



RETROFITTING SURFACE WATER MANAGEMENT MEASURES PROVIDES AN OPPORTUNITY TO ENHANCE OUR URBAN AREAS

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Current drivers



Current drivers

ciria



Current drivers



Current drivers



Traditional approaches to managing our surface water



Traditional approaches to managing our surface water



Areas of historical flood risk



Solutions

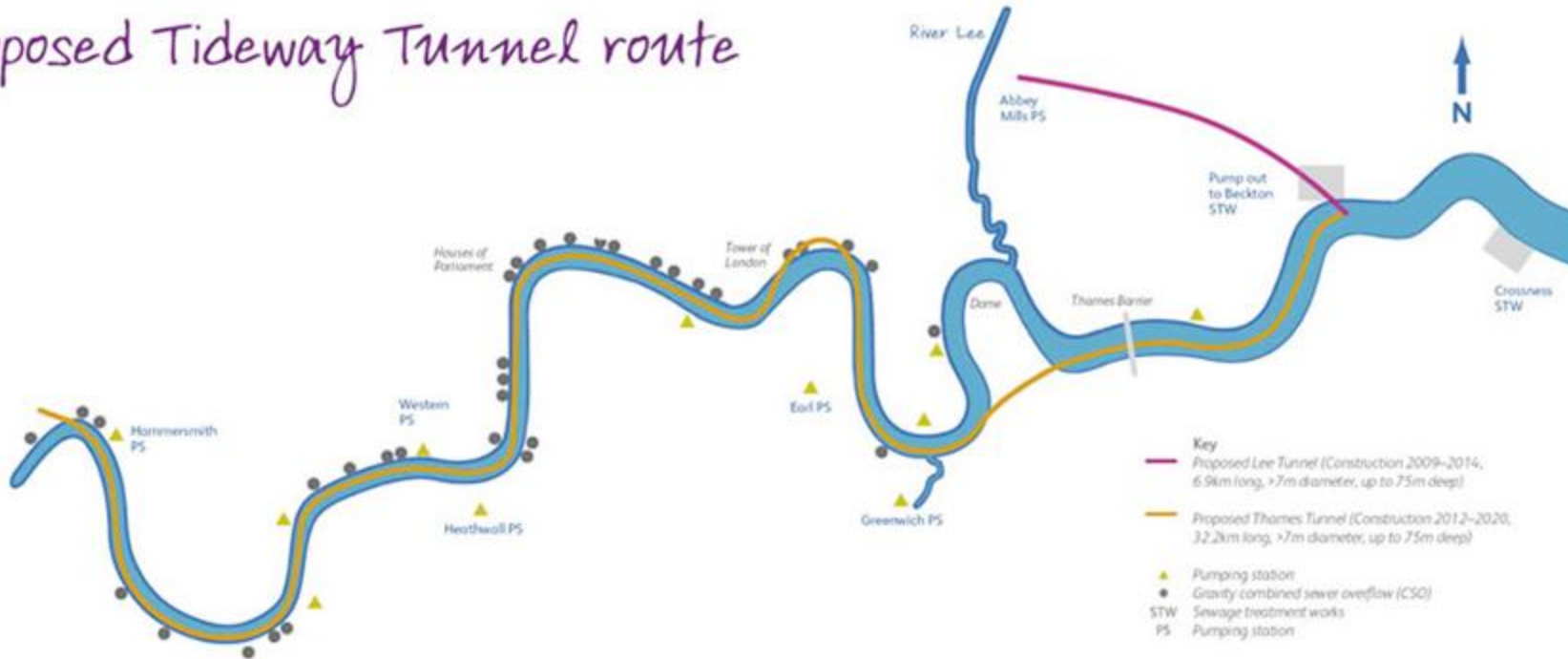


Solutions



Proposed Tideway Tunnel route

River Thames



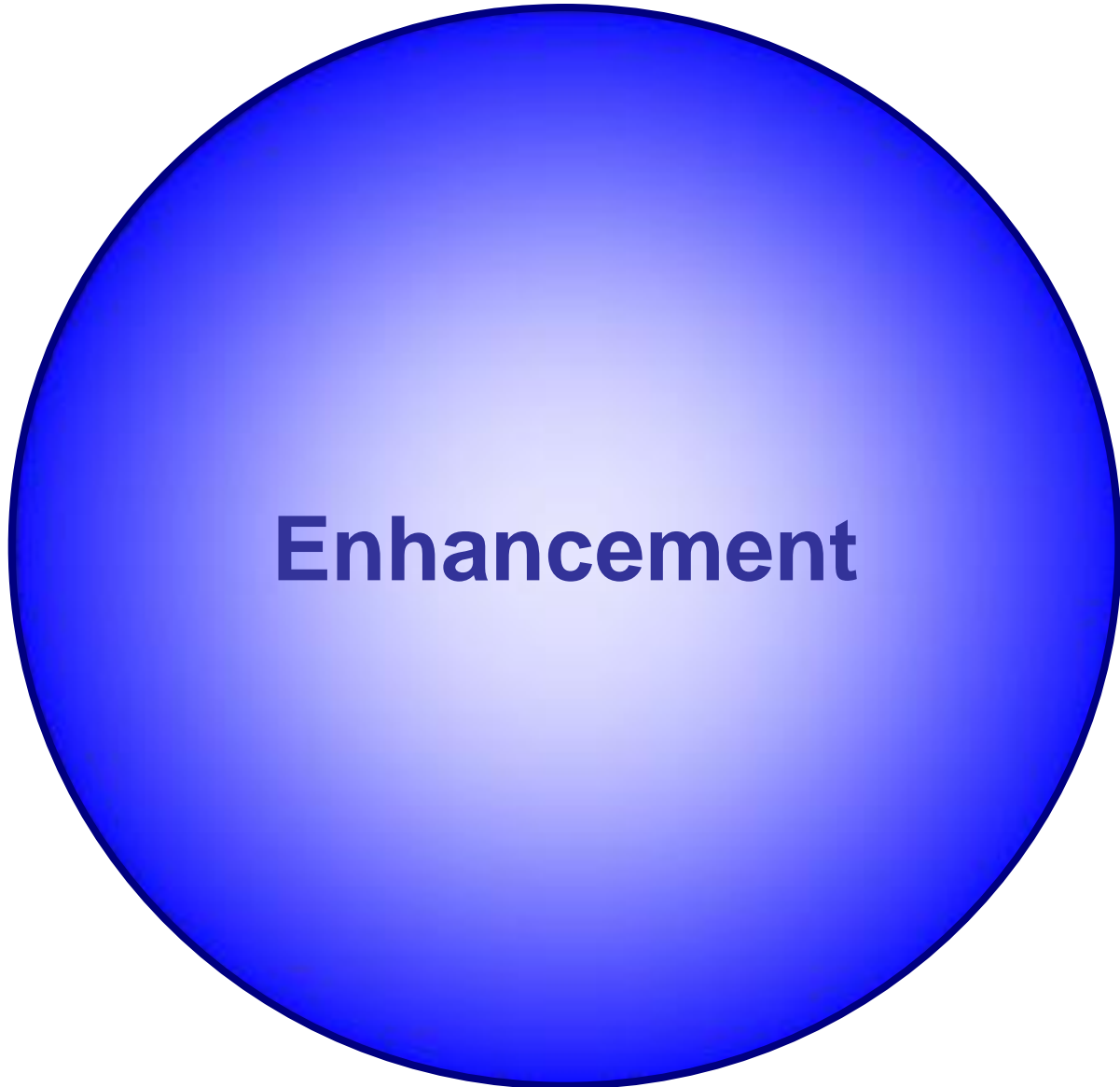
Solutions



Solutions



Multiple benefits



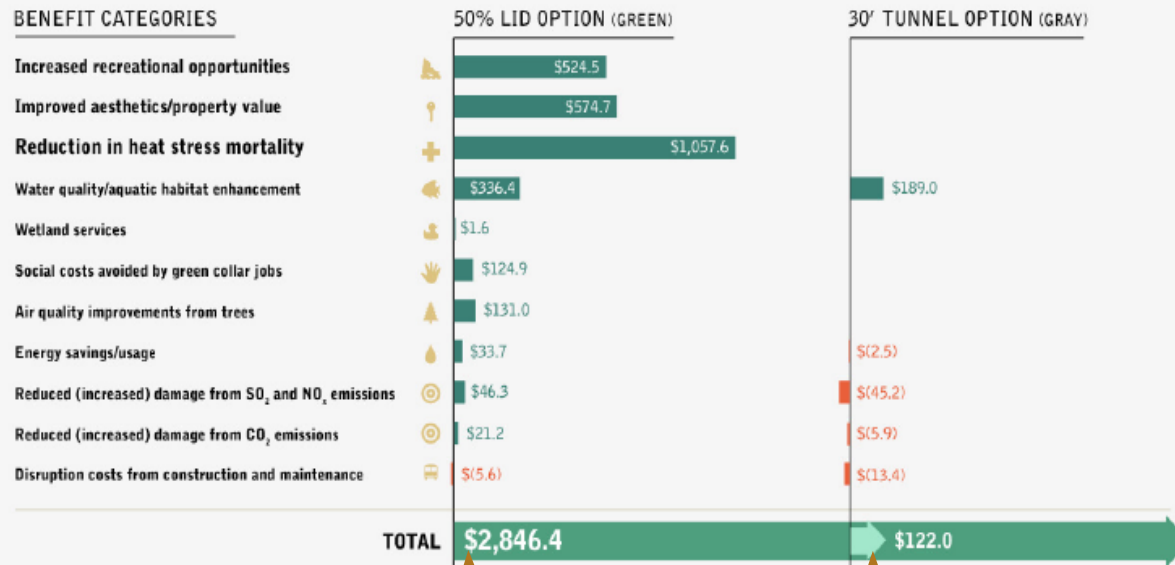
Multiple benefits

- Reduced flood risk
- Improved water quality
- Increased biodiversity
- Increased levels of green infrastructure
- Better places to live
- Engagement with local communities
- Shared budgets
- Improved microclimates
- Carbon management
- Adaptation to climate change



Philly Triple Bottom Line

Benefits of CSO options: Cumulative through 2049 in millions of US dollars



Philadelphia Watersheds (Stantec Consulting) 2009

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Cumulative added-value (whole life) of using GI to deal with CSOs - \$2.8bn

Cumulative added-value (whole life) of using big sewers \$122m

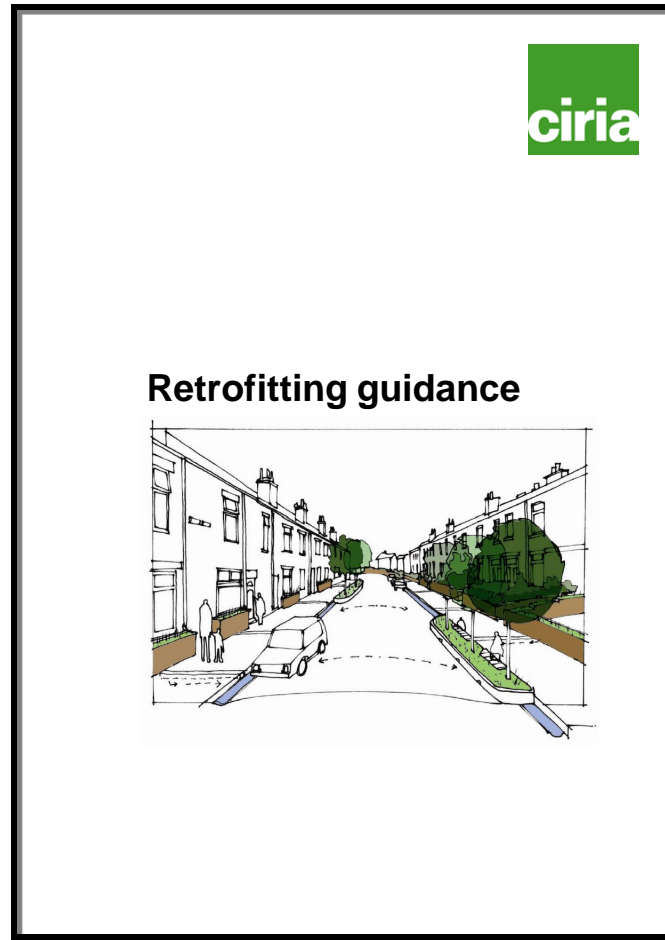
Retrofit in practice - Dings



Retrofit in practice - Dings



New guidance...



Potential retrofit?



Maybe this...



Or this...



What next?

