

NI Water's Contribution to the Environment

Belfast Lough & Lagan Catchment Stakeholder Group

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Wastewater Operations Manager

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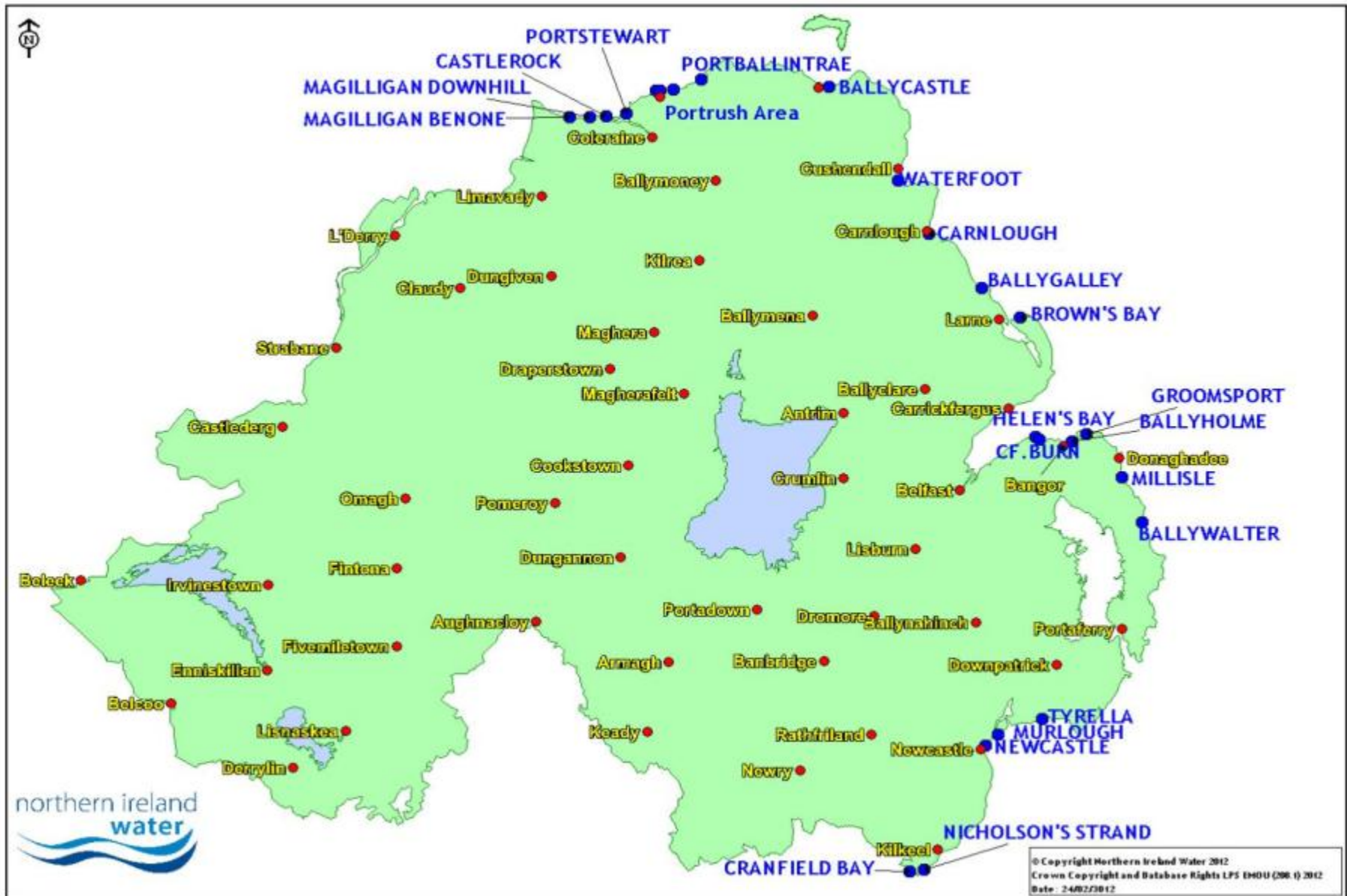
NI Water's Environmental Contribution Presentation Structure

- 1) Capital Expenditure**
- 2) Compliance**
- 3) Operational Issues**
- 4) Environmental Solutions**
- 5) Summary**

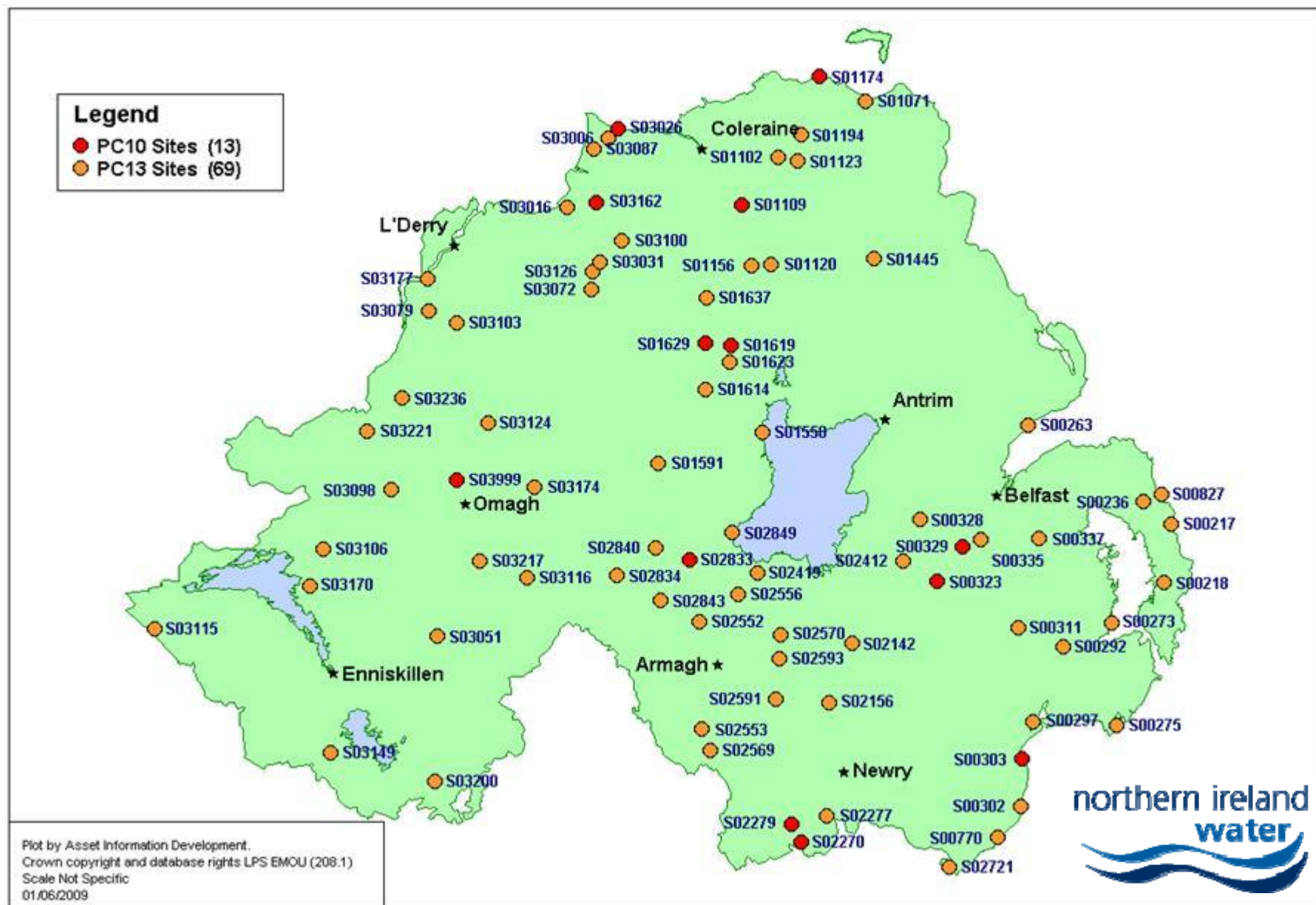
Capital Expenditure

- Enhancement of water / wastewater treatment works – to improve quality of discharges
- Upgrades of sewer networks – to limit overflows
- Base Maintenance and Operational expenditure – to sustain quality of discharges

NIW Operating Area – Predominantly Rural, Long Coastline, 24 Bathing Waters
>99% of Raw Water Drawn from Surface Water Sources



PC10 Period & PC13 Period WwTW Programme



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1) Capital Expenditure

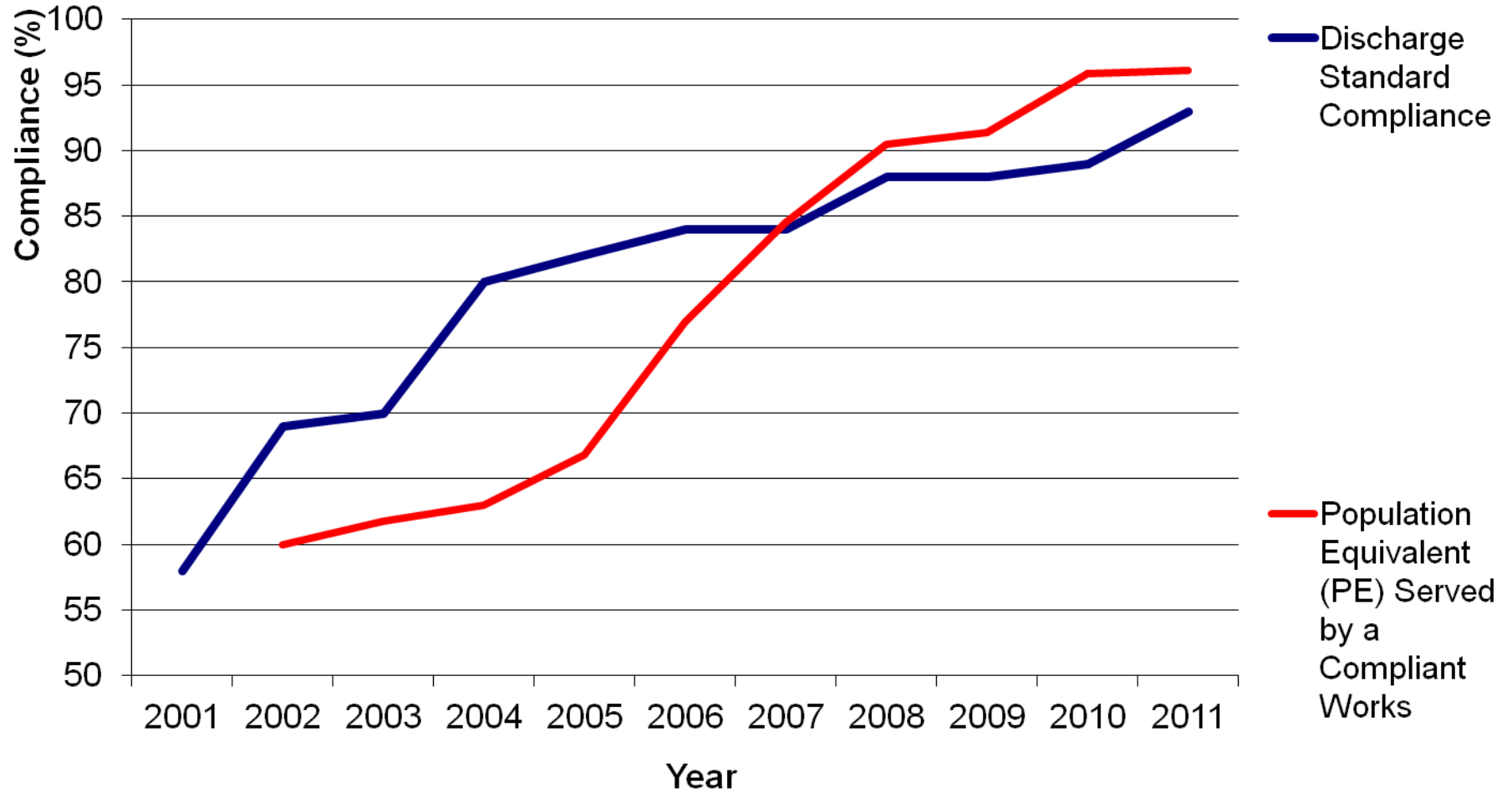
2) Compliance

3) Operational Issues

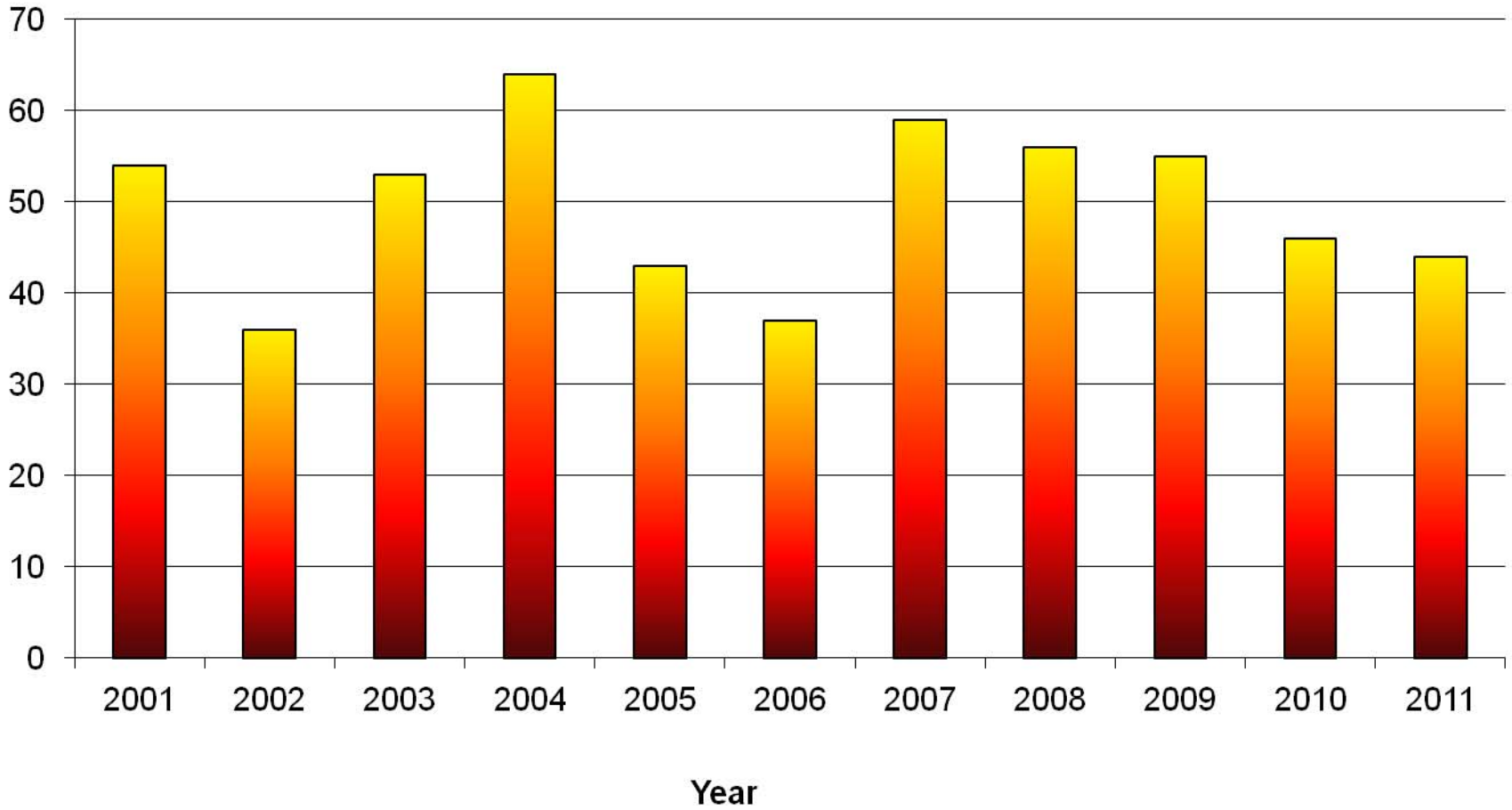
4) Environmental Solutions

5) Conclusions

Wastewater Treatment - Discharge Standard Compliance



High / Medium Pollution Incidents attributed to NIW



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Background

- Sewer flooding is caused by both hydraulic overload and other causes
- **Hydraulic overload** - due to heavy rain and insufficient capacity in sewer network. (10%)

These problems are being dealt with by 'upgrading' the system.

- **Other cause flooding** - due to blockages (90%), pump failure and sewer collapses.

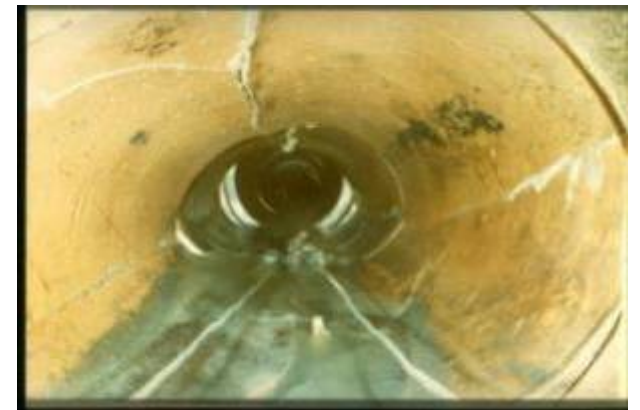
These problems are being dealt with by reactive clearance/ maintenance/ repairs.



Current situation

Understanding of what causes blockages is crucial

- Current NIW records suggests that:
 - 2/3 of blockages are caused by rags;
 - almost 1/3 by fats, oils and greases (FOG); and
 - only 2% by problem in a pipe.



Inappropriate flushing

- Disposable products – rags
- Fats, oils and greases (FOG)
- Food waste



Severe grease build up



Rags, grease and debris



Wastewater Operational Scope

- 1) Approximately 14,000km of sewers**
- 2) Over 1,000 Wastewater treatment works**
- 3) Over 1,200 sewage pumping stations**
- 4) Over 700 combined sewer overflows**
- 5) Over 950 emergency overflows**

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General Public - Education and Awareness Techniques

Bag it & Bin it Campaigns



Local Press

Advertising



Public representatives & community groups



School visits

Commercial / Industrial - Education and Awareness techniques



NIW Booklet

Face to face visits, monitoring, trade effluent team, Environmental Health Officer, letters of warning, prosecutions




Guidance posters

In summary

NI Water is progressing education campaigns in partnership with a number of organisations

NI Water will continue to deliver investment on a prioritised basis to improve the water environment



**Thank you for your
attention.**

Any questions?

Visit www.niwater.com
for more information