History

- Facility Plan in 1986
- Design of Major Upgrade in 1988
- Construction Complete in 1989
- No Significant Upgrades or Modifications Since 1989
Design Capacity

- Annual Average Flow Rate – 0.636 MGD
- Peak Hour Flow Rate – 3.419 MGD
- BOD$_5$ Loading – 2,751 lbs/day
- TSS Loading – 3,191 lbs/day
Current Conditions

- Annual Average Flow Rate – 0.595 MGD
- Peak Hour Flow Rate – 2.082 MGD
- BOD$_5$ Loading – 1,442 lbs/day
- TSS Loading – 1,689 lbs/day
Current Effluent

- BOD₅ mg/l  6.2
- TSS mg/l  3.8
- Ammonia mg/l  0.9
- Phosphorus mg/l  0.6
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Monthly Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD$_5$ and TSS</td>
<td>30 mg/l</td>
</tr>
<tr>
<td>Ammonia</td>
<td>11 – 18 mg/l</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>1.0 mg/l</td>
</tr>
<tr>
<td>Seasonal Disinfection</td>
<td></td>
</tr>
</tbody>
</table>
Future Effluent Limits

- No Change to BOD, TSS and Ammonia
- Water Quality Based Phosphorus Limit will be 0.47 mg/l
Existing WWTP

- Raw Wastewater Pumping
- Fine Screen
- Grit Removal
- Oxidation Ditch Activated Sludge
- Final Clarifiers
- UV Disinfection
Existing WWTP

- WAS from Oxidation Ditch
- Dissolved Air Flotation Sludge Thickening
- Remote Liquid Sludge Storage Tank
  - On Airport Property – Need to Relocate
Need For Project

- Replace Aging Equipment
  - Oxidation Ditch
  - Final Clarifiers (Plus New Dome Covers)
  - Influent Screen
  - Process Pumps
  - Chemical Feed Pumps
  - Polymer Feed for DAF system
Need For Project

- New Structures
  - Selector Tank for Bio-P Removal
  - Influent Lift Station With Screen Preceding Pumps
  - Sludge Storage Tank and Mixing System

- Upgrade Existing Structures
  - Mechanical/Plumbing/Electrical/Architectural
    - Four Main Process Buildings

- SCADA