



EMWD Insights

Hemet/San Jacinto Regional Water Reclamation Facility

What goes around...

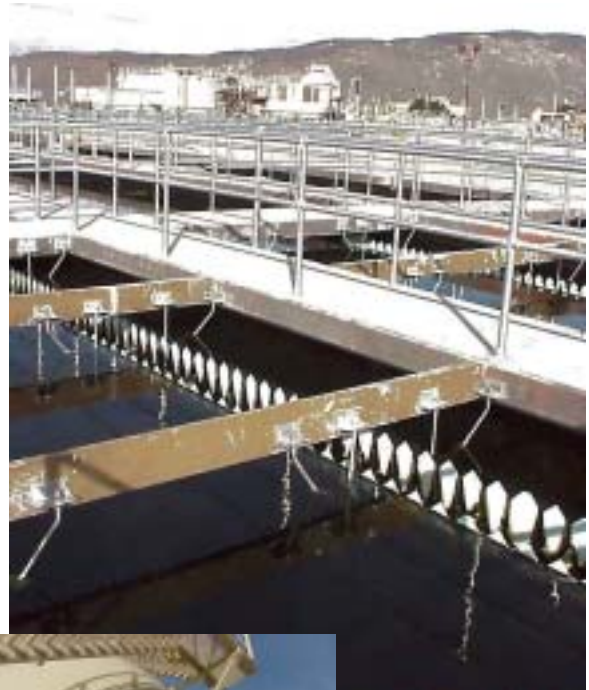
Water treatment and sewer treatment are two sides of the same coin.

EMWD sees sewage treatment as a way to convert a nuisance and an expense into a resource that extends water supplies.

By the 1920s, wastewater processing consisted of **primary treatment**--a mechanical process involving settling, skimming off floating materials and removing sludge. By the end of World War II, it became apparent this wasn't enough.

What came next incorporated biological processes into a more advanced **secondary treatment**. This advance in technology is based on what occurs in nature--after solids have dropped out, organisms consume remaining nutrients. Simply put, a treatment plant speeds up the natural water cycle process.

During the late 1980s, even more advanced treatment--known as **tertiary**—became feasible and was, in some instances required. This highest treatment level



Hemet/San Jacinto operation in millions of gallons/day (mgd)	
Typical daily flows:	7.8
Capacity:	11
Ultimate expansion:	27

removes bacteria and viruses and virtually all suspended solids. Water at this level can be used for most any purpose short of direct human consumption.

Every gallon of water that is used at least one more time means one more gallon can be left in the ground, or one less gallon would need to be imported through

aqueducts from hundreds of miles away.

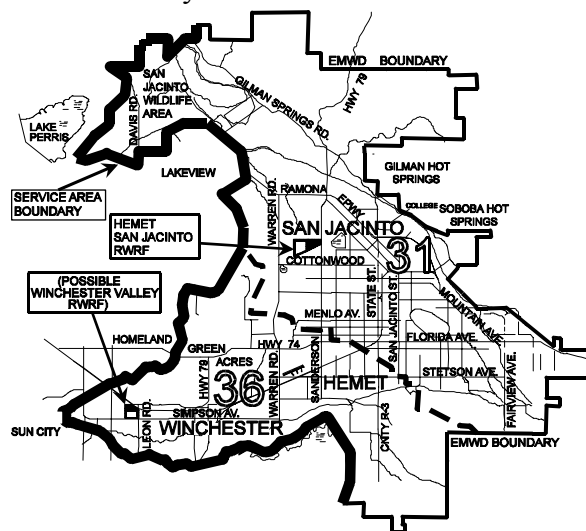
In the beginning...

Not having an ocean outfall for wastewater was becoming a problem for the San Jacinto Valley in the 1960s.

To meet the needs of local people and the many newcomers relocating from more urbanized counties, a larger sewer system was required.

Rather than invest in separate, expensive systems, a regional plan emerged that took good advantage of economies of scale, which continue today.

With overwhelming community support, voters approved a \$6.8 million bond issue for EMWD to develop a regional sewer and reclamation system.



The 255 acres for the reclamation facility in west San Jacinto today serves the population living within its 167-square-mile service area.

During the summer growing season, dairies and other agricultural customers use as much reclaimed water as possible. At other times, the largest single customer is

the 4,700-acre San Jacinto Wildlife area (SJWA), adjacent to Lake Perris.

Wetlands research...



One exciting aspect of the Hemet-San Jacinto facilities is the use of secondary treated reclaimed water from the plant to create a wetlands.

Attracting the attention of the U.S. Bureau of Reclamation and water resource experts from many countries, the site converted nearly 60 acres into a demonstration wetlands processing 2½ million gallons a day.

There, bulrushes and other vegetation filter out heavy metals, nitrates and phosphorus. And as the ecology of the system matures, it is expected to create a final product comparable in water quality to that produced by higher tech, more expensive treatment.

Scientists and international policy makers are not the only ones interested in multipurpose, constructed wetlands. More than 120 species of waterfowl and other birds have visited the area so far.

D:\INSIGHTS\HJSRWRP.doc

Prepared by Eastern Municipal Water District □ Community Involvement Department
P.O. Box 8300 2270 Trumble Road, Perris, CA 92572
909/928-3777, ext. 4219 FAX 909/928-6160