



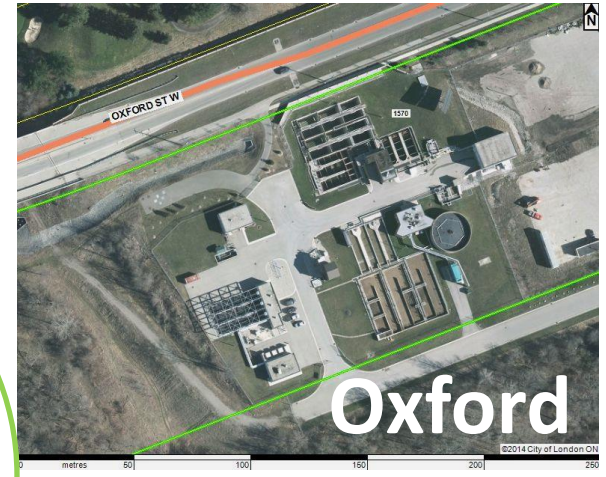
Treatment Plant Optimization



Adelaide



**A Roadmap to
Sustainability**



Oxford



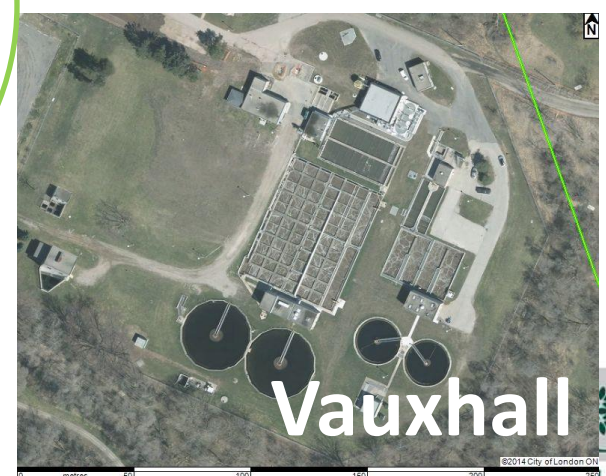
Pottersburg



Vauxhall



Our Plants are Essential...



**40% of all City
of London
Wastewater is
treated at
these 4 Plants**

\$311M



Adelaide



1950's

\$100M

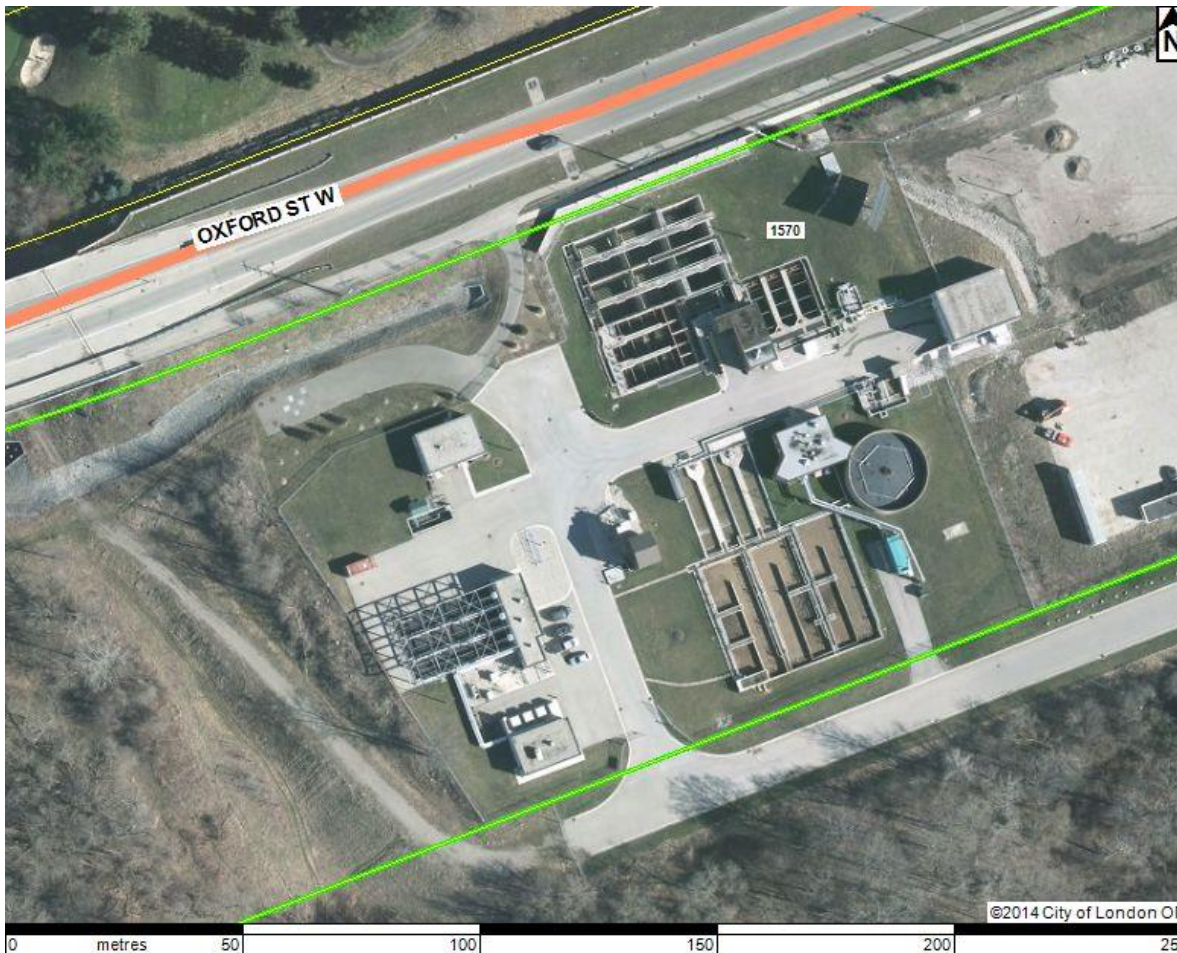
**Secondary
Treatment**

Flood Protection

Wet Weather



Oxford



1960's

\$45M

Tertiary Treatment

**Canadian
Consulting
Engineers Award
(2011)**

**Wet Weather
Impacts**



Pottersburg



1950's

\$110M

Secondary Treatment

Wet Weather

Growth Constraints

ILDS



Vauxhall

1950's

\$56M

Secondary

Consulting Engineers
of Ontario Award
(2014)

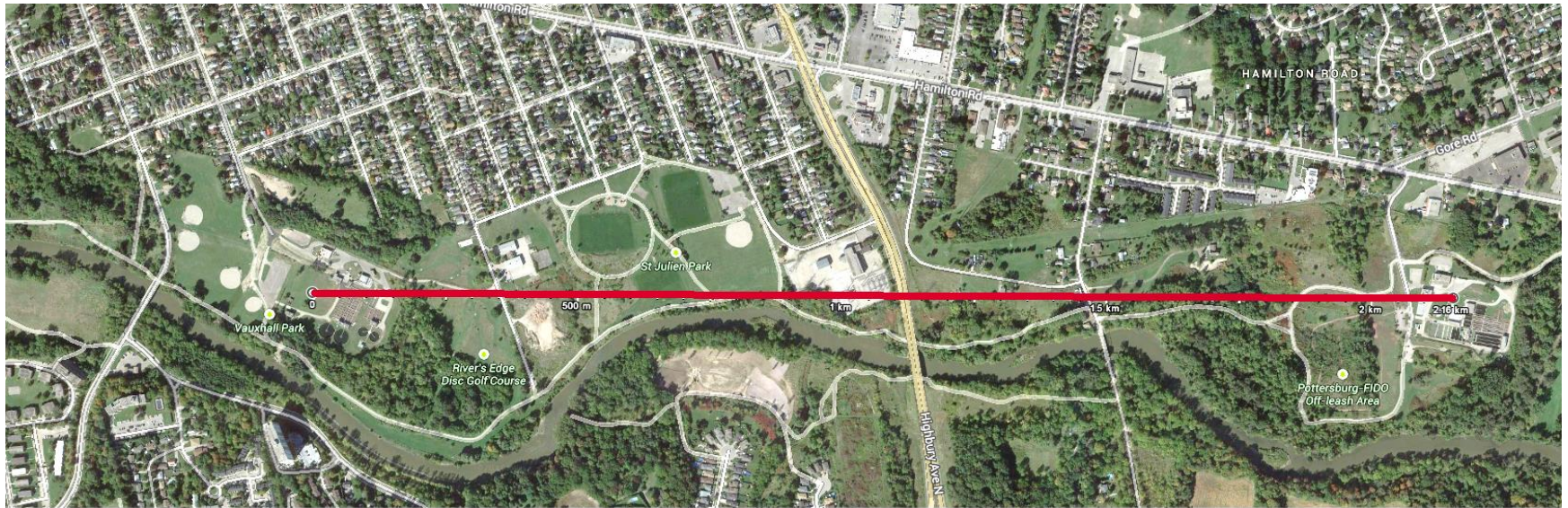
Capacity opportunity

Interconnect
opportunity





Pottersburg-Vauxhall Interconnection



Enhanced capacity utilization and flexibility during asset renewal



Triggers for Upgrades

AECOM

The Corporation of the City of London

**2014 Wastewater Servicing Master Plan
Update and Development Charge
Background Study**

Prepared by:
AECOM
250 York Street, Suite 410
London ON, N6A 6K2

Project Number:
60275661

Date:
June, 2014



- **Historically growth**
- **Other plant needs integrated**
- **Per capita flow rates have been dropping**
- **Different triggers**



And facilities continue to age ...





Wastewater Treatment Optimization

Unlocking available treatment capacity without major plant expansions

- Review underway; optimization plan to be completed late 2013/early 2014
- Objectives:
 - Find latent capacity
 - Coordinate life cycle needs
 - Address tighter effluent criteria, CSO's & climate change impacts
- Desired outcomes:
 - Operational savings through efficiencies & reduced energy costs
 - Reduction and/or deferral of capital costs



Investments may be required to operationalize the optimization strategy. These investments are currently unknown and will be added to future Wastewater budgets if required.





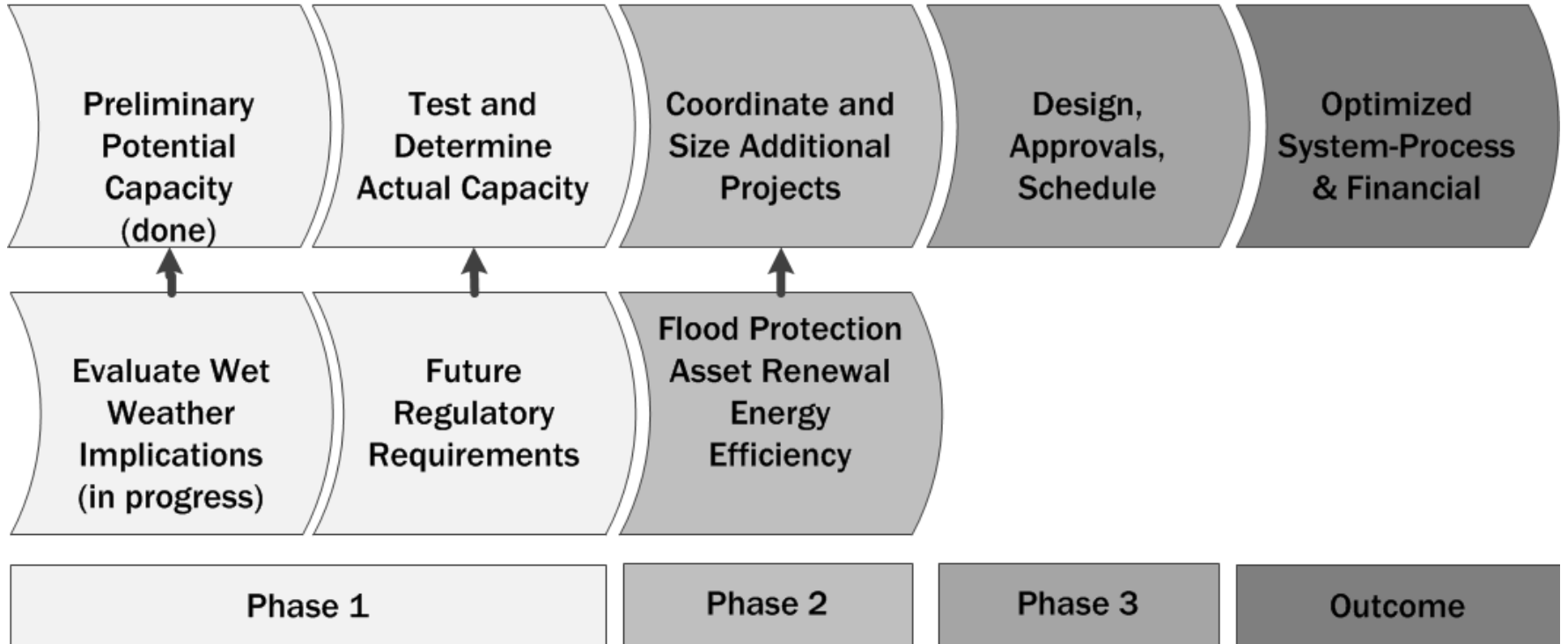
We've Done This Before





We Know What We Need



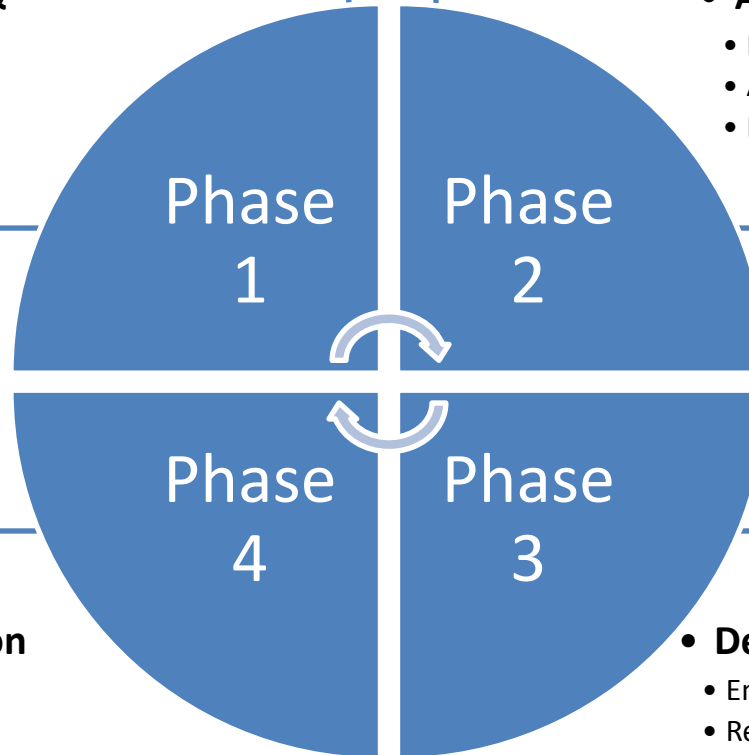




We Have a Plan

• Evaluate Wet Weather & Future Regulations

- Preliminary Potential Capacity (complete)
- Determine Actual Max Capacity
- Establish Optimization Plan



• Additional Projects

- Flood Protection
- Asset Renewal
- Energy Efficiency

• Construction & Operation

- Optimization Complete

• Design

- Engineering Design
- Regulatory Approvals
- Schedule & Budget



We Know What to Do Next

- **Evaluate Wet Weather & Future Regulations**

- Preliminary Potential Capacity (complete)
- Determine Actual Max Capacity
- Establish Optimization Plan

Phase
1

- Engineering studies (\$500k) will be covered by budget from ES5084-13
- Future Phases – Pottersburg / Vauxhall Interconnection under ES3097. Future work will be determined from the study results.



.....the development of an optimization strategy and roadmap for the Adelaide, Oxford, Pottersburg and Vauxhall Wastewater Treatment Plants plan **BE ENDORSED.**



LONDON

**4 Valuable assets -- \$311M -- 40% of London served
New investment triggers**



**Goal: Manage Future Rate increases to Cost of Living
Proposed Roadmap for Financial and Technical Goals**

Funding for Phase 1 available



Questions?

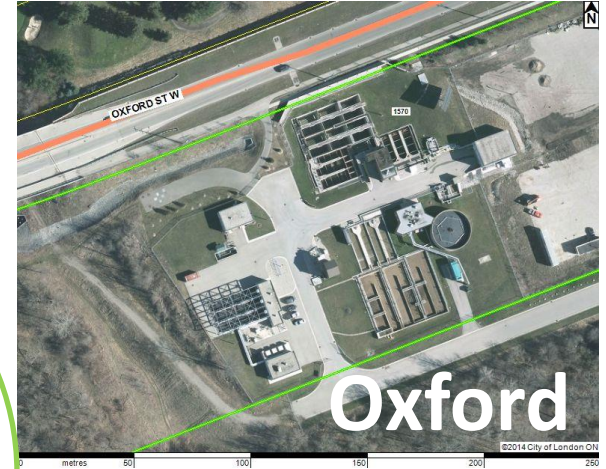


Adelaide

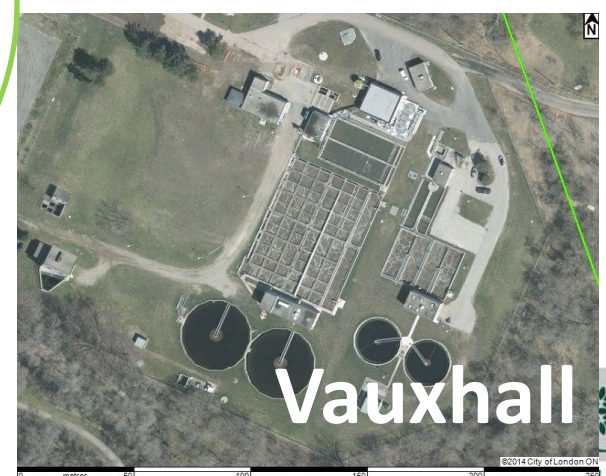


Pottersburg

**40% of all City
of London
Wastewater is
treated at
these 4 Plants**



Oxford



Vauxhall