Cobb County Water System
Engineering and Records Division
Cobb County Water System –
From the Customer’s View

WHAT’S ENGINEERING GOT TO DO WITH IT?
Cobb’s Water and Sewer Infrastructure

**in·fra·struc·ture** - *noun*
1927, from Fr. (1875), from *infra- (q.v.) + structure*. The installations that form the basis for any operation or system. Originally in a military sense.
Cobb’s Water and Sewer Infrastructure

- 3,000 miles of Water Mains
- 23,300 Fire Hydrants
- 58,700 Valves
- 2,500 miles of Sewer Lines
- 71,300 Manholes
- 45 miles of Force Mains
Cobb’s Water and Sewer Infrastructure

Legend

Cobb County Water System

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purple</td>
<td>Water Mains</td>
</tr>
<tr>
<td>Green</td>
<td>Sewer Lines</td>
</tr>
</tbody>
</table>

3,000 Miles of Water Mains!

2,500 Miles of Sewer Lines!
Engineering and Records Division
Inflow/Infiltration Section

Closed Circuit Television Inspection
Closed Circuit Television Inspection

Cobb Co. Water System, I&I Section
Sub-Basin Project Title - 5/20/2008
From MH 404-M023 Depth 11'
To MH 404-M024 Depth 7'
Survey Direction: U-stream
Loc. Winfair Pl., Cobb County
Closed Circuit Television Inspection – Common Problems Found
Capital Improvement Program Projects
Utility Locate Services
The Nemesis of the System Maintenance Division

MIS-DIRECTIONAL BORING MACHINES!
The Nemesis of System Maintenance – MIS-DIRECTIONAL BORING MACHINES!

Horizontal Directional Drilling

Sewer Line

Gas Line

Water Main

Drill Operators
The Nemesis of System Maintenance – MIS-DIRECTIONAL BORING MACHINES!
COBB COUNTY WATER SYSTEM

NORTHWEST COBB WATER RECLAMATION FACILITY EXPANSION

CCWS PROJECT NO. T4016
B&V PROJECT NO. 130403

JULY 2004
Recent Major Projects
(Not So) Recent Major Project

Name That Plant!
Cobb’s Water and Sewer Infrastructure

Sewage Pump Stations

Noonday Creek WRF

Northwest Cobb WRF

Water Pump Stations

R.L. Sutton WRF

Water Storage Tanks

South Cobb WRF

This is Now

“but what was it in the Beginning”?

...but what was it in the Beginning??

LOOKING BACK – Population Growth in Cobb

1900 to 1940
Population Increase of 13,600 Persons
LOOKING BACK – Population Growth in Cobb
LOOKING BACK – Population Growth in Cobb

1970 Census – Cobb Population at 196,800!
LOOKING BACK – Infrastructure Growth

HOW MANY SEWAGE TREATMENT PLANTS IN COBB 40 YEARS AGO?

a. 0 5
b. 5 10
c. 10 – 20
d. 20 – 50
LOOKING BACK – How Many Plants 40 Years Ago?

City of Acworth

City of Kennesaw

Developer-Built Plants (30)

City of Marietta (5)

Lockheed

Cobb County (2)

City of Smyrna

City of Austell

42!!
LOOKING BACK –
ENGINEERS AT WORK!

OVER 40 MAJOR DESIGN AND
CONSTRUCTION PROJECTS BETWEEN
1970 AND 1977!
Infrastructure Growth – The 1970s

$32,000,000 in Construction Costs

- Noonday Creek WRF, Rubes Creek PS and Interceptors
- Olley Creek Interceptor
- South Cobb Interceptors
- Austell, 120, and Six Flags Pump Stations
- Nickajack PS and Interceptor
- Chattahoochee Tunnel
- Rottenwood and Sope Creek Interceptors
- Upper Sope Creek and Morgan Falls Interceptors
- Fulton County River Crossings
- Chattahoochee WRF (now Sutton WRF)
- South Cobb WRF - Expansion to 8 mgd
- Willeo Creek Outfalls (to Fulton’s Big Creek WRF)
Population Growth in Cobb – The Upward Trend Continues

1970 Population = 196,800
Population Growth in Cobb – The Upward Trend Continues

Population more than doubles to 447,800!
Infrastructure Growth – The 1980s

- Tanyard Creek PS and Interceptors
- Proctor Creek PS, Proctor and Butler Creek Interceptors
- County Line PS and Allatoona Interceptors
- Noses and Ward Creek Interceptors
- Northwest Cobb WRF
- Noonday Creek WRF Replacement
- Willeo Creek PS and Force Main
- Sutton WRF - Three Expansions
- South Cobb WRF Expansion
Projections for Cobb’s Future

- 1900
- 1910
- 1920
- 1930
- 1940
- 1950
- 1960
- 1970
- 1980
- 1990
- 2000
- 2010
- 2020
- 2030
Projections for Cobb’s Future
Projections for Cobb’s Future

Population will top 710,000 in 2010!

1967 Sewer Study Projection – 628,000 in 2020

Population Increase of 1,860% since 1940!
Cobb Water – Continuing into the Future

- Northwest Cobb WRF
  - 12 mgd (2020)

- South Cobb Tunnel

- Noonday Creek WRF
  - 20 mgd (2024)

- Chattahoochee Tunnel

- R.L. Sutton WRF
  - 60 mgd (2038)

- South Cobb WRF
  - 40 mgd (2018)
Cobb County Water System – Expanding Regional Relationships

- Cobb-to-Fulton
  - Willeo Creek Basin

- Cobb-to-Paulding
  - Pumpkinvine Creek Basin

- Paulding-to-Cobb
  - Allatoona Creek Basin

- Paulding-to-Cobb
  - Sweetwater Creek Basin

- Fulton-to-Cobb
  - North Fulton Area

- Fulton-to-Cobb
  - Sandy Springs Area

- Bartow and Cherokee-to-Cobb
Cobb County Water System
Engineering and Records Division

Cobb County Water System

Cobb County at the Best!