

NATIONAL LEAKAGE RESEARCH & TEST CENTRE (NLRTC)

Progress update

Daniel Wilson – NWG

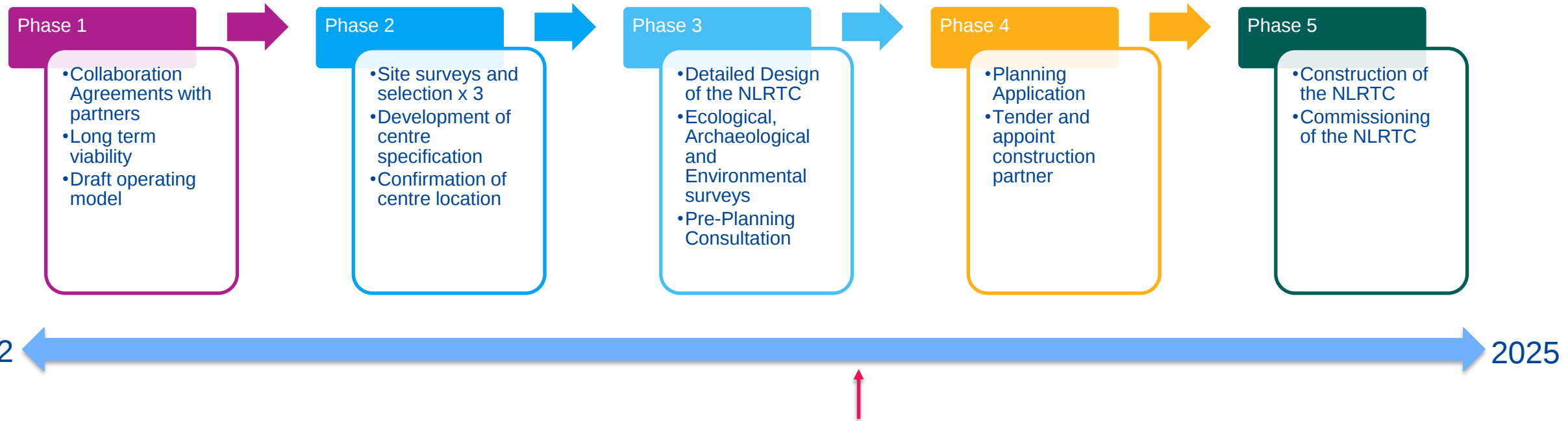
Andy Ball – HR Wallingford

THE PROJECT

- A collaborative bid submitted by Northumbrian Water into the Water Breakthrough Challenge on behalf of UK Water Companies, Researchers, Universities and supply chain partners
- The project seeks to reduce timescales between innovation ideas and deployment that is currently constrained by a lack of testing facilities that represent 'real world' conditions and individual, specific testing requirements of water companies.
- To provide innovators with a Certification recognised by UK water companies, eliminating the need for individual, company specific testing regimes.



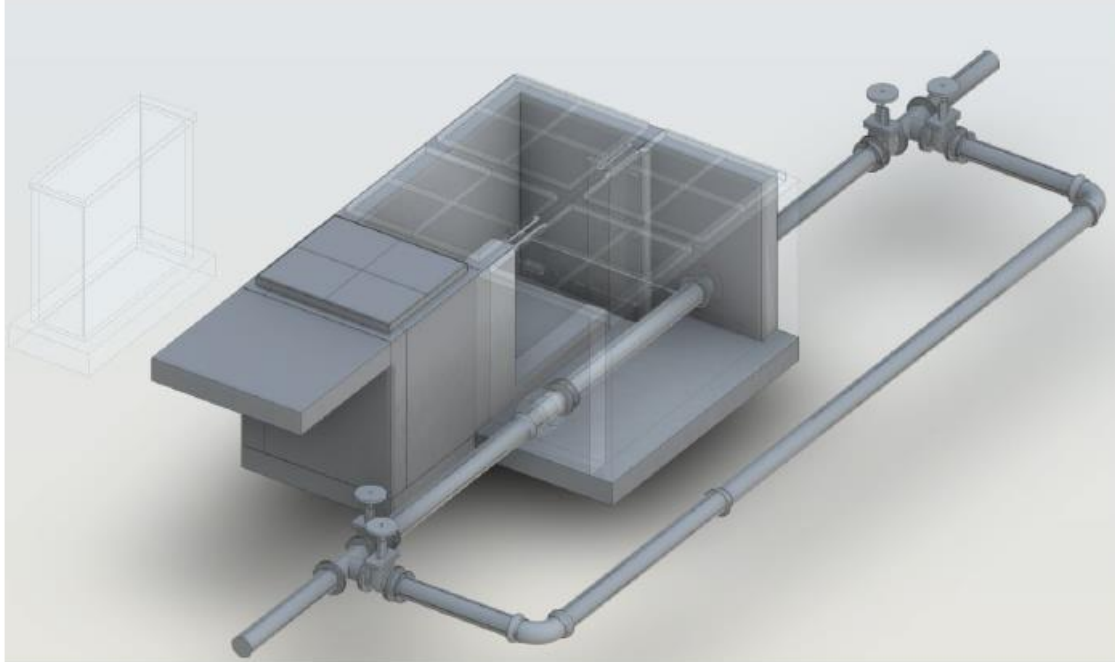
WHAT HAS THE PROJECT ACHIEVED TO DATE?



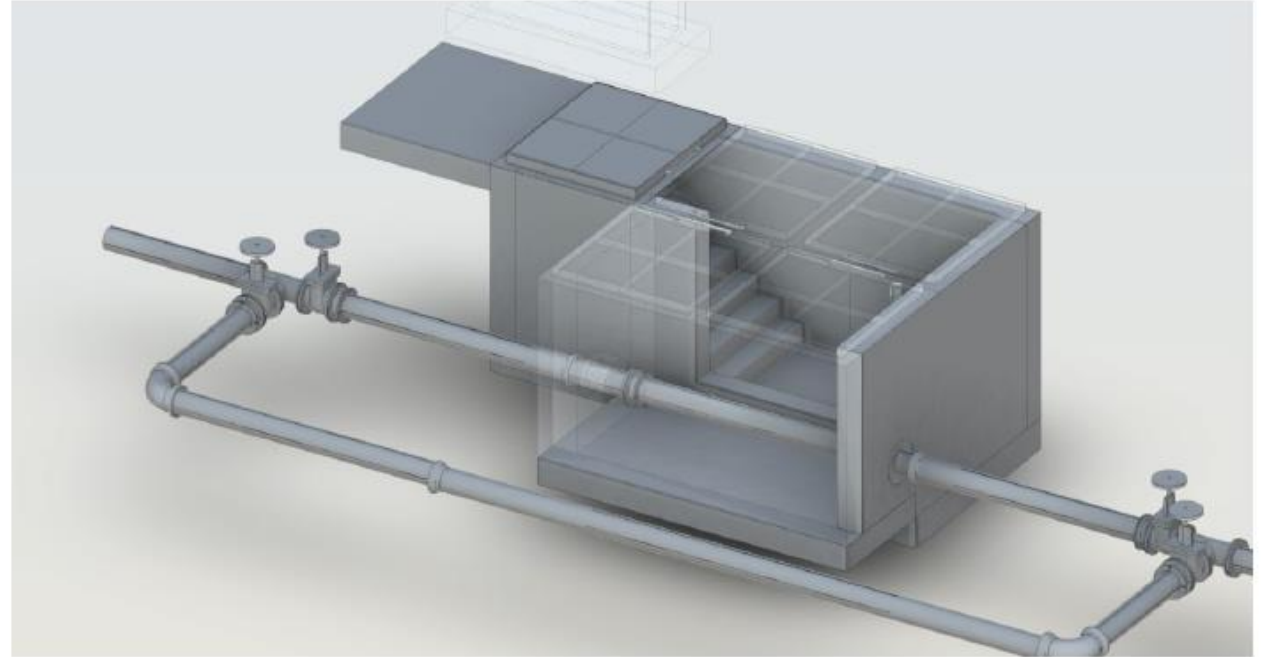
NEXT STEPS

- Planning Application with the Local Planning Authority
- Archaeological mitigation works at the site location.
- Tender for the construction of the Centre. We have 3 of Northumbrian Waters construction partners interested in construction phase.

NLRTC LAYOUT AND FEATURES



- 6 No. leakage bunkers distributed across the DMA
- Can be used to install or remove specific sections of pipework for testing and or observation
- Backfill material can be altered within each leakage bunker to simulate different ground conditions.



- Access into each bunker is possible through hatch covers
- Water lost through deliberate is largely recovered and returned to the system

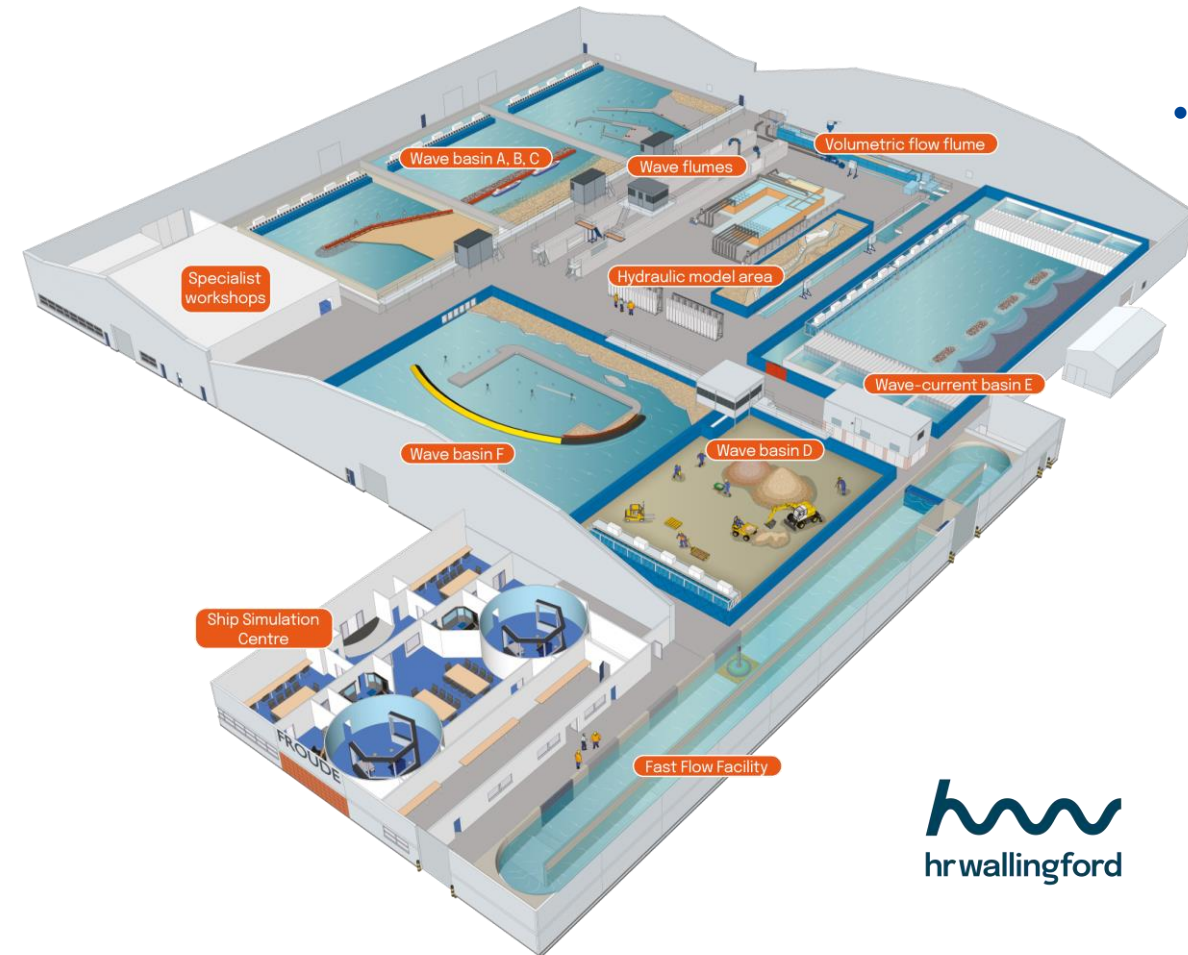
OPERATION AND OWNERSHIP OF THE NLRTC

OPERATION AND OWNERSHIP OF THE NLRTC

- Various workshops to discuss the operation and management of the NLRTC
- Use cases assessed and they have influenced the design
- Agreed that water companies will fund some of the operational costs via an annual subscription
 - This gives them access to the site to test products and services they want to evaluate
 - This could be either in isolation or as consortia
 - Commitment from Water Companies to date to proposed post construction funding on sliding scale
- Important that there will be opportunities for innovators, researchers etc to use the site
 - Commercial access to anyone with technical support from HR Wallingford and WRc staff
 - Lower costs for early TRL projects
- Site can also be used for other purposes (training etc)

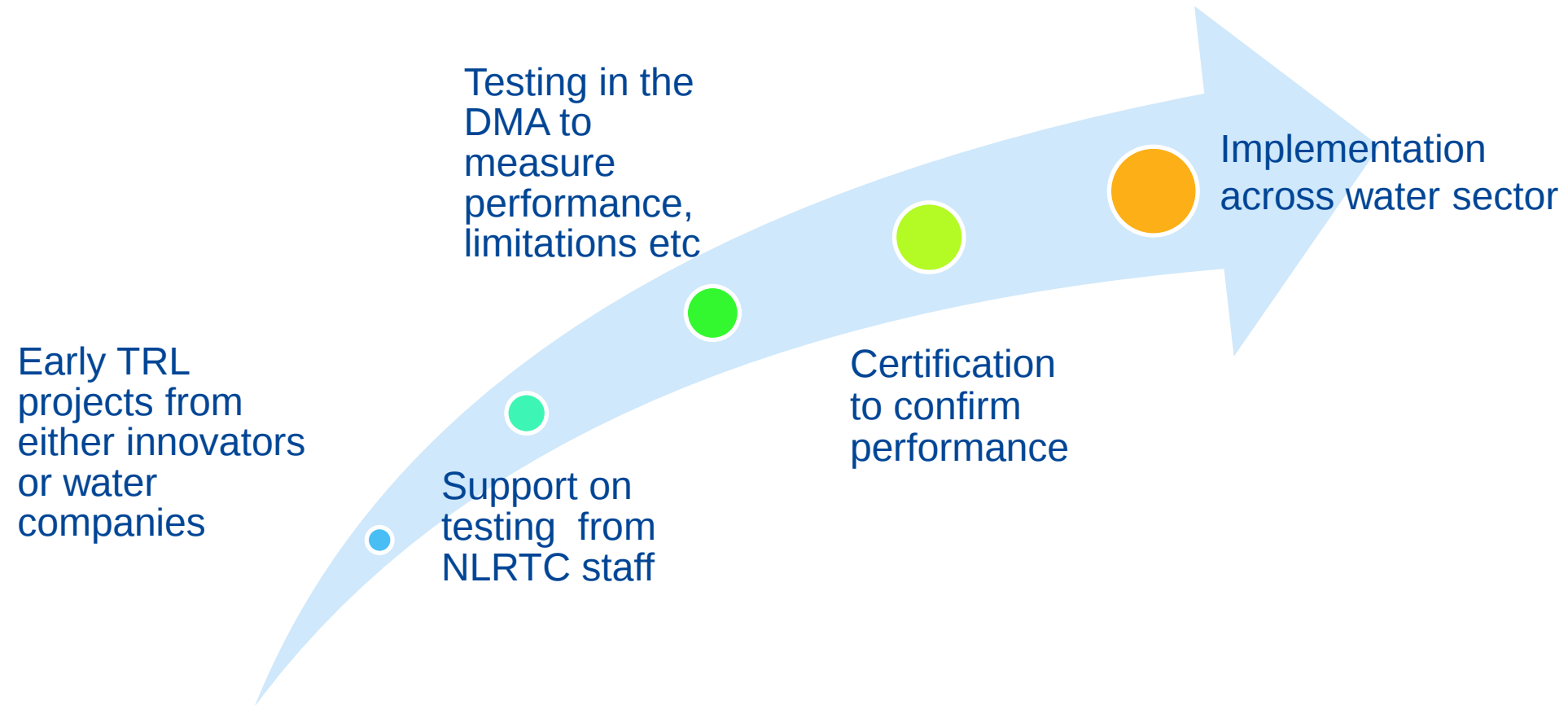


OPERATION AND OWNERSHIP OF THE NLRTC



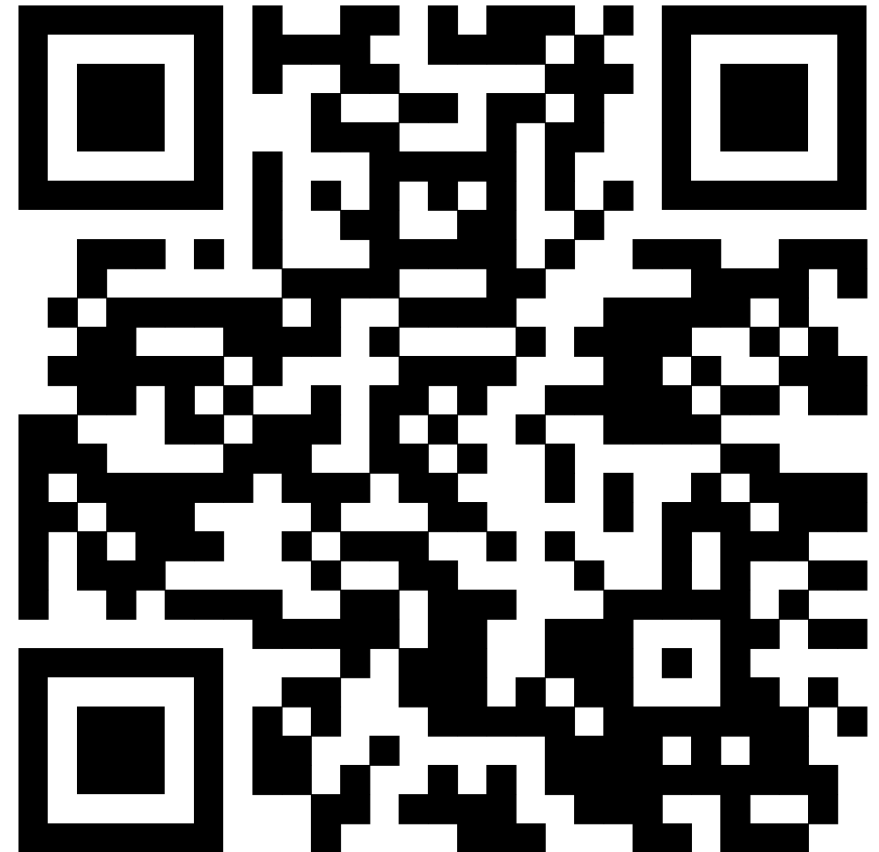
- NLRTC will be operated by HR Wallingford and WRc
 - HR Wallingford already builds physical models (e.g. ports, pumping stations etc).
 - The Sandpit will be in the Froude modelling hall (14000m c. three football pitches)
 - Sandpit provides support for innovators on early TRL with DMA providing an assurance/certification service (“NLRTC kitemark”)
 - It will support innovation as well as “just” test approaches
 - It may develop over time with more funding, ideas
 - Designed for 25 – 30 years

THE SERVICES OF THE NLRTC



WHAT HAPPENS NEXT

- Come to the NLRTC stand and give us feedback on the plans
- Register on the website (NLRTC.co.uk)
- Keep an eye out for update emails etc
- Tell your colleagues, supply chain and friends
- We have to provide a further update to Ofwat before Christmas



QUESTIONS & AOB

