

The Right Tool for the Job!



The Golden Hammer

- An over-reliance on a familiar tool
- "If all you have is a hammer, everything looks like a nail" Mosher



Where we are now

- \$250 million for stormwater management over the next 20 years
- Based on wet ponds and storm sewers

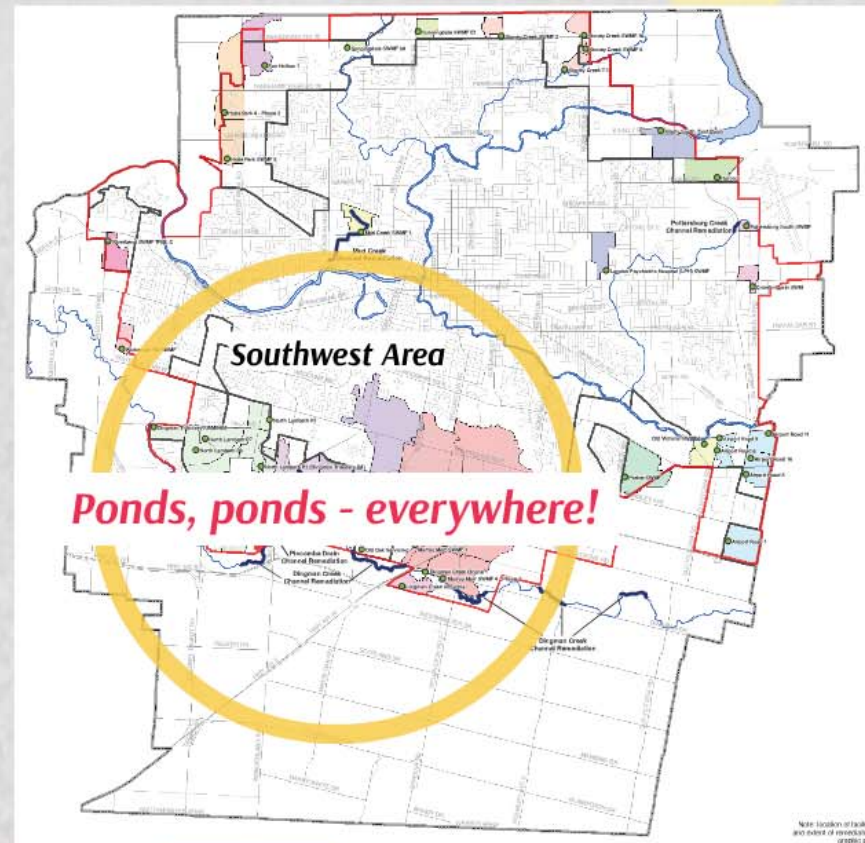


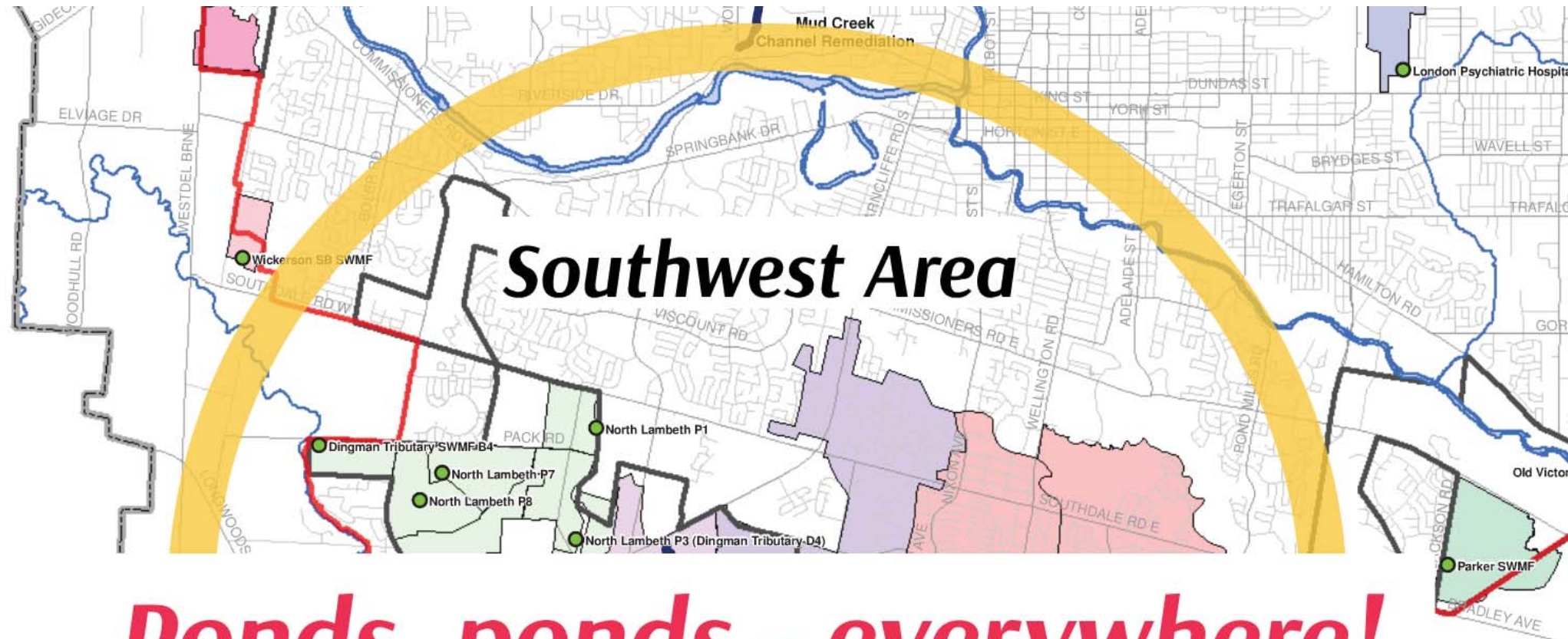
Igniting Low Impact Development in London

Scott Mathers
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City of London
April 6, 2016

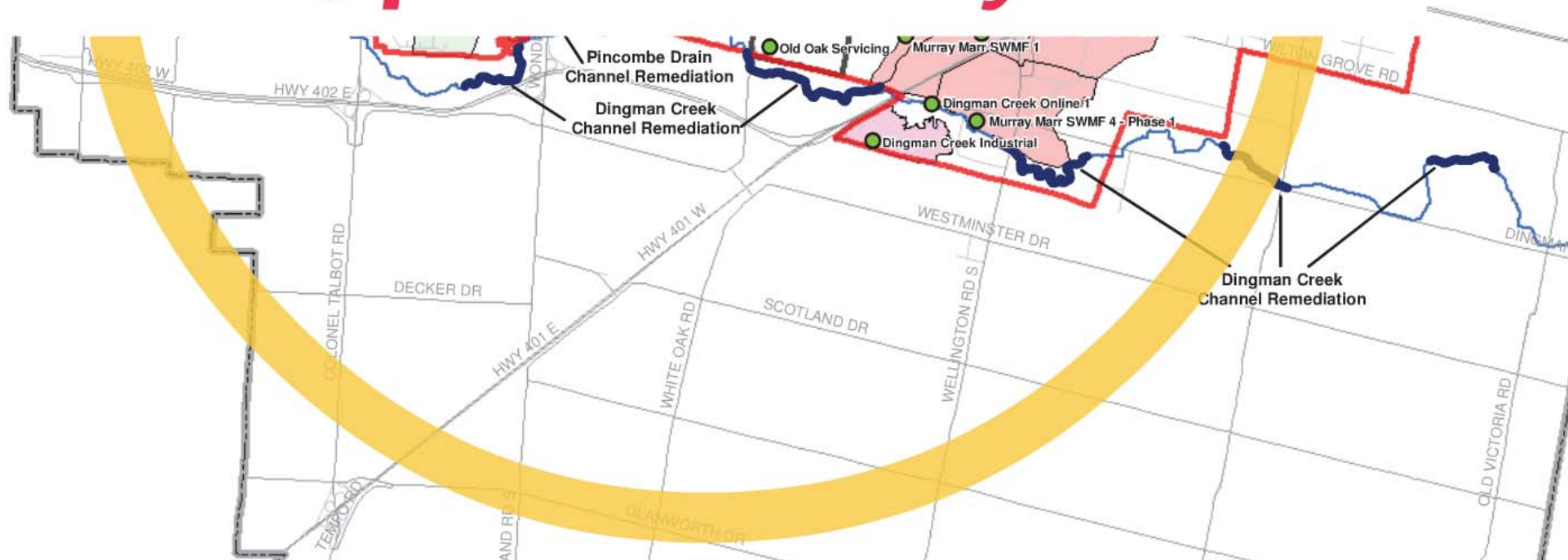
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Ponds, ponds - everywhere!



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Assessing Wet ponds



Pros:

- Attenuate post-development flow rates
- Reduce flooding risk
- An amenity space; integrates with natural heritage system



Sunningdale 'Corlon 2' SWMF

Assessing Wet Ponds



Cons:

- Increase runoff **volume**
- Limit infiltration & groundwater recharge
- Does not match the existing spatiotemporal variation of the water flow, i.e., the flow regime.



Westminster Wetlands



TOO HOT



TOO COLD



JUST RIGHT



Where are we going?

- Ministry of Environment and Climate Change LID Manual to be released by end of 2016
- At-source controls to increase infiltration
- The Toolbox: Low Impact Development



A Suite of Tools

- Bioretention/Rain gardens
- Bioswales
- Box Planters
- Permeable Pavers
- Green Roofs
- Rainwater harvesting
- Reduced impervious areas

Better match
with the
existing flow
regime.



<http://stormwater.horrycounty.org/Home/LowImpactDevelopment.aspx>

Opportunities: Municipal Right of Way

- Infrastructure Renewal Projects: opportunities for retrofit Pilot Projects
- Enhance public participation and education
- Incorporate LID into the City's standards as part of the future Complete Streets Manual

Factors to Consider

- Other utilities
- Capital/lifecycle costs
- Maintenance
- Public safety/risk management
- Aesthetics
- How it will integrate with the character of the neighbourhood.

Municipal ROWs



Nashville, TN

Atlanta, GA

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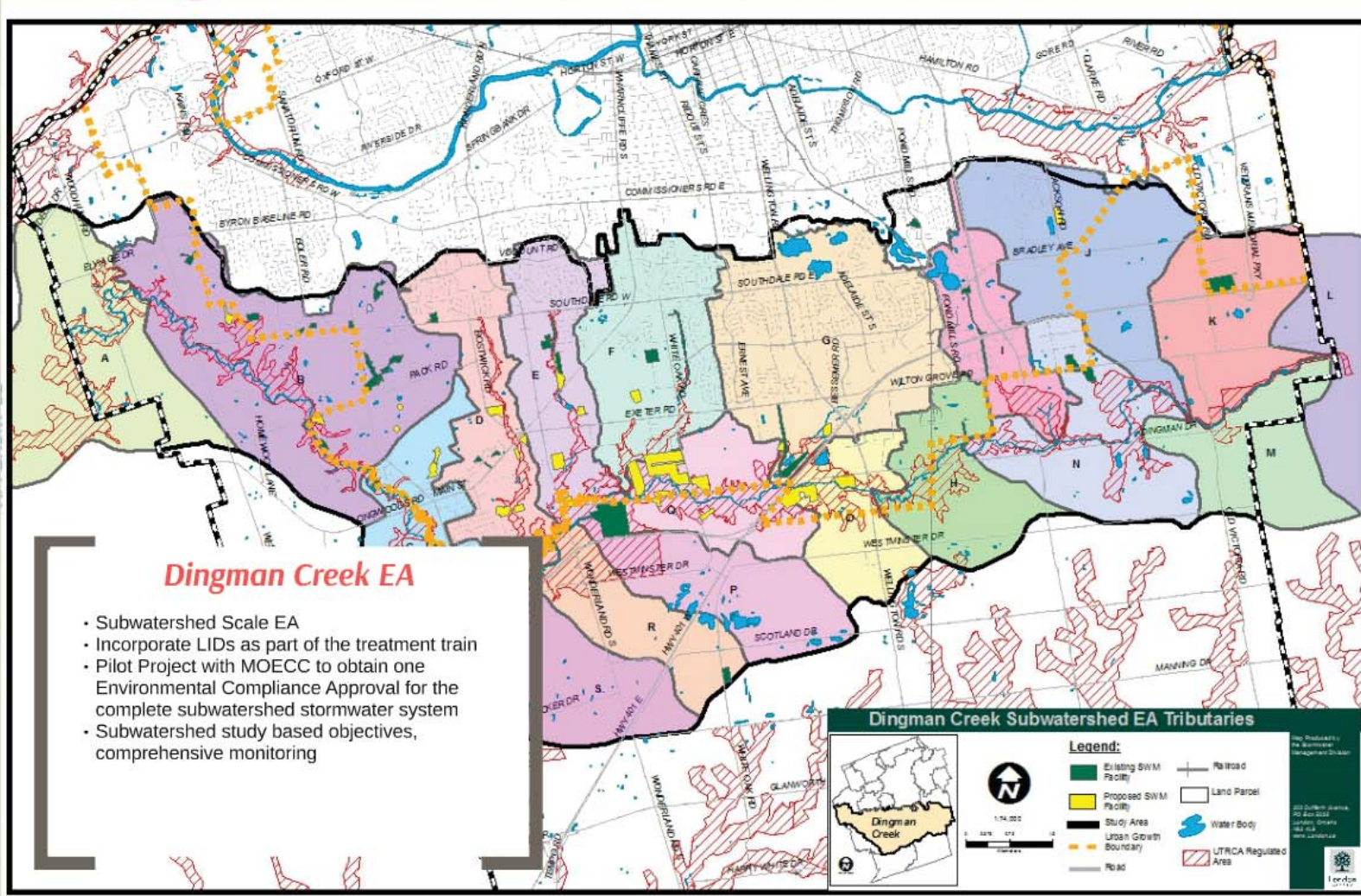
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New Subdivisions & Site Plans

- Consult with local consulting engineers and developers
- Conduct training and education sessions for internal and external stakeholders
- Update the City's Design Standards and Specification Manual for new development



Dingman Creek Subwatershed





Dingman Creek EA

- Subwatershed Scale EA
- Incorporate LIDs as part of the treatment train
- Pilot Project with MOECC to obtain one Environmental Compliance Approval for the complete subwatershed stormwater system
- Subwatershed study based objectives, comprehensive monitoring

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