



PRESS RELEASE: ET Water First to Pass Irrigation Association's S.W.A.T. Performance Protocol

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CORTE MADERA, Calif. — Today ET Water Systems, LLC, announced that its new self-adjusting landscape irrigation control system was the first product to pass the Irrigation Association's (IA) Smart Water Application Technology (SWAT) performance protocol. This protocol was developed by water purveyors and industry representatives to identify high-efficiency, climatologically-based irrigation controllers.

Testing of the ET Water smart controller to the new performance protocol was conducted by the Center for Irrigation Technology (CIT). The month-long irrigation controller test was created to determine both **adequacy** (a controller's ability to provide adequate water for plant health by automatically adjusting watering schedules according to daily changes in weather conditions) and **efficiency** (ability to irrigate without over-watering or creating runoff).

A perfect score is 100% on each measurement. Currently, a passing score is 80% adequacy and 65% efficiency. ET Water scored 100% on adequacy and 98.5% on efficiency, a near-perfect performance.

"We are pleased that ET Water stepped up to be the first company to test its self-adjusting controller with CIT," said David Zoldoske,

Director of CIT. "They were very responsive and cooperative throughout the process. Identifying products which provide high water use efficiency is an important step in managing our nation's water supplies."

ET Water CEO Bruce Cardinal is extremely pleased with the controller's performance. "ET Water has demonstrated its smart controllers can meet the precise watering requirements demanded by the IA and the leading water agencies," Cardinal commented. "We are extremely pleased with our product's ability to meet, and even exceed comfortably, the industry's new standard of excellence."

The test's methodology is rigorous. Because CIT doesn't use actual, physical landscapes for the test, the controller's performance is tested on "virtual landscapes" whose attributes determine irrigation requirements. Six distinct virtual landscapes are programmed into the controller, and it is required to accurately water each. Each landscape has unique irrigation requirements determined via 11 landscape parameters that include soil type, slope, sun exposure, irrigation method, distribution uniformity, plant type and precipitation rate.

CIT then attaches a "datalogger" device to the controller. This device measures when a zone

begins watering, the duration of the watering event, the number of cycles a zone waters, and the length of soak time in between each cycle. This basic run time data is all that CIT needs to calculate how the controller performs.

The controller is assigned to an actual California Department of Water Resources - California Irrigation Management Information System (CIMIS) weather station and must use weather data from that station to calculate the level of evapotranspiration (ET) and rainfall for each of the six landscapes. Using the supplied weather data, the controller must adjust watering for each station on a daily basis to ensure the landscapes don't fall into water surplus or water deficit conditions.

The assigned CIMIS weather station is in the Mt. Shasta region, and recorded 3.98 inches of rain during the test. The ET Water controller successfully delayed watering as a result of this rainfall. Similarly, the controller adjusted the watering schedule for each landscape during the test in accordance with daily changes in ET.

"Meeting the IA performance criteria was not easy," Cardinal said. "We spent the past 15 months refining our watering algorithm and field testing our product in preparation for testing by CIT. ET Water has now set the bar for the rest of the industry."

The **Center for Irrigation Technology** is an independent testing laboratory, applied research facility, and educational resource center based at California State University, Fresno. CIT is dedicated to advancing water management practices and irrigation technology. Programs cover four major areas: hydraulics laboratory testing, field research, analytical studies and special projects, and education. For more information on CIT please visit their website at www.californiawater.org.

ET Water Systems, LLC, founded in December 2002, produces irrigation control systems that combine state-of-the-art horticultural science and proprietary web-based technology to automate the scheduling of sprinkler and drip irrigation. Following 22 months of development and field testing, the company's patent pending commercial and residential

irrigation systems are being introduced for sale at the November 14-16, 2004 International Irrigation Show in Tampa, Florida. For more information on ET Water, please visit our website at www.etwater.com.

The **Irrigation Association (IA)**, founded in 1949, is comprised of industry professionals from both public and private sectors — researchers, technicians, manufacturers, distributors, dealers, system designers, consultants, installers, and contractors — all dedicated to developing the irrigation industry and working toward a shared vision - water conservation through efficient irrigation. For more information on the IA please visit their website at www.irrigation.org.

Contact: Steve Snow at 415-357-5146 or email at ssnow@etwater.com