

Auckland Council - using stormwater interventions to meet environmental requirements

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BE THE HOW.
WHAKAMAUA KIA TINA!



Aim of this presentation

- Background to water quality pressures
- Benefits of stormwater interventions
- Recommendations for focus

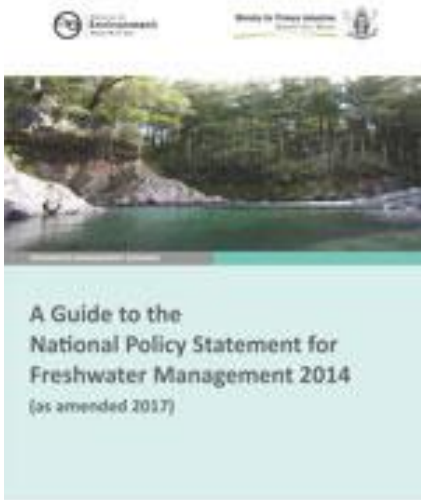




The problem



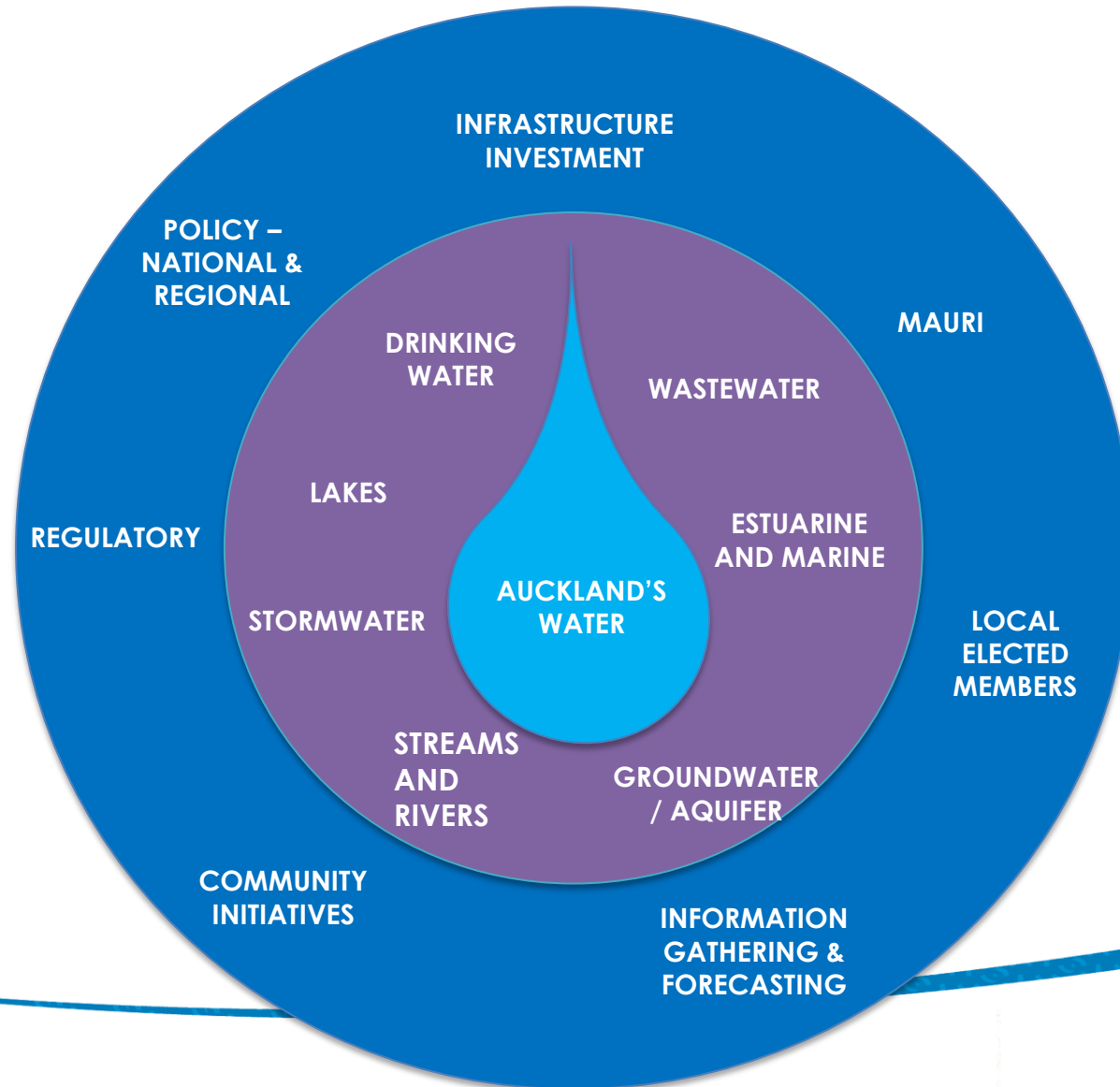
Sources



Pressures

- Growth
- Legislation
- Increased public scrutiny

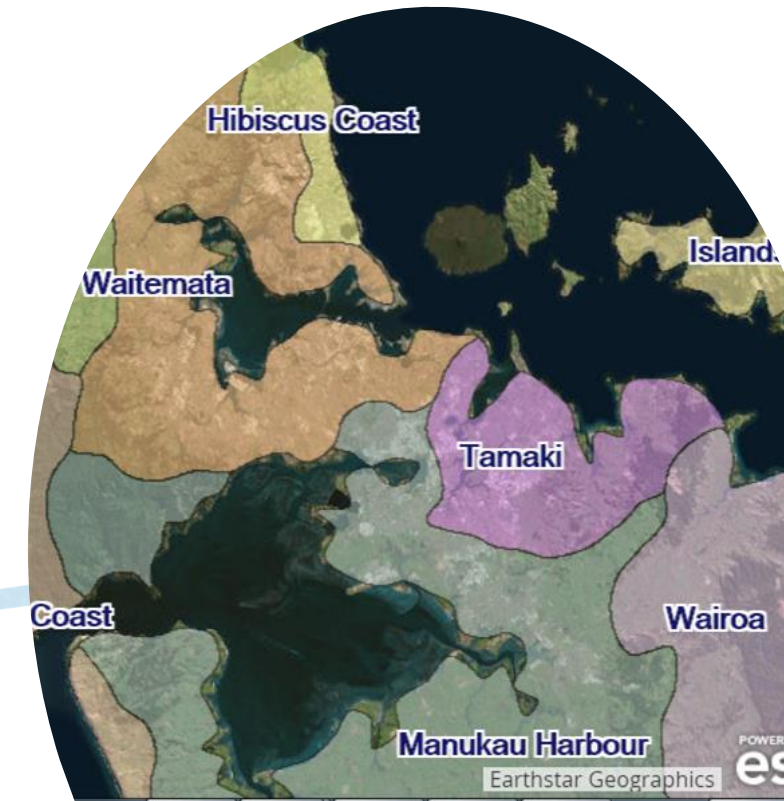
Complexity of water management



Understanding the issues

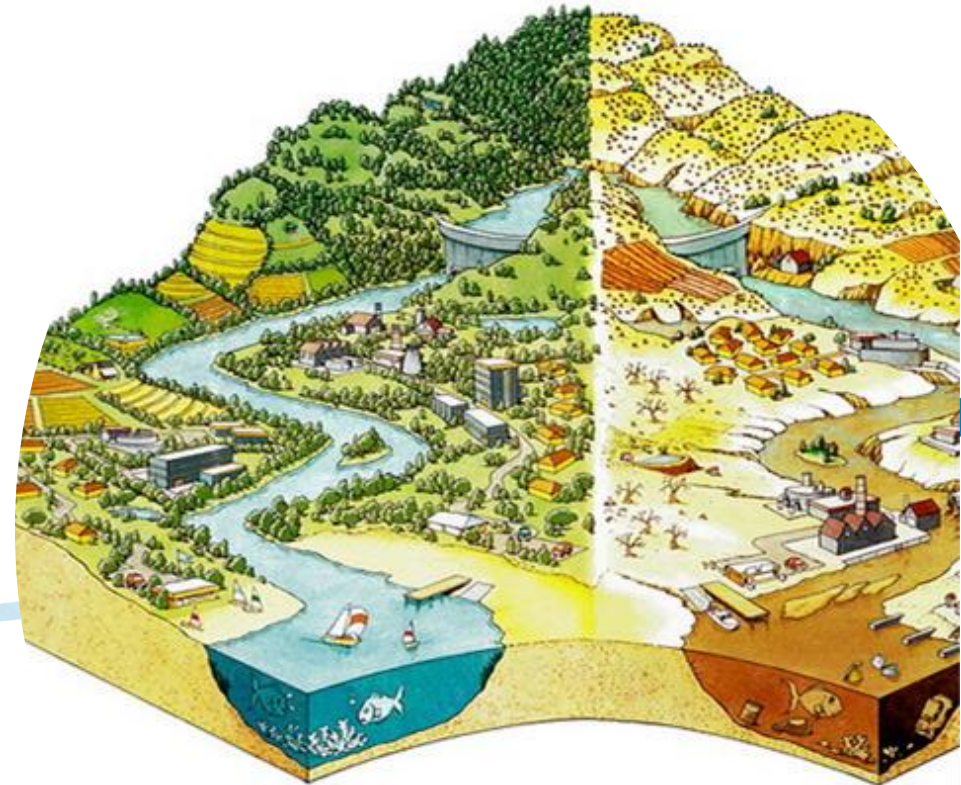
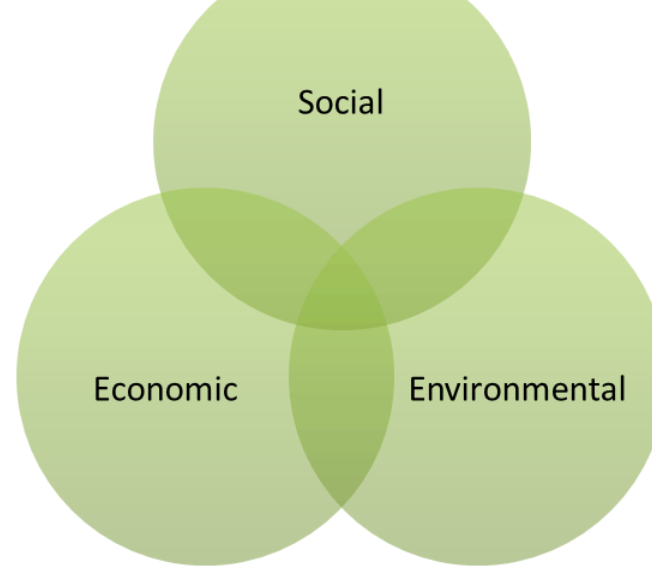
- Which contaminants
- Scale
- Identifying sources

| | | |
|---|---|--|
| | <ul style="list-style-type: none">• Polycyclic aromatic hydrocarbons | <ul style="list-style-type: none">• Litter• Habitat degradation |
| Discharges from new urban development or urban renewal projects | <ul style="list-style-type: none">• Sediment• Metals• Stream flow changes | <ul style="list-style-type: none">• Litter• Habitat degradation |
| Discharges from existing land use | <ul style="list-style-type: none">• Sediment• Faecal pathogens from animals• Metals• Industrial chemicals | <ul style="list-style-type: none">• Litter• Stream flow changes• Habitat degradation |
| Discharges from roads | <ul style="list-style-type: none">• Sediment• Metals• Polycyclic aromatic hydrocarbons• Industrial chemicals | <ul style="list-style-type: none">• Litter• Stream flow changes• Habitat degradation |
| Discharges from industry and agriculture | <ul style="list-style-type: none">• Sediment• Nutrients• Metals• Polycyclic aromatic hydrocarbons | <ul style="list-style-type: none">• Industrial• Litter• Stream flow changes |



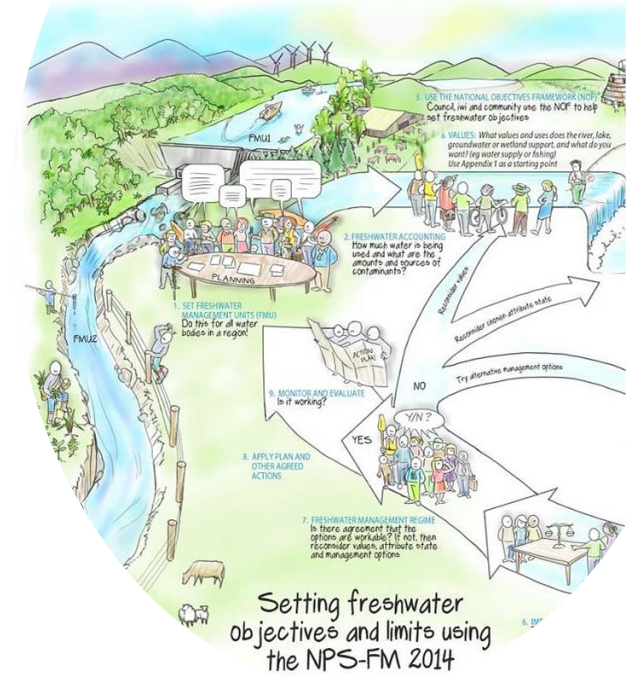
Identifying solutions

- Targeted
- Strategic
- Holistic
- Catchment
- Cost-effective



Non-structural interventions

- Policy
- Education and advocacy
- Behaviour change
- Safeswim



Industry pollution prevention programme





Structural interventions

- Flood prevention
- Environmental protection
- Investment
- Green benefits







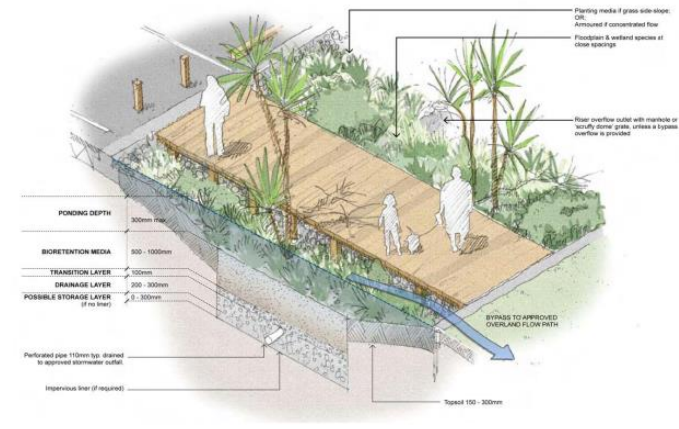
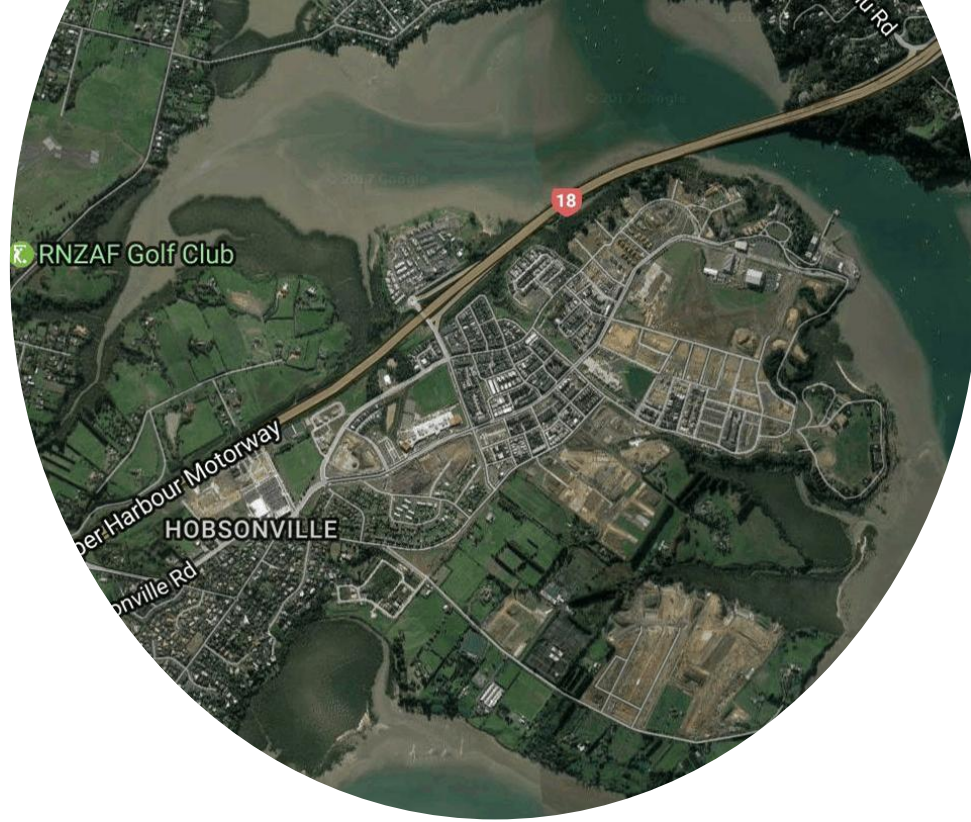
Picture courtesy of Boffa Miskell

Te Auaunga Awa



Takanini Cascades





New developments

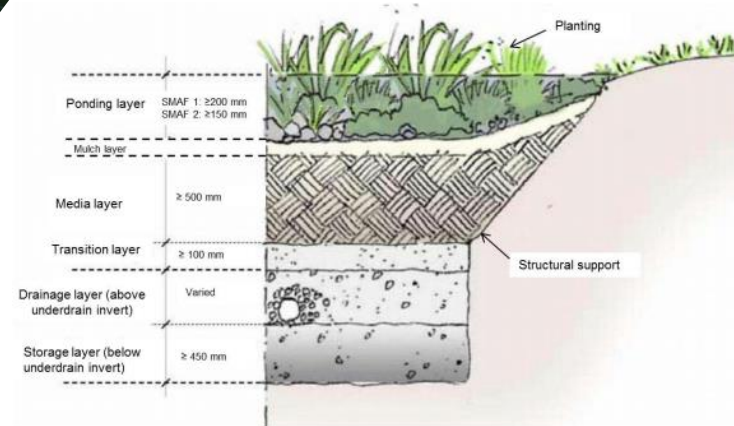


Effectiveness of structural interventions

- Location
- Design
- Maintenance
- In combination



Innovation



Riparian buffers



Additional benefits of interventions

- Health and social
- Economic
- Environmental resilience
- Opportunity for New Zealand to become world leaders



Recommendations

- Share learnings throughout industry
- Include environmental value of schemes within business cases
- Include monitoring within business cases
- Whole catchment approach
- Provide support for innovation
- Utilise public interest in schemes to lead to behaviour change



Conclusions

- Significant challenges to manage stormwater while producing healthy environments
- Collaboration and sharing ideas is key
- Opportunities to create legacy
- New Zealand is under scrutiny for its green image
- The stormwater industry can play a key role in ensuring a healthy water environment





La Rosa Garden reserve, Auckland *picture courtesy National Geographic*



Thank you.
Questions? Comments?

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