Intelligent Use of Water
Framework and Resources to Enhance Your Business

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The Intelligent Use of Water.™
Topics of Presentation

• Current Water Issues
• The Intelligent Use of Water™ Framework
• Water Source Management
• Irrigation System Design
• Irrigation Scheduling
• Application Technology
• System Maintenance
The World’s Water Crisis

There is no new water.
Current Water Issues

• The cost of water & power is rising annually

• As the population grows, limited water sources strain to keep up with demand = DROUGHT

• In many cities, water delivery systems were designed to service a much smaller number of people than is required today = INFRASTRUCTURE IS STRAINED

• Irrigation is one the most visible forms of water use and is usually the first to be regulated in a drought or water shortage condition
Current Water Issues

• A recent report on the irrigation industry stated that automatic irrigation systems are one of the largest causes of over-watering:
  – The controller on the typical irrigation system is adjusted an average of 1-1/2 times per year and many are never adjusted
  – Controllers are typically set to apply the peak irrigation requirement of the year
  – The average automatic irrigation system applies 2 to 3 times the amount of water required by the landscape
Current Water Issues

• Current politics of irrigation:
  – Water bans & restrictions
  – Tiered water rates
  – Lawn size and landscape restrictions
  – Mandatory irrigation audits
  – Mandatory ET-based controllers
  – Water-efficient product rebates
  – Restriction on precipitation rates and the use of overhead irrigation in certain design conditions
The need to deliver superior results with less water creates exciting new business opportunities.

As the industry leader in water-efficient irrigation, Rain Bird can help your business thrive.
The Intelligent Use of Water™
The Intelligent Use of Water™

Today’s Rain Bird Solutions

- Non-potable-water-ready:
  - Valves
  - Rotors
  - Sprays
  - Drip Products

- Pumps:
  - Integrated Plug-N-Pump
  - Custom-engineered

- Aerators

Tap into underutilized supplies such as underground well water, gray water, black water, condensate and rainwater.
Non-Potable Water Ready Products
Non-Potable Water Ready Products
Rain Bird Irrigation Pump Stations

Integrated Plug-N-Pump Systems

Custom Commercial Systems
Lake Management Aerators
The Intelligent Use of Water™

Today’s Rain Bird Solutions

• Design support and resources, including a referral network of top irrigation consultants and landscape architects in your area
• Comprehensive training
• LEED® point-earning products
• CAD drawings

Create landscapes as sustainable as they are beautiful.
LEED and Rain Bird: Water-Efficient Products

Provides an overview of the Rain Bird portfolio of LEED suitable products

• Overview of products and technologies
• Review of various drip irrigation applications
• Useful installation and maintenance tips
Understanding and Applying New Legislation

Assembly Bill 1881

SENATE LOCAL GOVERNMENT COMMITTEE Senator Christine Kehoe, Chair BILL NO: AB 1881 HEARING: 6/28/06 AUTHOR: Laird FISCAL: Yes VERSION: 6/12/06 CONSULTANT: WATER CONSERVATION AND LAND USE Background and Existing Law The 1990 Water Conservation in Landscaping Act required the State Department of Water Resources (DWR) to adopt a model local water efficient landscape ordinance, based on the recommendations of an advisory task force. The Act required the model ordinance to contain at least nine provisions for promoting water conservation in landscape design, construction, and maintenance. Cemeteries received special exemptions. After review by the Joint Legislative Budget Committee, DWR had until January 1, 1992 to adopt the model ordinance. Counties and general law cities had until January 1, 1993 to adopt a water efficient landscape ordinance or to adopt findings explaining why a local ordinance was unnecessary. If a county or city failed to adopt either the ordinance or the findings, then state law required local officials to enforce ordinance as if it had been adopted by the county or city (AB 350, Clute, 1990). In 2004, the Legislature asked the California Urban Water Conservation Council to convene a task force and recommend improvements to model local water efficient landscape ordinance (AB 2717, Laird, 2004). The resulting report, Water Smart Landscapes for California, offered 43 recommendations.

Consult with your Rain Bird sales representative

• Learn when and how new regulations will affect your business
• Understand impact on product selection

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The Intelligent Use of Water™

Today’s Rain Bird Solutions

- Controller, central control and sensor-based solutions to maximize water application efficiency
- ET (Evapotranspiration) Management
- Soil Moisture-based Management
- Seasonal adjust/water budgeting
- Cycle+Soak™
- Flow monitoring, leak detection & response
- Rainfall monitoring & response

Optimize the timing, quantity and frequency of water applied to the landscape with leading edge water management controls.
Rain Bird Landscape Irrigation
Central Control Products Family

Multi-Site

Larger Sites, Fully-Automatic Operation
Maxicom²

Single-Site

SiteControl

Smaller Sites, Semi-Automatic Operation
IQ

MDC
ET Controllers
20% to 50+% Water Savings

ET Manager
Commercial grade retro-fit product

ESP-LXM Controller
with ET Cartridge
Commercial grade, modular, ET controller

ESP-SMT
Residential or Light Commercial Smart Controller

IQ/Site Control/Maxicom
Residential or Light Commercial Smart Controller
Rainfall Monitoring & Response

Rain Check Rain Sensor

RSD Wired Rain Sensor

NEW

WR2 Wireless Rain/Freeze Sensor
Soil Moisture-Based Management
40% Water Savings or More

SMRT-Y Soil Moisture Sensor

NEW
Business Tools

Grow your business based on the Intelligent Use of Water Principles

• End-user Targeted Promotional Materials
The Intelligent Use of Water™

Today’s Rain Bird Solutions

• Water-smart rotor and spray features:
  – Pressure Regulating Stem (PRS) technology
  – Seal-A-Matic™ (SAM) check valves

• Landscape Drip: Direct-to-plant-root watering devices

• Root Watering Series

• High-efficiency nozzles:
  – Rain Curtain™ Nozzles
  – U-Series Nozzles
  – Matched Precipitation Rate (MPR) Nozzles
  – SQ Square Pattern Nozzle (formerly XPCN)

Distribute water to the landscape as efficiently as possible.
5000/5000 Plus PRS Series

• What is it?
  – Rotor throwing 25' to 50'
  – PRS – Pressure Regulating Stem similar to the 1800 (PRS).
  – ONLY ROTOR TO HAVE THIS

• What does it do?
  – “Plus” = rotor manual shut-off tab to shut off head even when valve is operating
  – In-stem pressure regulation reduces inlet pressure to 45psi for optimal nozzle performance.

• Save Water with PRS and Plus
Spray Body
1800 PRS Series

• PRS ensures optimal nozzle performance at 30 PSI in high pressure system
• Eliminates fogging & misting
• Reduces costly accidents and property damage
• Restricts water loss by 70% if the nozzle is damaged or removed
• Documented water savings of up to 50%
  – Reduces water usage by 6-8% every 5 psi reduction.
Spray Body-1800 SAM Series

• Built-in SAM check valve saves water and prevents erosion from low-head drainage.
Root Watering Series (RWS)
Minimizes the water volume required for healthy growth

RWS 36"
RWS-M 18"
RWS-S 10"
U-Series Nozzles
Use 20% to 30% Less Water

Lower Scheduling Coefficient
= Shorter Run Times
Rotary Nozzle

20-40% Proven Water Savings
The Intelligent Use of Water™

Today’s Rain Bird Solutions

• Durable products with worry-free warranties and built-in expandability
• Phone support and on-site service through certified service providers
• The Global Service Plan (GSP) for central control systems
• Comprehensive training

Use water efficiently and affordably for the long haul
Central Control Systems
Global Support Plan

Preserve your investment in Rain Bird Commercial Central Control

• Toll-free Software and Hardware Support
• Remote System Diagnostic
• Hardware Loaner Program
• Software Upgrades
• Training or On-site Support
Rain Bird Services Corporation
Rain Bird Academy

Provides a comprehensive selection of irrigation training courses

• Business Skills
• General Irrigation
• Design
• IA Certification Preparation
• Central Control
• ET Controller
• Golf Irrigation