



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Board Report

Information Technology Group

• Information Technology Group Monthly Activities for June 2026

Summary

This report provides a summary of activities related to the Information Technology Group for June 2026.

Purpose

Informational

Detailed Report

► Strategic Priority #3: ADAPT to changing climate and water resources Objective 1: Modernize and Upgrade Legacy Applications to Align with Evolving Technologies

The Information Technology Server Administration Team manages a wide range of technologies, including virtual servers, backup systems, and storage infrastructure. The team's most recent technology investment was the acquisition of two Dell PowerStore storage access network (SAN) appliances for the Nevada and El Segundo data centers. Over time, SAN storage technology has continued to advance in storage capacity, efficiency, processing power, and read/write performance. As technology evolves and equipment reaches the end of its service life, IT leverages newer solutions to enhance performance, reliability, and operational efficiency across the District.

Historically, Metropolitan has maintained unstructured data, such as Server Message Block and Network File System file shares, alongside block storage supporting virtual machines. A review of the existing environment found that it no longer meets the performance standards required to support current and future workloads. Additional storage capacity and performance were needed, therefore creating an opportunity to procure two new Dell PowerStore appliances rather than invest in upgrades to the existing SAN infrastructure. The cost of enhancing the current environment through processor and disk upgrades would have exceeded that of acquiring new appliances, while offering fewer long-term benefits.

While the existing SAN hardware continued to adequately support file-sharing workloads, performance analysis indicated that it was underperforming for virtual machine workloads and would not meet Metropolitan's growing operational needs. The new PowerStore appliances deliver significant improvements in both storage performance and processing power. They utilize Non-Volatile Memory Express (NVMe) disks, which represent the latest generation of enterprise-class high-performance storage, replacing flash-based storage systems that had previously replaced traditional spinning disks. Substantial performance improvements across all migrated workloads have been reported.

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Within Metropolitan's environment, the PowerStore appliances are dedicated to block storage supporting virtual server infrastructure. The Server Administration Team, while working closely with business stakeholders, successfully migrated most production HP-UX workloads from the Unity 680 systems to the new platform. The VMware environment has already been fully migrated. Additionally, the project includes migrating workloads from end-of-life hardware at the El Segundo data center, a critical component of Metropolitan's disaster recovery operations. These enhancements extend the useful life of Metropolitan's storage infrastructure while improving performance, reliability, and operational efficiency. The remaining workload migrations are scheduled for completion in July, subject to project schedules and resource availability.