



2024 Water and Wastewater Master Plan

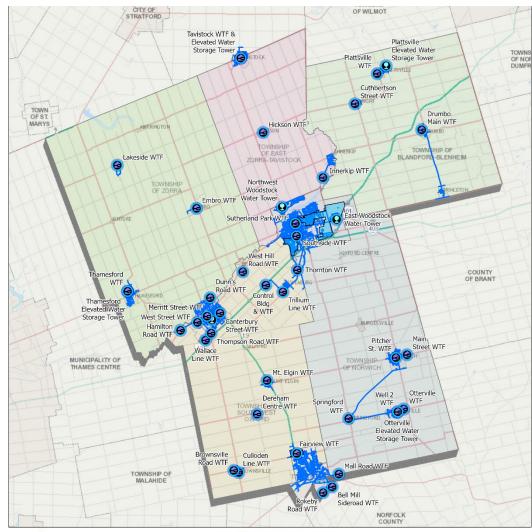
OXFORD COUNTY COUNCIL NOVEMBER 9, 2022







EXISTING WATER INFRASTRUCTURE

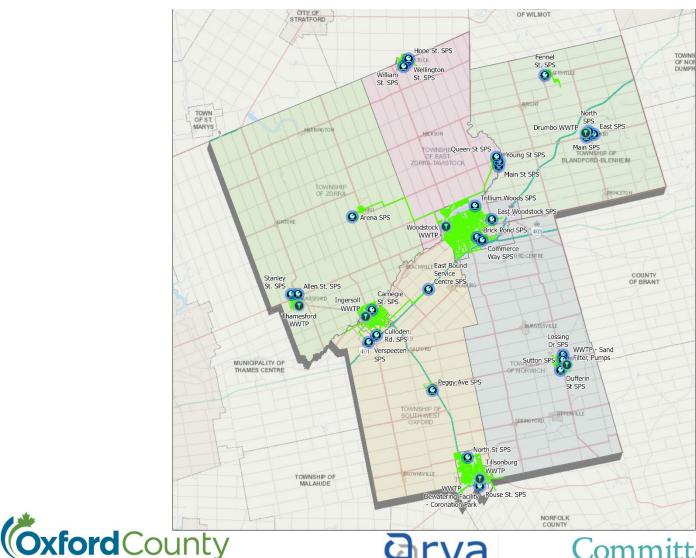








EXISTING WASTEWATER INFRASTRUCTURE





Growing stronger together



OXFORD COUNTY W / WW SYSTEM – RECENT IMPROVEMENTS

















W/WW MP COMPONENTS

- A comprehensive background review of water and wastewater services,
 - water supplies, water distribution, wastewater collection, treatment facilities, storage towers, etc.
- Analysis of the County's existing and future water & wastewater needs,
 - projected population/employment growth, development, social and economic conditions, facilities, and land use planning initiatives
- Develop updated water consumption demand and wastewater generation flow criteria
- Develop water and wastewater servicing alternatives
- A list of recommendations, proposals and capital projects to guide the County's future water and wastewater services
- Full public consultation and engagement









W/WW MP GUIDING PRINCIPLES

Service our Communities

- Provide safe and reliable water/wastewater service to residents and businesses
- Balance economic, social, environmental goals while minimizing community impact(s)
- Extensive public consultation and community engagement opportunities

Protect our environment

- Ensure that wastewater is treated effectively and responsibly
- Recognize water conservation/efficiency and sewer infiltration/inflow control measures
- Reduce carbon footprint and energy consumption, maximize resource recovery

Sustainability

- Optimize effectiveness of existing water and wastewater infrastructure
- Consider infrastructure full lifecycle costing to evaluate overall long-term financial implications and sustainability

Meet all regulatory requirements & County's asset level of service framework







MASTER PLAN CONTEXT

- Undertaken in accordance with MCEA process:
 - Integrate infrastructure requirements for existing and future land use using environmental assessment principles
 - > Evaluate all reasonable servicing alternatives with considerations to natural, social and economic environments ("triple bottom line")
- Determine preferred water and wastewater servicing strategy alternatives based on "triple bottom line" assessment, including high level conceptual/order of magnitude accuracy of costs







MASTER PLAN APPROACH

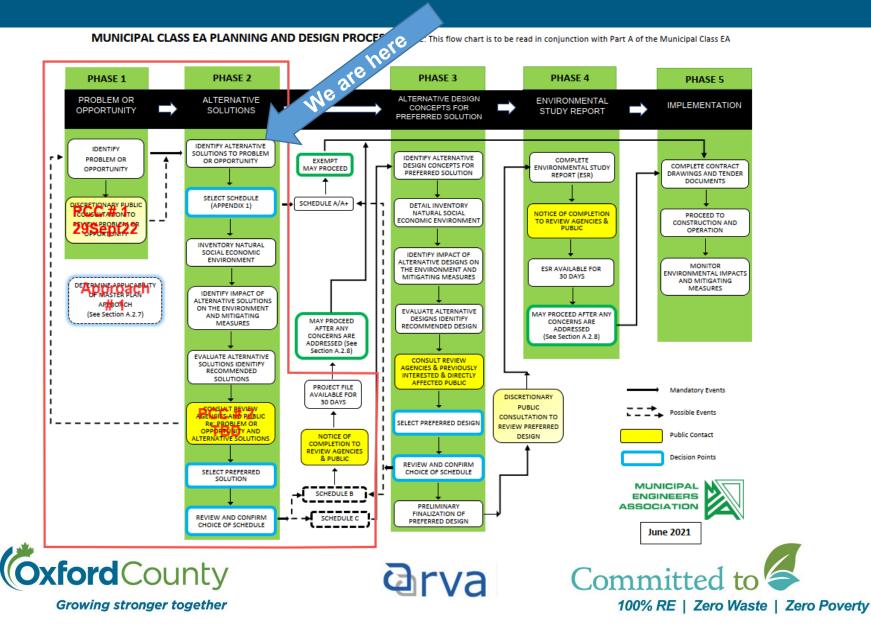
- There are four approaches to undertaking Master Plans per Section 4 of the MCEA Municipal Class EA guidance document
- For the 2024 Water and Wastewater Master Plan, Approach # 1 was selected as the most appropriate
- Approach # 1 is the preparation of a Master Plan document at the conclusion of Phases 1 and 2 of the Municipal Class EA process
- This was adopted as a broad level assessment thereby requiring more detailed investigations at the project-specific level to fulfil the Municipal Class EA documentation requirements for the specific Schedule B and C projects identified within the Master Plan.
 - Siven the requirements and number of water and wastewater systems to be reviewed, assessments must be made at a broad enough level to allow for considerations over the 25-year horizon
 - > The additional requirement to provide solutions for the County that consider and support its policy goals and the Triple Bottom Line
 - The Master Plan would provide a starting point for Schedule B and C projects that are identified as required in the near term







MUNICIPAL CLASS EA PROCESS



OBJECTIVES OF THE 2024 W/WW MP



- Develop a strategic long-term planning document to manage existing and future water/wastewater service needs to the year 2046.
- Accommodate planned population and employment growth in accordance with the County Official Plan and 2020 Provincial Policy Statement.
- Develop a capital implementation program for the preferred water and wastewater servicing alternatives.







FORECASTED POPULATION GROWTH

Municipality		Growth					
withicipality	2021**	2026	2031	2036	2041	2046	2021-2046
Woodstock	47,965	51,825	55,815	59,825	63,595	67,295	19,330
Tillsonburg	19,120	20,020	20,980	21,980	22,960	23,890	4,770
Ingersoll	14,065	14,955	15,915	16,895	17,855	18,785	4,720
Blandford- Blenheim	7,770	8,090	8,440	8,810	9,190	9,550	1,780
East Zorra- Tavistock	8,050	8,530	9,040	9,560	10,050	10,510	2,460
Norwich	11,450	11,920	12,420	12,960	13,490	13,990	2,540
South-West Oxford	7,785	8,025	8,295	8,555	8,765	8,975	1,190
Zorra	8,860	9,110	9,370	9,650	9,950	10,240	1,380
Oxford County	125,065	132,475	140,275	148,235	155,855	163,235	38,170

Where a Township contains more than one fully serviced settlement area, assumptions regarding the allocation of the Township's total forecasted growth to each settlement will also be used to inform the study findings for each system

^{** 2021} Census Population with preliminary correction for undercount of approximately 3%







FORECASTED EMPLOYMENT GROWTH

Municipality	Est	Growth					
Wallicipality	2021	2026	2031	2036	2041	2046	2021-2046
Woodstock	28,440	30,040	31,690	33,720	36,050	38,730	10,290
Tillsonburg	9,060	9,320	9,600	9,950	10,360	10,810	1,750
Ingersoll	9,710	10,080	10,470	10,950	11,510	12,150	2,440
Blandford-Blenheim	1,910	1,950	1,990	2,050	2,120	2,210	300
East Zorra-Tavistock	2,950	3,020	3,100	3,200	3,320	3,450	500
Norwich	4,200	4,280	4,360	4,470	4,600	4,740	540
South-West Oxford	2,920	2,960	2,990	3,040	3,090	3,150	230
Zorra	2,890	2,920	2,960	3,010	3,080	3,150	260
Oxford County	62,080	64,570	67,160	70,390	74,130	78,390	16,310

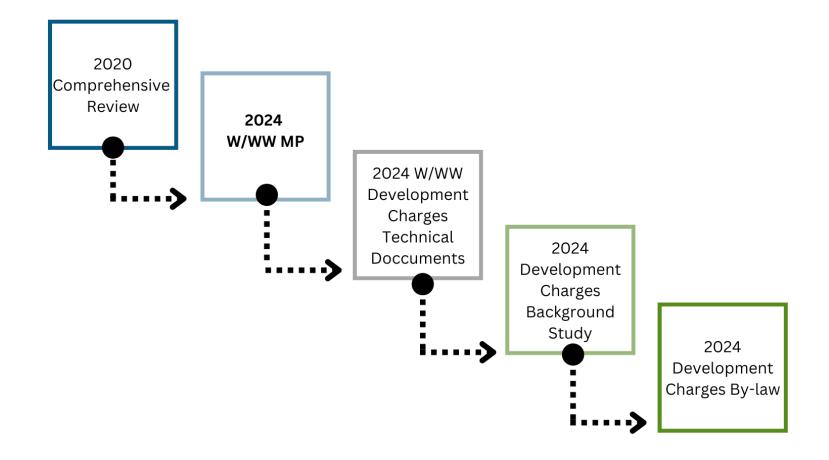
^{*} Figures may not add precisely due to rounding







INTEGRATED GROWTH MANAGEMENT PROCESS









PUBLIC CONSULTATION TO DATE:

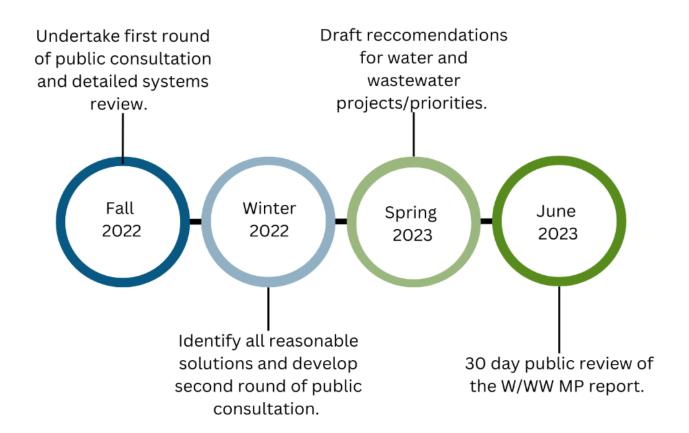
Activity	Date
Notice of Commencement Memo to Area Municipal Councils	14-Mar-22
Notice of Commencement Memo to County Council	14-Mar-22
Notice of Commencement Posted (Online)	14-Mar-22
Notice of Commencement sent to Stakeholders and Indigenous Communities	14-Mar-22
External Technical Advisory Committee (EXTAC) Meeting #1	07-Apr-22
Internal Technical Advisory Committee (INTAC) Meeting #1	13-Apr-22
Notice of Public Consultation Centre (PCC) Posted (online)	09-Sep-22
County Staff "Pop Up" Engagement at Canada's Outdoor Farm Show - Woodstock	14-Sep-22
Notice of PCC #1 sent to Stakeholders and Indigenous Communities	14-Sep-22
Notice of PCC #1 Memo to Area Municipal Councils	15-Sep-22
Notice of PCC #1 Memo to County Council	15-Sep-22
County Staff "Pop Up" Engagement at Tillsonburg Ribfest	23-Sep-22
County Staff "Pop Up" Engagement at Tillsonburg Ribfest	24-Sep-22
County Staff "Pop Up" Engagement at Ingersoll Town Hall	26-Sep-22
Virtual PCC #1 was held	29-Sep-22







PROJECT SCHEDULE









W/WW MP DELIVERABLES

- Final comprehensive Master Plan Class EA Report
- Full documentation of all public and stakeholder consultation, including Indigenous communities
- Preferred servicing alternatives
- Capital implementation plan for preferred servicing alternatives
- Clear identification of follow-on Class EA Studies (i.e. Schedule B or C projects)







W/WW MP STUDY INPUT

To have your say in the W/WW MP visit *Speak Up, Oxford!* or reach out to the project managers throughout the study.

www.oxfordcounty.ca/wwwmp

John Tyrrell, M.Sc. (Eng.), P.Eng. Senior Project Manager R.V. Anderson Associates Limited

Phone: 519-681-9916 ext 5038 Email: jtyrrell@rvanderson.com

Don Ford, BA, CMM III, C.Tech.

Manager, Water & Wastewater Services Oxford County

Phone: 519-539-9800 ext 3191

Email: dford@oxfordcounty.ca









DISCUSSION





