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Delivery Strategy for NZ's Largest WTP Replacement – Global Lessons



water
NEW ZEALAND
CONFERENCE & EXPO
17-19 OCTOBER 2023
Tākina, Te Whanganui-a-Tara Wellington

Context

The situation, problem and approach

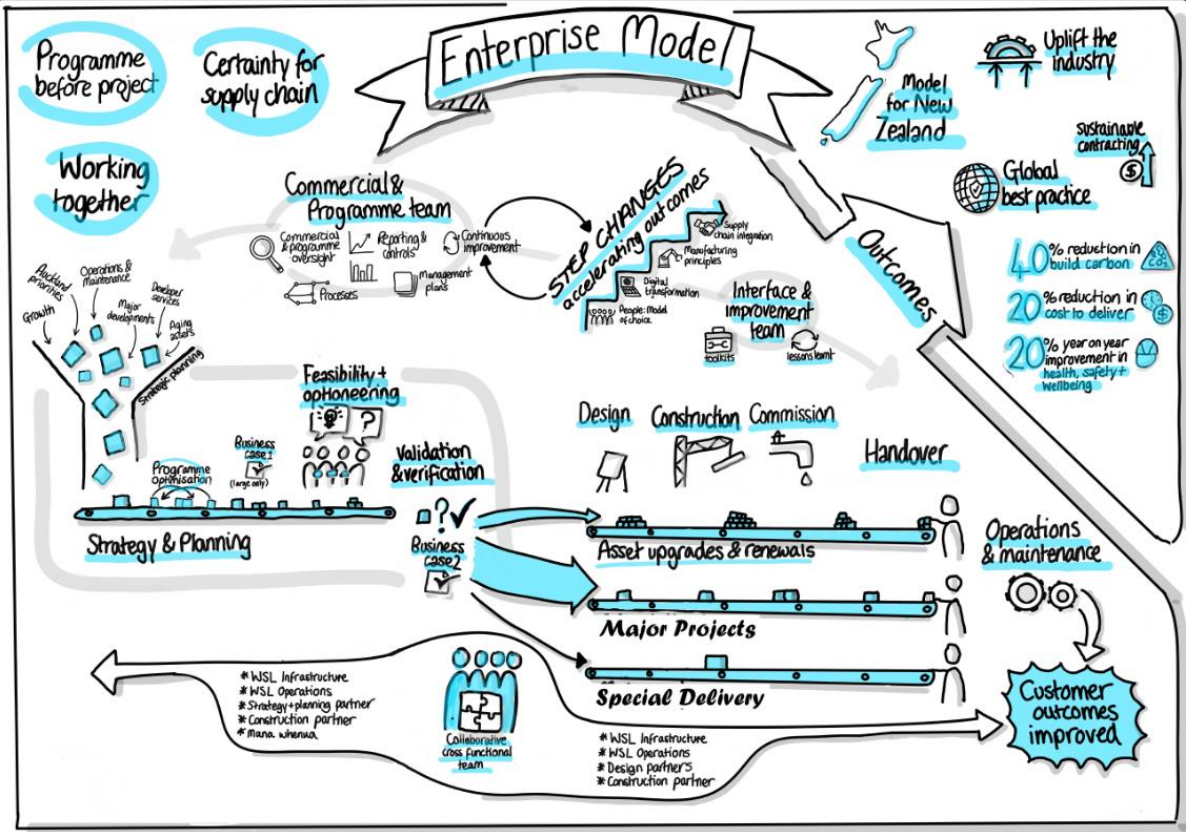
Watercare is undertaking NZ's largest WTP replacement to date

- Replace an ageing plant beyond its design life
- Can better cater to the growing needs of NW Auckland
- With a plant that can better utilize the yield available
- Is more resilient to climate change and changing water quality



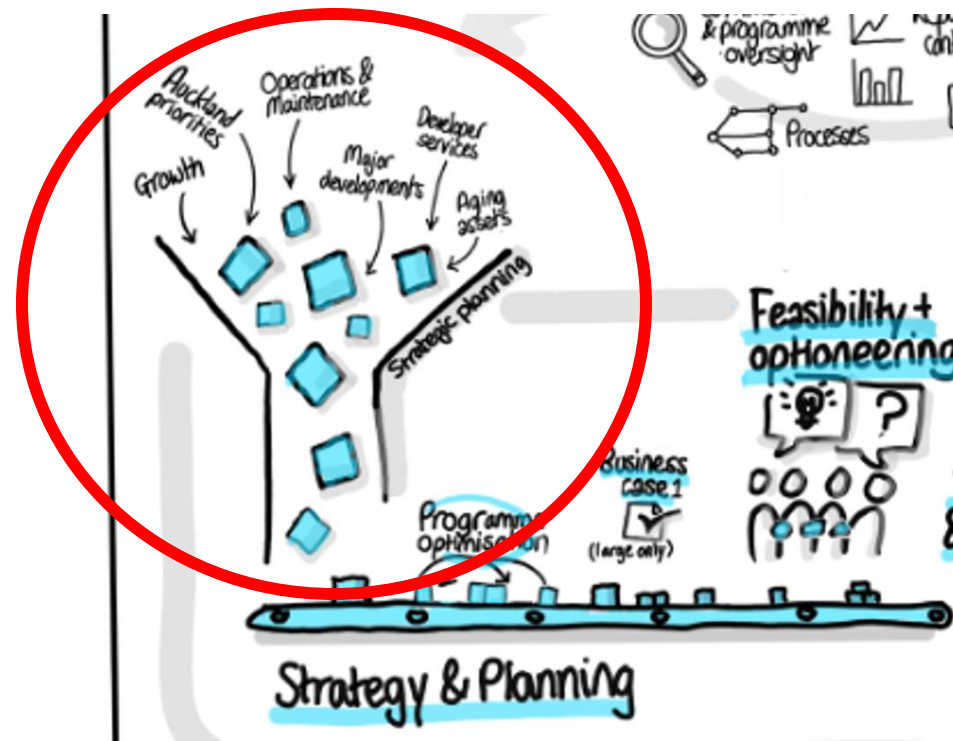
How can we best deliver this project?

- Outside the Enterprise Model due to size, complexity and multiple interfaces, typically Design-Bid-Build
- Lessons from other large projects emphasise a need for a defined delivery strategy



What is a Delivery Strategy?

- Outlines how a project is organised, managed and implemented
- Determines how the project meets outcomes



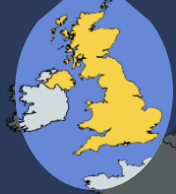


Think global..



**..act
local**





4 United Kingdom

Client	Delivery Model
Scottish Water	Progressive Design & Build
Scottish Water	Design & Build Alliance
Severn Trent Water	ECI Design & Build
Scottish Water	Alliance D&B consortia

6 Australia

Client	Delivery Model
South Australian (SA) Water	Design-Build-Operate-Maintain
Water Corporation	Competitive Alliance
Melbourne Water	Competitive ECI, then D&C, followed by a 6-month PoP
Melbourne Water	Competitive ECI, then D&C, followed by a 24-month PoP
Melbourne Water	Design then Construct (Design-Bid-Build)
Sydney Water	Competitive ECI then D&C

8 New Zealand

Client	Delivery Model
Watercare	Design-Bid-Build
Watercare	Primarily Design-Bid-Build
Watercare	Design-Bid-Build
Watercare	Enterprise Model
Wellington City Council	Competitive Alliance
Tauranga City Council	Primarily Design-Bid-Build
Food Manufacturing	Direct Managed
Power Generation Company	ECI to EPC, change to Direct Managed and D&B



A dark blue world map with white outlines of continents and countries. The United Kingdom, Australia, and New Zealand are highlighted in a golden-brown color. The text is overlaid on the map.

Lessons learnt from conducting our research

- 1. Face-to-face conversations (can be virtual) are important**
- 2. Let Subject Matter Expert drive questioning**
- 3. We were humbled by people's willingness to share**

How lessons learnt inform the delivery strategy

International lessons learnt



Lessons for Huia



Delivery Strategy

Lessons for you

What did we learn?

Lessons for us and you

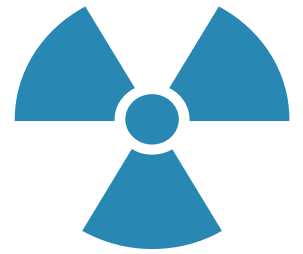


What we learnt

1. Market Engagement

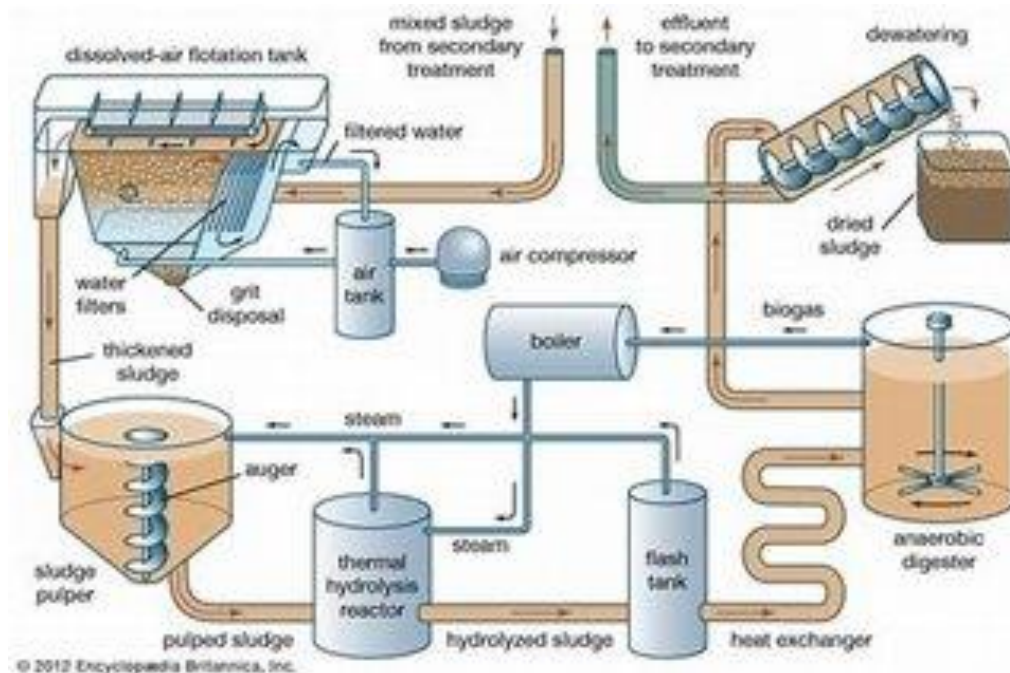
- Communicate project requirements and areas of importance
- Preparation for procurement process
- Encourage market competition
- Test potential packaging and delivery strategies and draft risk allocation





What we learnt

2. Approaches to Risk Management



Typical risks include: process risks, ground risks, schedule risk, supply chain risk, cost escalation risk, contract interfaces, third party stakeholders etc.



What we learnt

3. Early Contractor Involvement

ECI and the consistency and depth of knowledge from maintaining parties from functional design onwards, have become a crucial component of risk mitigation.





What we learnt

4. Collaborative Delivery Models

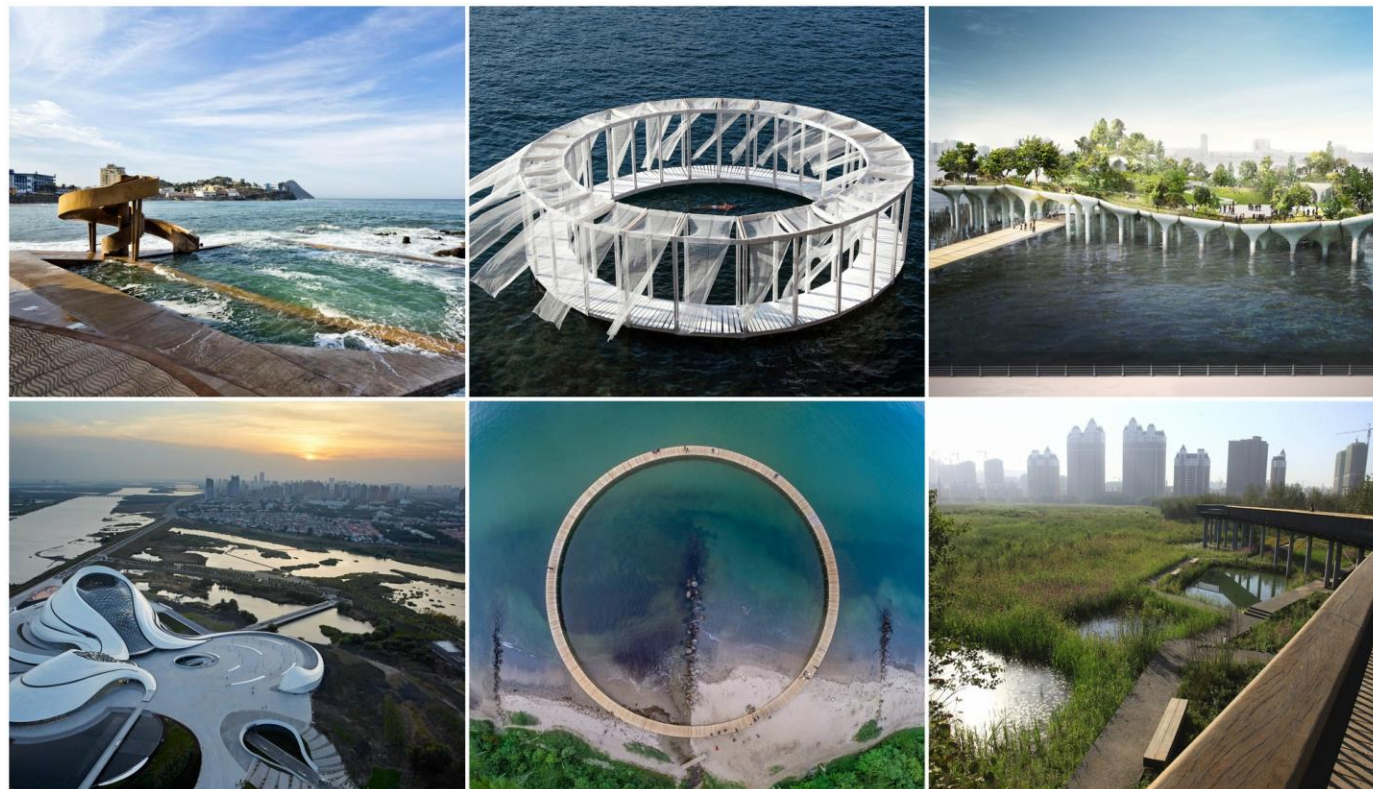


Some examples of collaborative contracting models are integrated project delivery, alliance contracting and relationship contracting.



What We Learnt

5. International Trends



Australian trends

UK trends

What can you take away?

1. Ensure teams are **resourced** with the **right** people
2. Reduction in market's **risk** appetite
3. Ensure realistic timeframes for **approvals**
4. Growing expectation for **reimbursement** for tender costs and **incentives**
5. Importance of **operations** involvement and stakeholder management
6. **Advanced warning** of intent to go to market

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