



OK, most people don't really spend much time thinking (much less talking) about the conveyance and treatment of sewage, but indulge us for a few moments, because the plans of the Pima County Wastewater Management Department (PCWMD) will affect our community for decades to come.

What is PCWMD planning?

PCWMD is working to meet new environmental requirements mandated by the Arizona Department of Environmental Quality (ADEQ). ADEQ regulates our activities and the way we convey and treat the community's sewage. ADEQ has directed us to meet new stringent quality standards for our effluent. These standards are based on mandates set by the United States Environmental Protection Agency (EPA).

What is effluent?

Effluent is highly treated wastewater that is the result of the wastewater treatment process.

Where is sewage treated in Pima County?

PCWMD operates two major wastewater treatment facilities in Pima County. These two facilities are the Roger Road Wastewater Treatment Plant located near I-10 and Sweetwater Drive and the Ina Road Water Pollution Control Facility located at Ina Road and I-10. There are nine smaller facilities located throughout the greater Tucson area.

Where does the effluent go?

At Wastewater Management's two major wastewater treatment facilities, effluent is discharged into the Santa Cruz River. At the other facilities, effluent disposal methods include evaporation, irrigation, and percolation.





What new standards does PCWMD have to meet?

ADEQ is mandating that PCWMD decrease the amount of nitrogen and ammonia in our effluent.

Why is it important to decrease nitrogen and ammonia levels in effluent?

Although nitrogen is helpful in plant growth, it is harmful to aquatic life. Additionally, effluent that is discharged into the Santa Cruz River can percolate into our groundwater and increase nitrogen and ammonia levels in the aquifer. Although small levels of nitrogen naturally exist in the aquifer, high levels of nitrogen in drinking water can be harmful to children and unborn babies. No local water providers draw from the groundwater near the Roger Road and Ina Road facilities, and the Wastewater Management Department performs regular monitoring of the groundwater in these areas.

What does Pima County intend to do to meet new standards?

With a number of community partners (the City of Tucson, the Town of Marana, the Town of Oro Valley, and others), PCWMD has developed the Regional Optimization Master Plan (ROMP). The ROMP will change how we manage and treat the community's sewage.

How much sewage is treated at the county's metropolitan facilities?

Today, the Roger Road plant has a capacity of 41 million gallons a day (mgd). The Ina Road facility has a capacity of 37.5 mgd. ROMP planners have projected that the metropolitan area will need a capacity of 85 mgd by 2030 (3 mgd will be provided by the Randolph Water Reclamation Facility located at 22nd Street and Alvernon Way.) When the ROMP is completed, the Ina Road facility will be upgraded and expanded to treat 50 mgd. The Roger Road plant will be decommissioned after a new 32 mgd water reclamation facility is built adjacent to the existing plant.

Aren't there different sets of pipes that convey sewage to the Roger Road and Ina Road facilities? How will PCWMD divert flows that now are treated at Roger Road to Ina Road?

The first project that will be constructed under the ROMP is the construction of an interceptor sewer that will take flows, that now go to the Roger Road plant, to the Ina Road facility. This will be the first large project to be undertaken within the ROMP program. It will also allow for future flows south of the Rillito River to be conveyed to Ina Road.

Won't the flow of 50 million gallons of sewage every day create an odor problem at the Ina Road facility? Will the odors that have been so prevalent at the Roger Road Plant decrease when the flows to that facility are decreased?

Both plants will have state of the art odor control features built in to the new/upgraded facilities. The county has decided that an effective system-wide odor control program will be developed and will be operational well in advance of the completion of the ROMP. Work is underway in the conveyance system to reduce odors system-wide. Additionally, various odor control projects to provide odor relief at Roger Road during the period before the new facility begins operations are also under construction.

What will the ROMP cost?

Preliminary estimates are \$501 million. However, this estimate is based on prices for necessary goods and services in 2006 dollars. Ultimately, the ROMP will cost more when additional needs and requirements are identified and inflation and debt service are factored into project costs.

That's a lot of money! Will my property taxes go up?

By federal law, no property tax dollars are used to pay for the conveyance and treatment of the community's sewage.

If my property taxes won't be raised, how will these projects be paid?

PCWMD will be asking for increases in sewer rates and sewer connection fees. These rates are paid by those of us who receive sewer service and by developers and any others who connect new plumbing fixtures that discharge into the sewer system.

What are Pima County's challenges in addressing collection and treatment costs?

- Pima County's system is quite spread out - we have more than 3,300 miles of sanitary sewers. (If laid end to end, these pipes would reach from Tucson to Nome, Alaska.)
- Most communities have only one or two treatment facilities. In Pima County, we have two major regional plants (the Roger Road and Ina Road facilities mentioned above). Nine smaller facilities that treat the community's sewage are located in:

- Arivaca Junction
- Avra Valley
- Corona de Tucson
- Green Valley
- Marana
- Mt. Lemmon
- Pima County Fairgrounds
- Randolph Park
- Rillito Vista

Why can't we pipe all the community's sewage to one of the major plants?

In most cases, the construction of sewer pipes to carry sewage from these locations would be cost prohibitive, and in some cases (due to geology, existing infrastructure, homes, and businesses) would be impossible.

Does Pima County have to decrease nitrogen and ammonia levels from the effluent produced at its smaller facilities?

Except for three plants, all our facilities remove nitrogen and ammonia to non-toxic levels or are in the process of being converted to new treatment processes that meet these standards. Arivaca Junction, Rillito Vista, and the Fairgrounds facilities do not have nitrogen-removal processes because they operate as wastewater lagoons - a method that is used when there are only minimal sewage flows being treated.

How long do we have to make the changes ADEQ is requiring?

ADEQ has given us a deadline of January 1, 2014 to have the upgrade and expansion at the Ina Road facility in operation. January 1, 2015 is the deadline to have the new water reclamation facility adjacent to the Roger Road site operational.

What would happen if Pima County does not meet those deadlines?

ADEQ has the authority to fine PCWMD if we do not meet the deadlines. Such fines are in addition to funds we have to expend to construct the new facilities and upgrades. These fines ultimately would be paid for by Wastewater Management's customers.

Are other cities and counties in Arizona facing the same requirements Pima County is facing?

Pima County is the only wastewater utility management entity of this size that has not already met these new standards.

How can I learn more about Pima County's plans for sewers and treatment plants?

For more information, call 740-6500 or visit the web site at www.pima.gov/wwm/odor. To provide comments about the ROMP or the Odor Control program, call Pima County's Hotline at (520) 622-2020. All comments will be included in reports to the Pima County Board of Supervisors.

