Fiscal Year 2016 Upstate Rate Hearing

June 1, 2015

Water Supply System

- **Supply one billion gallons of water per day to 8.5 million City residents and one million upstate residents**
  - Three upstate reservoir systems with 19 storage reservoirs and three controlled lakes
  - 580 billion gallons of storage capacity
  - 177,124 acres of City-owned land and easements in the watershed, plus 35,963 acres of reservoir area
  - Seven upstate wastewater treatment plants
  - 295 miles of aqueducts and tunnels

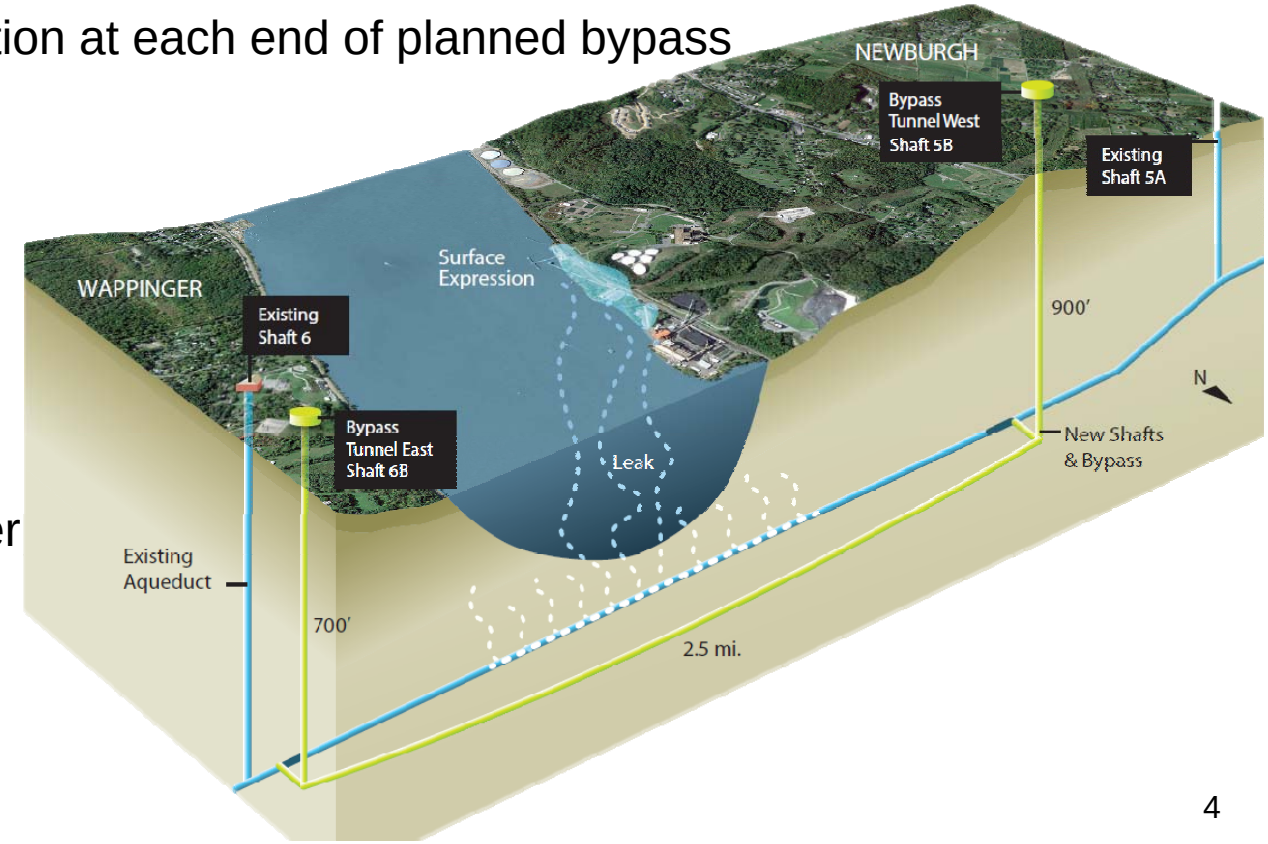
Dam Reconstruction

- DEP's Capital Improvement Plan for FY 2015-2025 sets aside $450 million for the reconstruction and rehabilitation of dams
- The most significant project is the rehabilitation of Gilboa Dam to meet New York State Department of Environmental Conservation (NYSDEC) safety guidelines
  - Reconstruction is expected to be complete by 2023
  - Construction of spillway control section, improvement of hydraulic flow conditions, and enhancement of structural stability completed in FY 2015, two years ahead of schedule
  - Work on dam's lower level outlet and Shandaken Intake Chamber remains

Gilboa Dam

Water for the Future

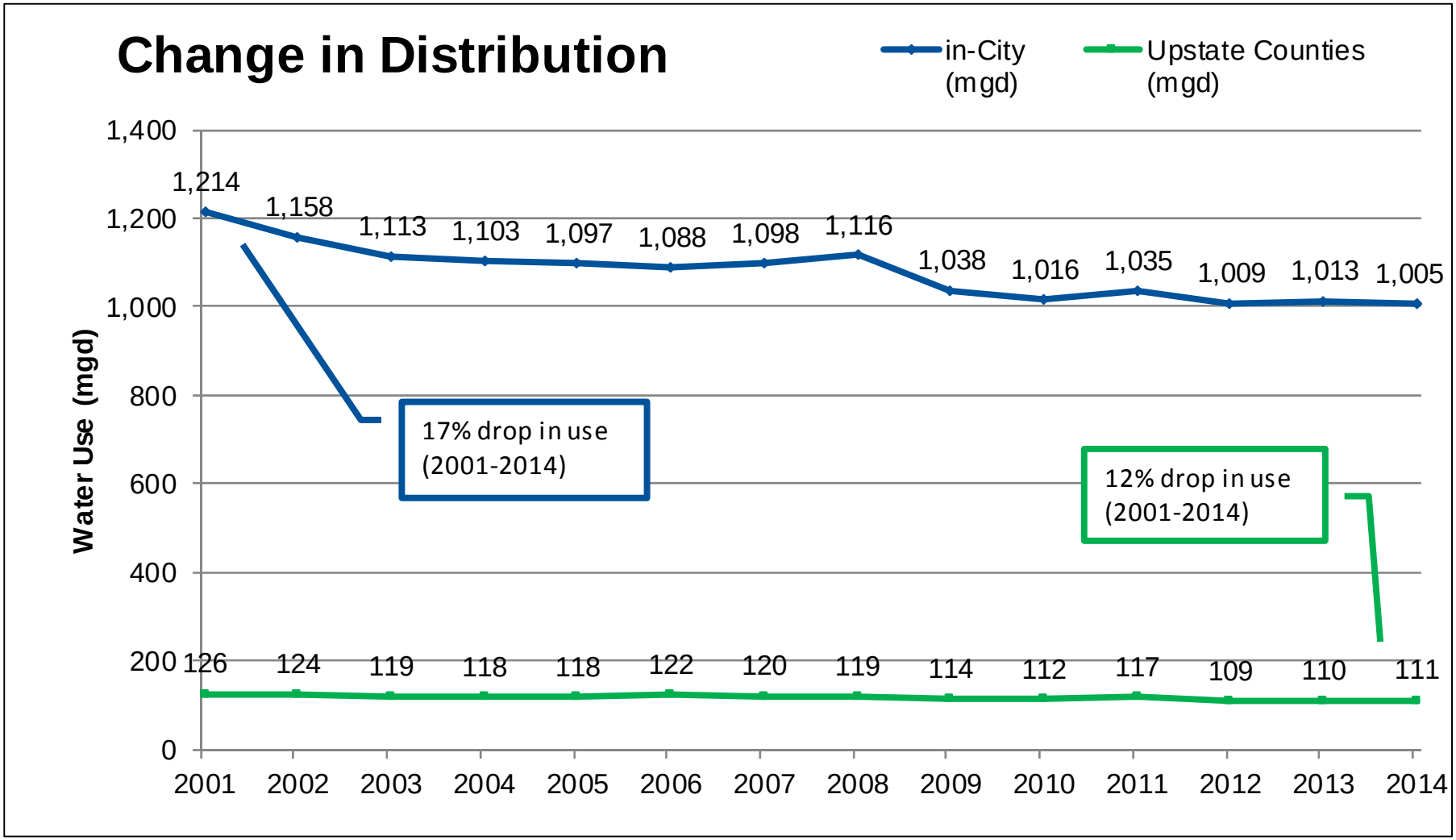
- DEP will ensure the dependability of our water by repairing leaks in the Delaware Aqueduct through the $1.1 billion *Water for the Future* program
- The program concludes by connecting the Rondout-West Branch Tunnel bypass to the Delaware Aqueduct beginning in 2022
  - Anticipated duration of Delaware Aqueduct shutdown is 6 to 10 months
- By FY 2016, DEP will:
  - Bid and register the bypass tunnel construction contract
  - Complete shaft construction at each end of planned bypass
  - Complete construction and start-up of interconnection facilities that will transfer water from the Delaware to the Catskill Aqueduct
  - Design for repair and rehabilitation of the Upper Catskill Aqueduct
  - Continue program to reduce water consumption by 5%



Wholesale Water Demand

In FY 2014, the upstate customers:

- Consumed an average of 111 million gallons per day
- Accounted for approximately 10% of total system consumption



Wholesale Demand Management Program

Wholesale Demand Management Goal:

- Reduce demand by ~5 MGD by FY 2019 from FY 2013 baseline

Program Overview:

- Phase 1 - Planning Assistance: Water Board and DEP are providing consultant planning services to the ten upstate customers with the greatest water demand to help them develop demand management plans
  - So far, six customers have signed Agreements with the Water Board for consulting services: Town of New Windsor, Westchester Joint Water Works (WJWW), Village of Scarsdale, City of Mt. Vernon, Town of Greenburgh, and United Water Westchester
  - Draft plans for four of these customers have been prepared
- Phase 2 - Implementation Assistance: Demand management measures identified in the plans are eligible for implementation cost sharing. Potential measures include leak detection and retrofits

Upstate Rate

- Wholesale water is sold to approximately 40 customers north of New York City (the “City”), which distribute water to their retail customers in 70 communities
- Upstate communities entitled to daily quantities of water equal to the per capita consumption in the City multiplied by the population of the upstate community. This consumption is billed at the Entitlement Rate
- The Entitlement Rate =
  - The capital and operating costs of supplying and treating water
  - Excluding in-City costs
  - Divided by the forecast consumption in-City and upstate
- Excess consumption above the entitled quantities is billed at an Excess Rate, which is equal to the in-City rate

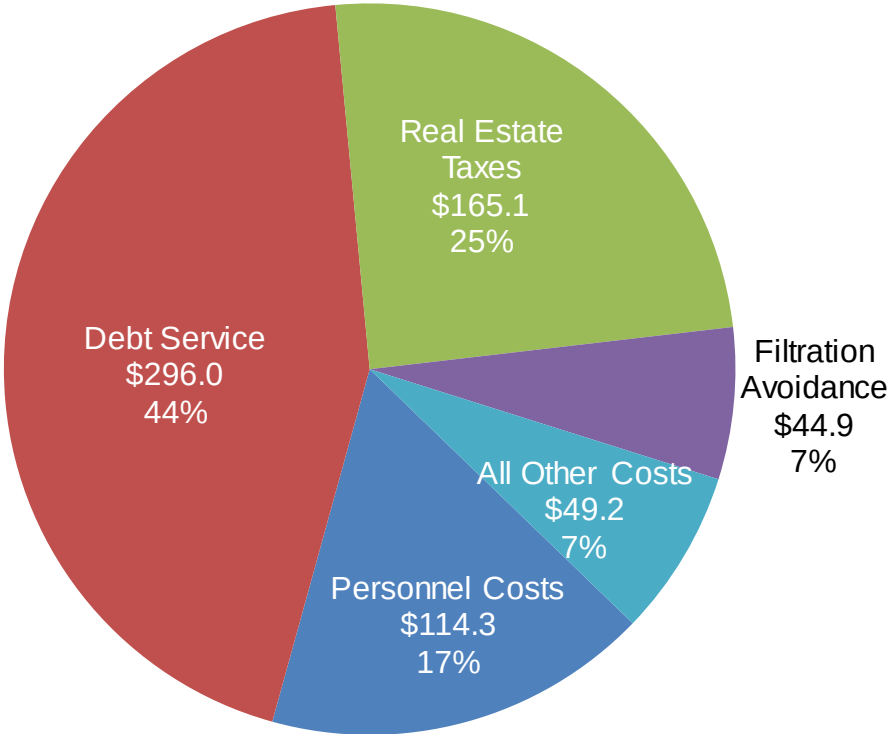
Calculating the Upstate Rate

- Gather costs of supplying and/or treating water
- Reconcile final costs and consumption for prior fiscal years, as applicable
  - Reconciliation for FY 2014 Cost of Service and Consumption will be spread over four years, starting with FY 2016 rate; reconciliation for FY 2015 costs will occur with FY 2017 rate setting
- Forecast consumption based on ten-year regression analysis
- Divide Net Cost of Service by Consumption to calculate Entitlement Rate

	Enacted FY 2015	FY 2015 Currently Projected	Proposed FY 2016
Cost of Service	$622,503,254	$691,357,830	$669,443,446
Reconciliation	$4,052,236	$4,040,159	$10,958,585
Net Cost of Service	$626,555,490	$695,397,989	$680,402,031
Consumption (MG)	398,163	398,529	393,525
Entitlement Rate ($ per MG)	$1,573.61	$1,744.91	$1,728.99
Change in Rate	5.13%		9.87%

The increase in the Cost of Service in the current FY 2015 projection is primarily due to the use of funds pay down debt and reduce debt service in future years

FY 2016 Cost of Service



Total: $669.4 million

All Other Costs	($ Millions)
Chemicals	$3.8
Contractual Services	$5.8
Energy Costs	$10.5
Supplies & Materials	$3.4
Hillview Reservoir	$13.9
UV Facility	$8.1
Other OTPS Costs*	$4.2
Other Costs**	$12.0
Miscellaneous Revenues	($12.5)
Total	**$49.2**

* Other OTPS Costs includes costs incurred in the provision of water supply north of the City (e.g., telecom, maintenance and repairs, etc.); it is net of projected OpX savings of $5.2 million

** Other Costs includes Judgment and Claims and the upstate water supply share of DEP OTPS and City Central Service Costs

Changes in Water Service Costs

Cost	Budgeted 2015	Projected 2016	Change
Debt Service/Capital	$257.5	$296.0	$38.5
Real Estate Taxes	$157.5	$165.1	$7.6
Personnel	$111.4	$114.3	$2.9
Filtration Avoidance	$46.8	$44.9	($1.9)
All Other Costs	$49.4	$49.2	($0.2)
Total Cost of Service	**$622.5**	**$669.4**	**$46.9**
Add: Prior-year Reconciliation*	$4.1	$11.0	$6.9
Net Total Cost of Service	**$626.6**	**$680.4**	**$53.8**
Consumption (MG)	398,163	393,525	(4,638)
Unit Rate ($ per MG)	$1,573.61	$1,728.99	$155.38

All costs in $ millions

* The 2015 reconciliation charge is the full amount to reconcile to the cost of service for 2013. The 2016 reconciliation charge reflects a proposed four-year recovery period to reconcile to the cost of service for 2014

Calculation of FY 2016 Rate

FY 2016 Cost of Service	**$669,443,446**
Plus: Reconciliation for FY 2014 Cost of Service	$10,958,585
Net Cost of Service	**$680,402,031**
Estimated Consumption (MG)	393,525
Proposed Unit Rate for FY 2016 ($ per MG)	**$1,728.99**
Current Unit Rate for FY 2015 ($ per MG)	$1,573.61
Proposed % Change	**9.87%**
Last Year's Rate Projection for FY 2016	$1,705.18
Last Year's Projected % Increase	8.36%
Incremental Increase in Rate	1.51%

Comparison to in-City Rate

	Entitlement Rate	Net Excess Charge	in-City Water Rate
FY 2015 Rate per MG	$1,573.61	$3,372.91	$4,946.52
Charge per Average Single-family Household *(80,000 gallons)*	$125.89	$269.83	$395.72
% of in-City Charge	31.8%	68.2%	100.0%
Proposed FY 2016 Rate per MG	$1,728.99	$3,364.59	$5,093.58
Proposed Charge per Average Single-family Household *(80,000 gallons)*	$138.32	$269.17	$407.49
% of in-City Charge	33.9%	66.1%	100.0%

	Entitlement Rate	in-City Water Rate
FY 2015 Rate Increase	5.13%	3.35%
FY 2016 Proposed Rate Increase	9.87%	2.97%
Five-year Average Rate Increase (FY 2012-FY 2016 Proposed)	8.54%	5.28%

Upstate Rate Comparison

- NYC water supply costs comprise between 17% and 51% of residential water charges in the upstate communities
- For the volume of water consumed by the average single-family home, the proposed cost increase is $12.43 per year

	FY 2015 Rate					Proposed FY 2016 Rate
	Total Water Charges	NYC Water Supply Portion	Local Utility Portion	NYC Water Supply % of Total	Local Utility % of Total	NYC Water Supply Increase as % of Total Charges
New Rochelle	$753	$126	$627	17%	83%	1.7%
Carmel WD #1	$682	$126	$556	18%	82%	1.8%
Mamaroneck	$604	$126	$478	21%	79%	2.1%
Harrison	$588	$126	$462	21%	79%	2.1%
New York City	$396	$126	$270	32%	68%	3.1%
Yonkers	$313	$126	$187	40%	60%	4.0%
White Plains	$271	$126	$145	46%	54%	4.6%
Scarsdale	$249	$126	$123	51%	49%	5.0%

Calculations assume average annual usage of 80,000 gallons
Total increase in NYC in-City water rate for FY 2016 is 2.97%, which is $11.76 per 80,000 gallons

Questions?

For more information visit www.nyc.gov/dep and www.nyc.gov/waterboard

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For the Board's consideration, please submit any testimony that is not given at today's hearing by June 5th at 12:00 p.m.

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