



## CASE STUDY

# IRWD BECOMES DATA-FIT IN JUST 9 MONTHS WITH 40,000 ASSETS READY FOR MAXIMO UPGRADE

Irvine Ranch Water District (IRWD) is one of California's largest producers of domestic and recycled water and the pioneer of the nation-wide "purple-pipe" recycled water program. They have seen their asset portfolio grow steadily over the years. With expansion came a variety of data-entry practices that, while perfectly reasonable at the time, gradually introduced inconsistencies into the EAM system's asset register. To ensure the information supporting day-to-day maintenance and an upcoming enterprise Maximo upgrade is as reliable as the infrastructure itself, IRWD asked MaxGrip to help harmonize the hierarchy, reinforce data quality, and position the utility company for its next phase of digital progress.

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**AMBITIONS:  
RELIABLE FOUNDATION  
BEFORE AN EAM  
SYSTEM UPGRADE**

IRWD set four tightly linked goals for the data improvement project:

- Single source of truth: Replace a fragmented hierarchy with one intuitive structure every technician can navigate.
- Data integrity: Early analysis showed Maximo held roughly twice the real equipment count, clouding KPIs and spares management.
- Clear naming & governance: Create a formal policy aligned with ISO and water-utility best practice, applicable to 14 facility types ranging from treatment plants to recycling sites.
- Seamless upgrade path: Have clean, validated data ready ahead of IRWD's planned Maximo upgrade in early 2026.

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**APPROACH:  
BUILDING THE  
FOUNDATION FOR  
CONTINUOUS SUCCESS**

To turn a fragmented register into upgrade-ready, high-quality data, MaxGrip applies a structured, end-to-end methodology that is both repeatable and scalable.

**1 | Mobilize & Align Scope**

A kickoff workshop brought important stakeholders into one room to agree objectives and set a realistic mobilization path. The pilot scope was a 6-week effort during which the policy would be holistically developed, a pilot site selected, and deployment to around 450 assets as a proof of concept.

**2 | Extract the Baseline**

MaxGrip exported every live Maximo record, mapped it against P&IDs, asset ledgers and spares files, and consolidated the results in a master equipment list. The exercise revealed a two-to-one over-count and surfaced dozens of duplicate tag strings that had crept in over the years.

**3 | Validate on Site for Truth Capture**

IRWD and MaxGrip teams walked the pilot facility, scanning tags, confirming functional locations and marking handrails, fencing and other non-maintainable items for removal. By the end of the walk-down, 94 % of the physical assets were already represented in the master list and every discrepancy was clearly logged.

**4 | Design the Hierarchy Policy**

Through a series of interactive workshops we co-created a naming and classification standard aligned with ISO 14224 and AWWA best practice. The policy defined level-1-to-7 breakdowns, tag syntax, mandatory attributes and governance rules that would work equally well for treatment plants, wells, booster stations and recycled-water sites.

**5 | Model & Test the Pilot Hierarchy**

Using the new policy, consultants rebuilt the full structure for the pilot facility with around 1,000 assets inside a sandbox database. A stakeholder review where technicians were able to quickly navigate from plant level to pump sub-assembly provided the project's "aha" moment and green-lit pilot rollout.

## 6 | Cleanse, Enrich & Load

Duplicates were merged, obsolete records struck off and missing attributes were added. Clean data were then bulk-uploaded to Maximo with audit trails that allow any future change to be traced back to source.

## 7 | Stakeholder Engagement

MaxGrip produced a policy and worked closely with the IRWD team from the start so they could voice their ideas, give feedback and share ownership of the solution. Weekly updates keeps stakeholders engaged and ensures buy-in throughout the pilot stage. The maintenance team experience the improved way of working in their day to day practice, which elevates job satisfaction and further cementing this new approach for IRWD.

This structured, repeatable approach means every subsequent site can be processed faster than the one before, guaranteeing that the full portfolio will be fully “data-fit” and Maximo-ready within the nine-month window.

## Current Status and Next Steps

The pilot not only finished on schedule, it delivered around 1,000 validated assets instead of the 450 originally scoped. This gives IRWD an entire flagship facility ready for immediate use. With that success, MaxGrip and IRWD have launched Phase 2, covering their next largest sites. The roadmap targets completion of the remaining 39,000 assets, spanning 480 locations, by the end of this year, ensuring clean data is in place for the Maximo upgrade soon after.

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MaxGrip quickly understood the issues we were facing with our inconsistent asset breakdown structure. They provided expert engineering resources to logically and intuitively restructure our assets and locations, ensuring compliance with local and national water industry standards. To ensure consistency going forward, MaxGrip developed an “Asset and Functional Locations Standard” that can be applied to future expansions and enhancements at IRWD. The project was managed professionally and transparently and was delivered on time without surprises.

- Verowin Hunting, Reliability Manager at IRWD

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## EXPECTED BENEFITS

## READY IN 9 MONTHS FOR MAXIMO UPGRADE

Building on the success of the pilot, IRWD now has a clear line of sight to the business value this program will unlock across maintenance, finance, and supply-chain functions. As the remaining 39,000 assets receive the same treatment, the utility expects to realize:

- Lean, trustworthy data: Asset count reduced around 50 % with duplicates and obsolete entries eliminated.
- Faster work management: Technicians can pinpoint any asset from its tag string, cutting search time and wrench time.
- Improved budgeting & cost control
- Warehouse & spares integration: A clean hierarchy clears the path for upcoming warehouse-system links, reducing parts-mapping rework.
- Rapid time-to-value: Tangible benefits realized within months; full portfolio slated for completion in under 9 months from kickoff.

Collectively, these outcomes turn the register from a patchwork of records into a reliable decision engine. As Phase 2 accelerates, work is recorded against the correct assets, improving visibility on open and completed work for critical assets. Leadership is updated with accurate KPIs and enabled to make the correct decisions.



MaxGrip is a global Asset Performance Management consultancy that enables asset-intensive organizations to improve their bottom line by optimizing asset performance and accelerating digital transformation. Our experts work with leaders in a broad range of industries, including Oil & Gas, FMCG, Power Generation & Distribution, Water and Wastewater, Infrastructure and Metals and Mining.

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