

Master Servicing Plan Update for the Municipality of Grey Highlands

Public Information Centre No. 2

Tuesday September 24th, 2024

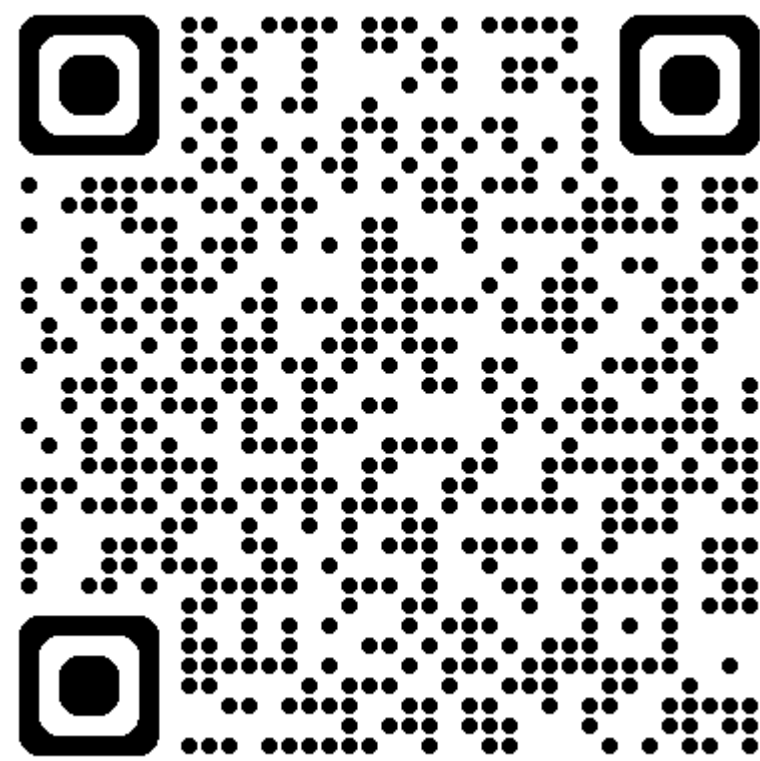


Why are we here?

Public Information Centre (PIC)



Connect Grey Highlands MSP Key Dates



September 24 to October 31, 2024

If you have any questions or wish to provide your input, please speak with one of the project team members, and/or contact the Project Manager at moyers@greyhighlands.ca

Public Information Centre (PIC) Objectives

-  Present the evaluation of the servicing concepts.
-  Update on the communities since the 2017 MSP
-  Present the preliminary preferred alternatives
-  Get feedback on preliminary preferred alternatives

Considering that the previous Master Servicing Plan was completed in 2017, and that three Phase 1 recommended capital projects were completed over the past five years, the Municipality has identified a need to review the timeline and feasibility of the next phases of implementation.

A comprehensive update to the Master Servicing Plan for water and wastewater is being undertaken to identify the current capacity of the existing systems and to clearly define the infrastructure requirements needed to support the Municipality of Grey Highlands' population and employment growth forecasts to the year 2054.

The Master Servicing Plan is intended to be the foundation document and roadmap for implementing cost-effective, safe, reliable, and efficient servicing strategies required to support the Municipality's long-term development and growth. .

How is this study being conducted?

Municipal Class Environmental Assessment Process

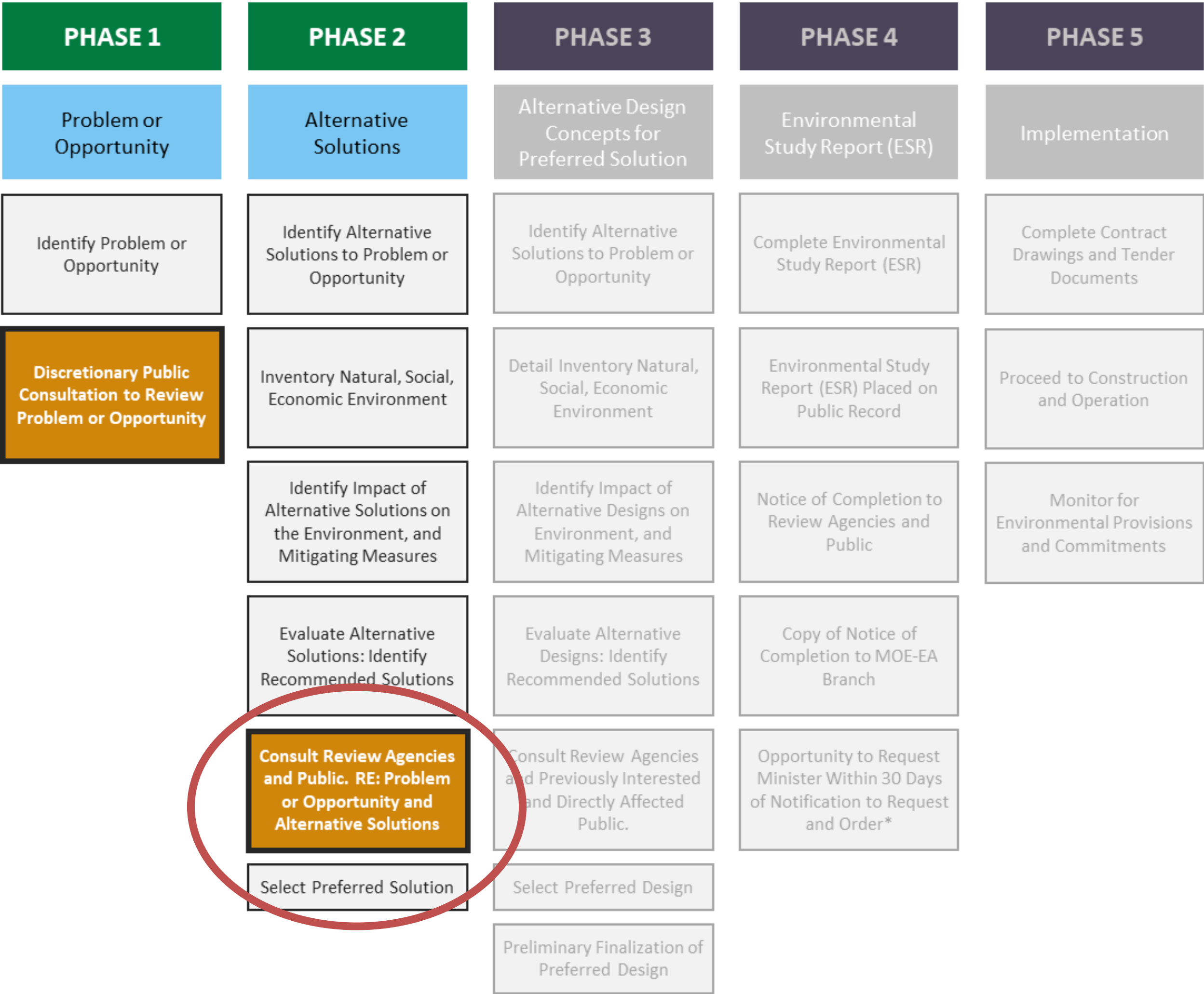


The Municipal Class Environmental Assessment (MCEA) process is a decision-making process that all Ontario municipalities follow for rehabilitating and building new public infrastructure.

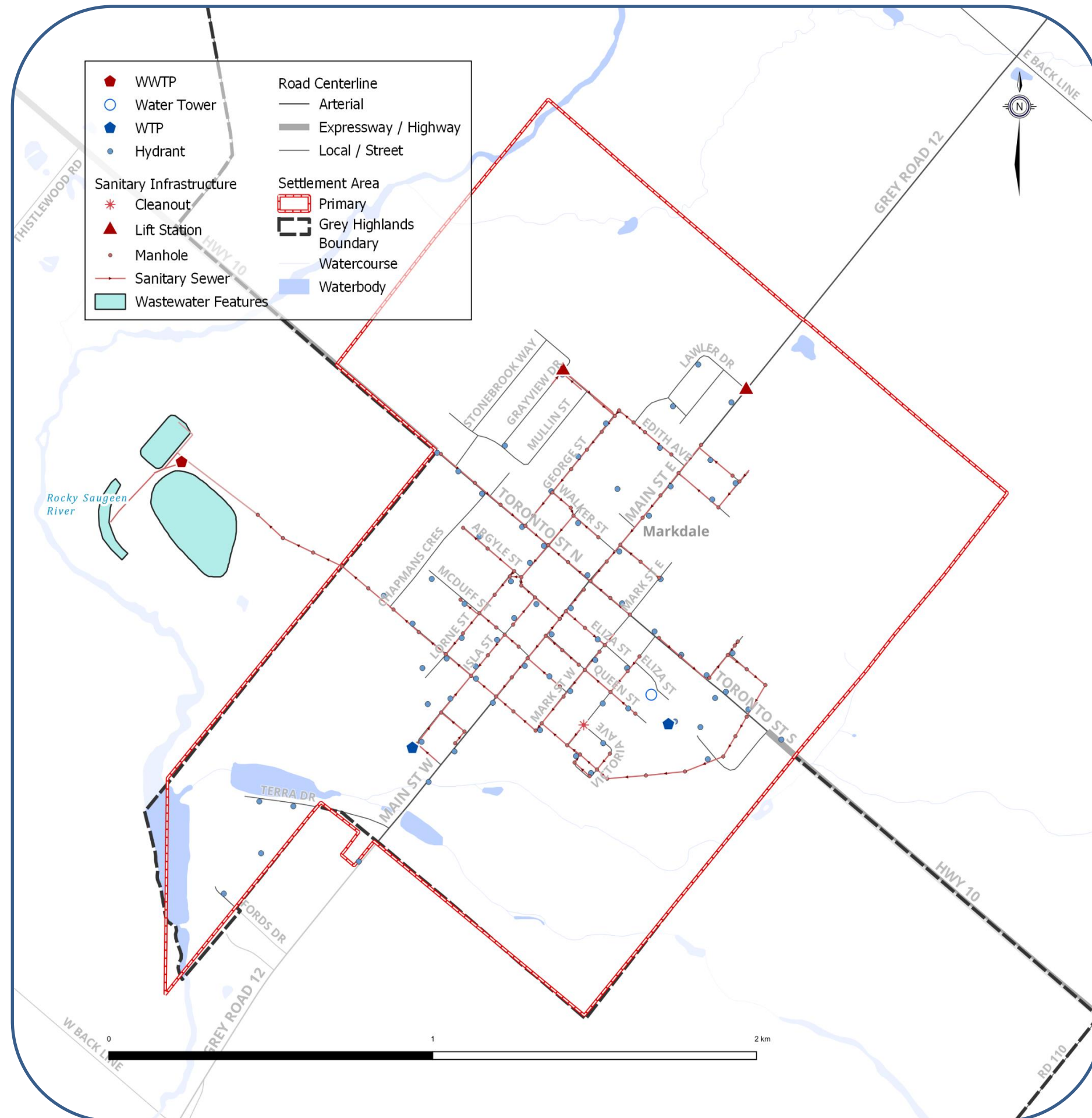
The **Grey Highlands Municipal Servicing Master Plan Update** is following the Class Environment Assessment (EA) process for Master Plans and will satisfy Phases 1 and 2 of the Class EA process (October 2000, as amended in 2007, 2011, 2015, and 2023).

Phase 1 of the MCEA process focuses on the development of a problem / opportunity statement to be addressed by the project.

Phase 2 will evaluate alternatives and present the recommended servicing solutions for water and wastewater infrastructure and the proposed capital program. **This is where we are now.**



The Village of Markdale



Population: 1,200 Persons

Designation: Primary Settlement Area

Services: Municipal Water and Wastewater

Future Growth

- In 2022 there were 1,206 persons living in Markdale, with ICI representing a significant component of the servicing capacity (predominantly Chapmans).
- There are developments with committed capacity as well as future potential capacity in Markdale totaling 2,995 people.
- The Official Plan growth rate predicts 230 new people to reside in Markdale by 2051.
- The conclusion is that there is currently more planned development than theoretical as calculated based on historic growth rates within the planning horizon.

System Evaluation

- Water System: Currently operating at approximately 44% of capacity.
- Wastewater System: Currently operating at approximately 50% of capacity with ongoing upgrades to the WWTP to provide additional capacity.

P1-1 Village of Markdale Update

From the 2017 Master Plan, a new elevated tower with 3725m³ of storage was recommended, 2900m³ was constructed with the removal of the service areas to Kimberly or Flesherton.

Optimization of the Existing Wastewater Treatment Plan was completed. Another Class EA process is reviewing capacity expansion.

P1-1A Village of Markdale including the extension into West Grey Update

The demand from this area is included in the existing committed numbers that were part of the Gap Analysis and is therefore included in both alternatives, including the “Do Nothing” and can advance when both Municipalities desire.

P1-3 Beaver Valley Ski Club to Road 32 Update

The option of extending services to Beaver Valley was removed from the 2017 Master Plan as the decision was made to continue to use the Amik-Talisman system and therefore this phase is now included in the alternatives for the Amik-Talisman system.

P1-4 Grey Road 12 and 30 from Beaver Vally Ski Club to Grey Road 13 Update

This option would extend the Markdale Water to Blue Jay Crescent, Bowles Bluff Road and Windy Lane Drive. It is an additional service area that exceeds the capacity of the plant. Council directed staff in 2017 to remove this option and therefore is not included in the 2024 recommendations.

Markdale Water System



Description	# Units	# People	Max Day Flow (m³/day)	Water Tower Storage (m³)
Plant Capacity	--	--	5990	2900
Existing	--		2366	1878
Remaining Capacity			3624	1022
Committed:				
Infill Lots	10	25	23	468
Stonebrook Developments Phase 1 and 2	117	296	266	544
Stonebrook Phase 3	47	120	108	494
Devonleigh Homes Centre Point South - Phase 1	151	383	345	677
Devonleigh Homes Centre Point South - Phase 2 to 5	183	463	417	814
Loon Call Golf Course Lands	412	1043	939	1085
Markdale Hospital	13	34	31	470
Planned Service Extension into West Grey	22	66	59	480
Total Committed		2364	2187	1583*
Remaining Capacity			1475	-562
Potential:				
Stonebrook Developments (233 Main St W)	158	400	360	386
Grey Gables	22	56	51	290
Total Potential		456	410	1165
Remaining Capacity (after committed)			1027	-1727

* Fire storage calculation based on total population, not sum of individual demands.

Observations and Conclusions

- Grey County Official Plan Population projections suggest an additional 230 people whereas total commitments would enable 2,430 and with potential developments 2,886 people.
- There is capacity in the supply system for these developments, however more storage will be required before all the commitments are constructed.
- Chapmans is a very large user on the system (10% of the total capacity) and changes in the servicing arrangement could affect the timing of any system expansion.
- With the number of committed units known it is prudent to monitor the flows and review again as they approach 80%.

Markdale Water System Alternatives

	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1. Do Nothing				
a) Proceed with the detailed design and construction for the extension to West Grey.	Medium	Low	High	Low
b) Monitor water flows as developments are constructed and brought on-line to determine Water Supply Storage expansion timing.	Low	Low	High	Low
Option 2. Undergo Class EA for Storage expansion	Medium	Medium	High	Medium

Markdale Water System Alternatives

	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1. Do Nothing				
a) Proceed with the detailed design and construction for the extension to West Grey.	Medium	Low	High	Low
b) Monitor water flows as developments are constructed and brought on-line to determine Water Supply Storage expansion timing.	Low	Low	High	Low
Option 2. Undergo Class EA for Storage expansion	Medium	Medium	High	Medium

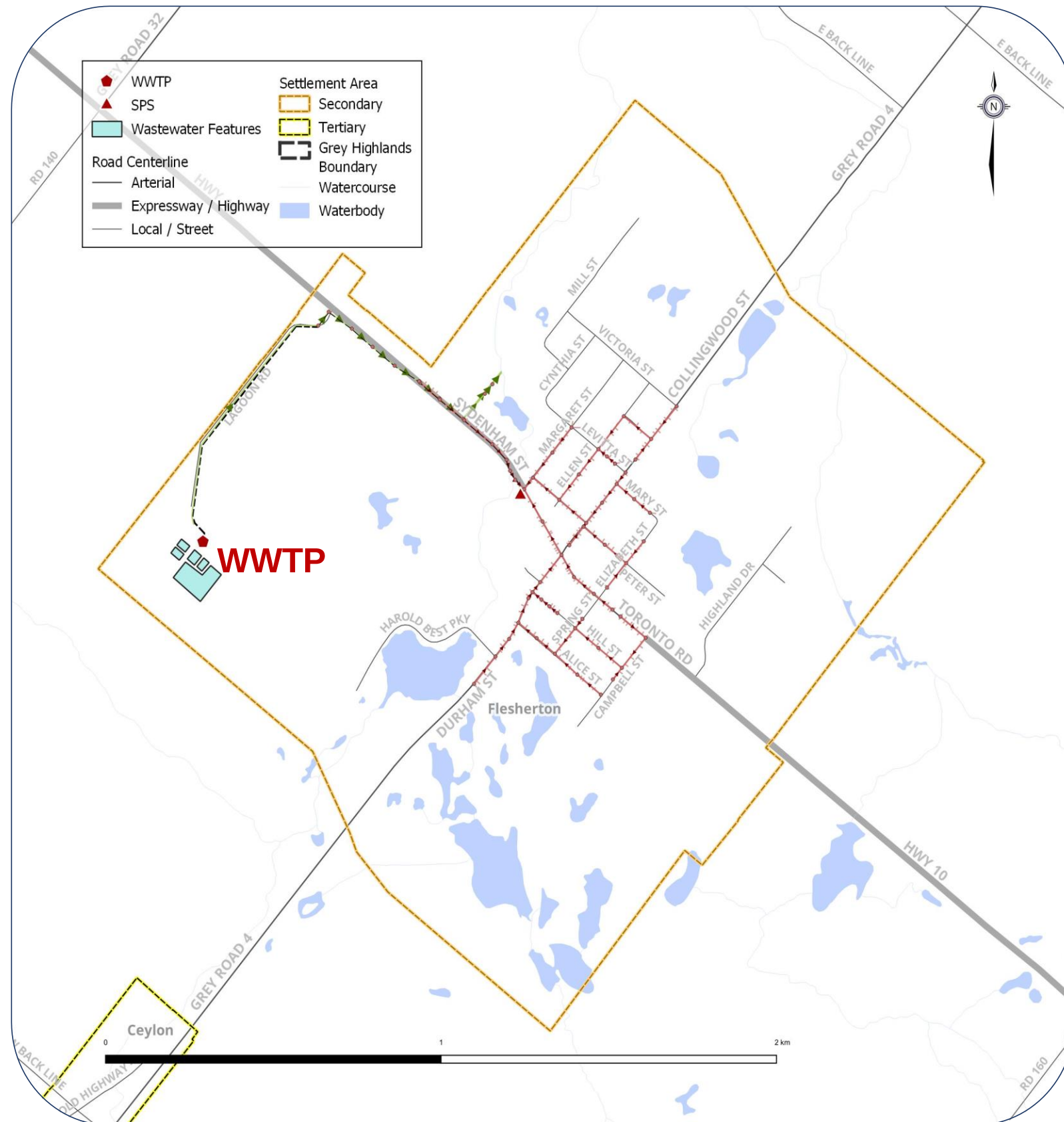
Markdale Wastewater System



Description	# Units	# People	Avg. Day Flow (m³/day)
Plant Capacity	--	--	1722
Existing	--		857
Remaining Capacity			865
Committed:			
Infill Lots	10	25	11
Stonebrook Developments Phase 1 and 2	117	296	133
Stonebrook Phase 3	47	120	54
Devonleigh Homes Centre Point South - Phase 1	151	383	172
Devonleigh Homes Centre Point South - Phase 2 to 5	183	463	208
Loon Call Golf Course Lands	412	1043	469
Markdale Hospital	13	34	15
Planned Service Extension into West Grey	22	66	30
Remaining Capacity			-229
Potential:			
Stonebrook Developments (233 Main St W)	158	400	180
Grey Gables	22	56	25
Remaining Capacity			-434

Observations and Conclusions

- Grey County Official Plan Population projections suggest an additional 230 people whereas total commitments would enable 2,430 and with potential developments 2,886 people.
- Chapmans is a very large user on the system (20% of the total capacity) and changes in the servicing arrangement could affect the timing of any system expansion.
- A separate Class EA study is currently underway for the Wastewater System to review expansion options.



Population: 590 Persons

Designation: Secondary Settlement Area

Services: Municipal Wastewater, Private Water (wells)

Future Growth

- Residential and business lands.
- 54 residential units in committed and 10 in potential development.
- Limited to small developments as municipal water servicing is not available.
- The growth rate from the Official Plan calculated an additional 110 people.
- Commitments already in place account for 132 people (157 with potential).
- Capacity exists for 390 additional people.

System Evaluation

- Water System: No municipal services provided. Drinking water and any fire storage must be privately obtained.
- Wastewater System: Service provided in settlement area. Currently operating at approximately 39% of capacity. With the addition of planned development, the WWTP will be operating at around 55% of capacity.
- Some residents and most institutional uses are on private wastewater services.

2017 MSP Update for Flesherton Area

P2-1 Village of Flesherton (existing sanitary service area) Update

This area continues to be serviced with sanitary sewers only. The treatment plant operates under capacity and therefore could accept development within the area or from external areas. Understanding of the physical limitations of the collection system is lacking and should be reviewed.

P2-2 Built-up Areas in Flesherton beyond the existing sanitary sewers Update

There is capacity at the treatment plant to accept flows from land outside the current serviced area and as development applications come in, they can be considered depending on the collection system's capacity.

P2-3 Highway 10 corridor from Markdale to Road 120

If future development applications or for servicing efficiencies this area could be included in an Expansion EA study. It also provides for a long-term connection to the Markdale system providing for redundancy to both water and wastewater systems and potential for additional storage or fire protection.

P2-4 Highway 10 corridor from Road 120 to Flesherton Update

For future development applications or for servicing efficiencies this area could be included in an Expansion EA study. It also provides for a long-term connection to the Markdale system providing for redundancy to both systems and potential for additional storage or fire protection.

Flesherton Wastewater System



Description	# Units	# People	Avg Day Flow (m ³ /day)
Plant Capacity	--	--	419
Existing	--	740	257
Committed:			
Colton Townhouses	10	20	9
Highland Drive	17	43	19
Residential Infill	27	68	31
Remaining Capacity:		415	187
Potential (inside serviced area):			
Barnyard Builders	10	25	11
Remaining Capacity:		390	175
Extended Service Areas:			
Highway 10 South	16	41	18
Southwest Flesherton (near Campbell St.)	5	13	6
Northeast Flesherton (near Mill St.)	233* (based on 11 units/ha)	589	289
Remaining Capacity:			-114

Observations and Conclusions

- In 2023 there were approximately 250 connections on the Flesherton System, and a population of 560 people (2021 Census).
- The growth rate from the Official Plan calculated an additional 110 people.
- Commitments already in place account for 132 people, capacity is available for 390 people.
- Commitments are within the realm of the development rate and could be completed by the end of the planning period (2056).
- Lands designated as “Development” in the Zoning Bylaw could enable 589 people, which is greater than the capacity of the existing plant.

Flesherton Wastewater System Alternatives

	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1. Do Nothing				
a) Review collection system for capacity and ability to connect to existing commitments. b) Review again in 2029 Master Servicing Plan Update.	Medium	Low	Medium	Medium
Option 2. Undergo a Water and Wastewater Masterplan specific to Flesherton in conjunction with the next Official Plan update				
a) Study includes areas external to the current service areas.	Low	Low	Low	Medium

Flesherton Wastewater System Alternatives

	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1. Do Nothing				
a) Review collection system for capacity and ability to connect to existing commitments. b) Review again in 2029 Master Servicing Plan Update.	Medium	Low	Medium	Medium
Option 2. Undergo a Water and Wastewater Masterplan specific to Flesherton in conjunction with the next Official Plan update				
a) Study includes areas external to the current service areas.	Low	Low	Low	Medium

Flesherton Water System

- Currently there is no municipal water in Flesherton.
- There are 385 lots, meaning 385 private wells on the same aquifer of which 293 have municipal sewer connections.
- There is 712ha of land designated for Development.

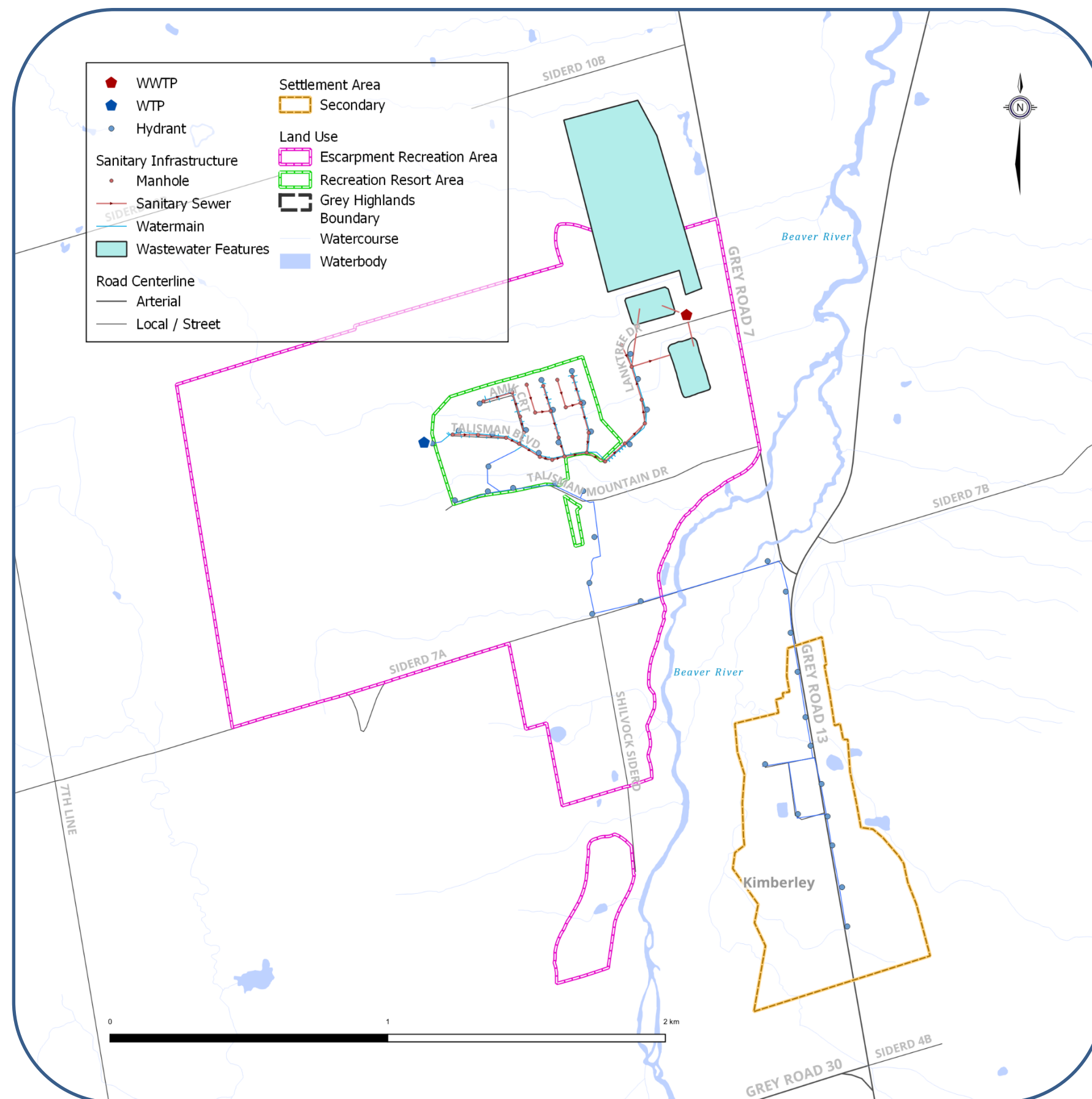
	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1. Do Nothing				
a) Monitor local aquifer and assess its ability to continue supporting private systems versus communal systems (quantity and quality)	High	Low	Low	Medium
b) Review again in 2029 Master Servicing Plan Update.				
Option 2. Undergo a Water and Wastewater Masterplan specific to Flesherton in conjunction with the next Official Plan update				
a) Study includes areas external to the current sanitary service areas.	Low	Low	Low	Medium
Option 3. Undergo a Class EA Study to service the lots within the sanitary serviced areas	Low	Low	High	High

Flesherton Water System

- Currently there is no municipal water in Flesherton.
- There are 385 lots, meaning 385 private wells on the same aquifer of which 293 have municipal sewer connections.
- There is 712ha of land designated for Development.

	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1. Do Nothing				
a) Monitor local aquifer and assess its ability to continue supporting private systems versus communal systems (quantity and quality) b) Review again in 2029 Master Servicing Plan Update.	High	Low	Low	Medium
Option 2. Undergo a Water and Wastewater Masterplan specific to Flesherton in conjunction with the next Official Plan update				
a) Study includes areas external to the current sanitary service areas.	Low	Low	Low	Medium
Option 3. Undergo a Class EA Study to service the lots within the sanitary serviced areas	Low	Low	High	High

Amik, Talisman & Kimberley



Population: 500 Persons (estimated) plus seasonal residents

Designation: Secondary Settlement, Recreation Resort, and Escarpment Recreation Areas

Services: Amik and Talisman on both municipal water and wastewater. Kimberley has municipal water only.

Future Development

- Residential and recreation lands primarily
- 60m³/day committed to the existing Talisman Ski Hill
- Potential redevelopment of lands at Talisman

System Evaluation

- Water System: Currently operating at approximately 21% of capacity. With the addition of potential development, would be at 91% of capacity.
- Wastewater System: Services provided to Amik and Talisman only. Currently operating at approximately 37% of capacity. With the addition of planned development, the WWTP would be operating at around 59% of capacity.

P1-2 Kimberly, Amik and Talisman Update

This phase looked at improving the water service in the existing service area. It is included as the additional connections within Kimberly. The proposed developments in the vicinity were included in the 2024 analysis for both water and wastewater.

P1-3 Beaver Valley Ski Club to Road 32 Update

With the decision in 2017 to keep the Amik-Talisman system on-line, extending services from Markdale were eliminated from this review, and therefore extending services to Beaver Valley Ski Club was included in this 2024 update as being extended from Amik-Talisman.

P1-5 Grey Road 30 from Beaver Valley Ski Club to Grey Road 13 Update

With the decision in 2017 to keep the Amik-Talisman system on-line, extending services from Markdale were eliminated from this review, and therefore extending services between Beaver Valley Ski Club and Grey Road 13 was included in this 2024 update as being extended from Amik-Talisman. Ski club support was there to support connecting in the next 5-10 years.

Kimberley, Amik, Talisman Water System



Description	# Units	# People	Max Day Flows (m ³ /day)	Storage (m ³)
Plant Capacity	--	--	1184	870
Existing	--	--	246	397
Committed:				
Former Talisman			60	30
Remaining Capacity		800	897	367
Potential Developments/Expansion:				
Beaver Valley Development Group Phase 1	111	222	250	352
Beaver Valley Development Group Phase 2	260	464	525	625
Kimberley residential Infill	20	51	57	291
Remaining Capacity			46	-383
Beaver Valley Ski Club	9		26	282
Residences between Beaver Valley Ski Club to Kimberly (Grey Road 32, 30 and 13)	20	51	57	291
Residences on Beaver Trail, Mary B's Lane, etc.	79	200	225	344
Brock Street Condominiums	11	28	32	284
Total		1035	1171	935
Remaining Capacity			-274	-599

Observations and Conclusions

- Proposed growth from Official Plan = 75 additional people by 2056, for a total of 425 people
- Known Potential Developments:
 - 371 residential units, 1 commercial use within the Amik serviced area resulting in 686 additional people
 - 11 residential units outside the Amik serviced area resulting in 28 additional people
- Plant Capacity exists for 798 new people
- At current growth rates, it could take until 2072 to reach full build out
- There is capacity in the plant to service the proposed development and to connect residents in Kimberley not currently on water
- There is not capacity to extend the water system into the Beaver Valley Ski Club area after the developments are built out.

Kimberley, Amik, Talisman Water System Alternatives

	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1 Do Nothing				
Option 1 a) Undergo a plant Optimization Study/Condition Assessment for improvements to plan operations.	Medium	Low	Low	Medium
Option 2 Undergo Class EA for plant expansion				
Option 2a) Study includes Beaver Valley Development Group Plan of Subdivision at full build out and Kimberley infill	Low	Low	High	Medium
Option 2b) Study includes Beaver Valley Development Group Plan of Subdivision at full build out, and the servicing of the Beaver Valley Ski Club, including residences along the alignment.	High	Low	Low	Low

Kimberley, Amik, Talisman Water System Alternatives

	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1 Do Nothing				
Option 1 a) Undergo a plant Optimization Study/Condition Assessment for improvements to plan operations.	Medium	Low	Low	Medium
Option 2 Undergo Class EA for plant expansion				
Option 2a) Study includes Beaver Valley Development Group Plan of Subdivision at full build out and Kimberley infill	Low	Low	High	Medium
Option 2b) Study includes Beaver Valley Development Group Plan of Subdivision at full build out, and the servicing of the Beaver Valley Ski Club, including residences along the alignment.	High	Low	Low	Low

Amik and Talisman Wastewater System



Description	# Units	# People	Demand (m ³ /day)
Plant Capacity	--	--	249
Existing	--	--	101
Remaining Capacity			157
Committed:			
Former Talisman			60
Remaining Capacity			97
Potential Developments/Expansion:			
Beaver Valley Development Group Phase 1	111	222	100
Beaver Valley Development Group Phase 2	260	464	210
Kimberley residential Infill	112		128
Beaver Valley Ski Club	9		30
Residences between Beaver Valley Ski Club to Kimberly (Grey Road 32, 30 and 13)	20	51	23
Residences on Beaver Trail, Mary B's Lane, etc	79	200	90
Brock Street Condominiums	11	28	13
Total	602	1250	593
Remaining Capacity			-496

Observations and Conclusions

- Proposed growth from Official Plan = 75 additional people by 2056, for a total of 425 people.
- Known Potential Developments:
 - 371 residential units, 1 commercial use within the Amik serviced area resulting in 686 additional people.
 - 11 residential units outside the Amik serviced area resulting in 28 additional people.
- Plant Capacity exists for 216 new people.
- At current growth rates, it could take until 2072 to reach full build out.
- Extending services to Kimberley requires 30m³/day more capacity than is available.

Amik and Talisman Wastewater System Alternatives

	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1. Do Nothing				
a) Undergo a plant optimization study for improvements to plant operations.	Medium	High	Low	Low
Option 2. Update to MECP approved Modifications				
a) Review plant and proposed modifications, update for system needs and reapply for same rated capacity.	High	High	Medium	Medium
Option 3. Undergo Class EA for plant expansion				
Option 3a) Study includes Beaver Valley Development Group Plan of Subdivision at full build out	Low	Low	High	Medium
Option 3b) Study includes Beaver Valley Development Group Plan of Subdivision at full build out, and the servicing of the Beaver Valley Ski Club, including residences along the alignment.	High	Low	Medium	Medium

Amik and Talisman Wastewater System Alternatives

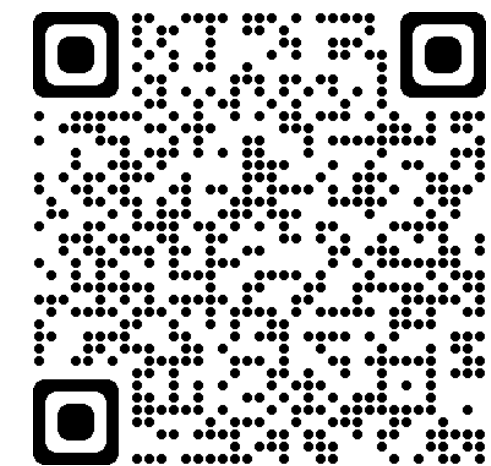
	Natural Environment: Impacts based on outcome and construction	Cultural Environment: Impacts of built and cultural resources	Social Environment: Ability to meet the objectives of the Official Plan:	Financial Environment
Option 1. Do Nothing				
a) Undergo a plant optimization study for improvements to plant operations.	Medium	High	Low	Low
Option 2. Update to MECP approved Modifications				
a) Review plant and proposed modifications, update for system needs and reapply for same rated capacity.	High	High	Medium	Medium
Option 3. Undergo Class EA for plant expansion				
Option 3a) Study includes Beaver Valley Development Group Plan of Subdivision at full build out	Low	Low	High	Medium
Option 3b) Study includes Beaver Valley Development Group Plan of Subdivision at full build out, and the servicing of the Beaver Valley Ski Club, including residences along the alignment.	High	Low	Medium	Medium

2024 Recommended Alternatives Summary

Markdale Water Supply
Option 1. Do Nothing
i) Proceed with the detailed design and construction for the extension to West Grey.
ii) Monitor water flows as developments are constructed and brought on-line to determine Water Supply Storage expansion timing.
Markdale Wastewater Collection
Class EA currently underway.
Flesherton Wastewater Collection
Option 1. Do Nothing
i) Review collection system for capacity and ability to connect to existing commitments.
ii) Review again in 2029 Master Servicing Plan Update.
Flesherton Water Supply
Option 1. Do Nothing
a) Monitor local aquifer and assess its ability to continue supporting private systems versus communal systems (quantity and quality)
a) Review again in 2029 Master Servicing Plan Update.
Kimberly Amik Talisman Water Supply
Option 2. Undergo Class EA for plant expansion
Option 2a) Study includes Beaver Valley Development Group Plan of Subdivision at full build out and Kimberley infill
Kimberly Amik Talisman Wastewater Collection
Option 3. Undergo Class EA for plant expansion
Option 3a) Study includes Beaver Valley Development Group Plan of Subdivision at full build out

How Can You Provide Feedback Following this Presentation?

- Read the information sheets, available in person or on the project website <https://connectgreyhighlands.ca/MSP> or scan the QR Code
- Answer the **Questionnaire** in person or on the project website
- Fill in a **Comment Form**
- Send the project team your comments by **Mail or E-mail**
- **Sign up** in-person or send the project team a request to be notified of future public consultations for this study



What are we doing next?

Please provide comments by October 31st, 2024

Shawn Moyer, Director of Environmental Services

Municipality of Grey Highlands

206 Toronto Street South

Markdale, Ontario N0C 1H0

Tel: 519-986-1216 Ext. 234

moyers@greyhighlands.ca

Amanda Froese, P.Eng. FEC., Project Manager

GEI Consultants Canada Ltd.

1260-2nd Avenue East, Unit 1

Owen Sound, ON N4K 2J3

519-376-1805

afroese@geiconsultants.com

Please note that information related to this study will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. All comments received will become part of the public record and may be included in the study documentation prepared for public review.

If you need any accommodations to provide comments and/or feedback for this study, please contact the Project Manager.