

Resource Management Tools for achieving IWM benefits:

- **Water Plan Resource Management Strategies**
- **Institutional Tools**
- **Other?**

27 RESOURCE MANAGEMENT STRATEGIES *A RANGE OF CHOICES*

Reduce Water Demand

- Agricultural Water Use Efficiency
- Urban Water Use Efficiency

Improve Operational Efficiency & Transfers

- Conveyance – Delta
- Conveyance – Regional / Local
- System Reoperation
- Water Transfers

Increase Water Supply

- Conjunctive Management & Groundwater Storage
- Desalination – Brackish & Seawater
- Precipitation Enhancement
- Recycled Municipal Water
- Surface Storage – CALFED
- Surface Storage – Regional / Local

Improve Flood Management

- Flood Risk Management

Improve Water Quality

- Drinking Water Treatment & Distribution
- Groundwater / Aquifer Remediation
- Matching Quality to Use
- Pollution Prevention
- Salt & Salinity Management
- Urban Runoff Management

Practice Resource Stewardship

- Agricultural Lands Stewardship
- Economic Incentives
(Loans, Grants & Water Pricing)
- Ecosystem Restoration
- Forest Management
- Land Use Planning & Management
- Recharge Areas Protection
- Water-Dependent Recreation
- Watershed Management

Other-- Crop idling, dew vaporization, fog collection, irrigated land retirement, rainfed agriculture,

Institutional Tools for Managing Resources

In many cases, several institutional tools interact in managing resources:

- Collaborative decision-making—A decision made through collaboration can avoid the need for new legislation, regulation, and litigation.
- Education—Educational programs can be the least expensive way to influence public action. Information on water use efficiency practices, water costs, habitat conditions, and other important subjects can help the public become active participants in plan implementation.
- Legislation—Legislation can provide new statutes for managing resources. (See Volume 4 Reference Guide article “Recent Water Legislation.”)
- Voter-approved propositions—Voters can directly enact new laws by approving propositions. In many cases, voters decide on major funding requests. Since 1996, voters have approved four major California waterbonds (propositions 204, 13, 40, and 50).
- Regulation—State regulatory agencies adopt regulations (rules) to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure.
- Permitting – Authorization by a governing authority to implement an action or engage in an activity
- Litigation—Lawsuits provide a dispute-resolution tool that most, if not all, water stakeholders will employ when it appears to be their best alternative. These judicial proceedings can provide greater certainty to water rights holders and to public trust values in California in ways that the collaborative process may fail to accomplish. Legal precedents create a framework for setting up water resource management programs, but do not themselves create or implement the programs. (See Volume 4 Reference Guide article “Summary of Significant Litigation 1998-2005.”)