



Stormwater Group
WATER NEW ZEALAND

Water New Zealand Stormwater Education, Training and Sector Development Plan

Water NZ Webinar, 21st May 2020



Purpose

1. **Communicate** strategic framework for organising stormwater training, and resource available in training plan (TODAY)
2. **Understand** training priorities in the area and organisation/network (ONGOING)
3. **Promote** collaboration (ONGOING)
4. **Identify** potential partnerships for joint benefit and local/regional 'Training Champions' (FUTURE)
5. **Encourage** budgeting in LTP cycle for training - staff and investment in courses as needed (FUTURE)



Why did we develop the Plan?

Drivers for investment in a co-ordinated approach to training

1. **Rapid change** in the industry and high cost of inadequate training
2. Poor outcomes for the environment
3. Motivating our practitioners and employers
4. Water NZ is the right organisation to **co-ordinate** a national approach ...
5. Barriers:
 - A lack of structure to industry training
 - A lack of funding to develop and deliver

Example:

Auckland Council spent \$153,000 to fix vested ponds not up to design standard due to poor design/construction.

Training Structure



1. Coherent/logical
2. Training topics classified
3. Modules can be added/refined
4. Understand bigger picture/transcend silos



Key Outcomes from the Plan

1. Comprehensive resource/reference for the industry – the 'go to' guide
2. List of training needs in each stage
3. For every training need in each stage:
 1. Needs
 2. Drivers
 3. Target audience
 4. Providers
4. Lot of training available, but not visible to our industry
5. Key gaps – supported by industry survey
6. Guidance on:
 1. Prioritising training needs
 2. How to develop training
 3. Evaluate training (measure ROI & build the next business case!)
7. Recommendation and Next Steps – 3 Year Executable Action Plan

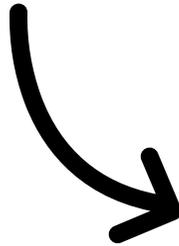


Resources in the Plan



9. Maintenance (Toolkit 2 Tables 9.1-9.3)

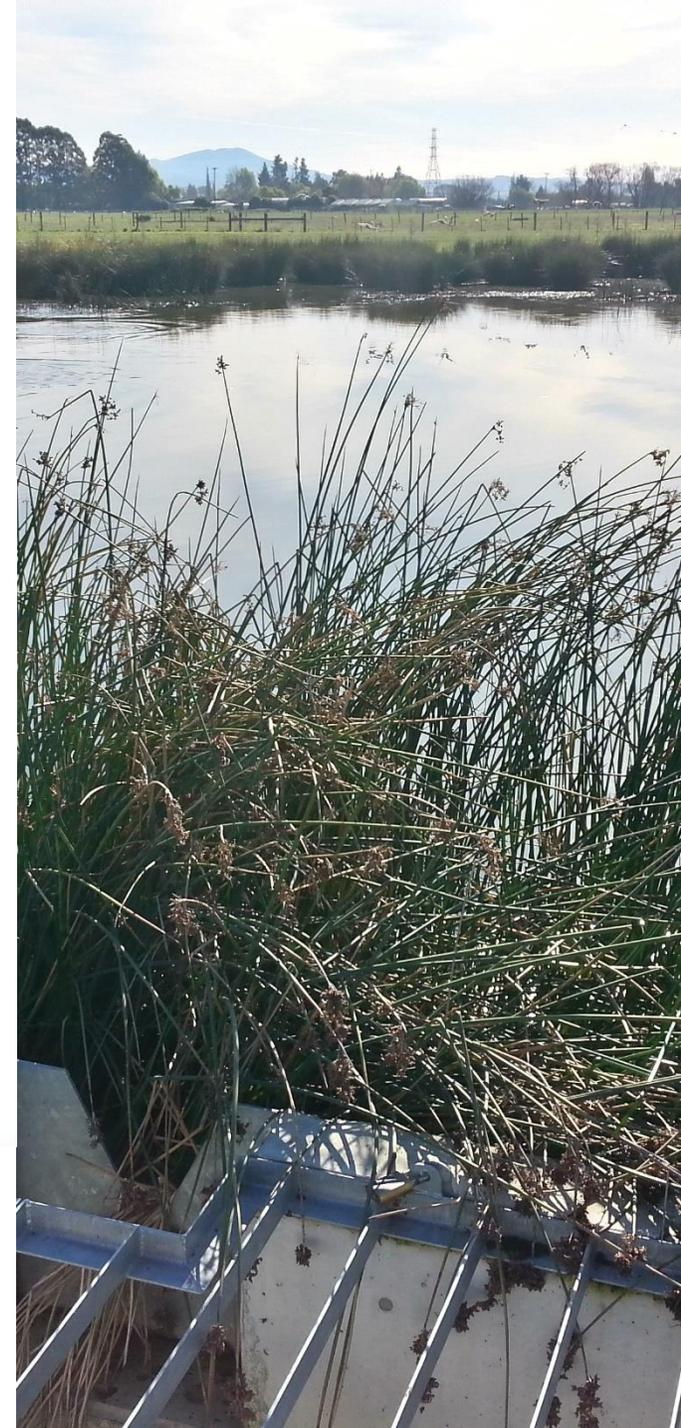
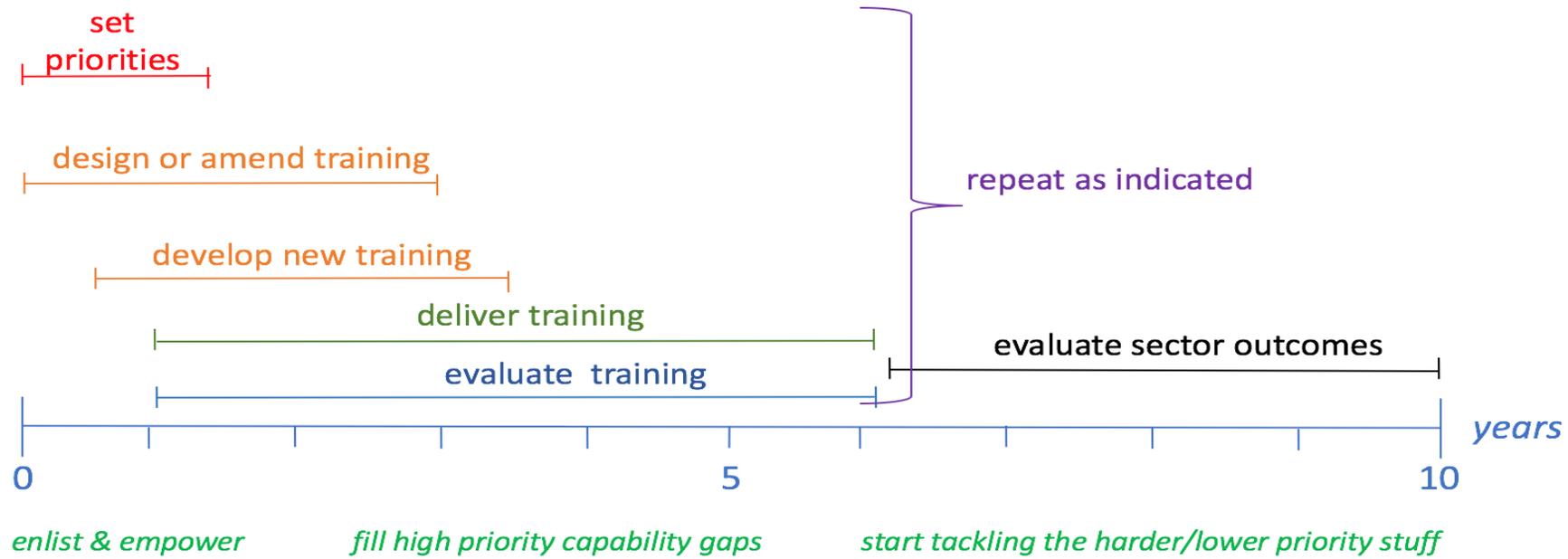
9.1	Inspection: the art and science of inspecting green and grey assets on public and private land
9.2	Proactive maintenance: planning, budgeting, implementing, documenting, learning
9.3	Reactive maintenance: budgeting, implementing, documenting, learning



9.1 Inspection: The art and science of inspecting green and grey assets on public and private land				
Needs	Underlying causes of performance gap	Flow-on results of the performance gap	Target audiences	
<ul style="list-style-type: none"> inspection: what to look for and what to do about it for green infrastructure (including natural water bodies) and the interfaces between green and grey infrastructure the importance of keeping good records building an interactive GIS-based asset register review for learnings/continual improvement/adaptive management 	<ul style="list-style-type: none"> lack of consistent approach and training for asset inspectors lack of understanding of the synergies and gaps between green and grey infrastructure lack of training in stormwater BMP asset management generally communities don't understand green and grey asset life cycles 	<ul style="list-style-type: none"> inspectors don't know what to look for under-performance of the green assets investment in assets doesn't deliver the anticipated ROI across the four wellbeings communities are less likely to find what they misunderstand 	<ul style="list-style-type: none"> stormwater professionals developers consultants contractors utilities/built asset managers council consenting and compliance staff 	
Solutions (please also refer to the list of providers in Toolkits 13 and 14)				
Needs	Education: Polytech/ITO <ul style="list-style-type: none"> inspection of WSUD and green/grey stormwater infrastructure 	Education: University <ul style="list-style-type: none"> lecture topic 	Professional training <ul style="list-style-type: none"> inspection of WSUD and mixed green/grey stormwater infrastructure Peter Mitchell, Stormwater Asset Manager, Auckland Motorways Alliance NAMS Infrastructure Management Manual and others here NGICP Clearwater asset management training WSUD research team Peter Christensen and other councils 	Other support <ul style="list-style-type: none"> Infrastructure New Zealand https://infrastructure.org.nz/ ZAM WSUD Handbook: Zero Additional Maintenance Water Sensitive Urban Design without ongoing maintenance requirements for asset owners, CRC et al, 2018 ISCA NGICP
Providers	<ul style="list-style-type: none"> BCITO Connexis NZIHT Unitec (landscape architecture) 	<ul style="list-style-type: none"> schools of engineering, biological sciences at Auckland and Canterbury 		



Moving Forward



Beyond 2019/2020

1. Network of local training **champions**?
2. **Accessible Plan/Resource** - converting content of training plan into a web based reference resource for industry?
3. **Partnership plan** - outcome from 2019/2020 engagement?
4. **Sustainable funding** plan for training?
TBC
5. **Training** - development and delivery?

