

Gambrills/Odenton Public Drinking Water Quality

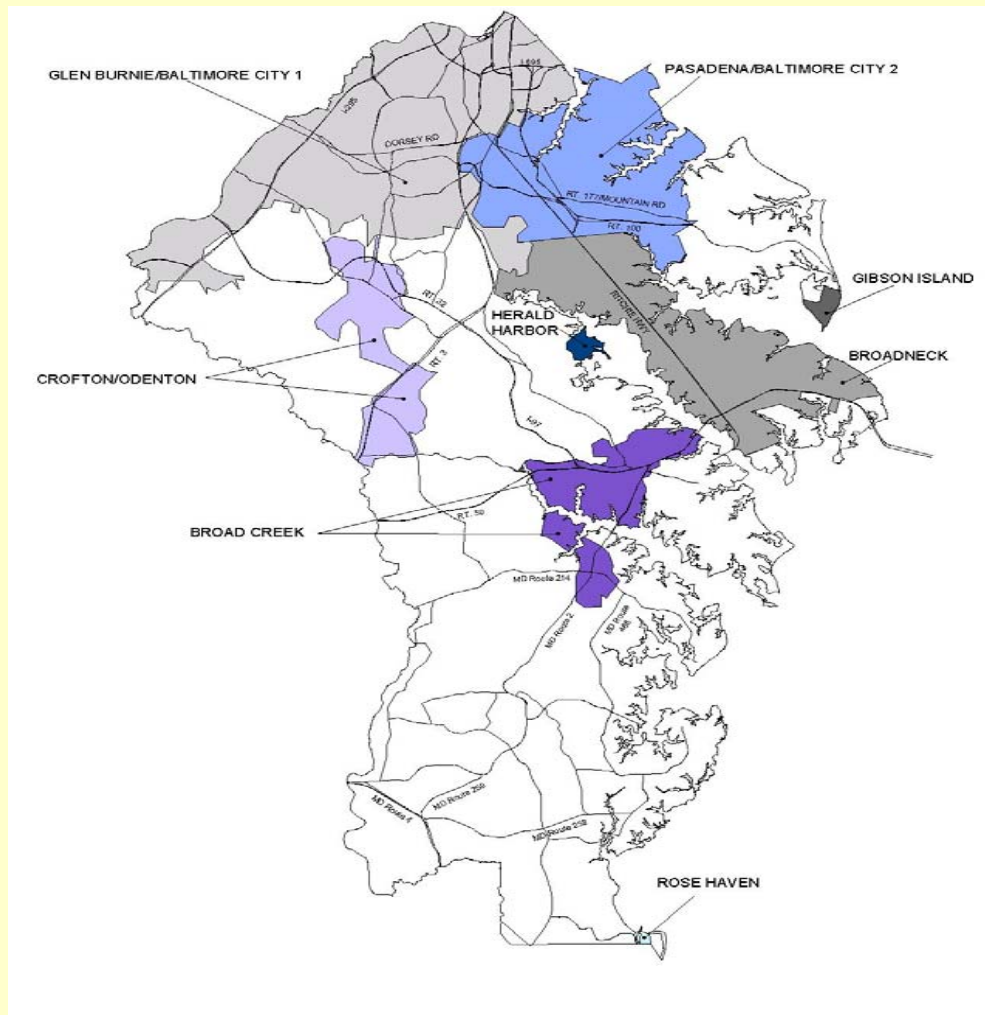


Department of Public Works

Gambrills/Odenton Public Drinking Water System Quality

- General description of the system
- Quality/safety of public drinking water
- Efforts to manage the supply source
- Questions

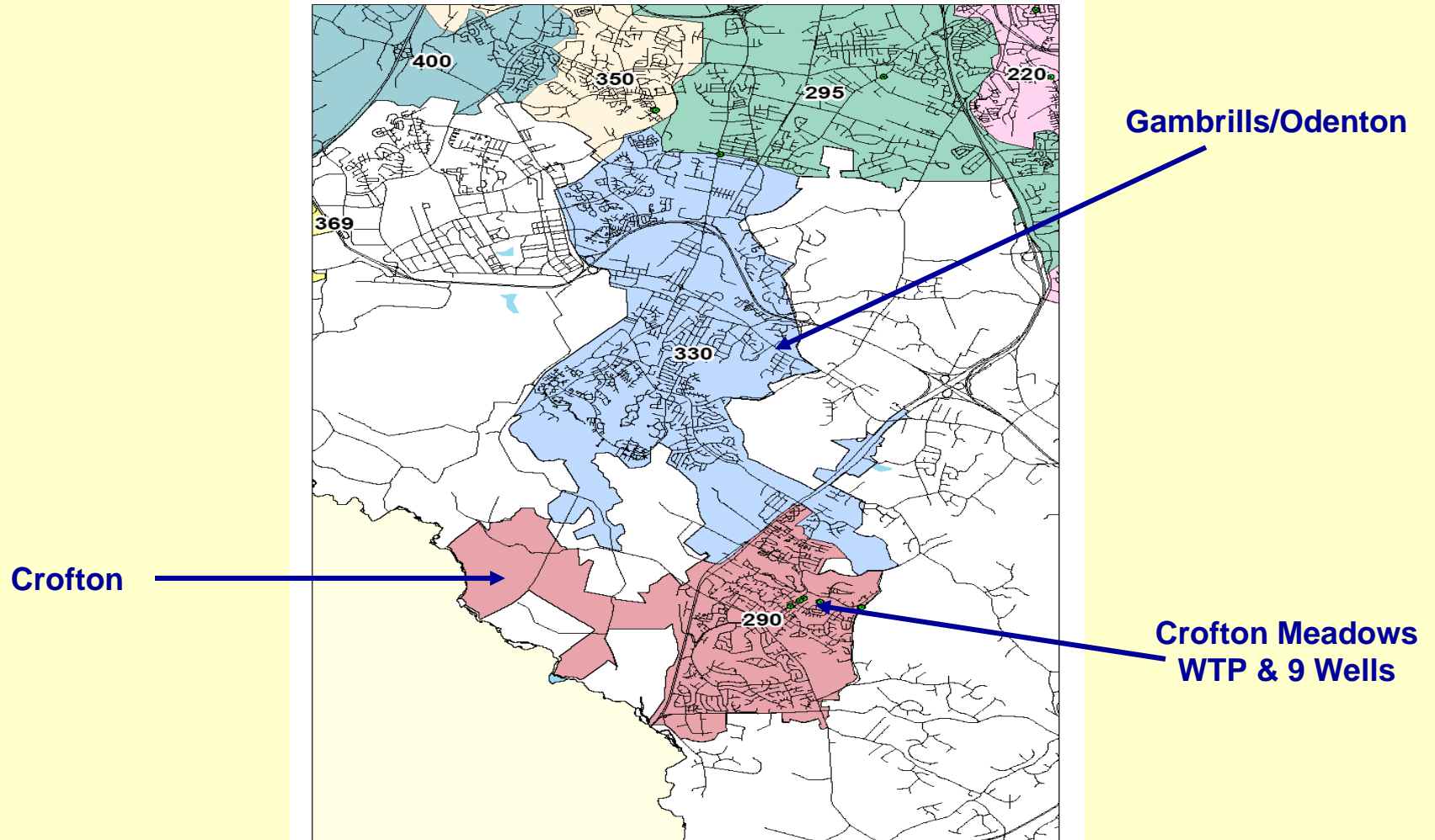
Anne Arundel County Water System Map



Anne Arundel County Public Drinking Water System: Facts and Figures

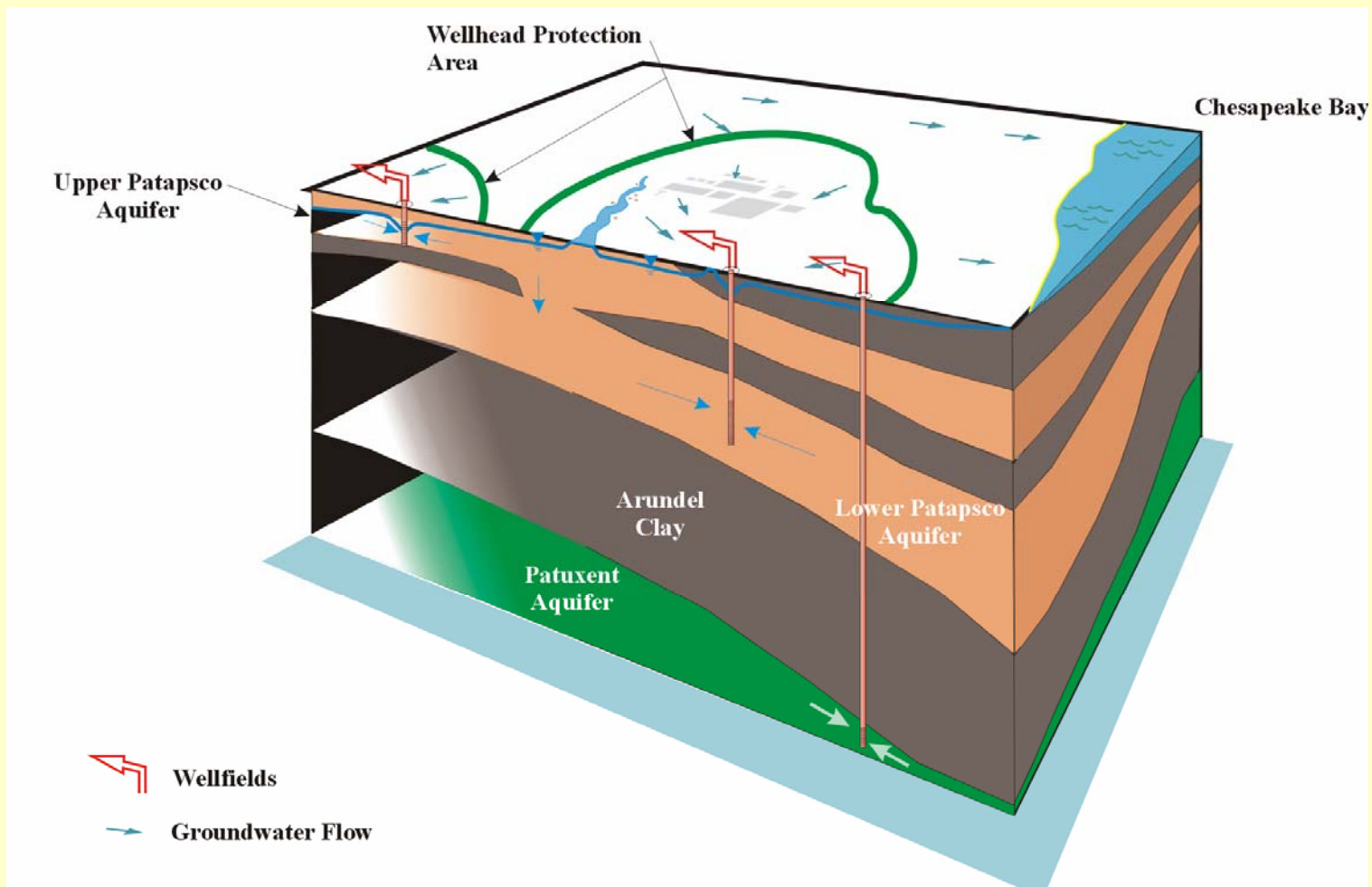
- Provide over 13.4 billion gallons of water per year
- 106,000 customer accounts
- 49 wells
- 18 Water Treatment Plants
- 15 Water Booster Stations
- 1,200 miles of water mains
- 30,000 system valves
- 31 Elevated water storage tanks
- 10,000 fire hydrants

Gambrills/Odenton Area Water System Map



Quality/Safety of Public Drinking Water

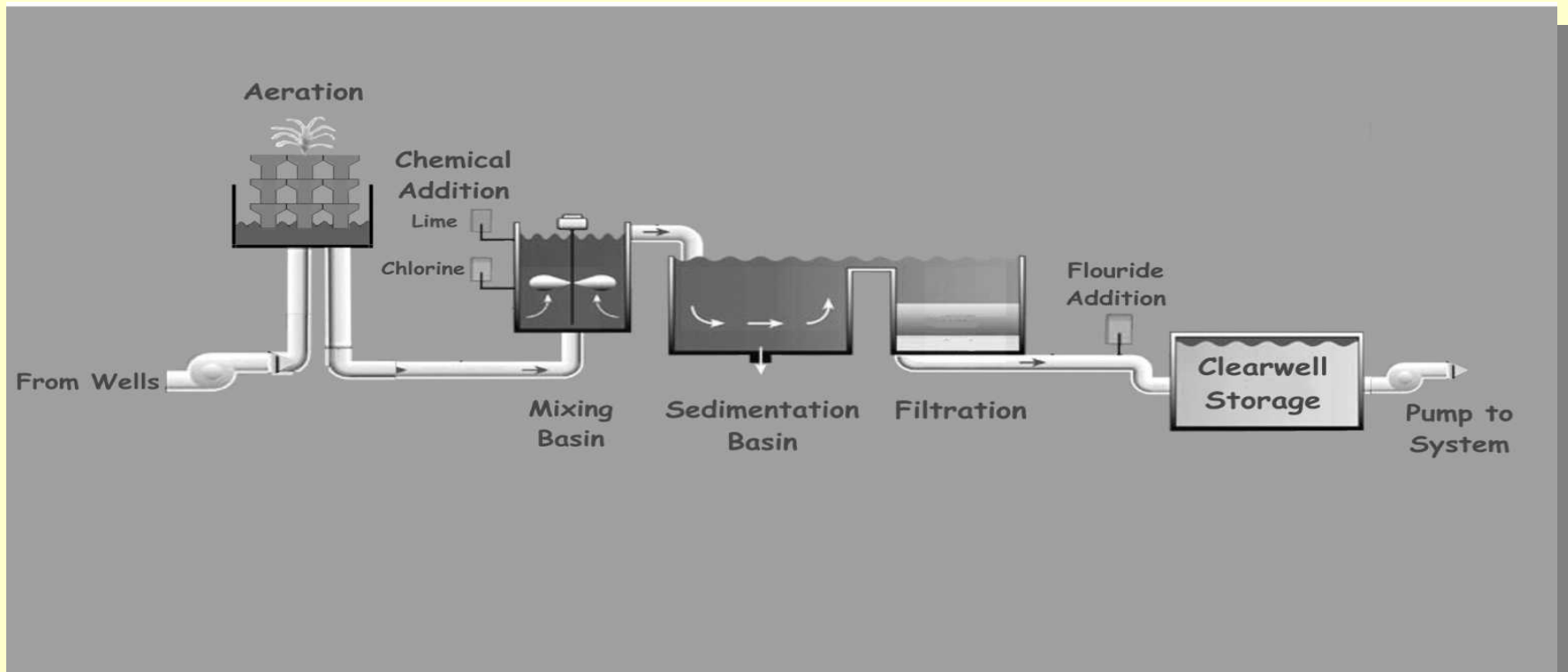
Ground Water Flow Beneath AA County



Typical Aquifer & Well Depths

	RANGE OF DEPTH BELOW GROUND LEVEL	# OF PUBLIC WATER SUPPLY WELLS IN THIS AQUIFER - COUNTY	# OF PUBLIC WATER SUPPLY WELLS IN THIS AQUIFER - CROFTON AREA	AVERAGE DEPTH OF CROFTON AREA WELLS
Magothy Aquifer	40 - 140 FEET	None	None	N/A
Upper Patapsco Aquifer	290 - 360 FEET	11	None	N/A
Lower Patapsco Aquifer	410 - 720 FEET	24	2	693 FEET
Patuxent Aquifer	890 - 1260 FEET	12	2	1191 FEET

Water Treatment Processes



Water Quality Testing

- 38,000 water quality analyses performed annually
- Analyses for 110 different contaminants, including:
 - Volatile Organics
 - Inorganics
 - Radiological Compounds
 - Disinfection By-Products
- Monthly reporting to the State
- Compliance rate over the last 10 years exceeds 99.99%

Managing the Supply Source

Managing the Supply Source

- Groundwater Withdrawal Permit Program
- Maryland Geological Survey Studies
- Wellhead Protection Program
- Water and Sewer Master Plan

Summary

- Abundant, protected source of water
- Advanced treatment; producing high quality drinking water
- Comprehensive sampling and analyses in compliance with Maryland Department of the Environment regulations

For More Information:

<http://www.aacounty.org/DPW/index.cfm>

Questions?

Typical Water Quality Analyses Results

	MCL Standard	Crofton Meadows Wells	Crofton Meadows Finished Water
Arsenic	10 ppb	Not Tested	<i>None Detected</i>
Cadmium	5 ppb	<i>None Detected</i>	<i>None Detected</i>
Lead	15 ppb	<i>None Detected</i>	<i>None Detected</i>
Thallium	2 ppb	<i>None Detected</i>	<i>None Detected</i>
Aluminum	None	Not Tested	Not Tested
Manganese	None	0.17 ppm	Not Tested
Beryllium	4 ppb	<i>None Detected</i>	<i>None Detected</i>
Sulfates	None	12 ppm	8 ppm
Radium 226/228	5 pCi/L *	0.3 pCi/L	0.2 pCi/L
Gross Alpha	15 pCi/L *	NT	1 pCi/L
VOC:	Various	<i>None Detected</i>	<i>None Detected</i>

* based on quarterly average

Estimated Outcrop Areas that may Function as Recharge Areas to the Deep Aquifers

