



Oak Lodge Water Service District: Scaling sustainability

Client

Oak Lodge Water Services District,
Oak Grove, Oregon

Vitals

Service area that includes approximately:

- 8,600 sewer connections
- 2,273 sewer manholes
- 100 sedimentation manholes
- 2,500 catch basins
- 50 private detention systems

Challenges

In 2017 Oak Lodge Water Services District doubled in size after merging with Oak Lodge Sanitary District.

Results

- 20% return on investment
- Projected 10% reduction in capital plan
- 100% asset management database integration

The Challenge & Opportunity

In 2017, Oak Lodge Water Services District doubled in size. Voters approved a merger with Oak Lodge Sanitary District, sharing 85% of the same customer base. Managed optimally, the consolidation would yield improved service, a savings of at least \$425,000 in annual operating costs, and approximately \$750,000 added to its capital reserves.

Along with clear benefits, Oak Lodge Water Services District's leaders inherited increased scope and complexity in their planning and operations. Their capital budget had been based on historic funding levels and only a rough understanding of matching renewal funding with asset degradation. Among other assets, their service area now included approximately 8,600 sewer connections, 2,273 sewer manholes, 100 sedimentation manholes, 2,500 catch basins, and 50 private detention systems.

Monitoring the infrastructure and prioritizing projects would require robust data analysis and a more advanced decision-making framework. Oak Lodge Water Services District called on Brightly to help advance their capabilities.

Results

- Uncovered optimal investment strategy across its expanded service area: \$1.5 million over 30 years.
- Achieved highest overall system condition while mitigating risk and downtime as much as possible.
- Identified opportunities to combine water and sewer projects, resulting in capital investment savings; produced a prioritized 30 year Capital Improvement Plan.
- Leveraged Lucity data to illustrate total cost of ownership: how maintenance costs rise with corresponding asset degradation.
- Funding was set at 0.5%, 1.0%, 1.5% and 2.5% of replacement cost, allowing decisionmakers to easily understand the rate at which the asset network degrades and the cost to sustain it in today's dollars.
- Discovered that small increases in rates over the next 15 years will have dramatic impact on financial sustainability over next 75 years.

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Using Brightly Predictor, we can see the optimal location and timing of renewal projects for both water and sewer. This allows us to combine projects and greatly reduce equipment costs, mobilization costs, and most importantly, service interruptions.

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Richard Ludlow
Asset Maintenance Manager

From:
Budget Driven Services Level



To:
Service Level Driven Budgets

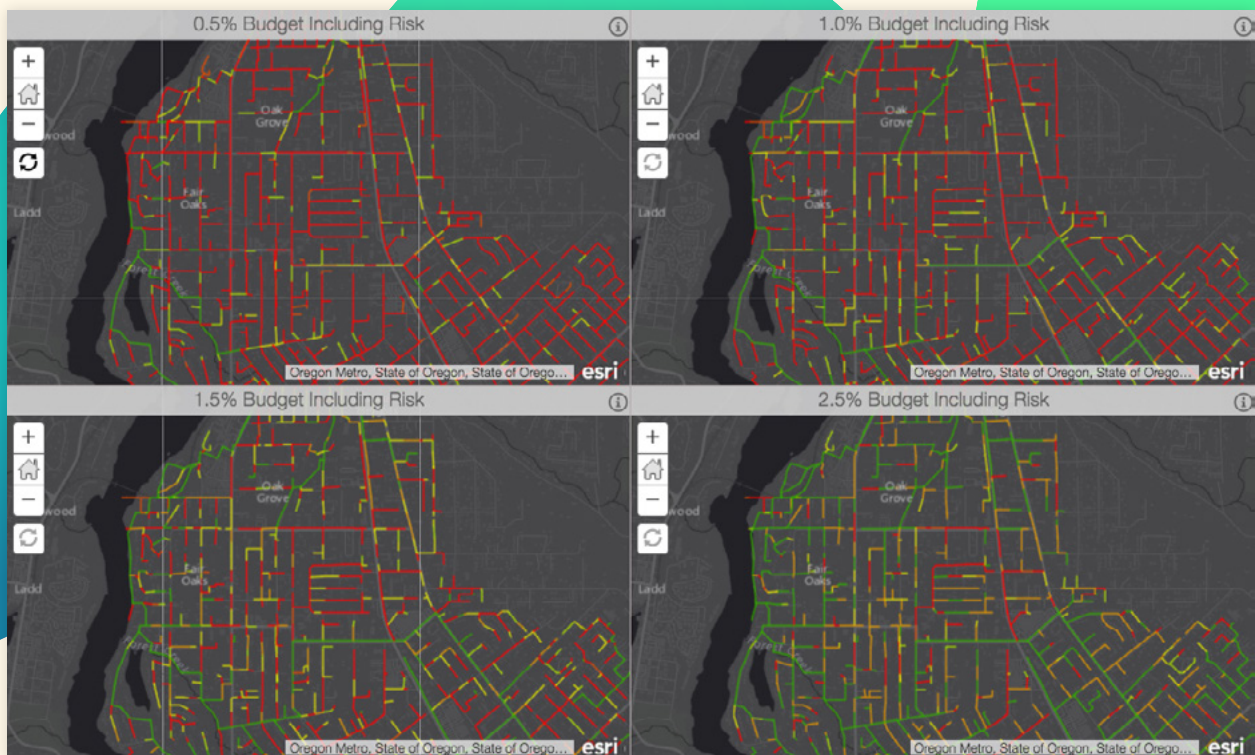


Brightly & Oak Lodge Water Service

Oak Lodge Water Services District’s asset maintenance manager, GIS manager, and veteran maintenance supervisor, provided Brightly with existing maintenance and capital renewal activities.

With input from the OLWS team, Brightly produced four capital rehabilitation and renewal strategies in Brightly Predictor; 5-year CIP plans, and optimal long-term financial plans. The results were published to an Esri story map for easy dissemination and engagement with District senior management.

Oak Lodge Water Services District is now able to exceed current service levels with a 2.5% annual contribution to capital reserves, and to meet and possibly exceed service levels at just under 2.0%. In addition, because their infrastructure is in good condition today, funding contributions can be slowly phased in over the next 10 years.



Visualizing Brightly Predictor scenarios using Esri Story Maps, was integral to helping Oak Lodge select the optimal long-term capital investment plan that minimized cost, risk and service interruptions.