



Satellite Technology Aids Smart Water Management

Metro JPA Vice Chair Mayda Winter spoke to Metro JPA Commissioners about how weather satellites are being harnessed to aid smart water management programs, from large commercial installations to small cities. She was impressed by a system presentation made recently at the League of California Cities conference in Squaw Valley.

Matthew Thompson from Healdsburg spoke at the League of Cities event and talked about their program using the WeatherTRAK system. The system automatically schedules irrigation based on individual landscape needs and local weather conditions drawn from information delivered wirelessly from weather stations. This greatly improves upon the old-fashioned "timed" irrigation systems that tend to over water landscapes resulting in higher than needed water bills.

Each day, the system automatically adjusts irrigation based on changing weather based on data from 27,000 weather stations, including the National Oceanic and Atmospheric Administration (NOAA) network, state and county networks and private weather stations. Proven scientific modeling techniques calculate and validate local weather down to one square kilometer before the updates are transmitted to the central controllers. The calculations take into consideration the potential risk of a bad reading from a single local sensor and the effects of humidity, solar radiation, temperature and wind. The system can manage single or multiple sites over a localized or large regional area and its easy-to-use interface provides management oversight and historical reports that can be exported for recording or presentation purposes.

Commissioner Mark Robak mentioned that the Water Conservation Garden in Rancho San Diego uses a satellite-monitored irrigation system. Commissioners requested a presentation by WeatherTRAK at a future meeting.

Sewer Monitoring System Uses Satellite Technology

Metro TAC Chair Scott Huth spoke of a recent demonstration presented to TAC members by a company called Hadronex. They use satellite technology to prevent sewage spills using a device installed under manhole covers. The SmartCover® Unit gives almost instantaneous warnings of a sewer spill or vandalism. The electronics, communications and power pack module, are mounted either mechanically or magnetically. The sensor line hangs below the lid to continuously measure the water level. And an intrusion

sensor can determine if the manhole cover has been lifted. The real-time wireless communications are sent to cell phones, pagers, PDAs, or other mobile hand-held units. Commissioners are expected to see a presentation in an upcoming meeting.

Future Water Needs Outlined

Because of drought and increasing demands on the Colorado River as a source, the region faces the possibility of imminent serious water shortages. IROC (the Independent Rates Oversight Committee) reports that in the future 100,000 additional acre feet of water will be needed per year to meet the region's needs, either through conservation or recycling, or a combination of both.

Next Commission Meeting is August 7

The next meeting of the Metro JPA and Commission will be at 12 noon on Thursday, August 7 in the Metropolitan Operations Center (MOC II) auditorium, 9192 Topaz Way, Kearny Mesa.

Metro TAC Meets on July 16

Metro TAC will hold its next luncheon meeting at 11 a.m. on Wednesday, July 16 in the MOC II auditorium at 9192 Topaz Way, Kearny Mesa.

Upcoming Metro Commission Meetings

September 4 -- October 2 -- November 6 -- December 4

Upcoming Metro TAC Meetings

August 20 -- September 17-- October 15 -- November 19
December 18

Metro Commissioners

Councilmember Henry Abarbanel, Del Mar - Chair
Councilmember Mayda Winter, Imperial Beach - Vice Chair
Mayor Cheryl Cox, Chula Vista
Councilmember Al Ovrom, Coronado
Mayor Mark Lewis, El Cajon
Vice Mayor Ernest Ewin, La Mesa
Councilmember Jerry Jones, Lemon Grove Sanitation District
Councilmember Luis Natividad, National City
Board Member Mark Robak, Otay Water District
Board Member Augie Caires, Padre Dam Muni. Water District
Councilmember Merrilee Boyack, Poway
Supervisor Dianne Jacob, County of San Diego

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