

Westlands Water District Drainage Management Options

SOURCE CONTROL: ADVANCED IRRIGATION SYSTEMS

Westlands is a leader in water conservation, employing advanced techniques and the latest technologies to increase water efficiency and help crops withstand harsh conditions. More than 93% of all fields in Westlands use some form of drip irrigation.



Drip Irrigation in row crops.



RETIRED LAND PUT TO BENEFICIAL USE

Water systems on retired lands are capped to make additional water available to irrigable areas. Lands can be equipped with solar panels to take advantage of plentiful natural sunlight and convert it to renewable energy. Solar projects in the District are expected to generate up to 2.4 gigawatts of power, greater energy potential than the combined output of several large nuclear power plants.



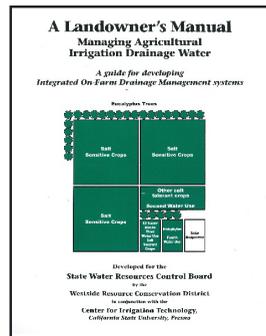
A capped distribution system in a fallowed field.



Solar panels on the Westside.

INTEGRATED ON-FARM DRAINAGE MANAGEMENT SYSTEM

The Integrated On-Farm Drainage Management (IFDM) system was developed to manage these problems. A state-of-the-art, yet practical irrigation management system, the IFDM provides for drainage water reuse to improve water availability for crop production and to minimize salt and selenium risks to water quality and the environment.



Manual for land owners to maximize resources

INNOVATIVE WATER COLLECTION AND REUSE PROCESS

Westlands could implement innovative collection and reuse technologies to supply agricultural water. The drainage settlement language requires Westlands to manage drainage water, and reuse is a potential solution.

A tail water collection and reuse system.



Drainage water treatment facility.



Salt is a byproduct of the treatment process that requires disposal.



SUPPLY FOR WESTLANDS WATER DISTRICT

An example, the Panoche Water and Drainage District collects drainage water (through the process described to the left) and provides it as recycled water to irrigate crops such as Jose Tall Wheat Grass and pistachios.



Jose Tall Wheatgrass and pistachios grown with drainage water.

