Marina Coast Water District Water/Wastewater Systems

In-Tract Water and Wastewater Collection System Infrastructure Policy

By
Marina Coast Water District

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Summary

During the last 10 to 15 years, an increasing number of studies nationwide have confirmed that water and sewer infrastructure replacement costs are soaring. Water pipe replacement costs alone are estimated to be $1.7 billion per year nationwide, and numerous other studies add to the sense of urgency to improve the nation's underground infrastructure. The infrastructure found on the former Fort Ord is no exception. Much of the water and wastewater collection systems infrastructure is estimated to be 50 years old and integrity and performance issues have already been documented.

Under the Water/Wastewater Facilities Agreement between the District and the FORA, the District is responsible for the successful operation and maintenance of the water and wastewater collection systems on the former Fort Ord, as well as improvements to the systems as FORA reasonably determines are necessary. In an effort to assure the successful redevelopment of the former Fort Ord, the District may cause to be planned, designed, and constructed any other facilities as the District reasonably determines may be needed to carry out the goals as established by FORA.

Systems Age

The former Fort Ord water and wastewater collection systems are on average estimated to be 40 to 50 years old and are nearing the end of their useful life. From this point forward, the systems will continue to deteriorate at an unpredictable pace. A majority of all valves are experiencing failure. Many of the service taps (laterals connecting to mains) have been found to be leaking due to poor construction. Pipelines will increasingly become more brittle over time.

The District implemented a preventative maintenance program to enable a systematic approach to pipeline maintenance. However, when operation and maintenance crews continue to repair or replace components of a system that continues to fail unpredictably, the success of a prudent preventative maintenance program cannot be realized.

Water Infrastructure System

FORA and the District depend on the ability to extract and deliver up to 6,600 afy of groundwater from the Salinas River groundwater basin in accordance with a FORA-approved water allocation plan for land use jurisdictions.

The majority of water use in the Ord Community service area is estimated because meters have not yet been installed on residences. Within the overall water allocation for all jurisdictions, 532 afy (or 8 percent of 6,600 afy) is presently estimated and assigned as water loss. (Industry standards for water loss range from 6% to 15% and include water lost due to water line breaks, fire hydrant use, construction water, etc.) The District accepts its responsibility as the steward of the significantly important water resources in support of FORA's redevelopment plan, and will work to minimize water loss. The District has established a water loss goal of 5 percent from

water leaks. To achieve this goal, water use will need to be accurately measured and distributed through a watertight system

Wastewater Collection System

The District is responsible for maintaining a system free from sewage overflows. Much of the collection system was not constructed to current design standards and is showing signs of aging. It is difficult to determine the failure rate of an aging system as pipelines loose integrity over time. Sewage spills (overflows) is one of the symptoms of system failure. During 2002, the District experienced 15 sewage spills. Many of the spills occurred within redevelopment areas.

The District completed its Wastewater Master Plan for the Ord Community service area in 2001 which included visually inspecting (via video) many of the collection lines and connections. The Plan describes a system that requires an aggressive and costly collection pipe replacement program.

As the collection system continues to experience problems, the District is subject to increasingly tighter regulatory control that will not tolerate sewage spills. Per recent sewer system maintenance regulations promulgated by the California Regional Water Quality Control Board, the District is required to minimize sewage overflows. Given that the sewage system is not constructed to today's design standards, overflows are expected to continue to occur at an accelerated pace. By replacing components of the aging wastewater collection system, the District will be able to keep its permits in good standing and improve upon overall maintenance costs to customers.

Capital Improvement Program

The District is making every effort to keep rates affordable for our customers. With monthly water and wastewater collection rates already on the high end for this region, additional District-funded (in-tract) capital improvements would cause the rates to escalate further, adding to the burden on potentially low to middle income customers in an area where low-income housing is strongly encouraged. Requiring developers to be responsible for in-tract capital improvements to the water system and wastewater collection system would help contain District rates while ensuring the systems are progressively brought up to standard.

Pipelines Relocated from Planned Lots of Record and Planned Improvements

Upon conveyance, the District agreed to accept the systems "as-is" and "where-is". To address right of way issues to decrease District exposure to liabilities due to systems maintenance and/or repair, we must assure that new pipelines planned in redevelopment areas are not constructed to conflict with planned lots of record or planned improvements. Examples of planned improvements include structures, roads, landscape areas, walkways, parking facilities, etc. The District will work to relocate all systems within public easements, e.g. roadway easements. Better access to systems infrastructure will result in more cost effective repairs and reduced liability to the District.

In conclusion, an in-tract water and wastewater collection system infrastructure policy that clearly establishes requirements for developers to bring systems components to industry standards during redevelopment projects is supportive of District responsibilities to FORA and to our customers.

In-Tract Infrastructure Policy

For all proposed redevelopment projects in areas served by existing water and wastewater collection infrastructure, the developer will be required to implement one of the following procedures:

1. Where redevelopment will raze the existing buildings and streets:

    - Developer completes a subdivision water and sewer master plan per the District standards.
    - Developer replaces all existing water and wastewater collection pipelines and components within the project area to District standards, and replaces all existing water and wastewater collection pipelines and components adjacent to the project area to District standards, as project impacts necessitate.
    - Developer provides meter boxes for all structures and landscaping.
    - Developer provides for District's installation of remote read meters.

2. Where redevelopment will use existing buildings and infrastructure or will raze or remodel a portion or all of the existing buildings but streets and existing infrastructure will remain:

    - Developer completes a subdivision water and sewer master plan per the District standards. This subdivision master plan would include a physical and design standard condition assessment of the systems per District standards. The subdivision master plan must be approved by the District prior to receiving water and sewer service.
    - From the subdivision master plan, the Developer replaces components as required by the District.
    - Developer relocates the District's backbone water/sewer infrastructure (infrastructure that serves other upstream and downstream users) onto roadway right of way, as necessary.
    - When the Developer is planning to construct improvements, including, but not limited to, structures, landscape areas, walkways, parking facilities, etc., over existing water and sewer infrastructure, then the Developer is responsible to relocate existing water/sewer infrastructure away from under proposed improvements.
    - The developer will enter into a separate utility agreement with the District to provide for anticipated higher maintenance costs of the remaining older systems that will be left in place.
    - The separate utility agreement will include an annual water and wastewater collection inspection report to be completed by the Developer or its successor in accordance with District standards. That agreement will require the developer to provide an annual wastewater collection system, water system inspection report in accordance

with District standards and to provide master meters for the project. The water inspection report will include a water audit.

- Developer provides meter boxes for all structures and landscaping.
- Developer provides for District's installation of remote read meters.