



## Agenda for the Water and Sewer Committee Meeting February 28, 2024 7:00 PM

### Old Business

- Minutes from previous meeting January 24, 2024.
- PFAS PFOS – **Grant for Pilot testing, design and construction was submitted to MDE.**
- Water and Sewer Capacity Update – **Report was filed with MDE Jan 30, attached.**
- ENR PER Update – Town provided requested letter to MDE regarding the change request. Town has received approval of the requested Amendment and reimbursement of requested charges.
- I and I CB Basin update – Draft report has been received (545 pages as well as all pipe inspection video) staff will review and provide comment for the committee. **Staff has reviewed all the video of 36,470 ft of line (45 hours) and responded to issues that needed immediate attention with other staff (8 hours root and debris removal). A spreadsheet of all deficiencies and rating them by condition has been completed. Staff met with B and L and will proceed with smoke testing and inspecting each connection in the CB Basing for sump pumps. The inspection will be done in house and a schedule and determination of manhours will be made. Letters will be sent to each .**
- Memar Appropriation Application – Staff directed the hydrogeologist to amend the application to request 130 gpd/unit. Testing for PFAS tort suit results indicated non detect. MDE will advise testing 2x during the 60 day long term pumping test. **No update**
- SERCAP Rate Study and Fees- Committee was formed to evaluate the rate study and review a rewrite of the current rate structure and classifications.
- Springline Replacement Project & RMC Grant Application- discussion of the history and feasibility of the replacement project. Board has agreed to move forward with phase one design and construction with conditions. Staff has received a cost estimate of \$550,000.00 for the first phase of construction (Well field to Rt 70.). Staff will create document and apply for permits. Scheduled for October 2024

- Lead and Copper Revision- Lead Survey due October 2024. MDE will issue the 2nd revised spreadsheet in January (MDE has not yet released). This task will require 840 manhours to complete.
- SHA Route 17 project. Existing curb stops are located in the project limits and will be replaced to the proposed grade of the new ADA sidewalks. Committee recommends replacing the curb stops with outside meters installed by Town or its Contractor. Will be shown in CIP budget request.
- Water Conservation Rewrite and Town Ordinance change. Attachment. Discussion: Commercial conservation, watering of gardens in code red. No action taken
- Drought Update: Springs steady at 79.6 gpm or 114,624 gpd, the current drought map indicates normal conditions. Public notification has been set to code blue. Rewrite of the Public Alert System and have it approved by the Town Board by April is recommended.
- MDE Grant application: Submittals for grant cycle FFY24 SFY26: I and I, PFAS, Springline, ENR WWTP, Stream Restoration MS4, Comprehensive Flood Management (Lagoon Decommission) were submitted Jan 30.
- Interior Water Meter Leak Policy: completed with written procedure provided to staff
- Emergency Water Connection with Frederick County: Staff will draft outline of services to county Water and Sewer. **No action**

## **New Business**

- Monthly Water and Sewer Operating Report for February 24
- Well 14 to be replaced March 7. \$2040.73 cost, budget \$4500.00
- AMI (Advanced Metering Infrastructure)
- I and I Sump Pump Inspections: City of Brunswick information.  
Staff has reviewed all the video of 36,470 ft of line (45 hours) and responded to issues that needed immediate attention with other staff (8 hours root and debris removal). A spreadsheet of all deficiencies and rating them by condition has been completed. Staff met with B and L and will proceed with smoke testing and inspecting each connection in the CB Basing for sump pumps. The inspection will be done in house and a schedule and determination of manhours will be made. Letters will be sent to each residence. **Chapter 13.08 Sewer Service System should be reviewed for sump pump connections and corrections and penalties.**

- **13.08.040 - Drainwater.**

No person(s) shall make connection of roof downspouts, foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer unless such connection is approved by the superintendent or town administrator or such other person designated by the commissioners for purposes of disposal of polluted surface drainage.

(Prior code § 4-2204)

- **13.08.230 - Entry of premises.**

The director of public works and other duly authorized employees of the town bearing proper credentials and identification shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling and testing pertinent to discharge to the community system.

(Prior code § 4-2501)

(Ord. No. 20-01-02, § II, 2-24-2020)

There is NO Enforcement or Penalties for article 13.08. Section 13.15.060 Enforcement and Penalties is relative to Chapter 13.15 Illicit Discharges but could be introduced to 13.08 as a new subchapter.

- **Staff Projects: Water conservation plan and water audit plan for MDE will be written by Staff, FY 25 Budget, UV system upgrade, CBPS flow and pump rebuild and spare purchase. Cost for rebuild \$12,800 and new softstart \$5000.00 to be installed February 26; cost for new pump \$33,000.00 to be shipped February 21, 2024**

## January 2024 Water and Sewer Meeting Minutes

### Rate Study by SERCAP

David Lake questioned how the Debt Service was being treated in the rates. Jean (SERCAP) responded the debt service and reserves are in the fixed cost based on the current debt service. The Debt service payment will change with retired or new debt. This will be included in the basic charge. The AWWA practice is to put these costs in the fixed EDU charge and not the usage rates so all fixed costs are recovered by the base rate. The W and S Committee requested an executive summary for the rate study and distribute to the Town Board.

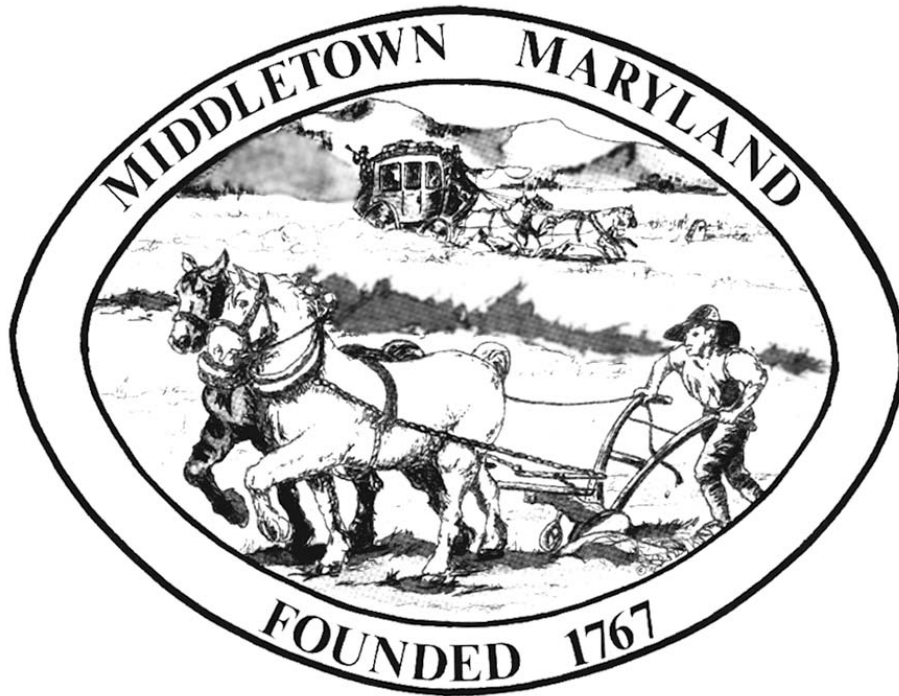
95% of the Middletown customers are in the first tier. SERCAP would recommend revising the rate structure since only 5% of customers use above the 25% rate.

All customers would be charged an EDU fixed rate then the usage on top of that.

### Interior Meter Leak Policy

The Town insurance carrier (LEGIT) has provided a revision to the Town Policy for leak coverage and the Board has approved it.

A subcommittee was setup to discuss the rate study and rate structure. The committee was approved at the February 12 Town Board Meeting. Members include, Comm. Falcinelli, Town Admin. Paul Mantello, Committee Member Robert Smart, Town Staff Stottlemyer, Alberghini and Carbaugh.



# **Burgess and Commissioners of Middletown, Maryland**

## **Wastewater Capacity Management Plan 2023**

Approved by Burgess and Commissioners  
Of Middletown, Maryland  
First Draft January 31, 2024

## **General Information**

### PURPOSE OF THE WASTEWATER CAPACITY MANAGEMENT PLAN (WWCMP)

This WWCMP is provided to assist the Town Board and Planning Commission to determine plant capacity and to track the remaining available capacity for allocation. Because of the significant lead time required for measures such as sewer rehabilitation or facility expansion, the WWCMP emphasizes the need for facility planning to ensure that growth takes place without overloading sewage facilities. The guide enables the Town to:

- ❖ Identify when a treatment plant's actual flows are approaching or exceeding the design capacity.
- ❖ Make commitments for new connections with confidence that there is adequate capacity to serve the new as well as existing customers.
- ❖ Determine when the issuance of additional building permits must be curtailed until improvements are completed so that the treatment plant can maintain compliance with its discharge permit.
- ❖ Provide time to plan for needed collection and wastewater treatment system upgrades to accommodate new growth and to arrange for the financing of the improvements.
- ❖ Become more aware of how your facility is performing; and be encouraged to take appropriate steps to address or prevent increased flows before effluent violations, regular bypassing, or overflows occur.
- ❖ Provide Town Board and Planning Commission with the information needed to make informed decisions about the capacity of their wastewater systems and the ability to accommodate new connections.

### LEGAL MANDATES

The Town faces many challenges to maintain and operate these systems in compliance with federal and State laws and regulations. The cost to keep these increasingly complex facilities staffed with skilled operators continues to increase. The ability to raise rates to keep pace with these costs is a challenge. Perhaps most challenging, however, is the need to manage the allocation of flow to new customers for residential, commercial, and industrial use, in conformance with local land use, water and sewerage plans, and the NPDES permit limits. The following language from the Maryland Environment Article makes it clear that the authority responsible for issuing building permits and subdivision plat approvals must ensure that adequate capacity is or will be available:

#### **§ 9-512 (b) Building Permits – Conformity with County Plan; Issuance of Building Permits**

*(1) A State or local authority may not issue a building permit unless:*

*(i) The water supply system, sewerage system, or solid waste acceptance facility is adequate to serve the proposed construction, taking into account all existing and approved developments in the service area;*

*(ii) Any water supply system, sewerage system, or solid waste acceptance facility described in the application will not overload any present facility for conveying, pumping, storing, or treating water, sewage, or solid waste;...*

#### **§ 9-512 (d) Subdivision Plats**

*(1) A State or local authority may not record or approve a subdivision plat unless any approved facility for conveying, pumping, storing, or treating water, sewage, or solid waste to serve the proposed development would be:*

*(i) Completed in time to serve the proposed development; and*

*(ii) Adequate to serve the proposed development, once completed, without overloading any water supply system, sewerage system, or solid waste acceptance facility.*

*(2) Each water supply system, sewerage system, and solid waste acceptance facility in a subdivision shall:*

*(i) Conform to the applicable county plan; and*

*(ii) Take into consideration all present and approved subdivision plats and building permits in the service area.*

In addition to the required State mandates, the Town has also passed legislation to ensure capacity is available. In April of 2003, the Town Board passed the Water & Sewer Certification Ordinance which requires capacity to be available prior to the approval of improvement plans:

#### **16.12.055 Water and sewer capacity certification**

*A. Upon approval of the preliminary plat, the town administrator shall conduct a review and analysis of the capacities of the town water and sewer systems in order to determine whether there exists sufficient water and sewer capacity to service the proposed subdivision or the development project thereon. The review and analysis shall be conducted in coordination with the director of operations and construction and the water and sewer superintendent who shall provide the administrator with pertinent information and data regarding the capacity of the town to provide water and sewer service to the proposed subdivision or project. In the review and analysis of the town water and sewer capacity, the demands of the proposed subdivision or project for water and sewer shall be based upon a daily consumption of two hundred and fifty (250) gallons per equivalent dwelling unit as per the standards of the American Water and Wastewater Association.*

*B. If the town administrator determines that there is sufficient water and sewer capacity to service the proposed subdivision or project, then he shall issue a certificate of water and sewer capacity for the proposed subdivision or project.*

*C. If the town administrator determines that there is not sufficient water and sewer capacity to service the proposed subdivision or project, then a certificate of water and sewer capacity shall not be issued for the proposed subdivision or project.*

*D. The planning commission shall not approve any improvement plans for the proposed subdivision or project unless a certificate of water and sewer capacity has been issued for the proposed subdivision or project.*

*E. If an approved preliminary plat is revised after a certificate of water and sewer capacity has been issued and the revision is approved by the planning commission, and if the effect of the revision does not increase the previously determined water demand of the proposed subdivision or project based upon the standards provided for in subsection (A) of this section, then a new certificate of water and sewer capacity shall not be required, and the previously issued certificate shall remain valid. If the effect of such approved revision is to increase the previously determined water demand of the proposed subdivision or project based upon the standards provided for in subsection (A) of this section, then the previously issued certificate shall be void, and a new certificate shall be issued, if appropriate, in accordance with the procedures set forth above.*

*(Ord. 03-04-01 §1, 2003)*

## Executive Summary

The Middletown sewage system consists of a 0.250 mgd treatment plant located on the west side of Town (West WWTP), and a 0.250 mgd activated sludge plant (expandable to 0.350 mgd by permit revision and 0.7 mgd by construction) located on the east side of Town (East WWTP), three (3) sewage pump stations, and a network of 8” to 12” sanitary sewer lines. The West WWTP, which was designed in 1973, became operational in 1976 and replaced an older facility. The East WWTP, located on Holter Road, was constructed in 1999-2000 and became operational on June 14, 2000.

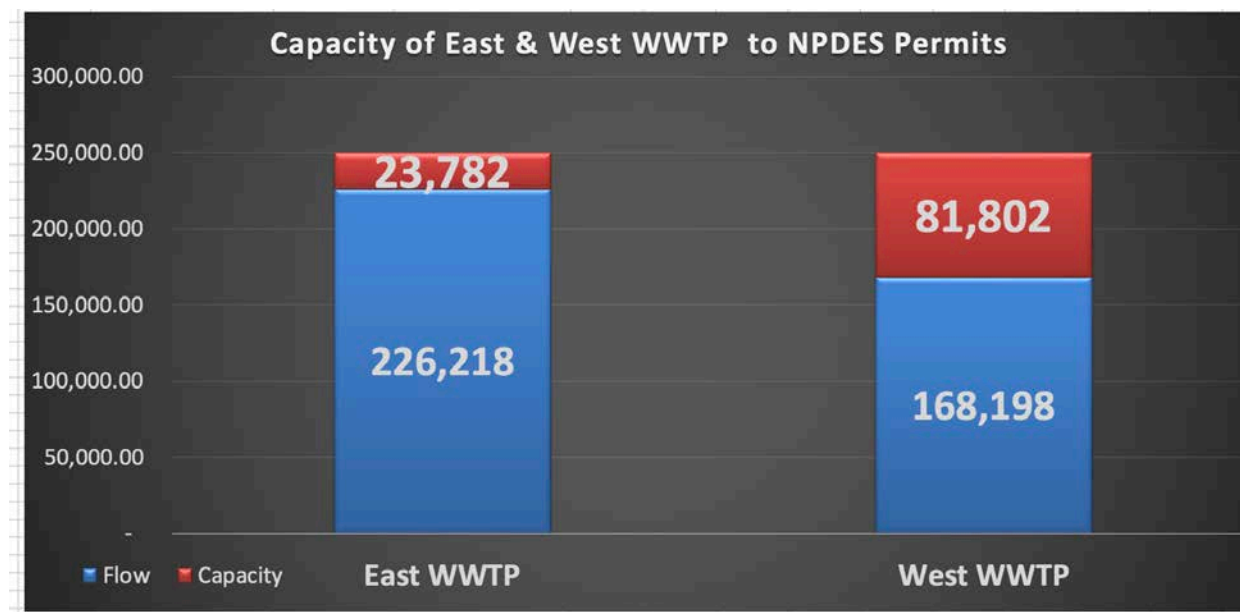
The West WWTP plant has a design capacity of 0.250 mgd with an NPDES Permit for the same. The East WWTP plant has a design capacity of 0.350 mgd with an NPDES Permit for 0.250 mgd. The Town requested an increase in our permit capacity to the full design capacity from MDE on September 3, 2020. In calculating the capacity for the Town, the permit capacities were combined for an overall total of 0.500 mgd. At current permit capacities and 3 year average flow data the system has 222 EDU’s available.

Recent replacement of the interceptor to the West WWTP and other I and I improvements has reduced the amount of infiltration and the discharge from the West plant creating development capacity that was previously used by I and I. The Town has also taken a proactive approach to managing the flow from the Cone Branch Pump Station to both treatment plants.

The information contained in this report was generated following the details specified in the Guidance Document – *Wastewater Capacity Management Plans* as prepared by the Maryland Department of the Environment.

### Permitted Capacity

The Town of Middletown’s current permitted combined treatment system capacity, based on calculations by 3 year average flow less future approved connections is 95.0% (67.5% design capacity) at the East WWTP and 72.0% at the West WWTP. The combined permit capacity (the system can pump flow to each treatment facility to balance the loading) is 81.0%.





## **Summary and Recommendations**

Based on the current permitted capacity of 0.500 mgd the Town has capacity for an additional 222 EDU's. The Town has requested an increase in the permit at the East WWTP to the full design capacity of 0.350 mgd from MDE and is currently conducting an I&I Study in the Cone Branch Basin to make recommendations on repairs and improvements. The January 2023 completed interceptor to the West Plant has demonstrated a reduction of flow to the west plant. I&I projects are expected to substantially increase sewer capacity after completion.

It is recommended that the Planning Commission follow the water and sewer certification process while discharge from the wastewater treatment plants continues to be monitored. When MDE issues a new NPDES Permit at the East WWTP to the full design capacity of 0.350 mgd additional permit capacity in the amount of 400 EDU's will be available for a total of 622 EDU's.

The attached appendix contains flow data and Capacity calculations to support our recommendations.

# Appendices

## Capacity Management

		Usage GPD	Basin*	EWWT	WWTP	
Design Capacity				350,000	250,000	
Permit Number				13-DP3182	18-DP-0462	
Permitted Capacity	MGD			0.25	0.25	
planned permit increase	MGD			0.100	0.000	
Current Permit Discharge Limi	MGD			0.250	0.250	
Planned Permit Discharge Lin	MGD			0.350	0.250	
3 year avg discharge flow	MGD			0.226	0.168	
Percent Capacity Used at Permit Capacity				90%	67%	
Available Capacity	MGD			0.0238	0.0818	
Units Available Current Permi	SFD			95	327	
<b>Future Connections</b>						
infill lots S1 actual sold 2023						
Brown TH	3	250	West			0.00075
Carolines View	9	250	West			0.00225
Cross Stone Commons	4.95	250	East	0.0012375		
Memorial Hall	11	250	West			0.00275
Infill Lots	14	250	West			0.0035
Library	4.18	250	West			0.001045
						46.13
planned S2 res MEMAR	148	250	Either			0.037
planned S2 comm LANC	1	1600	East	0.0016		0
Planned future flow	MGD			0.0028		0.047
Available Capacity with approved connections at current Permit				0.0209		0.0345
Units available at current permit				84		138
						222
Available Future Capacity at design capacity Permit				0.1209		0.0345
Units available at design capacity				484		138
						622
<b>Abbreviations</b>						
Million Gallons/ Day	MGD					
Single Family Dwelling	SFD					
Equivalent Dwelling Unit	EDU					
Equivalent Dwelling Unit flow	1 EDU = 250 GPD					
Approved Lot but not connecte	S1					
Platted Lot proposed usage	S2					
Basin determined by gravity						

### 3 Year Flow History

		East WTP	West WTP	Combined	Rainfall	WTP	I&I
2021	January	0.260	0.224	0.484	2.55	0.318	0.167
	February	0.291	0.179	0.469	4.85	0.301	0.168
	March	0.283	0.208	0.491	2.70	0.298	0.193
	April	0.221	0.220	0.441	3.50	0.316	0.125
	May	0.234	0.261	0.494	5.30	0.318	0.176
	June	0.184	0.183	0.367	4.25	0.328	0.039
	July	0.171	0.144	0.315	3.55	0.313	0.002
	August	0.223	0.167	0.390	7.60	0.321	0.069
	September	0.312	0.342	0.654	11.65	0.301	0.354
	October	0.213	0.194	0.408	3.15	0.319	0.089
	November	0.204	0.143	0.347	1.05	0.293	0.055
	December	0.181	0.101	0.282	2.70	0.287	-0.005
2022	January	0.242	0.147	0.389	2.60	0.301	0.088
	February	0.263	0.194	0.458	3.60	0.314	0.144
	March	0.236	0.169	0.405	2.50	0.301	0.104
	April	0.267	0.186	0.453	3.20	0.317	0.136
	May	0.300	0.293	0.593	7.25	0.319	0.274
	June	0.203	0.124	0.327	2.25	0.330	-0.003
	July	0.195	0.137	0.333	5.40	0.318	0.015
	August	0.201	0.133	0.334	2.80	0.323	0.011
	September	0.227	0.160	0.387	5.25	0.301	0.086
	October	0.210	0.135	0.345	2.20	0.309	0.036
	November	0.217	0.141	0.358	3.25	0.299	0.059
	December	0.283	0.239	0.521	4.30	0.308	0.213
2023	January	0.252	0.164	0.416	2.5	0.301	0.115
	February	0.239	0.132	0.371	1.9	0.314	0.057
	March	0.275	0.162	0.437	2.9	0.301	0.136
	April	0.213	0.117	0.330	3.05	0.317	0.013
	May	0.237	0.151	0.388	2.55	0.319	0.069
	June	0.198	0.119	0.317	2.4	0.330	-0.013
	July	0.178	0.127	0.305	3.15	0.318	-0.013
	August	0.167	0.115	0.282	1.75	0.323	-0.041
	September	0.182	0.131	0.313	3.75	0.301	0.012
	October	0.172	0.112	0.284	1.05	0.309	-0.025
	November	0.184	0.126	0.310	2.2	0.299	0.011
	December	0.224	0.174	0.398	3.35	0.308	0.090
<b>3 Year Average/ month</b>		0.226	0.168	0.394	3.57	0.31	0.08
<b>Permit/Design Capacity</b>		0.250	0.250	0.500			
<b>% Capacity</b>		90.43%	67.28%	78.88%			
			0.197				
			0.172				
			0.136	0.168			
<b>Annual Average Calculations Combined</b>							
Average Annual Flow for 2021		0.429					
Average Annual Flow for 2022		0.409					
Average Annual Flow for 2023		0.346					
Overall Average		0.39					
<b>Inflow &amp; Infiltration Calculations</b>					<b>Total Rainfall</b>		
Average Annual I&I for 2021		0.119			52.85		
Average Annual I&I for 2022		0.097			44.60		
Average Annual I&I for 2023		0.034			31.15		
Overall Average		0.084					



# **Burgess and Commissioners of Middletown, Maryland**

## **Water Supply Capacity Management Plan 2023**

Approved by Burgess and Commissioners  
Of Middletown, Maryland  
First Draft January 31, 2024

### **General Information**

PURPOSE OF THE WATER SUPPLY CAPACITY MANAGEMENT PLAN (WSCMP)

This WSCMP is provided to assist the Town Board and Planning Commission in determining the capacity of their water supply systems and in allocating the remaining capacity in a responsible manner. Having an adequate water supply that meets the existing and future water demand in a community is vital for public health protection. Having accurate allocation information, combined with reasonable demand projections, will help ensure that water supply systems achieve a high level of public health protection; operate within Water Appropriation Permit parameters; operate within the limitations of their system to produce safe water; and meet the water supply needs of future residential, commercial, and industrial users in a timely manner. This plan enables the Town to:

- Identify when the demand for water is approaching or exceeding the safe capacity of the water supply system;
- Provide timely and critical information to the Local Health Officer, Environmental Health Director, and elected officials for the approval of subdivision plats and building permits;
- Make commitments for new connections with confidence that there is adequate capacity to serve new as well as existing customers;
- Determine when the approval of subdivision plats and the issuance of additional building permits need to be curtailed until improvements are completed to meet the additional water demand;
- Plan for needed water supply system improvements to ensure continued adequacy of the water system as new growth occurs and as water demand increases; and
- Provide an adequate water supply in order to ensure the protection of public health.

## LEGAL MANDATES

It is essential for local governments to carefully manage the allocation of water to new residential, commercial and industrial customers, in conformance with local Comprehensive Plans, County Water and Sewerage Plans, Water Appropriation Permits, and the requirements of the Annotated Code of Maryland pertaining to building permits and subdivision plats. Local governments must ensure that the water supply will be adequate to meet the demand of existing and new users and must allocate any available water in accordance with State as well as local requirements.

The Environment Article of the Annotated Code of Maryland sets forth the State requirements for insuring the adequacy of the water supply to serve new development as well as the authority of the Secretary of the Department to require Water Supply Capacity Management Plans:

### **§ 9-512 (b) Building Permits – Conformity with county plan; issuance of building permits. –**

*(1) A State or local authority may not issue a building permit unless:*

- (i) The water supply system, sewerage system, or solid waste acceptance facility is adequate to serve the proposed construction, taking into account all existing and approved developments in the service area;*
- (ii) Any water supply system, sewerage system, or solid waste acceptance facility described in the application will not overload any present facility for conveying, pumping, storing, or treating water, sewage, or solid waste; ...*

### **§ 9-512 (d) Subdivision plats – Conformity with county plan; recording or approving subdivision plats. –**

*(1) A State or local authority may not record or approve a subdivision plat unless any approved facility for conveying, pumping, storing, or treating water, sewage or solid waste to serve the proposed development would be:*

- (i) Completed in time to serve the proposed development; and*
- (ii) Adequate to serve the proposed development, once completed, without overloading any water supply system, sewerage system, or solid waste acceptance facility.*

- (2) *Each water supply system, sewerage system, and solid waste acceptance facility in a subdivision shall:*
- (i) *Conform to the applicable county plan; and*
  - (ii) *Take into consideration all present and approved subdivision plats and building permits in the service area.*

**§ 9-205. Submitting plans for existing water supply system, sewerage system, or refuse disposal system for public use.**

- (a) *“Authority” defined. – In this section, “authority” means a water, sewerage, or sanitary district authority.*
- (b) *Application of section. – This section applies only to any water supply system, sewerage system, or refuse disposal system that is for public use in this State.*
- (c) *Required plans, specifications, and reports – In general. – Any authority or person who owns a water supply system, sewerage system, or refuse disposal system or who supplies or is authorized to supply water, sewerage, or refuse disposal service to the public shall submit to the Secretary:*
- (1) *A certified copy of the complete plans for the water supply system, sewerage system, or refuse disposal system that:*
    - (i) *Is correct on the date of submission; and*
    - (ii) *Is of the scope and detail that the Secretary requires; and*
  - (2) *Any existing specifications of or reports on the water supply system, sewerage system, or refuse disposal system.*
- (d) *Same – Exceptions. – If plans do not exist or are of insufficient scope or detail, the authority or person who is required to submit the plans shall:*
- (1) *Prepare and submit to the Secretary new or supplemented plans; and*
  - (2) *Make any investigation that is necessary to ensure that the new or supplemented plans are correct.*
- (e) *Additional information. –*
- (1) *The Secretary may request any other information about the water supply system, sewerage system, or refuse disposal system, including information or records on maintenance and operation, that the Secretary considers appropriate.*
  - (2) *Any authority or person to whom a request is made under paragraph (1) of this subsection shall submit the information or records to the Secretary.*

In addition to the required State mandates, the Town has also passed legislation to ensure capacity is available. In April of 2003, the Town Board passed the Water & Sewer Certification Ordinance which requires capacity to be available prior the approval of improvement plans:

**16.12.055 Water and sewer capacity certification**

*A. Upon approval of the preliminary plat, the town administrator shall conduct a review and analysis of the capacities of the town water and sewer systems in order to determine whether there exists sufficient water and sewer capacity to service the proposed subdivision or the development project thereon. The review and analysis shall be conducted in coordination with the director of operations and construction and the water and sewer superintendent who shall provide the administrator with pertinent information and data regarding the capacity of the town to provide water and sewer service to the proposed subdivision or project. In the review and analysis of the town water and sewer capacity, the demands of the proposed subdivision or project for water and sewer shall be based upon a daily consumption of two hundred and fifty (250) gallons per equivalent dwelling unit as per the standards of the American Water and Wastewater Association.*

*B. If the town administrator determines that there is sufficient water and sewer capacity to service the proposed subdivision or project, then he shall issue a certificate of water and sewer capacity for the proposed subdivision or project.*

*C. If the town administrator determines that there is not sufficient water and sewer capacity to service the proposed subdivision or project, then a certificate of water and sewer capacity shall not be issued for the proposed subdivision or project.*

*D. The planning commission shall not approve any improvement plans for the proposed subdivision or project unless a certificate of water and sewer capacity has been issued for the proposed subdivision or project.*

*E. If an approved preliminary plat is revised after a certificate of water and sewer capacity has been issued and the revision is approved by the planning commission, and if the effect of the revision does not increase the previously determined water demand of the proposed subdivision or project based upon the standards provided for in subsection (A) of this section, then a new certificate of water and sewer capacity shall not be required, and the previously issued certificate shall remain valid. If the effect of such approved revision is to increase the previously determined water demand of the proposed subdivision or project based upon the standards provided for in subsection (A) of this section, then the previously issued certificate shall be void, and a new certificate shall be issued, if appropriate, in accordance with the procedures set forth above.*

*(Ord. 03-04-01 §1, 2003)*

## Executive Summary

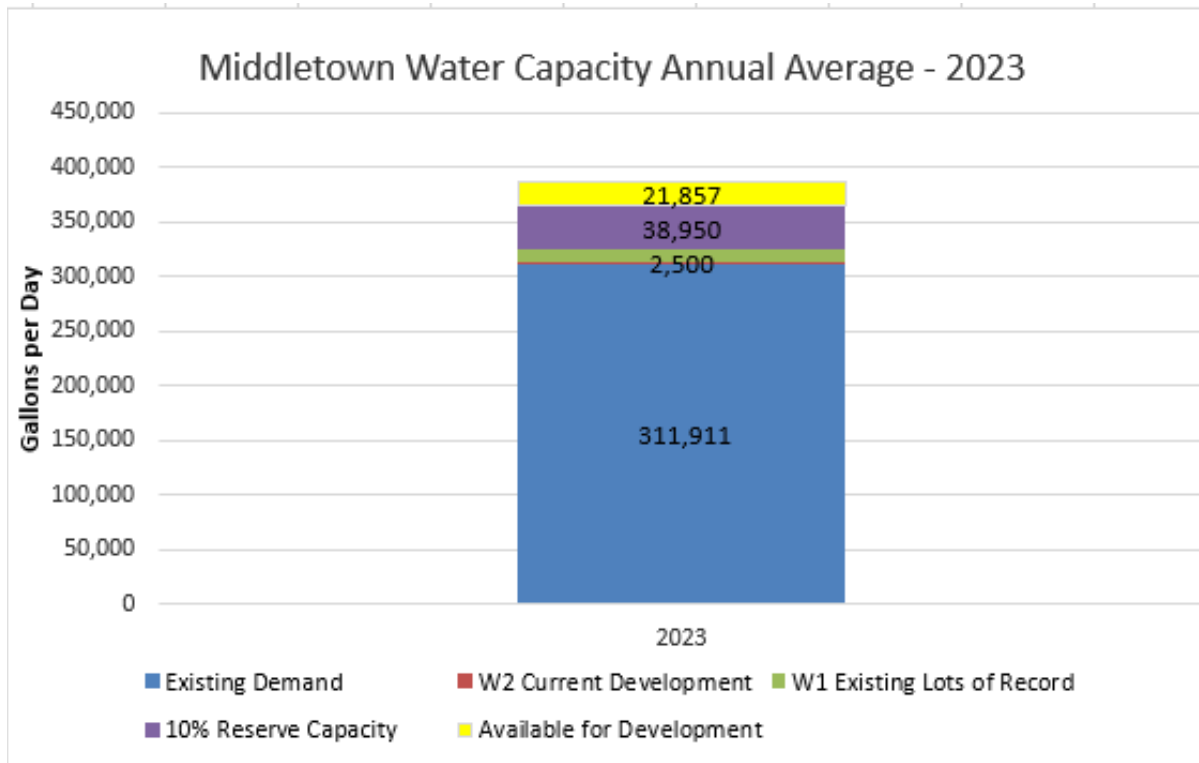
The Middletown water system is supplied by twelve active (12) wells and four (4) major groups of springs located on the west side of the Catoctin Mountain, north of town. Water from the springs flow by gravity to a groundwater storage tank with a capacity of one million gallons. Water treatment consists of adding caustic soda, for pH adjustment, chlorine, as a disinfectant to protect against microbial contaminants. From the plant, the water is pumped to our 400,000 gallon elevated storage tank.

The Town currently has Water Appropriation Permits in the Hollow Creek, Cone Branch, and Catoctin Watersheds. The combined permit limits for withdraw are 387,000 gpd Annual Average and 504,000 gpd Month of Maximum Use. The current capacity of the Town's water supply, during drought conditions, has been determined by MDE to be 533,640 gpd. Considering all approved lots and the current 3-year average usage the Town has 87 taps available.

The information contained in this report was generated following the details specified in the Guidance Document – *Water Supply Capacity Management Plans* as prepared by the Maryland Department of the Environment.

### Annual Average

The Town of Middletown's current water system capacity, based on flow and considering current approved lots and 10% reserve is 94.4%.



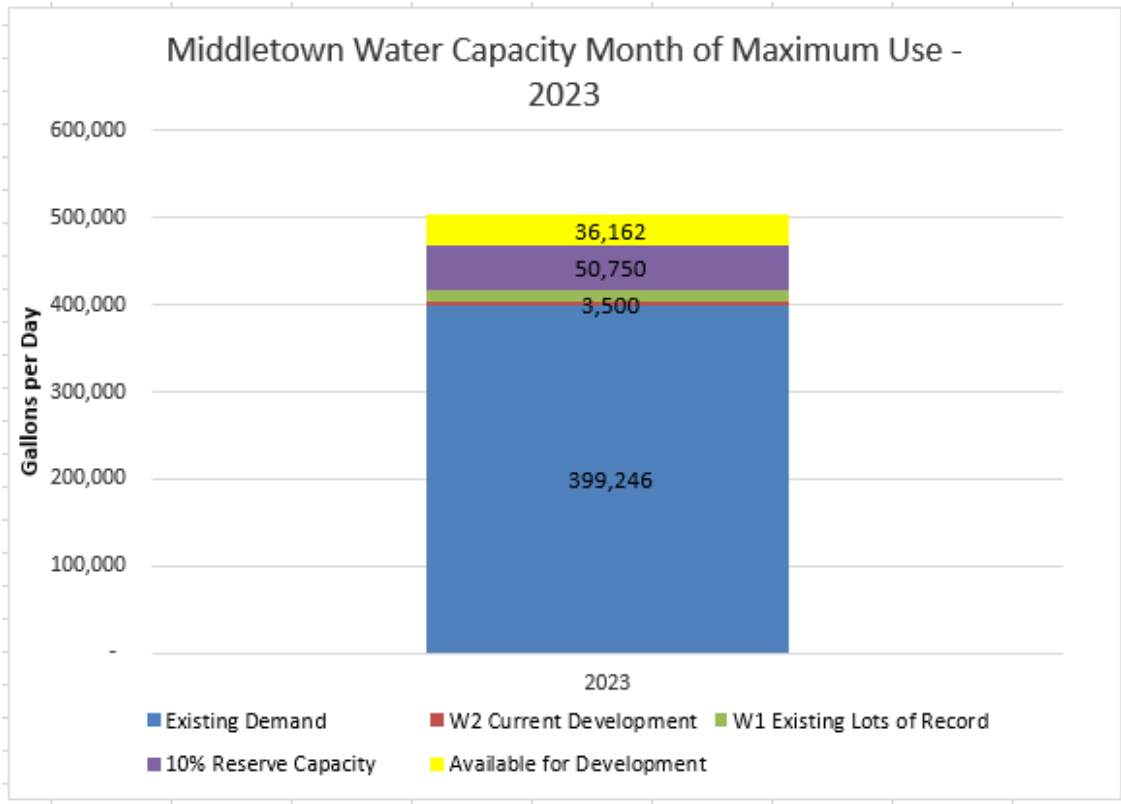
2023 annual average demand is 317,000 gpd

**\*\*Calculations do not include Memar Annexation**

### Month of Maximum Use

Month of maximum use considering the current water system capacity, based on calculations by flow and considering the current approved lots and 10% reserve is 93.0%.





**\*\*Calculation do not include Memar Annexation**

**Summary and Recommendations**

Since the Memar Annexation is required to supply their own demand plus reserve capacity the future demand is not included in this report. Based on the calculations, in accordance with MDE guidance, the Town has 87 water taps available based on the capacity analysis.

<b>Numbers for Comparison to Appropriation Permit</b>		
	<b>Flow AA</b>	<b>Flow MMU</b>
Existing Demand	311,911	399,246
W2 Current Development	2,500	3,500
W1 Existing Lots of Record	11,783	15,317
10% Reserve Capacity	38,950	50,750
Available for Development	21,857	35,187
<b>Total</b>	<b>387,000</b>	<b>504,000</b>
Permit Limit	387,000	
<b>Total Demand</b>	<b>365,143</b>	<b>468,813</b>
	<b>94.35%</b>	<b>93.0%</b>
Permits Available	87	





# THE CITY OF BRUNSWICK MARYLAND

1 WEST POTOMAC STREET

· BRUNSWICK, MARYLAND 21716 · (301) 834-7500

BRUNSWICK, MD 21716

Your PIN is:



Scan with phone camera  
to schedule

Dear Resident,

The City of Brunswick has contracted with Duke's Root Control ("Dukes") to perform sump pump and sanitary sewer connection inspections in conjunction with Brunswick's Inflow & Infiltration reduction program. This program is intended to improve sanitary sewer performance and will be used to determine future infrastructure improvements and upgrades. Please note that this inspection is part of the wastewater flow reduction efforts and not the storm water management effort.

Representatives from Duke's will need to enter your home briefly to perform a 15 minute visual inspection of your sump pump, ejector pump and anything else that may be connected to Brunswick's sanitary sewer system. In addition, Duke's will be performing external property inspections. No alterations or modifications will be made to your plumbing. When booking your appointment, you will be given a **one-hour window** for the technician to arrive and complete the inspection.

Inspections will occur in your area from **8:00AM to 5:30PM**  
Tuesday, February 20th - Saturday, February 24th  
Tuesday, February 27th - Saturday, March 2nd

**Please scan the QR Code with your phone camera to book instantly with the scheduling tool.** The PIN referenced above can be used to book your appointment online at <https://dukes.tools/inspection> if you choose to schedule manually.

The City of Brunswick wants you to know that they appreciate and value every homeowner. As a THANK YOU, the City will email you a **\$20.00** Buy Local, Buy Brunswick gift card that you can use at any participating merchant downtown after your home inspection is complete. In addition, the City will fund a percentage of needed repairs found during the inspection. The percentage amount will be based on data collected from the inspection. Please provide your email address when booking your appointment to receive your gift for participating in this important program.

For more information on this program, to schedule your appointment by phone, and for a list of FAQs, please visit: [www.dukes.com](http://www.dukes.com) or call (866) 963-1330.

Sincerely,

*John Gerstner*

John Gerstner, Director Public Works  
City of Brunswick

INCORPORATED 1890

BIG TOWN  
SMALL CITY

BRUNSWICKMD.GOV



**DRAFT**  
**Water Conservation Public Alert System**  
**Updated 8/2023**

Middlestown's water supply is from ground water sources that are sensitive to drought conditions. "Droughts are periods of time when natural or managed water systems do not provide enough water to meet established human and environmental uses because of natural shortfalls in precipitation or stream flow." To keep Middlestown residents informed of our drinking water supply status during drought conditions, the Burgess and Commissioners developed the following Public Alert System:

**Public Notification of Code Status:**

- Color coded water drop signs will be hung from a bracket attached to the welcome pillars on both ends of Town when drought conditions are present.
  - The code status will be posted on the town web page and distributed electronically via the web page list serve **and via the Town's alert system.**
- 

**CODE BLUE (blue water drop)** Watering of lawns is *prohibited* between 9am. - 6pm. Ground water conditions are in the normal range.

**Critical Factors:** Spring flows range between 60,000 -130,000 gpd., and/or water table levels in wells are at normal historical levels, and/or the U.S. Drought Monitor for Frederick County, Maryland indicate a drought condition of NONE or ABNORMALLY DRY

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**CODE YELLOW (yellow water drop):** A reduction goal of 5 to 10% of the average daily use will be monitored. Watering of lawns is *prohibited*. Additional voluntary water conservation is requested. Ground water conditions are decreasing at a rapid rate. Residents are requested to follow water conservation practices as outlined in 20 Tips to Prevent Water Waste found on the town's website. Water levels in the wells are monitored biweekly.

**Critical Factors:** Any of the following factors may trigger **CODE YELLOW**: MDE issues a drought declaration watch, spring flows range between 43,000--59,000 gpd, water table levels in wells are below historic levels and dropping, the U.S. Drought Monitor for Frederick County, Maryland indicate a drought condition of MODERATE.

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**CODE ORANGE (Orange water drop):** A reduction goal of 10% - 15% of the daily use will be monitored. Mandatory water restrictions are instituted by the Burgess & Commissioners per Section 13.04.010. Severe drought conditions are present. Violation of these restrictions will result in a \$100 fine and immediate disconnection of water service. No warning will be issued. Water levels in wells are monitored bi-weekly.

- Watering of grass is prohibited. This includes athletic and/or playing fields.

- Washing paved surfaces such as streets, roads, sidewalks, driveways, garages, parking areas, tennis courts, and patios is prohibited.
- No vehicle washing, including automobiles, trucks, trailers and boats. Except cleaning of emergency vehicles, if necessary, to preserve the proper functioning and safe operation of the vehicle.
- Golf courses must have a water conservation plan in effect that shows a 10% reduction in usage, even if they do not use town water. No restriction on effluent usage
- No flushing of water lines, fire hydrants or distribution equipment.
- Any additional restrictions the Burgess and Commissioners deem necessary per section 13.04.010
- \*\*Use of rain barrels and gray water (i.e., used bath water) is permitted and encouraged.

**Critical Factors:** Any of the following factors may trigger **CODE ORANGE**: MDE issues a declaration of a drought warning and/or spring flows are below 43,000 gpd and/or the water table levels in wells are far below historic levels and are dropping. U.S. Drought Monitor for Frederick County, Maryland indicates a drought condition of SEVERE.

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**CODE RED, (red water drop):** A reduction goal of 15% - 20% of the daily use will be monitored. Code Red, mandatory water restrictions plus building restrictions and commercial water use restrictions. Violation of these restrictions will result in a \$200 fine and immediate disconnection of water service. No warning will be issued. Water levels in wells are monitored weekly.

- All outside water use of any kind is prohibited.
- Use of water for the operation of ornamental fountains, artificial waterfalls, misting machines, and reflecting pools is prohibited.
- Private (homeowners) pools and exterior hot tubs may not be filled or topped off.
- Golf courses must have a water conservation plan in effect that shows a 10% reduction in usage, even if they do not use town water. No restriction on effluent usage in accordance with the permit.
- Connecting to town fire hydrants is prohibited, except for emergency purposes.
- Any additional restrictions the Burgess and Commissioners deem necessary per section 13.04.010
- All businesses and residents are required to reduce potable water consumption by 10%
- No issuance of building permits
- \*\*Use of rain barrels and gray water (i.e., used bath water) is permitted and encouraged.

**Critical Factors:** The Governor of Maryland declares a drought emergency by executive order, and/or spring flows are below 29,000 gpd and/or the water table levels in wells are far below historic levels and are dropping. U.S. Drought Monitor for Frederick County, Maryland indicates a drought condition of EXTREME The raw water reservoirs cannot be kept full on a daily basis.

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### 13.04.010 - Restrictions on water use.

A. The burgess and commissioners may impose reasonable restrictions on the use of water from the municipal water system during periods of short supply, protracted drought, excessive demand or other scarcity of water. Such restrictions may include, but are not limited to, limitations on or prohibitions against the use of water from the municipal water system as determined by the burgess and commissioners. The town administrator may, with the approval of the burgess and commissioners, develop and establish a **Water Conservation Public Alert System.** ~~or other system of codes to announce to the public differing levels of water restrictions.~~

B. Any water use restriction imposed pursuant to this section shall be determined and announced at a regular or special meeting of the burgess and commissioners and shall be published ~~in a newspaper of general circulation in the town.~~ on the Town's website, distributed electronically via the web page list serve and the Town's alert system. Additionally, color coded water drop signs will be hung from a bracket attached to the welcome pillars on both ends of Town when drought conditions are present.

C. The Water Conservation Public Alert System will be published on the Town's website and will spell out the conditions and restrictions for each of following code status colors: Code Blue (least restrictive), Code Yellow, Code Orange, and Code Red (most restrictive).

~~The watering of lawns or grassy areas of property is prohibited at any time between the hours of 9:00 a.m. and 6:00 p.m. during the least restrictive periods of water use under the water conservation public alert system (currently "Code Blue"), and upon written application to the town administrator, the watering of lawns or grassy areas during these hours shall be permitted for the purpose of watering newly seeded or sodded lawns for up to seven days after such seeding or after the installation of sod.~~

D. Penalties for violating water restrictions:

1. Any person detected connecting to a town fire hydrant for any nonemergency purpose will be subject to a one thousand dollar (\$1,000.00) fine for each offense.
2. Any landlord, tenant, or other individual in possession of real property violating the terms and conditions of any water restriction shall be subject to the following:
  - a. Filling or topping off of pools or outdoor hot tubs during a water restriction period established pursuant to subsection A of this section will constitute a municipal infraction punishable by a fine of five hundred dollars (\$500.00) and disconnection of water service.
  - b. For all other violations of this section, a written warning and notification to refrain from any further violation will be issued for a first offense. Each subsequent offense will constitute a municipal infraction punishable by a fine of one hundred dollars (\$100.00) and **immediate** disconnection of water service. **For violations during a "Code Red" restriction the fine will be two hundred dollars (\$200.00) and the immediate disconnection of water service.**

E. Any landowner, tenant or individual in possession who has had service disconnected to his or her property pursuant to this section shall not have such service reconnected until the current reconnection fee established by the town is paid. Any further violation of the water restriction by that individual after reconnection of water service shall result in water service again being disconnected to such property, and service shall not be reconnected until the currently established reconnection fee is paid to the town.

(Ord. 06-04-01 § 1, 2006; Ord. 02-04-01 § 1, 2002; Ord. 97-09-02 § 2: prior code § 4-2203)



# Mandatory Water Use Restrictions

## *Prohibited*

## *Exceptions*

### *Watering of lawns*

- To establish and maintain newly seeded and sodded grass areas, water may be applied on the day of installation and for 21 days following installation by any means designed and operated to assure effective water conservation. Irrigation must be personally supervised at all times to eliminate run-off or excessive watering.
- To maintain athletic fields when a 50% water reduction plan is in effect.
- Wastewater effluent or storm water treatment systems utilizing spray irrigation may apply water in designated areas according to permit conditions.

### *Use of Watering for irrigation and watering of gardens, landscaped areas, trees, shrubs and other outdoor plants*

- For agricultural irrigation for the production of food and fiber, the maintenance of livestock and poultry or the production of nursery stock.
- By means of a hand-held container, hand-held hose equipped with an automatic shut-off nozzle, or drip irrigation system when applied between the hours of 8 p.m. and 8 a.m.
- When used by commercial nurseries at the minimum rate necessary to maintain stock.
- Water may be used by arboretums and public gardens of National, State, or regional significance at the minimum rate necessary to preserve specimens.

### *Irrigation and watering of golf courses*

- To water tees and greens between the hours of 8 p.m. and 8 a.m.
- To water localized areas with a handheld hose at the minimum rate necessary.
- To water fairways when irrigation is reduced by at least 30%.
- As part of a necessary overseeding or resodding operation during the months of September and October at the minimum rate necessary.
- Sources of water other than potable water should be used when available.
- Irrigation of rough areas is not allowed.

<i>Washing paved surfaces such as streets, roads, sidewalks, driveways, garages, parking areas, tennis courts, and patios</i>	<ul style="list-style-type: none"> <li>• For prewashing in preparation of asphalt street or driveway recoating and sealing.</li> <li>• At the minimum rate necessary for the maintenance of tennis courts composed of clay or similar materials by means of a hand-held hose equipped with an automatic shutoff nozzle.</li> <li>• At the minimum rate necessary for sanitation or public health purposes, such as eating and drinking areas.</li> <li>• At the minimum rate necessary to maintain effective dust control during the construction of highways and roads.</li> </ul>
<i>Use of water for the operation of ornamental fountains, artificial waterfalls, misting machines, and reflecting pools</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<i>Use of water for washing or cleaning of mobile equipment including automobiles, trucks, trailers and boats</i>	<ul style="list-style-type: none"> <li>• Commercial car washes that recycle 45% of their wash water or reduce total water consumption by at least 10%.</li> <li>• Cleaning of construction, emergency or public transportation vehicles if necessary to preserve the proper functioning and safe operation of the vehicle.</li> <li>• Cleaning of new and used vehicles which are part of a dealer's sales inventory only under the following provisions: a) a vehicle is being prepared for sale at the time the vehicle is received from the manufacturer or prior owner, b) a vehicle shall be washed no more than once every 7 days, and c) a vehicle may be washed following sale immediately prior to delivery to the purchaser. Vehicles may be washed only by a means of a bucket or hand-held hose equipped with an automatic shut-off nozzle.</li> </ul>
<i>Use of water to fill and top off swimming pools</i>	<ul style="list-style-type: none"> <li>• Public or residential swimming pools serving 25 or more dwelling units, if the pools have filtration equipment allowing for continued use and recycling of water over the swimming season.</li> <li>• Swimming pools operated by health care facilities used in relation to patient care and rehabilitation.</li> <li>• Filling of newly constructed pools or following pool repair.</li> </ul>
<i>Homeowner power-washing of buildings, fences, decks or other structures</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<i>Serving of water in restaurants, clubs, or eating places, unless specifically requested by the customer</i>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<i>All other businesses and industries implement plans to reduce water consumption by 10%</i>	