

Water Words Dictionary—Appendix C–2

EFFICIENT WATER MANAGEMENT PRACTICES (EWMP)

AGRICULTURAL WATER USE

Efficient water management practices (EWMP) consist of the agricultural water use equivalent of *Best Management Practices (BMP)* as applied to urban water use, efficient water management practices cover the spectrum of methods to improve both the efficiency and conservation of agricultural water use by (1) enhancing irrigation management services, measurement, and accounting; (2) improving the physical system of irrigation delivery, distribution, application, and drainage; and (3) promoting the modification of and adjustment to the institutional system of water use by agricultural interests to include information and educational programs. More specifically, the most significant of these management practices would include:

Irrigation Management

- Improve water measurement and accounting;
- Conduct irrigation efficiency studies;
- Provide farmers with "normal year" and "real time" irrigation, scheduling, and crop evapotranspiration ET information;
- Monitor surface water qualities and quantities;
- Monitor soil moisture;
- Promote efficient pre-irrigation techniques;
- Monitor soil salinity and build-up;
- Provide on-farm irrigation system evaluations;
- Monitor quantity and quality of drainage waters;
- Evaluate and improve water user pump efficiencies;
- Designate a water conservation coordinator.

Physical Improvement

- Improve the condition and type of flow measuring devices;
- Automate canal structures;
- Line or pipe ditches and canals;
- Modify distribution facilities to increase the flexibility of water deliveries;
- Construct or line regulatory reservoirs;
- Construct Irrigation District tailwater reuse systems;
- Develop recharge basins for systems;
- Improve on-farm irrigation and drainage systems;
- Evaluate efficiencies of Irrigation District pumps;
- Provide education seminars.

Institutional Adjustments

- Improve communication and cooperative work among district, farmers, and other agencies;
- Change the water fee structure in order to provide incentives for more efficient use of water and drainage reduction;
- Increase flexibility in water ordering and delivery;
- Conduct public information programs;
- Facilitate financing capital improvements for Irrigation Districts and on-farm irrigation systems;
- Increase conjunctive use of ground water and surface water;
- Facilitate, where appropriate, alternative land uses.

Source: ***California Water Plan Update, Volume 1***, Bulletin 160–93, October 1994, Department of Water Resources, The Resources Agency, State of California, Sacramento, California.