

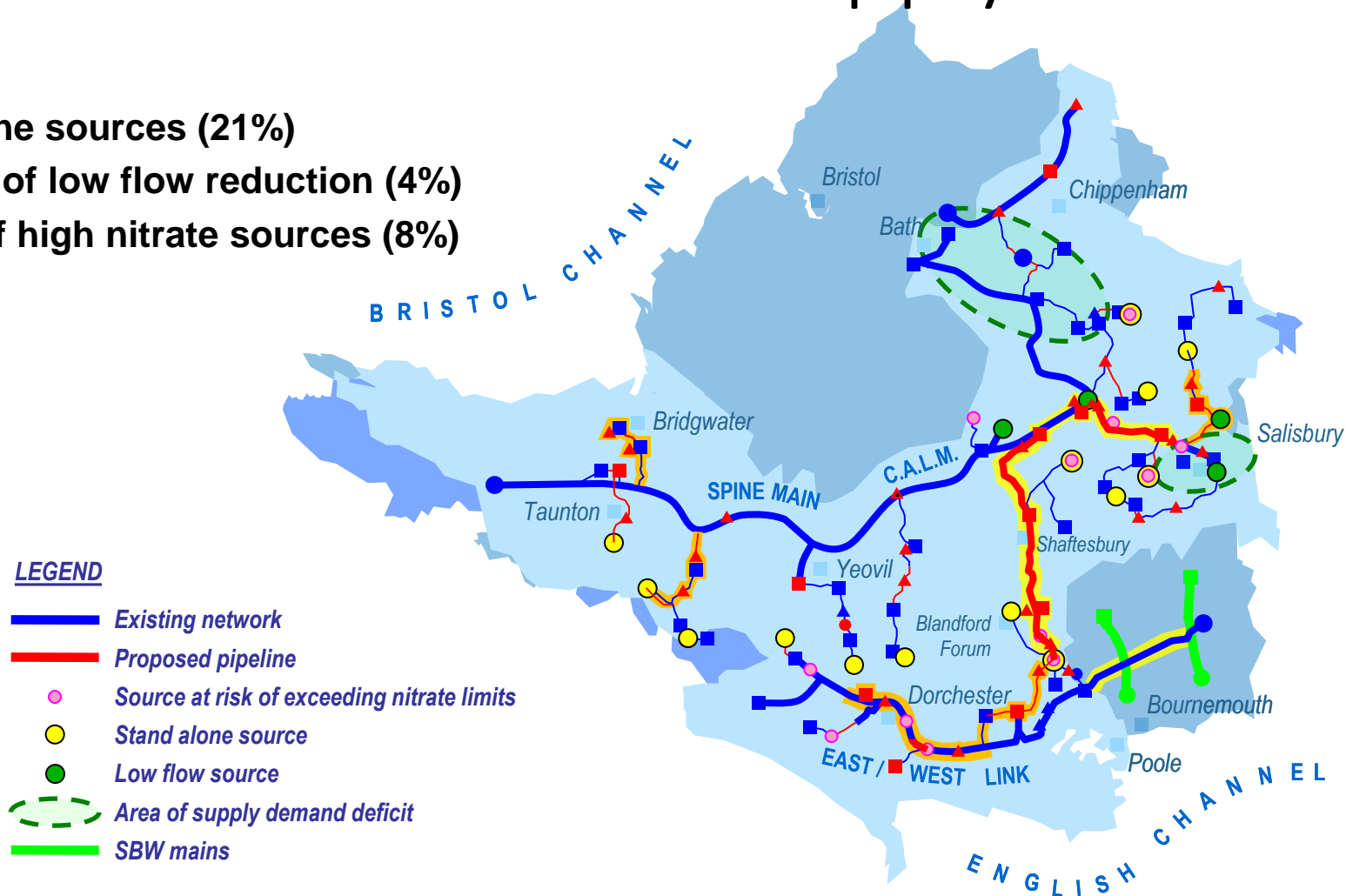
Wessex Water's New Supply Grid and Optimiser

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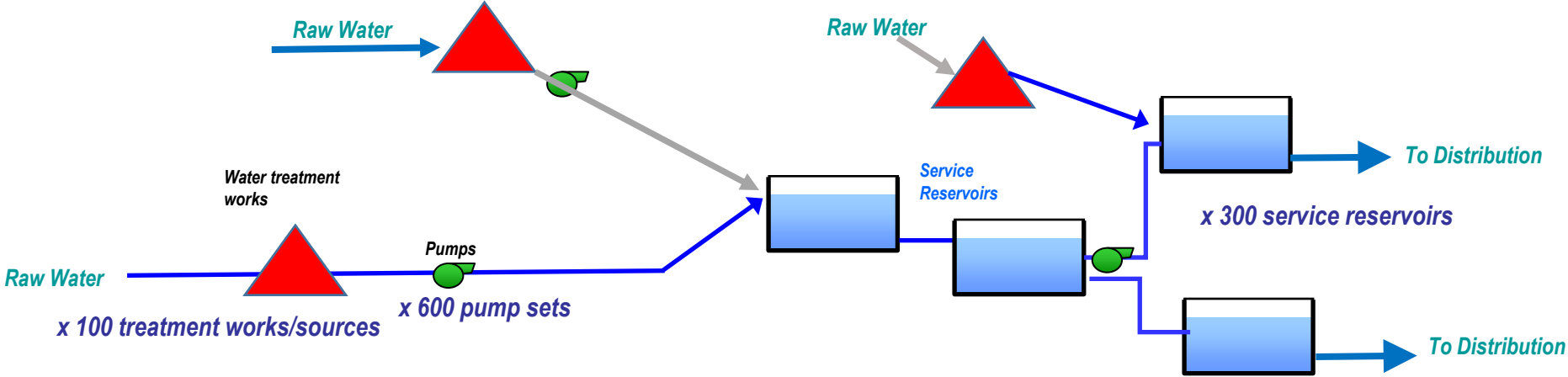
Wessex Water's New Supply Grid

- Standalone sources (21%)
- 23.5 MI/d of low flow reduction (4%)
- 43 MI/d of high nitrate sources (8%)



- 12 new service reservoirs
- Treatment plant upgrades (Fe + NO₃ removal)
- 24 new pumping stations
- >200km new pipelines

New Flow Optimiser Needed



What is the Optimiser?

- Pump scheduling software
- Monitors demands, flows and reservoir levels
- Forecasts demand up to 72hrs ahead, every 30 minutes
- Produces pump schedules for next 48hours
- Holistic - looks at all the sites under its control



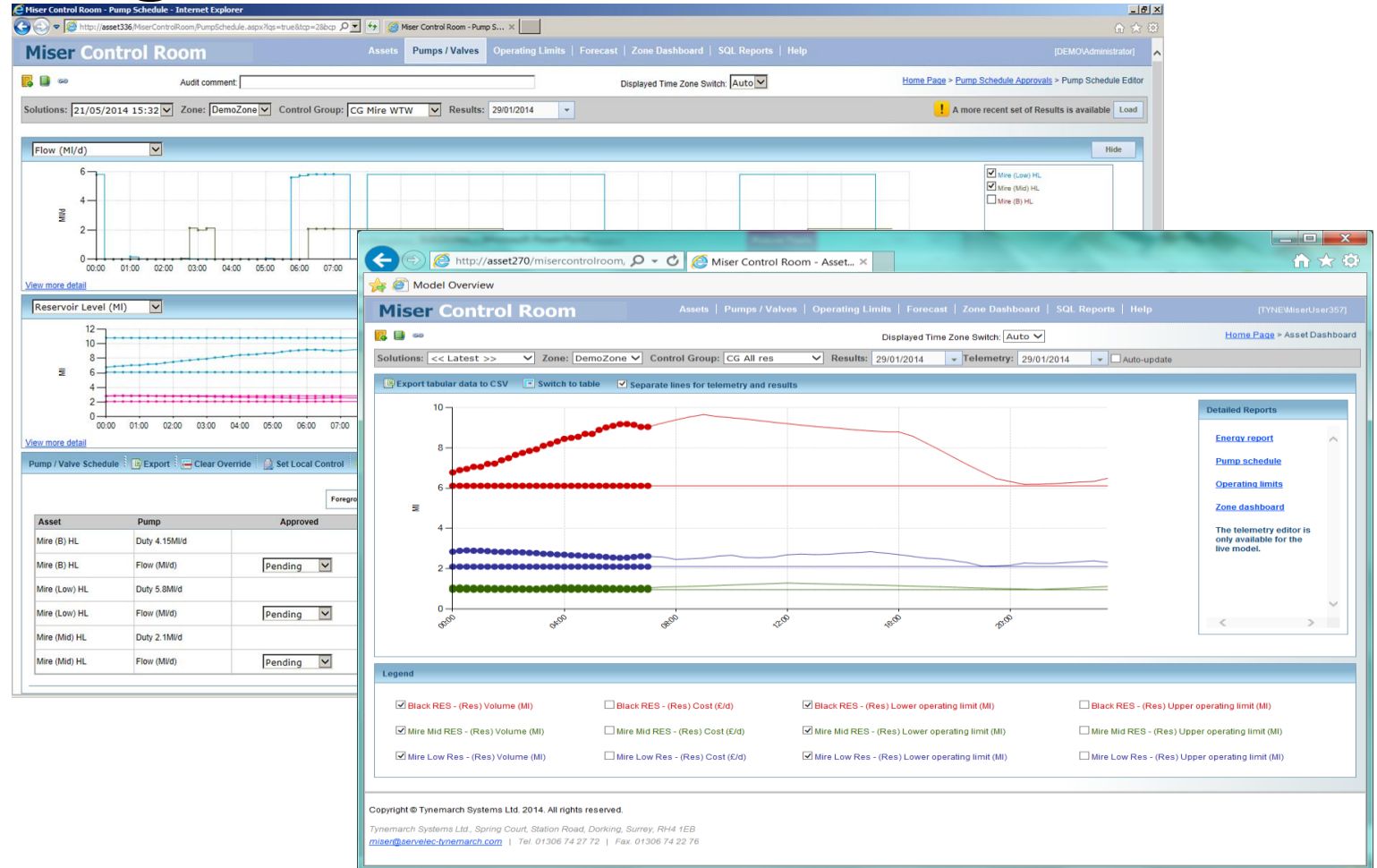
Benefits of the Optimiser

- Improved security of supply
- Efficient transfer of flows in a complex system
- Savings made avoiding Triads and Duos periods
- Optimal outage planning
- Optimal blending ratios for nitrate sources
- Reduced call outs out-of-hours



Predictive Modelling

- Continually updates
- Export control signals
- Maintain reservoir levels
- User overrides
- Respond to events
- Forward looking
- Security of supply
- Water quality
- Load balancing
- Maximise performance



Key Learning Points

- Collaborative Teamwork required
- Detailed End to End testing pays dividends
- Use expertise of each of your teams
- Engagement with Servelec Technologies
- Ensure adequate server power
- Communication and training is critical
- Manual input required daily

- Business Transformation required – different way of working !

