



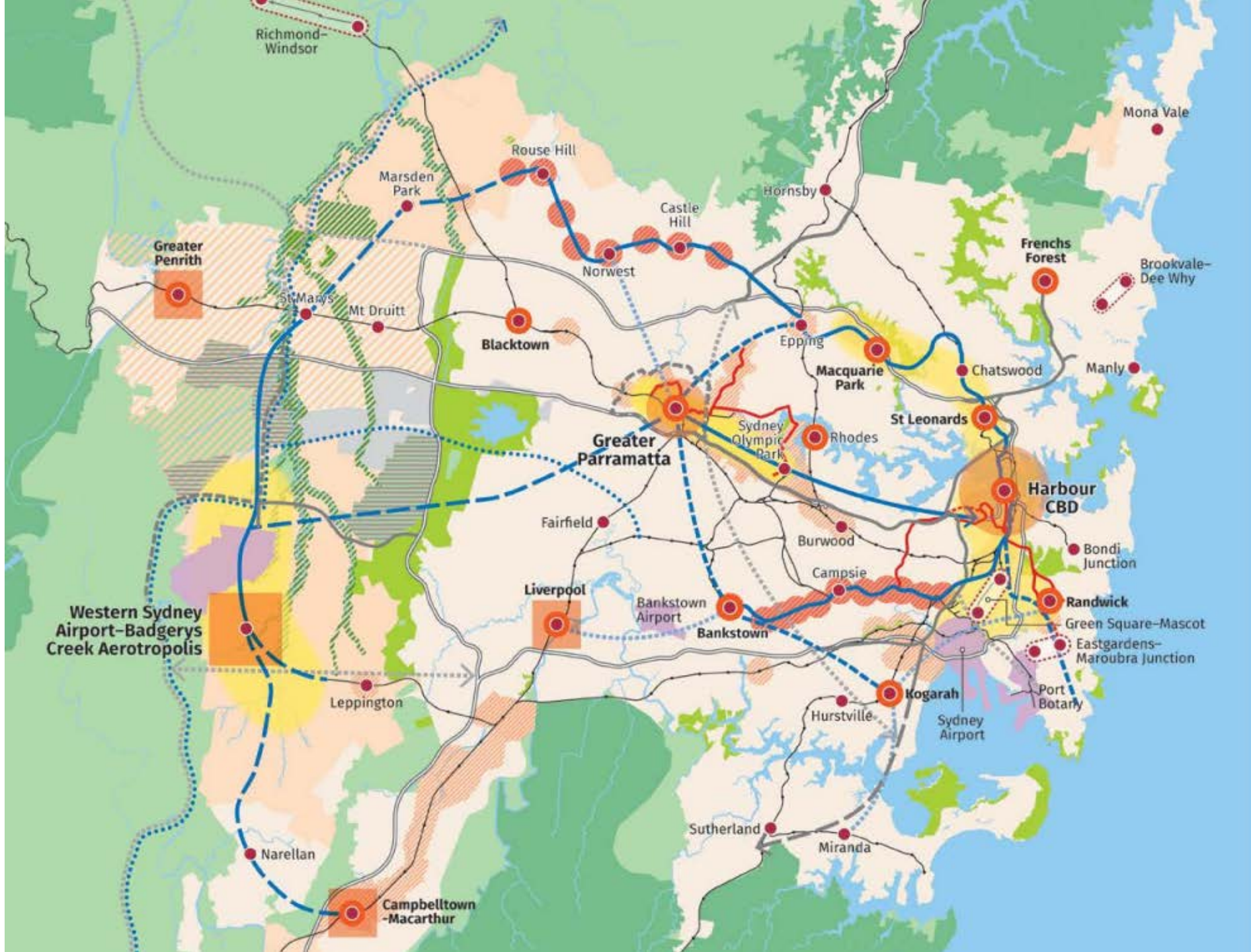
Delivery Partner – An Effective Partnership Model for delivery of Major Treatment Programs

Anthony Korbel, Program Director, Lower South Creek Treatment Program

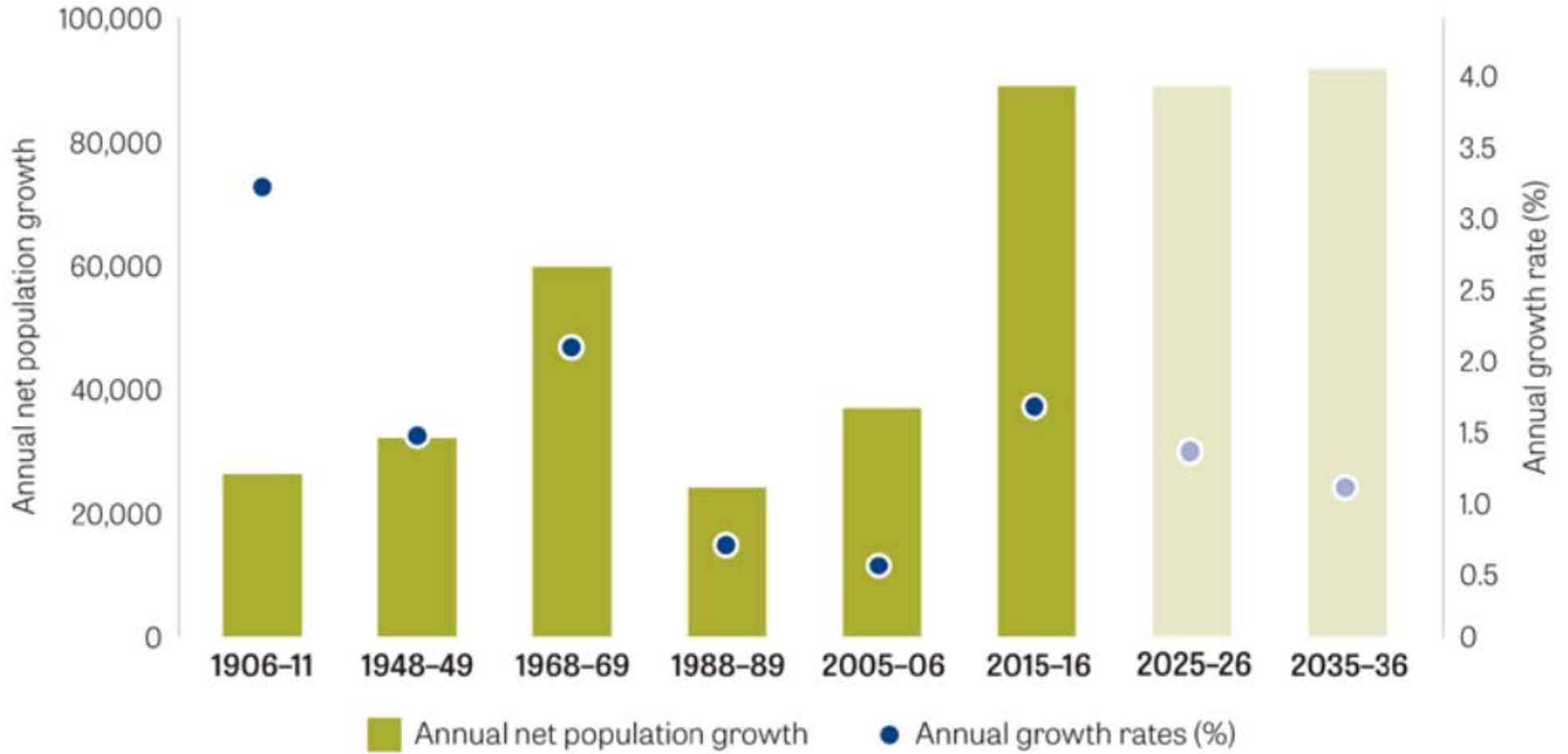
Lower South Creek Treatment Program

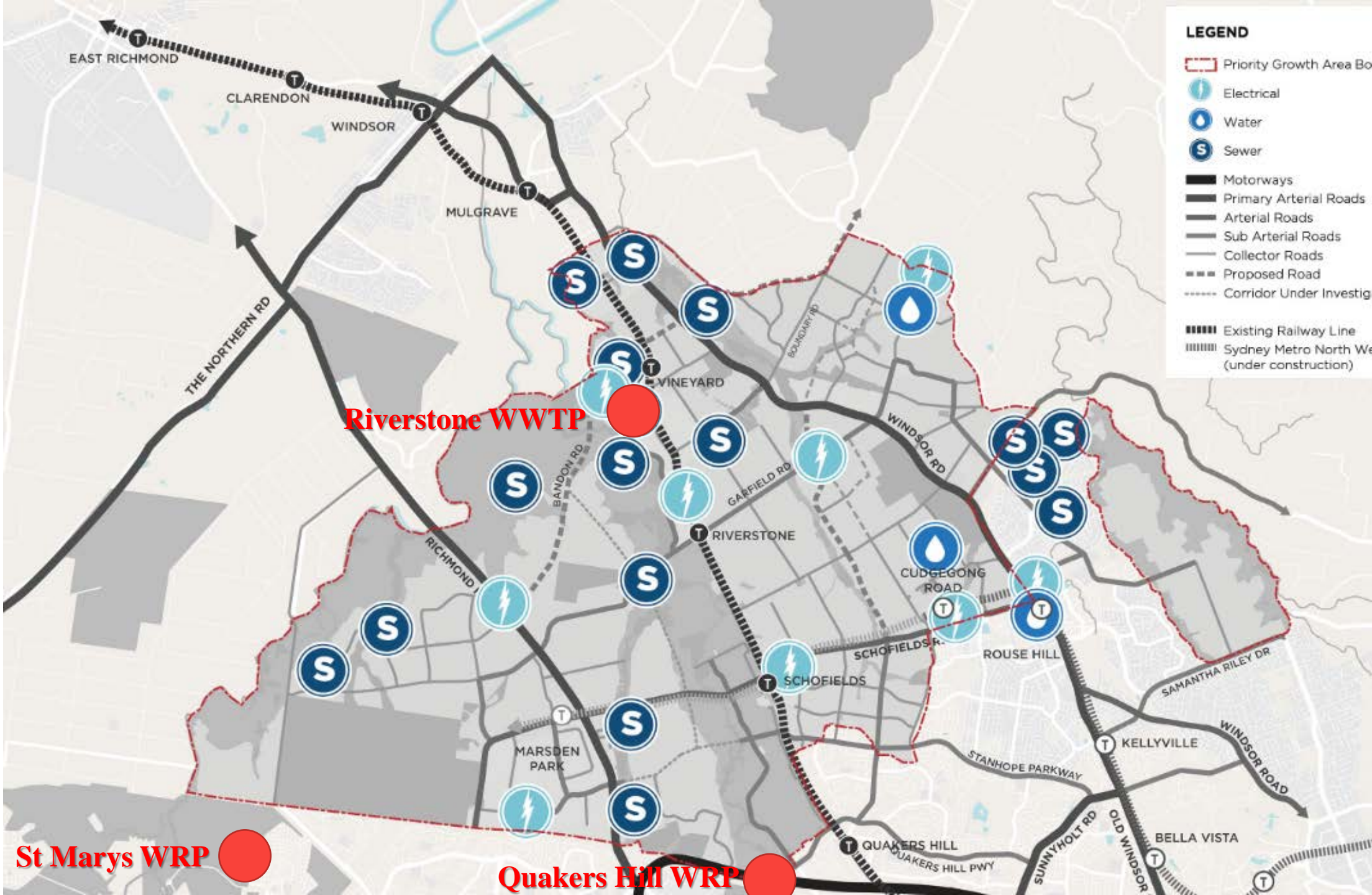
- **Riverstone WWTP**–14.2ML/day BNR plant to address regional growth in North West Sydney
- **St Marys WRP** – 25 ML/day BNR upgrade and biosolids hub with Thermal Hydrolysis Processing
- **Quakers Hill WRP** –38ML/day AGS plant with primary treatment to enable decommissioning of ageing infrastructure

Sydney Metropolitan Area



Challenge – Planning for Sydney's Growth





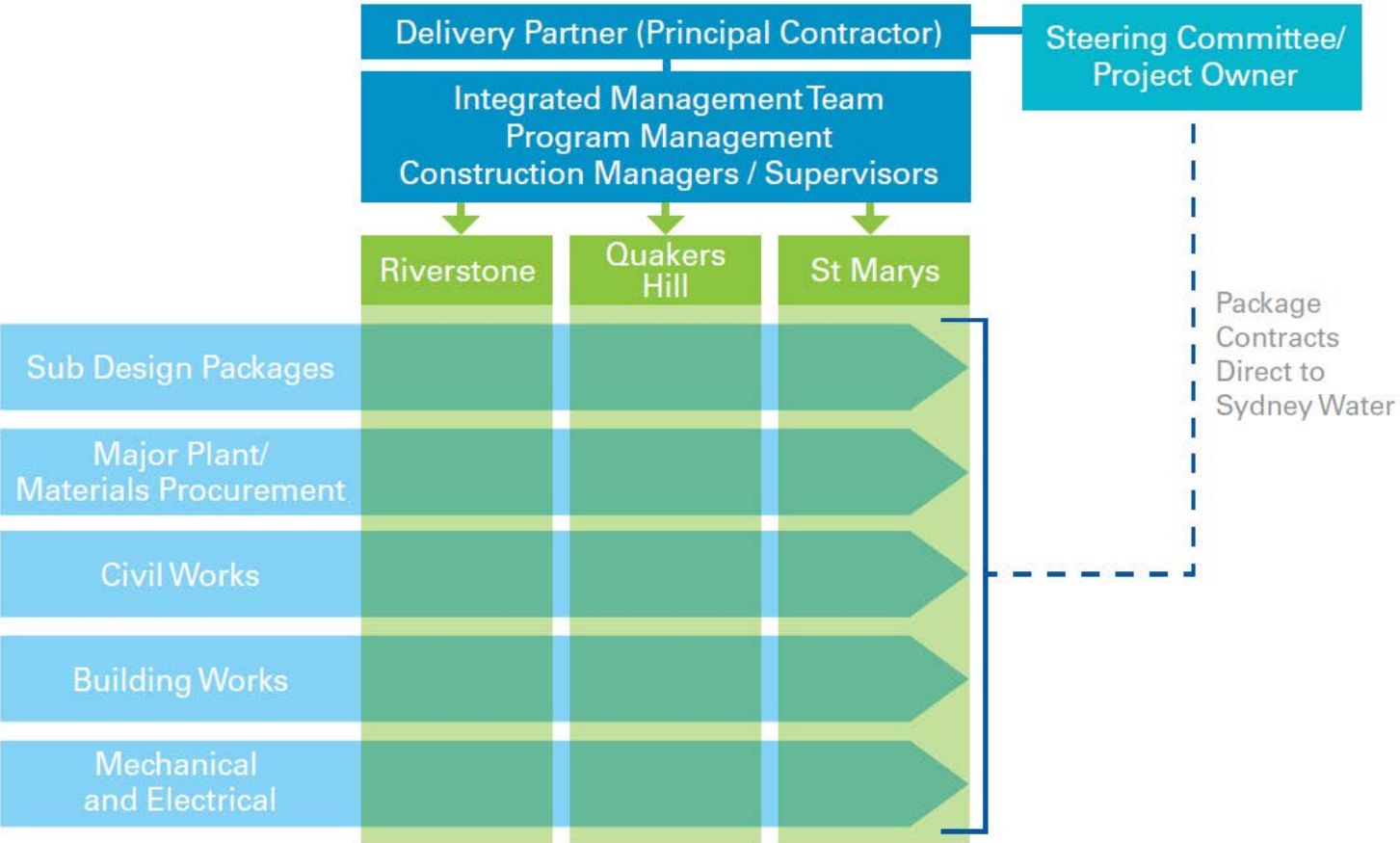
LEGEND

- Priority Growth Area Bo
- ⚡ Electrical
- 💧 Water
- S Sewer
- Motorways
- Primary Arterial Roads
- Arterial Roads
- Sub Arterial Roads
- Collector Roads
- Proposed Road
- Corridor Under Investig
- Existing Railway Line
- Sydney Metro North We
(under construction)

St Marys WRP ●

Quakers Hill WRP ●

Delivery Partner for Lower South Creek Treatment Program



What is a Delivery Partner

- provide the skills and resources to the client organisation for total program and project management;
- acting as the single point of accountability for the project management of the delivery program;
- develop packaging and procurement strategies to optimise program outcomes;
- competitively procure contracts for the design, supply, construction and commissioning of the program of works within the Government's procurement framework;
- lead and manage the supply chain in the design and construction of program, including the option of acting as Principal Contractor.

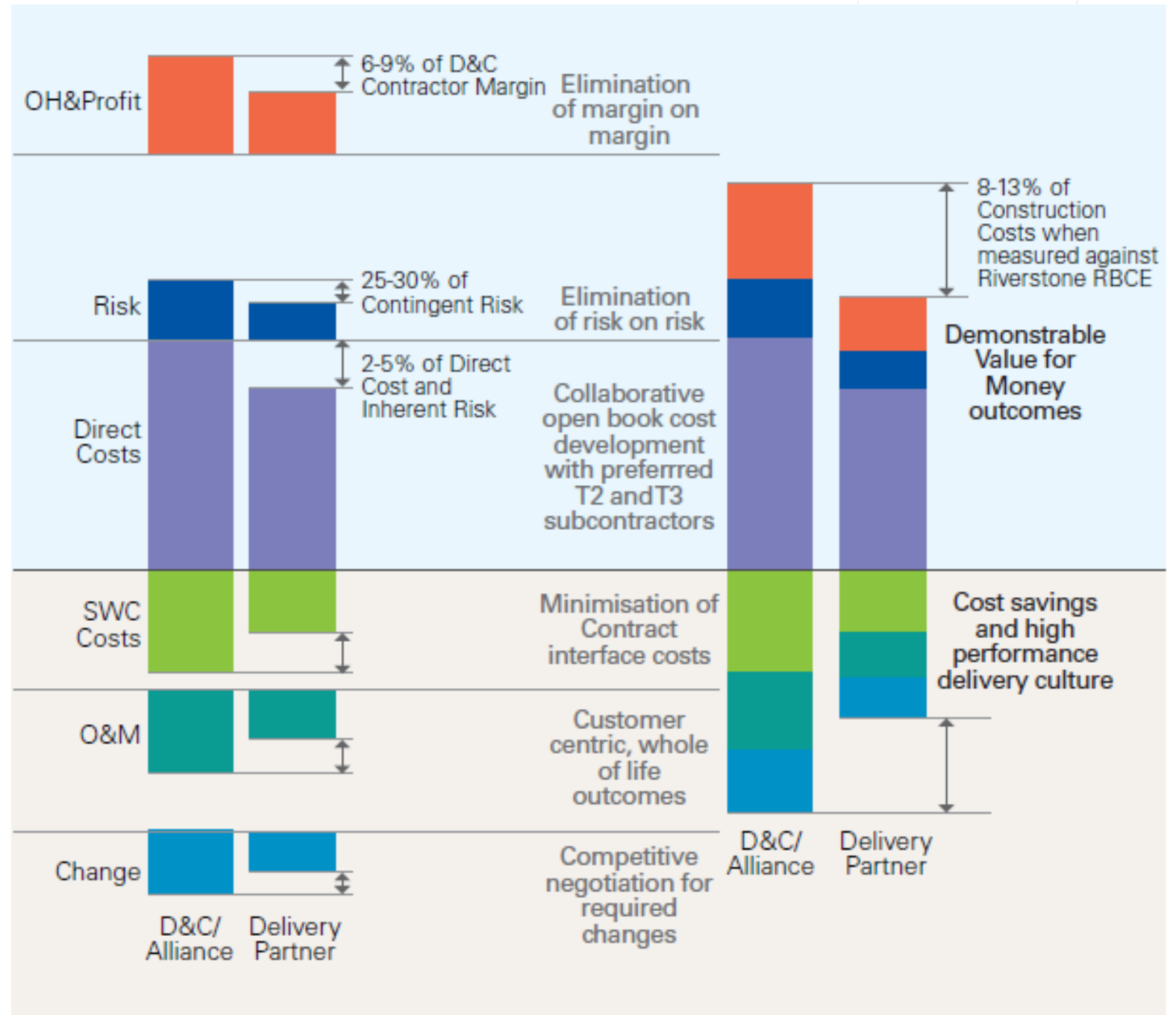
Features of Delivery Partner Model

| | Delivery Partner | Design & Construct |
|----------------------|---|---|
| Model | Principal's Agent | Full accountability to PPRs |
| Performance of Works | Precluded from self-performance | Solely responsible for executing works |
| Governance | Commitments remain accountability of owner as Principal | Full accountability for financial commitments under terms of contract |
| Owners involvement | Moderate, including high level of input to design process | Low |
| Compensation | Cost reimbursable with margin cap and pain/gain KPI regime | Lump sum with LDs |
| Risk | Owner at risk for direct costs. DP at risk for corporate OH and painshare. | Contractor at risk for cost and LDs for timely completion |
| Supply Chain | DP procures contracts as owner's agent within owner's procurement framework | Owner procures D&C contract, who subcontracts work packages. |
| Design | Detailed Design contract (PSC) procured by DP who accepts design responsibility | Contractor accepts design responsibility |
| Program | DP accountable for program, with pain/gain on milestone dates | Contractor accountable for program, and incentivised by LDs |

Delivery Partner -Strengths

- Effective risk allocation and pricing
- Enables and encourages innovation
- Effective engagement of principal throughout delivery
- Program Management of the supply chain
- Partnership with the supply chain

Reducing Margin on Margin



Innovation Technology used in the delivery of LSCTP

- **Thermal Hydrolysis Process (THP)** – solids treatment to improve biogas recovery, reduce energy consumption, and improve biosolids recovery for reuse.
- **Aerobic Granular Sludge (AGS)** - used at Quakers Hill WRP as an alternative to FSBP, due to reduction in capital cost, reduction in construction footprint, reduction in energy consumption and operating cost savings.
- **Mechanical Primary Sedimentation (MPS) Screens** are being utilised at both Quakers Hill and St Marys WRP due to capital and life cycle cost savings, reduction in construction footprint and improved odour control of primary treatment.

Riverstone WWTP



Riverstone WWTP



13



St Marys Biosolid Dewatering Plant

