## This brief history of the Midway Sewer District has been prepared for the 2008 Comprehensive Plan.

## **History**

The Midway Sewer District (fka Des Moines Sewer District) was initiated by a petition prepared and signed by residents of an area of approximately 200 acres in downtown Des Moines, and heard before the Board of County Commissioners. On July 16, 1946, at a special election, the sewer district was formed and the Commissioners elected.

The Board of Commissioners retained an engineering consultant to prepare a Comprehensive Scheme to provide a guide for the District. The Comprehensive Scheme was presented to the voters in 1949 and defeated. The Board did not meet again for over seven years. During this time the area continued to grow and the need for sewers became more urgent. The District existed in name only until the ninth meeting of the Board of Commissioners held on November 23, 1956. At this meeting the Board adopted an amended Comprehensive Scheme of Sewers. The Board declared an emergency and called for a special election on November 6, 1956, regarding authorization to issue general obligation and revenue bonds.

The special election propositions passed and by April 24, 1957, the first ULID was established. The District set about the process of constructing a collection system, submarine outfall, primary treatment plant, and two pump stations. By December, 1958, the District had an operating system of sewers.

Once the new sewerage system was in operation, numerous small extensions were installed to serve the rapidly developing area. By early 1960 there was interest from several surrounding developments, communities and precincts such as: Des Moines Terrace, Wesley Terrace, Zenith, Angle Lake, Thunderbird Estates, Bow Vista, Lake Olga & Rancho Vista, the Airport, Cascade, Columbus, Crest View, Ferdinand, Isabella, Limerick, Roosevelt, and Sweptwing.

In January, 1961, a system of Additions and Betterments to the Comprehensive Plan was adopted by the District. Later this revised plan was put into effect by construction of sewers in ULID No. 2 to extend the Midway Trunk Sewer and to serve an area east of Des Moines known as Thunderbird Estates.

By August, 1960, the District began the process to build a new treatment plant even though the existing plant was only 1½ years old. The location of today's present day Des Moines Creek Wastewater Treatment Plant was selected because it was better suited to serve the rapidly growing area. This treatment facility was completed in 1965, and was sized for an average dry weather flow of 1.91 MGD. The original treatment plant was converted into a pump station which is today the site of the 7<sup>th</sup> Avenue pump station.

In 1965, the Seattle-Tacoma International Airport abandoned their Bow Lake sewage treatment facility, which was inadequate for their future needs and began discharging sewage into the District's system. The Airport also constructed an industrial waste treatment plant which

discharges into the District's outfall via an industrial trunk sewer that by-passes the sewage treatment plant.

There were numerous annexations in the period 1960 to 1980. The largest of these annexations was the merger of the Sylvia Pines Sewer District into the Midway Sewer District effective in June of 1968. The sanitary wastes from the sewered area of Sylvia Pines Sewer District were treated at a small treatment plant located on the east side of Salt Water State Park. In 1969, this treatment plant was abandoned and converted into the present day 16<sup>th</sup> Avenue Pump Station. The flows from this abandoned plant were conveyed to the Des Moines Creek Wastewater Treatment Plant.

As the District continued to grow the capacity at the Des Moines Creek Wastewater Treatment Plant was incrementally increased. The treatment facility was expanded from 1.9 MGD to 6.0 MGD capacity. Upgrading the Des Moines Creek Wastewater Treatment Plant was complicated by certain geologic conditions at the plant location. Construction commenced with an extensive dewatering system to relieve the extreme artesian water pressure at the treatment plant site. Plant upgrades included construction of additional primary clarifiers, emergency generator, lab/office building, anaerobic digester, sludge pump room, chlorination building, chlorine contact chamber, and the addition of a 200 foot long multi-ported diffuser to the end of the existing outfall. This construction was completed in December, 1984.

Following the treatment capacity expansion the Des Moines Creek Wastewater Treatment Plant was upgraded to secondary treatment. Due to certain constraints at the plant site, the trickling filter / solids contact process was chosen. Two trickling filters, a filter pump station, an aeration basin, two secondary clarifiers, gravity thickener, belt press and building, and two carbon odor scrubbers were constructed. This construction was completed in July, 1989.

Immediately following start-up of the secondary treatment process an extensive odor control system at the treatment plant was constructed. This construction was completed in 1991.

Due to a continuing increase in demand, the treatment facility capacity was again increased. The chlorine disinfection system was replaced with ultra-violet disinfection, and additional emergency power generation equipment was added in December, 1999. Construction of a second anaerobic digester was completed June, 2000. Following completion of these improvements the treatment plant capacity increased to 9 MGD.

A partial replacement of the Des Moines Creek Trunk was on-line in June of 1997. The bulk of the terrestrial portion of the replacement Des Moines Creek Wastewater Treatment Plant Outfall was completed in October, 1998. The portion of the new outfall lying underneath Marine View Drive South, which was constructed in conjunction with the new bridge, was completed at the end of 2006. Construction of the submarine portion of the new outfall was completed in the fall of 2007. On September 30, 2007, all of the treatment plant and Port of Seattle industrial waste effluent was redirected into the new 48" outfall.

The District transferred ownership of the old 30" outfall and a significant portion of the old 24" trunk sewer to the Des Moines Creek Basin Committee. They intend to use the pipelines

donated to them by the District as a high-flow bypass to help prevent flooding, erosion and damage to the Des Moines Creek habitat.

Advancements in computer and electronic technology have made the development of a geographic information system (GIS) an attractive option. This GIS system provides better and more convenient access to sewer and other information. The District also now has a web site which provides easy public access to information about frequently asked questions. Additionally, the District produces a newsletter 3 times a year to keep its customers up to date on issues concerning the sewer.