESS D B & J Ltd Charlottetown PE (Company is no longer in business)	POSTAL CODE	DATE WELL ORIGINALLY CONSTRUCTED YYYY MM DD 1978 04 19
	WELL-DRILLER'S TELEPHONE NO. ( )	DATE OF LAST RECONSTRUCTION YYYY MM DD 1978 04 19

TYPE OF WELL [X] drilled [ ] dug [ ] other (specify)	METHOD OF DRILLING [ ] rotary [X] cable tool [ ] driven [ ] jetted [ ] other (specify)	WELL LOG AVAILABLE? [X] yes (attach) [ ] no

DEPTH OF WELL m or 450 ft.	DIAMETER OF WELL * m or 8 in.	SCREEN LENGTH N/A m or ft.	DEPTH TO TOP OF SCREEN N/A m or ft.

WELL CAPACITY See note below * L/s or 524 m³ /day	LOCATION OF WATER-BEARING FRACTION(S) (for bedrock wells): See well logs attached	YIELD OF WATER-BEARING FRACTION(S) See well logs attached L/s or m³

WELLHEAD ENCLOSURE Well is pitless with an adjacent manhole and power panel above ground and fenced	SURFACE SANITARY SEAL grouted to m or ft. [ ] no surface seal [X] pitless adapter

AVERAGE PUMPING RATE * 86,400 igpd or 393 m³ /day	HOW WAS PUMPING RATE DETERMINED? Approximation do to incomplete data collection	DEPTH OF INTAKE SETTING Unknown	PUMP AGE ?

ANNUAL VOLUME OF WATER PUMPED * 3.16E+7 igpy or 143,461 m³ /yr	HOW WAS VOLUME PUMPED DETERMINED? Approximation do to incomplete data collection
PUMPING CAPACITY * 80 igpm or 524 m³ /day	ANY CHANGES OR REPAIRS MADE TO THE PUMPING EQUIPMENT? (specify) Recent leak manifold in pump building Aug 2018, due to corrosion

TYPE OF STORAGE [X] tank(s) [ ] reservoir [ ] other (specify) Water Tower	STORAGE CAPACITY 300,000 ig or 1,364 m³	COMMON INLET OR OUTLET? [X] yes [ ] no
ATTACHED INFORMATION [X] well log [X] drawings [X] reports [X] pump test data [X] water quality data	**NOTE:** If no well log is available, please attach any other records documenting well construction (i.e., "as built" drawings, engineering reports).	

NOTES WITH ATTACHED INFORMATION

Well Capacity is the amount of water that can be pumped as per the Province of PEI permit issued in 2005.

* All volumes are combined totals from four (4) wells.

* 0 to 37 feet casing 10"
37 to 250 feet open hole 8"
250 to 450 open hole 6"

PART III: HYDROGEOLOGIC INFORMATION (Refer to Steps 1 and 2)

DEPTH TO PUMPING WATER LEVEL * Unknown m or ____ ft.

DEPTH TO NON-PUMPING WATER LEVEL * ____ m or 14 ft.

HOW WAS WATER LEVEL MEASURED? ☐ well log ☐ wetted tape ☒ probe ☐ transducer

WELLHEAD ELEVATION (height above mean sea level) 38 m

HOW WAS ELEVATION DETERMINED? ☐ survey ☐ altimeter ☒ topographic ☐ other (specify) ____

TYPE OF CONFINING LAYER FROM WELL LOG (e.g., clay, till) Typical Island lithology Sandstone and Shale

LOCATION OF CONFINING LAYER AT DEPTH FROM WELL LOG See attached logs m or ____ ft.

THICKNESS OF CONFINING LAYER FROM WELL LOG Lithology is documented in attached documents m or ____ ft.

HOW LATERALLY EXTENSIVE IS CONFINING LAYER? attached documents

ANNUAL RAINFALL 1200 mm or 47.24 in.

TYPE OF AQUIFER as above

☐ unconsolidated, confined ☐ unconsolidated, unconfined ☐ bedrock

ARE THERE OTHER HIGH-CAPACITY WELLS, 30 L/s OR 500 GAL./MIN. (agricultural, municipal and/or industrial), LOCATED WITHIN A 300-m RADIUS OF THE COMMUNITY WELL? ☒ yes How many? One ☐ no

AQUIFER TRANSMISSIVITY * 20.23 m^3/d or 4450 Igpd/ft.

HOW WAS TRANSMISSIVITY DETERMINED? ☒ from pumping test ☐ from specific capacity ☐ other (specify) . . . . . .

HYDRAULIC GRADIENT * 3.4×10^{-3}

HOW WAS HYDRAULIC GRADIENT DETERMINED? ☒ from well water levels ☐ from topography ☐ other *(specify)* . . . . . .

PLEASE IDENTIFY OR DESCRIBE ADDITIONAL HYDROLOGIC OR GEOGRAPHIC CONDITIONS THAT YOU BELIEVE MAY AFFECT THE SHAPE OF THE CAPTURE ZONE FOR THIS SOURCE. WHERE POSSIBLE, REFERENCE THEM TO LOCATIONS ON THE MAP PRODUCED IN PART IV.

* This well and well #4 are well documented in Callan Report on Kensington Water Supply 1978. Part of the Callan Report are included in this document. There are several maps and diagrams attached to this document outlining benefits and deficience with the capture zone.

PART IV: ASSESSMENT OF WATER QUALITY (Refer to Step 1)

1 HOW LONG HAS THE WATER SYSTEM BEEN IN EXISTENCE?

39 to 40 years

2 HAS YOUR WELL EVER BEEN DEEPENED, CLEANED, NEW WELL CONSTRUCTED?

[X] yes — [X] Why? Deepened for volume [ ] no

3 IN THIS TIME, HAVE THERE BEEN ANY WATER QUALITY PROBLEMS?

[X] yes x [ ] no [ ] don't know

IF YES, WHEN AND WHAT WAS THE CAUSE OF THESE PREVIOUS PROBLEMS (i.e., drought, pump failure, plugging, increased usage, interference, contamination)?

IF CONTAMINATION:
- WHAT WATER QUALITY CHANGES WERE APPARENT (i.e., taste, colour, turbidity, other)?
- WHAT ACTION WAS TAKEN TO OVERCOME THIS PROBLEM?
- WHAT WERE THE EFFECTS OF THIS ACTION?

* There have been no reported problems with Wells #3 or #4, however there have been problems in one other well attached to this system. See pumping log book.

4 **BACTERIAL CONTAMINATION**

ANY BACTERIAL DETECTION(S) IN THE PAST 3 YEARS BASED ON SOURCE-MONITORING RECORDS?	[ ] yes [X] no	HAVE THERE BEEN SAMPLING PROTOCOLS OR QA/QC ESTABLISHED? Unknown	[ ] yes [ ] no
HAS SOURCE (IN PAST 3 YEARS) HAD A BACTERIOLOGICAL CONTAMINATION PROBLEM FOUND IN DISTRIBUTION SAMPLES THAT WAS ATTRIBUTED TO THE SOURCE?	[ ] yes [X] no	IF YES, WHAT ARE THEY?	
WAS THE BACTERIOLOGICAL CONTAMINATION DUE TO THE SOURCE?	[ ] yes [ ] no		
WAS THE BACTERIOLOGICAL CONTAMINATION DUE TO CROSS-CONNECTIONS?	[ ] yes [ ] no		
IS THE WELL AVAILABLE FOR DIRECT SAMPLING?	[X] yes [ ] no		

SOURCE-SPECIFIC WATER QUALITY RECORDS *(Refer to Step 1)*

Please indicate the occurrence of any test results in the last 10 years that meet the following conditions:

PARAMETER	RECURRING PROBLEMS	TEST RESULTS	EXCEEDENCES OF CDWQG[1]
Bacteriological Total/Faecal Coliforms Background Heterotrophic plate counts Iron and Sulphate Reducers			
Disinfection by-products Bromodichloromethane Dibromochloromethane Chloroform			
Physical Parameters pH, colour, alkalinity, specific conductance, hardness, total dissolved solids, total organic carbon, turbidity			
Inorganic Parameters Nitrates, fluoride, sulfate, sulphide, ammonia, chloride, nitrite, nitrogen (organic)			
Metals* Calcium, iron, magnesium, manganese, sodium			

[1] Canadian Drinking Water Quality Guidelines

* A metal scan is usually performed every 3 years at least, and includes aluminum, arsenic, barium, cadmium, chromium, copper, lead, molybdenum, nickel, phosphorus, silver and zinc.

Please sketch in the box below the location sampling point with respect to the well.

See maps attached

PART V: WATER TREATMENT INFORMATION (Refer to Step 1)

IS THIS SOURCE TREATED? [X] yes [ ] no

IF YES, TYPE OF TREATMENT [X] disinfection [ ] filtration [ ] carbon filter [ ] air stripper [ ] water softener [ ] other (specify) _____

PURPOSE OF TREATMENT
Chlorination is required in public distribution systems.

IF SOURCE IS CHLORINATED: IS A CHLORINE RESIDUAL MAINTAINED? *yes*
Total Chlorine — ppm
Free Chlorine — ppm

WHAT IS THE RESIDUAL LEVEL OF TREATMENT?
By guide lines should be .2 mg/l

IS THERE ANY WATER STORAGE IN THE SYSTEM? [X] yes [ ] no

IS THE WATER TREATMENT BEFORE OR AFTER THE STORAGE UNIT? [X] before [ ] after

WHAT IS THE TOTAL AND FREE CHLORINE IN THE DISTRIBUTION SYSTEM?
Total Chlorine — ppm
Free Chlorine — ppm

IS THERE ANY ADDITIONAL CHLORINE ADDED AFTER THE SOURCE (rechlorination)?
Total Chlorine *No* ppm
Free Chlorine _____ ppm

WHAT TYPE OF CHEMICALS ARE USED IN THIS PROCESS? *(specify)*
Only Clorine

WHERE ARE CHEMICALS STORED?
In the Pump House

IS THERE PROPER STORAGE FOR THESE CHEMICALS? [ ] yes [ ] no
Unsure

IF STORED IN PUMP HOUSE, HOW ARE CHEMICALS ISOLATED FROM THE WELL?
Chemicals are stored at the distribution building (refereed to as Pump House)

NOTES
There are four well in this system. All well are connected together in a distribution building where a metre is used to adjust the chorine which is injected into the distributed water. The Town custodian samples the distributed water at predetermined locations for residual chorine. At the same time water samples are taken in treated bottles and transferred the Provincial Lab to check for bacteria at these locations.

PART VI: MAPPING THE CAPTURE ZONE TO YOUR COMMUNITY WELL (Refer to Step 2)

A map (1:5000 to 1:20,000 are typical scales) will be needed to complete this section. Multiple wells in the same area can be plotted on one map.

CIRCULAR CAPTURE ZONE (refer to Appendix 2.1)

*attach calculation sheets		RADIUS (m)
Arbitrary Fixed Radius		
Calculated Fixed Radius	(250 day travel time)*	*See Maps*
	(5-year travel time)*	
	(25-year travel time)*	

PARABOLIC CAPTURE ZONE (refer to Appendix 2.2)*

Downgradient distance *10* m

Width of capture zone *~150* m

Is there a river, lake, pond, stream or other obvious surface water body within the 6-month time of travel boundary? [ ] yes *(identify on map)* [X] no

Is there a stormwater and/or wastewater facility, treatment lagoon or holding pond located within the 6-month time of travel boundary? [X] yes *(identify on map)* [ ] no

NOTES

PART VII: SOURCE SURVEY (Refer to Step 3)

4 REGIONAL SOURCES OF RISK TO GROUND WATER

Please indicate if any of the following potential sources of contamination within the capture zone.

ACTIVITY	T.O.T. NOT SPECIFIED	250-DAY	5-YEAR	25-YEAR	COMMENTS
Chemical Storage *(specify)*		X			Chorine in distribution building
Injection wells				X	Geothermal use
Abandoned wells					
Landfills, dumps, disposal areas					
Commercial/industrial sites					
Known hazardous materials clean-up site					
Household hazardous waste					
Population density > 2 houses per hectare					
On-site sewage treatment					
Wastewater treatment facility					
Sites used for land application of waste					
Golf course					
Dairy or beef farms					
Poultry barns					
Hobby farms					
Fields: vegetables, hay, fruit *(specify)*					
Mining operations					
Gravel pits					
Household well		X	X		One well within 150m Five well in 5 year zone
Household septic		X	X		One septic within 150m

** Mark and identify on map any of the potential sources listed above which are located within the capture zone boundary.

SEPTIC FIELD SETBACK	GRADIENT TO SEPTIC FIELD	DENSITY OF ON-SITE SEWAGE DISPOSAL SYSTEMS	
—	☐ upgrade ☐ downgrade ☐ same grade	COMMUNITY SYSTEM	SYSTEM PER LOT
_____ m or _____ ft.	— _____ % _____ %	—	—

KENSINGTON NORTH WATERSHEDS ASSOCIATION

4

WELL ASSESSMENT FORM

TO BE USED WITH THE WELL PROTECTION TOOLKIT

IMPORTANT! Please complete one form for each ground water source used in your water system. Fill in available information. If missing information, it may be advisable to contact the Department of Environment, Office, or the local driller who drilled the well, to assist. Photocopy this form as necessary.

PART I: WELL SYSTEM INFORMATION (Refer to Step 1)

WATER SYSTEM LEGAL NAME Town of Kensington	LEGAL DESCRIPTION OF WELL LOCATION Town Well No 4 Road

WATER SYSTEM LEGAL ADDRESS
Town of Kensington PO Box 418 Kensington PE C0B1M0

LATITUDE / LONGITUDE N46.443102°E-63.630170°	HOW WERE LOCATION COORDINATES DETERMINED? ☐ GPS_____ *(specify accuracy)* ☐ survey ☒ digitized from 1200 map *(specify scale)*

UTM COORDINATES Zone 20 E451595 N5143473	HOW MANY OTHER WELLS MAKE UP THE WATER SYSTEM? 3	DOES THE WATER SYSTEM ALSO USE A SURFACE WATER SOURCE? *(describe)* No

NUMBER OF CONNECTIONS Maximum ____ Actual 650	POPULATION SERVED 1600	WATER USE ☒ industrial ☒ commercial ☐ irrigation ☒ domestic	other *(specify)* _____

Well Identification Plate No. (If available) Nil	CHEMISTRY NO. Well 4	WELL TAG NO. (If available)

Contact Department of Environment office for the following information:

Well Identification No. = DOE's metal tag affixed to the well for on-site identification.	Chemistry No. = DOE's site number for the water chemistry on their database.	WELL TAG NO. = DOE's computer number for the well.

Bulk supply ☒ yes ☐ no	Back-up supply ☐ yes ☒ no	Emergency supply ☐ yes ☒ no	See Note Metered ☒ yes ☐ no

WELL OWNER / OPERATOR INFORMATION

WELL OPERATOR Geoff Baker	WELL OPERATOR'S PHONE NO. (902)836-3781
WELL OPERATOR'S ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	
WELL OPERATOR Doug Killam	WELL OPERATOR'S PHONE NO. (902)439-5202
WELL OPERATOR'S ADDRESS Town of Kensington PO Box 418 Kensington PE C0B1M0	

NOTES

Commercial connections are metered and municipal residential unites

KENSINGTON NORTH WATERSHEDS ASSOCIATION

4

WELL ASSESSMENT FORM

TO BE USED WITH THE WELL PROTECTION TOOLKIT

IMPORTANT! Please complete one form for each ground water source used in your water system. Fill in available information. If missing information, it may be advisable to contact the Department of Environment, Office, or the local driller who drilled the well, to assist. Photocopy this form as necessary.

PART II: WELL CONSTRUCTION INFORMATION (Refer to Step 1)

WELL-DRILLER'S NAME, COMPANY AND ADDRESS D B & J Ltd Charlottetown PE (Company is no longer in business)	POSTAL CODE	DATE WELL ORIGINALLY CONSTRUCTED YYYY MM DD 1978 04 19
	WELL-DRILLER'S TELEPHONE NO. ( )	DATE OF LAST RECONSTRUCTION YYYY MM DD 1978 04 19

TYPE OF WELL [X] drilled [ ] dug [ ] other (specify)	METHOD OF DRILLING [ ] rotary [X] cable tool [ ] driven [ ] jetted [ ] other (specify)	WELL LOG AVAILABLE? [X] yes (attach) [ ] no

DEPTH OF WELL m or 250 ft.	DIAMETER OF WELL * m or 8 in.	SCREEN LENGTH N/a m or ft.	DEPTH TO TOP OF SCREEN N/a m or ft.

WELL CAPACITY See note below * L/s or 524 m³ /day	LOCATION OF WATER-BEARING FRACTION(S) (for bedrock wells): See well logs attached	YIELD OF WATER-BEARING FRACTION(S) See well logs attached L/s or m³

WELLHEAD ENCLOSURE Well is pitless with an adjacent manhole and power panel above ground and fenced	SURFACE SANITARY SEAL grouted to m or ft. [ ] no surface seal [X] pitless adapter

AVERAGE PUMPING RATE * 86,400 igpd or 393 m³ /day	HOW WAS PUMPING RATE DETERMINED? Approximation do to incomplete data collection	DEPTH OF INTAKE SETTING Unknown	PUMP AGE ?

ANNUAL VOLUME OF WATER PUMPED * 3.16E+7 igpy or 143,461 m³ /yr	HOW WAS VOLUME PUMPED DETERMINED? Approximation do to incomplete data collection
PUMPING CAPACITY * 80 igpm or 524 m³ /day	ANY CHANGES OR REPAIRS MADE TO THE PUMPING EQUIPMENT? (specify) Recent leak manifold in pump building Aug 2018, due to corrosion

TYPE OF STORAGE [X] tank(s) [ ] reservoir [ ] other (specify) Water Tower	STORAGE CAPACITY 300,000 ig or 1,364 m³	COMMON INLET OR OUTLET? [X] yes [ ] no
ATTACHED INFORMATION [X] well log [X] drawings [X] reports [X] pump test data [X] water quality data	**NOTE:** If no well log is available, please attach any other records documenting well construction (i.e., "as built" drawings, engineering reports).	

NOTES WITH ATTACHED INFORMATION

Well Capacity is the amount of water that can be pumped as per the Province of PEI permit issued in 2005.

* All volumes are combined totals from four (4) wells.

* 0 to 40 feet casing 8"
40 to 250 feet open hole 8"

PART III: HYDROGEOLOGIC INFORMATION (Refer to Steps 1 and 2)

DEPTH TO PUMPING WATER LEVEL * Unknown m or ____ ft.

DEPTH TO NON-PUMPING WATER LEVEL * ____ m or 37.5 ft.

HOW WAS WATER LEVEL MEASURED? ☐ well log ☐ wetted tape ☒ probe ☐ transducer

WELLHEAD ELEVATION (height above mean sea level) 38 m

HOW WAS ELEVATION DETERMINED? ☐ survey ☐ altimeter ☒ topographic ☐ other (specify) ____

TYPE OF CONFINING LAYER FROM WELL LOG (e.g., clay, till) Typical Island lithology Sandstone and Shale

LOCATION OF CONFINING LAYER AT DEPTH FROM WELL LOG See attached logs m or ____ ft.

THICKNESS OF CONFINING LAYER FROM WELL LOG Lithology is documented in attached documents m or ____ ft.

HOW LATERALLY EXTENSIVE IS CONFINING LAYER? attached documents

ANNUAL RAINFALL 1200 mm or 47.24 in.

TYPE OF AQUIFER as above

☐ unconsolidated, confined ☐ unconsolidated, unconfined ☐ bedrock

ARE THERE OTHER HIGH-CAPACITY WELLS, 30 L/s OR 500 GAL./MIN. (agricultural, municipal and/or industrial), LOCATED WITHIN A 300-m RADIUS OF THE COMMUNITY WELL? ☒ yes How many? One ☐ no

AQUIFER TRANSMISSIVITY * 20.23 m^3/d or 4450 Igpd/ft.

HOW WAS TRANSMISSIVITY DETERMINED? ☒ from pumping test ☐ from specific capacity ☐ other (specify) . . . . . .

HYDRAULIC GRADIENT * 3.4×10^{-3}

HOW WAS HYDRAULIC GRADIENT DETERMINED? ☒ from well water levels ☐ from topography ☐ other *(specify)* . . . . . .

PLEASE IDENTIFY OR DESCRIBE ADDITIONAL HYDROLOGIC OR GEOGRAPHIC CONDITIONS THAT YOU BELIEVE MAY AFFECT THE SHAPE OF THE CAPTURE ZONE FOR THIS SOURCE. WHERE POSSIBLE, REFERENCE THEM TO LOCATIONS ON THE MAP PRODUCED IN PART IV.

* This well and well #3 are well documented in Callan Report on Kensington Water Supply 1978. Part of the Callan Report are included in this document. There are several maps and diagrams attached to this document outlining benefits and deficience with the capture zone.

PART IV: ASSESSMENT OF WATER QUALITY (Refer to Step 1)

1 HOW LONG HAS THE WATER SYSTEM BEEN IN EXISTENCE?

39 to 40 years

2 HAS YOUR WELL EVER BEEN DEEPENED, CLEANED, NEW WELL CONSTRUCTED?

☐ yes — ☐ Why? _____ ☒ no

3 IN THIS TIME, HAVE THERE BEEN ANY WATER QUALITY PROBLEMS?

☒ yes * ☐ no ☐ don't know

IF YES, WHEN AND WHAT WAS THE CAUSE OF THESE PREVIOUS PROBLEMS (i.e., drought, pump failure, plugging, increased usage, interference, contamination)?

IF CONTAMINATION:
- WHAT WATER QUALITY CHANGES WERE APPARENT (i.e., taste, colour, turbidity, other)?
- WHAT ACTION WAS TAKEN TO OVERCOME THIS PROBLEM?
- WHAT WERE THE EFFECTS OF THIS ACTION?

** There have been no reported problems with Wells #3 or #4, however there have been problems in one other well attached to this system. See pumping log book.*

4 **BACTERIAL CONTAMINATION**

ANY BACTERIAL DETECTION(S) IN THE PAST 3 YEARS BASED ON SOURCE-MONITORING RECORDS?	☐ yes ☒ no	HAVE THERE BEEN SAMPLING PROTOCOLS OR QA/QC ESTABLISHED? *Unknown*	☐ yes ☐ no
HAS SOURCE (IN PAST 3 YEARS) HAD A BACTERIOLOGICAL CONTAMINATION PROBLEM FOUND IN DISTRIBUTION SAMPLES THAT WAS ATTRIBUTED TO THE SOURCE?	☐ yes ☒ no	IF YES, WHAT ARE THEY?	
WAS THE BACTERIOLOGICAL CONTAMINATION DUE TO THE SOURCE?	☐ yes ☐ no		
WAS THE BACTERIOLOGICAL CONTAMINATION DUE TO CROSS-CONNECTIONS?	☐ yes ☐ no		
IS THE WELL AVAILABLE FOR DIRECT SAMPLING?	☒ yes ☐ no		

SOURCE-SPECIFIC WATER QUALITY RECORDS *(Refer to Step 1)*

Please indicate the occurrence of any test results in the last 10 years that meet the following conditions:

PARAMETER	RECURRING PROBLEMS	TEST RESULTS	EXCEEDENCES OF CDWQG[1]
Bacteriological Total/Faecal Coliforms Background Heterotrophic plate counts Iron and Sulphate Reducers			
Disinfection by-products Bromodichloromethane Dibromochloromethane Chloroform			
Physical Parameters pH, colour, alkalinity, specific conductance, hardness, total dissolved solids, total organic carbon, turbidity			
Inorganic Parameters Nitrates, fluoride, sulfate, sulphide, ammonia, chloride, nitrite, nitrogen (organic)			
Metals* Calcium, iron, magnesium, manganese, sodium	*Manganese*		*Blending from other well helps*

[1] Canadian Drinking Water Quality Guidelines

* A metal scan is usually performed every 3 years at least, and includes aluminum, arsenic, barium, cadmium, chromium, copper, lead, molybdenum, nickel, phosphorus, silver and zinc.

Please sketch in the box below the location sampling point with respect to the well.

See maps attached

PART V: WATER TREATMENT INFORMATION (Refer to Step 1)

IS THIS SOURCE TREATED? [X] yes [ ] no

IF YES, TYPE OF TREATMENT [X] disinfection [ ] filtration [ ] carbon filter [ ] air stripper [ ] water softener [ ] other (specify) _____

PURPOSE OF TREATMENT
Chlorination is required in public distribution systems.

IF SOURCE IS CHLORINATED: IS A CHLORINE RESIDUAL MAINTAINED? *yes*
Total Chlorine — ppm
Free Chlorine — ppm

WHAT IS THE RESIDUAL LEVEL OF TREATMENT?
By guide lines should be .2 mg/l

IS THERE ANY WATER STORAGE IN THE SYSTEM? [X] yes [ ] no

IS THE WATER TREATMENT BEFORE OR AFTER THE STORAGE UNIT? [X] before [ ] after

WHAT IS THE TOTAL AND FREE CHLORINE IN THE DISTRIBUTION SYSTEM?
Total Chlorine — ppm
Free Chlorine — ppm

IS THERE ANY ADDITIONAL CHLORINE ADDED AFTER THE SOURCE (rechlorination)?
Total Chlorine *No* ppm
Free Chlorine _____ ppm

WHAT TYPE OF CHEMICALS ARE USED IN THIS PROCESS? *(specify)*
Only Clorine

WHERE ARE CHEMICALS STORED?
In the Pump House

IS THERE PROPER STORAGE FOR THESE CHEMICALS? [ ] yes [ ] no
Unsure

IF STORED IN PUMP HOUSE, HOW ARE CHEMICALS ISOLATED FROM THE WELL?
Chemicals are stored at the distribution building (refereed to as Pump House)

NOTES
There are four well in this system. All well are connected together in a distribution building where a metre is used to adjust the chorine which is injected into the distributed water. The Town custodian samples the distributed water at predetermined locations for residual chorine. At the same time water samples are taken in treated bottles and transferred the Provincial Lab to check for bacteria at these locations.

PART VI: MAPPING THE CAPTURE ZONE TO YOUR COMMUNITY WELL (Refer to Step 2)

A map (1:5000 to 1:20,000 are typical scales) will be needed to complete this section. Multiple wells in the same area can be plotted on one map.

CIRCULAR CAPTURE ZONE (refer to Appendix 2.1)

*attach calculation sheets		RADIUS (m)
Arbitrary Fixed Radius		
Calculated Fixed Radius	(250 day travel time)*	*See Maps*
	(5-year travel time)*	
	(25-year travel time)*	

PARABOLIC CAPTURE ZONE (refer to Appendix 2.2)*

Downgradient distance *11* m

Width of capture zone *~150* m

Is there a river, lake, pond, stream or other obvious surface water body within the 6-month time of travel boundary? [ ] yes *(identify on map)* [X] no

Is there a stormwater and/or wastewater facility, treatment lagoon or holding pond located within the 6-month time of travel boundary? [X] yes *(identify on map)* [ ] no

NOTES

PART VII: SOURCE SURVEY (Refer to Step 3)

4 REGIONAL SOURCES OF RISK TO GROUND WATER

Please indicate if any of the following potential sources of contamination within the capture zone.

ACTIVITY	T.O.T. NOT SPECIFIED	250-DAY	5-YEAR	25-YEAR	COMMENTS
Chemical Storage *(specify)*		X			Chorine in distribution building
Injection wells				X	Geothermal use
Abandoned wells					
Landfills, dumps, disposal areas					
Commercial/industrial sites					
Known hazardous materials clean-up site					
Household hazardous waste					
Population density > 2 houses per hectare					
On-site sewage treatment					
Wastewater treatment facility					
Sites used for land application of waste					
Golf course					
Dairy or beef farms					
Poultry barns					
Hobby farms					
Fields: vegetables, hay, fruit *(specify)*					
Mining operations					
Gravel pits					
Household well		X	X		One well within 125m Five well in 5 year zone
Household septic		X	X		One septic within 125m

** Mark and identify on map any of the potential sources listed above which are located within the capture zone boundary.

SEPTIC FIELD SETBACK	GRADIENT TO SEPTIC FIELD	DENSITY OF ON-SITE SEWAGE DISPOSAL SYSTEMS	
—	☐ upgrade ☐ downgrade ☐ same grade	COMMUNITY SYSTEM	SYSTEM PER LOT
_____ m or _____ ft.	— _____ % _____ %	—	—

PART VII: SOURCE SURVEY (Refer to Step 3)

4 REGIONAL SOURCES OF RISK TO GROUND WATER

Please indicate if any of the following potential sources of contamination within the capture zone.

ACTIVITY	T.O.T. NOT SPECIFIED	250-DAY	5-YEAR	25-YEAR	COMMENTS
Chemical Storage *(specify)*		X			Chlorine in distribution building
Injection wells				X	Geothermal use
Abandoned wells					
Landfills, dumps, disposal areas					
Commercial/industrial sites					
Known hazardous materials clean-up site					
Household hazardous waste					
Population density > 2 houses per hectare					
On-site sewage treatment					
Wastewater treatment facility					
Sites used for land application of waste					
Golf course					
Dairy or beef farms					
Poultry barns					
Hobby farms					
Fields: vegetables, hay, fruit *(specify)*					
Mining operations					
Gravel pits					
Household well		X	X		~~One well within 125m~~ Five well in 5 year zone
Household septic		X	X		One septic within 125m

** Mark and identify on map any of the potential sources listed above which are located within the capture zone boundary.

SEPTIC FIELD SETBACK	GRADIENT TO SEPTIC FIELD	DENSITY OF ON-SITE SEWAGE DISPOSAL SYSTEMS	
—	☐ upgrade ☐ downgrade ☐ same grade	COMMUNITY SYSTEM	SYSTEM PER LOT
_____ m or _____ ft.	— _____ % _____ %	—	—

TOWN OF KENSINGTON - MEMORANDUM

TO: COMMITTEE OF COUNCIL

FROM: GEOFF BAKER, CHIEF ADMINISTRATIVE OFFICER

SUBJECT: POLICE VEHICLE PROPOSAL CONSIDERATION

DATE: 2019-04-15

ATTACHMENTS:

Introduction

The Town has a current police vehicle compliment of two vehicles; a 2013 Ford Taurus (unmarked) and a 2016 Dodge Charger (marked). The 2016 Charger was bought new in 2016 and the 2013 Taurus was purchased used in 2018.

The Town has recently been made aware of the availability of a 2017 Ford Taurus which has low mileage and warranty remaining, to replace the 2013 Taurus. The following information is being presented to Town Council for consideration.

Background

The 2013 Taurus was bought used in 2018 at a price of $8,500. The Town was given a trade-in value of $3000 on a previous vehicle resulting in a net cost of $5,500 plus equipment transfer (total purchase price $7,699.84). The 2013 Taurus has 87,000 kms on the engine and no remaining warranty. It is anticipated that the vehicle has some years of services left on it and does not require immediate replacement. The only known maintenance required on the vehicle at this time is a new set of tires. The current 5-year capital plan calls for police vehicle replacements in 2020/21 and 2023/24.

As indicated, the Town has been made aware of a 2017 Ford Taurus with 6000 kms on the engine at an asking price of $20,000. The dealership is willing to give the town a $6,000 trade-in value on the 2013 Taurus leaving a residual cost to the Town of $14,000 plus equipment transfer costs estimated at $1,745 (total $15,745.00 plus HST).

It is understood that the 2017 Taurus was a police service vehicle in another maritime jurisdiction that had been in an accident. The vehicle was fixed and made available to other police departments at a reduced price. The vehicle still carries a 3-year/60,000 km warranty (approx. 1.5 years remaining) and a 5-year/100,000 km drive train warranty (approx. 3.5 years remaining). The vehicle is black in colour.

The department was not actively seeking a vehicle replacement at this time, however they were presented with the offer and felt it was prudent to pass the information on to Town

Council, as it could result in significant savings and delaying the replacement of the unmarked car as contemplated in the 5-year capital plan. A new Ford Taurus police cruiser would typically cost in the vicinity of $35,000 to $40,000.

Financial Considerations

- Total Purchase Price = $20,000 - $6,000 (trade-in) = $14,000 + $1,745 (Equipment Transfer) = ***$15,475 + applicable taxes (unbudgeted).***

- Police Vehicles are depreciated over a 5-year period (straight line).

    - Original Value = $7,699.84

    - Amortized at $1,540 per year ($1,540 depreciated in 2018)

    - Remaining value (undepreciated) - $6,159.84

    - ***Based on the trade-in value offered of $6,000 implies that the town will incur a loss on the disposal of the asset of $159.84 on the 2019/20 financial statement.***

- Based on the purchase price of $15,475, annual depreciation in the police department will increase from $1,540 per year to $3,095 per year (increase of $1,555/year).

Options

1. Purchase the used 2017 Ford Taurus.
2. Keep the current 2013 Taurus in operation and not purchase the 2017 model.

Recommendation

It is recommended that Town Council consider the preceding information and direct staff accordingly.

Martins River Auto

From: "Ward Thompson" <wthompson@bruceautogroup.com>
Date: March-18-19 1:26 PM
To: <martinsriverauto@ns.aliantzinc.ca>
Subject: taurus

OASIS
RESULT: 1FAHP2MK1HG138211 CAN: EN-US

18-MARCH-2019 / 12:24:33 EST/ EDCAS041B
Local Time: 18-MARCH-2019 / 1:24:35 PM

- VEHICLE INFORMATION

VEHICLE DESCRIPTION: 2017 Taurus
VERSION/SERIES: POLICE VERSION
BODY STYLE: Sedan Police
DRIVE TYPE: 4 WHL L/H FULL TIME DRIVE
ENGINE: 3.7L DOHC V6 Gas.
AXLE RATIO: 3.39 Ratio
ENGINE CALIBRATION: HPH1BP0A
AXLE CODE: 3A
TRANSMISSION: 6 Speed Auto Transmission 6F50
WHEEL SIZE: 8 X 18" Steel Wheel
FUEL TYPE: Flex Fuel
TIRE: 245/55R18 A/S BSW
SOLD TO FLEET: NO
RETAIL SALES TYPE: R

Additional Information
PAINT COLOR: ABSOLUTE BLACK
PAINT CODE: G1
GROSS VEHICLE WEIGHT: 5700 LB. GVW
RADIO: AM/FM CD/Clock

- OUTSTANDING FIELD SERVICE ACTIONS

NO CAMPAIGN MESSAGE(S) FOUND

- NO WARNING MESSAGES FOUND FOR THIS VIN

- GENERAL WARRANTY INFORMATION

WARRANTY START DATE: 13-SEPTEMBER-2017
BUILD DATE: 01-AUGUST-2017
RELEASE DATE: 17-AUGUST-2017
SALE MILEAGE: 00100

- WARRANTY COVERAGE

New Vehicle Base Warranty

NO WARRANTY COVERAGE MESSAGE(S) FOUND

--

Ward Thompson | Parts Manager | Bruce Ford
T: 902 825 6606 ext. 117 | F: 902 825 2737 | wthompson@bruceautogroup.com
461 Main St, Middleton, NS B0S 1P0

Geoff Baker

From: 9028887120@msg.telus.com
Sent: March 19, 2019 3:46 PM
To: townmanager@townofkensington.com

Afternoon Lew discussed in full with Wayne about the 2017 Taurus and your trade. I also have a copy of the warranty document on the car . I will send you a picture. The deal is. 20 k on the 2017 Taurus minus 6 k for your trade. 15 k plus tax deal is done. 2017 has 6 thousand kilometres on it. Thanks Tim .

You've received a Message from a TELUS phone.

If you don't hear or see the file, download the Quick Time player.

Vous avez reçu un Message d'un téléphone TELUS.

Si vous ne voyez ni n'entendez le fichier, veuillez télécharger QuickTime.

Cheryl Gallant

Member of Parliament
Renfrew-Nipissing-Pembroke
Member of Standing Committee on National Defence
Member of Standing Committee on Industry, Science and Technology

HOUSE OF COMMONS
OTTAWA, CANADA

April 5th, 2019

Kensington Township
Po Box 418 55 Victoria St. East
Kensington, Prince Edward Island
C0B 1M0

Dear Kensington Township,

This letter is to alert you to Bill C-68, another piece of interventionist federal legislation that will have a negative impact on your municipality, and on the property rights of your ratepayers.

Bill C-68, which is currently before the Senate, reverses changes to the Fisheries Act – changes which municipalities similar to yours requested our previous Conservative government to make.

Specifically, we amended the "HADD" provisions of the Act, (Harmful Alteration Disruption or Destruction of fish habitat).

One of the most significant problems identified by municipalities about the HADD provision was its broad application and restrictive nature, which ended up costing property taxpayers thousands of dollars, with no real or apparent benefit to the environment.

Municipalities which needed to install culverts or other flood mitigation work were in too many cases faced with negative enforcement after work was completed, with inconsistent guidance when they sought direction for compliance.

In addition to repealing our amendments, the current Federal Government has expanded the definition of "habitat," and added a new concept to the Act, "water flow."

By explicitly adding in the concept of water flow, which was not in the old legislation, the scope of offences municipalities can be charged with, have been greatly expanded.

Worst of all, rather than specifically listing what is and is not an offence under this legislation, including fines or jail, this power has been handed over to the unelected technocrats, to determine by regulation, what the penalties for non-compliance will be, after they have determined what is non-compliance.

As the longest consecutive serving Conservative MP in Ontario, representing a predominantly rural riding, I am very aware of the challenges rural and small-town municipalities have faced dealing with the Federal government.

PARLIAMENTARY OFFICE
Room 604, Justice Building
House of Commons
Ottawa, ON K1A 0A6
Tel.: (613) 992-7712
Fax: (613) 995-2561

CONSTITUENCY OFFICE
2nd Floor, 84 Isabella St.
Pembroke, ON K8A 5S5
Tel.: (613) 732-4404
Fax: (613) 732-4697
Toll Free: 1-866-295-7165
Website: www.cherylgallant.com


Special Olympics
Prince Edward Island

Mayor Caseley, Deputy Mayor Pickering, Town Councillors, and Town of Kensington residents

On behalf of everyone here at Special Olympics PEI, including Team Canada 2019 World Games athlete Roy Paynter and his family, thank you for hosting a Welcome Home Party for Roy.

Congratulations on a great turnout, and a fantastic event!

S Wagner

Sarah Profitt-Wagner
Special Olympics PEI

All municipalities should be demanding the Federal Government provide regulatory certainty before this legislation is passed into law.

Clear regulatory certainty is necessary to prevent the return of conflicted interpretations, and inconsistencies in enforcement of the Fisheries Act which happened in the past.

Sincerely,

Cheryl Gallant

Cheryl Gallant, M.P.
Renfrew—Nipissing—Pembroke
CG:mm

Kensington Intermediate Senior High School

http://www.edu.pe.ca/kish

Telephone: 836-8901 Fax: 836-8903

P.O. Box 340
Kensington
Prince Edward Island
C0B 1M0

Donald Mulligan, Principal
Michelle Beaman, Vice-Principal
Carolyn Black, School Counsellor

April 11th, 2019

As the end of the year approaches, the graduates of KISH are busy preparing for their end-of-year activities.

For many years, the grad class and KISH staff have had a very strong safe grad program. This program promotes fun activities for the grads without the use of drugs or alcohol. During the year they have held a potluck supper, attended the Haunted Motel and Mini putt at Halloween, had activities in the gym along with a Christmas Potluck, painted grad bricks in the school and created and entered a float in the Kensington Christmas Parade. The school hosted a welcome back fun day and BBQ at Burlington Amusement Park in September and end-of-year activities include a chem- free safe prom evening and safe grad activity after the graduation ceremony.

Again this year, students and staff have planned an after-prom safe grad activity to be held at the high school. Parents and grad advisors have met and are planning several activities, such as a mock casino, carnival games, games area, lounge area, giant inflatable games, hypnotist / entertainment and a food court area.

As part of this celebration, we would like to offer prizes during the night for those who have participated in the mock casino games. Parents and teachers are contributing to the prizes/awards that will be given out during the night. We hope that you might like to be involved by donating a prize to the prize draw or by donating money to offset the cost of the prizes, games rentals, and facility costs etc. with typical costs of approximately $2000 each year. Any extra funds will go to Safe Grad activities and bursary awards to be given out at our graduation. Recognition of your donation will be noted at the safe prom event and as an insert in the graduation program on graduation night.

Thank you for your consideration.

Sincerely,

Donald Mulligan

Donald Mulligan,
Principal

Linda MacLeod
836-4509

Société Alzheimer Society

PRINCE EDWARD ISLAND

Friday April 12, 2019

Dear Mayor Caseley,

The Alzheimer Society of Prince Edward Island is looking for other like minded groups who are in support of our mission. We are passionate to find a cure and to find dollars to build our programs and services. Our letter today, is to invite The Town of Kensington to become a sponsor for our Annual Walk for Alzheimer's.

This event will be held on Sunday May 26th, 2019 in Charlottetown, PE. It is Canada's biggest fundraiser for Alzheimer's disease and other dementias. The funds raised support programs and services we provide for individuals living with dementia and their families. Our education, counselling, and training, established on evidence based research improves their quality of life, while also supporting public awareness.

Your sponsorship will help assure the success of the Walk for Alzheimer's. Enclosed, you will find more information on this annual event and its sponsorship levels. Please do not hesitate to contact me with any questions or concerns.

Sincerely,

Alzheimer Society of PEI
Direct: 902-370-3136
Fax: 902-368-2715

Enclosure:
Sponsorship Package

WALK FOR ALZHEIMER'S
MAKE MEMORIES MATTER™

SPONSORSHIP PACKAGE

The Alzheimer Society of PEI

Behind every person with Alzheimer's disease and other dementias, there are people dedicated to helping. The Alzheimer Society is the leading non-profit health organization working nationwide to improve the quality of life for Canadians affected by Alzheimer's disease and other dementias and advance the search for the cause and cure. We are in every province across Canada and in over 150 local communities.

The Alzheimer Society of PEI was incorporated in 1989 and provides help for people with Alzheimer's disease and other dementias and their caregivers; that help comes in many ways.

The Alzheimer Society of Prince Edward provides support services, counselling, and education for individuals and families in our region affected by Alzheimer's disease, as well as their caregivers, health professionals and the public. One day, we envision a world without Alzheimer's disease and our commitment to research continues. Until this becomes a reality, we strive to improve the quality of life for all those affected.

The Walk for Alzheimer's

On May 26, 2019, The Alzheimer Society of PEI will be hosting one of our largest awareness and fundraising events held annually in the heart of Charlottetown and Summerside, PEI. This inspiring event calls on participants of all ages and abilities to help support people living with dementia in a walk and run.

The 2018 Walk for Alzheimer's was one of our most successful walk to date, with over 200 people in attendance and raising thousands in donations for our programs and services. In 2019 we strive to make this Walk for Alzheimer's bigger and better!

WALK FOR ALZHEIMER'S
MAKE MEMORIES MATTER™

Benefits of Sponsorship

By supporting this event, you will make a tangible impact on the quality of life for thousands of individuals who are navigating the challenges of Alzheimer's disease in our region. All funds raised will be directed to local programs and services here on PEI, **delivered at no cost to our clients**.

Walk for Alzheimer's Sponsorship	Gold Sponsor $2,500	Silver Sponsor $1,000	Bronze Sponsor $500
Opportunity to include promotional items in participant kits	•	•	
Opportunity to display your signage at our walks	•	•	
Recognition on official Alzheimer Society event signage	Logo		
Recognition during opening ceremonies on event day	•	•	•
Representative attending walks & welcomed during opening ceremonies	•	•	
Featured on the Walk for Alzheimer's website as a sponsor in your sponsorship category	Logo	Logo	Logo
Recognition as a sponsor on all printed promo materials	Logo		
Pre & post mentions on social media (Facebook & Twitter)	Logo	Logo	Logo


Thank you in The Alzheimer Society newsletter	Logo	Logo	Logo

To become a sponsor today, contact us at:

902-370-3136 or community@alzpei.ca