

CITY OF FULLERTON INFRASTRUCTURE AND NATURAL RESOURCES ADVISORY COMMITTEE

INFRASTRUCTURE DATA SHEET

Date: February 2020

Asset: STORM DRAIN SYSTEM

<u>Asset Description:</u> The City owns and maintains the storm water collection system throughout the City limits. The system consists of above ground swales and underground pipes, box culverts, catch basins, etc. Pipes and catch basins are typically located in street right of way, however, there are significant systems located within easements on private property.

The City drainage systems ultimately connect to Orange County Flood County District facilities such as Houston Storm Channel, Carbon Creek Channel, Placentia Storm Channel, Fullerton Creek Channel, Brea Creek Channel, or Imperial Channel.

There are also two dams owned and operated by the U.S. Army Corp of Engineers within the City. Brea Dam is located adjacent to the YMCA building and St. Jude Hospital. Fullerton Dam is located within Craig Park. Army Corp responsibility is primarily the dam gateworks that is used to control the release of water from behind the dam.

Asset Components:

Street Right of Way

- Various sizes and types of catch basins
 - Grate inlets
 - Curb opening catch basins
 - o Riser inlets
- Various sizes and types of pipe
 - Reinforced Concrete Pipe (RCP)
 - Pipe size range from 18" to 90" in diameter
 - Typically 18" 36" in diameter
 - Corrugated Metal Pipe (CMP)
 - Typically 12" to 24" in diameter

Easements (Private Property)

- Various sizes and types of pipe
 - o Typically Corrugated Metal Pipe
 - Typically 12" to 24" in diameter

Asset Needs: Various levels of preventive maintenance and improvements including:

- Lining of pipes within easements
- Replacement of CMP
- Upsizing of existing drainage systems
- Installation of new drainage systems
- Installation of trash and debris screens at catch basins

Approximate Total Current Need: T.B.D. as part of Drainage Master Plan update

Allowable Funding Sources: General Fund, Sanitation Fund, Drainage Capital Outlay Fund

Current Annual Funding: Varies depending on revenues, but approximately

\$ 500,000 Sanitation Fund

\$2,000,000 Drainage Capital Outlay Fund

Typical Annual Maintenance/Improvements: Various activities including:

- Cleaning of pipes, channels and catch basins
- Repair of damaged pipes
 - Typically CMP that has corroded over time
- Repair of damaged catch basins
 - Typically damaged by vehicles
- Lining of pipes
 - Typically CMP
- Replacement of pipes
 - Typically CMP
- Installation of new drainage systems

Locations for repair and lining of pipes typically determined by Maintenance Department due to issues beyond City staff capabilities.

Recommended Annual Strategy & Associated Costs:

- Lining of existing CMP
- Replacement of CMP where feasible
- Removal of facilities from easement where feasible
- Implement recommendations of the Master Plan of Drainage

Staff is currently updating the City's Master Plan of Drainage. This report reviews and incorporates existing drainage facilities and future land development data within the City boundaries into a comprehensive computer model. This model results in recommendations to improve the existing facilities or install new facilities to accommodate existing and future land development conditions.

Expected Recommended Annual Needs:

Miscellaneous Repairs and Preventative Maintenance = \$1,000,000 (Pipe lining, small repairs, etc.)

Major System Upgrades or New Facilities = \$3,000,000 (To be recommended by Drainage Master Plan)

TOTAL= \$4,000.000

Recommended Additional Annual Funding: \$ 1,500,000

